Level II: Introduction to Design

Education & Training Certification Requirements for Persons Involved in Land Disturbing Activities

Sponsored By

GSWCC

Table of Contents

Level II: Introduction to Design

Tab 1. Basics of Erosion & Sedimentation

- Presentation

Tab 2. The Georgia Erosion & Sedimentation Act

- Presentation
- O.C.G.A. 12-7-1

Tab 3. Stream Impacts

- Presentation
- DNR Rules 391-3-7 Erosion & Sedimentation Control

Tab 4. NPDES Permit Requirements

- Presentation
- General Permit GAR100001
- General Permit GAR100002
- General Permit GAR100003
- Notice of Intent – Primary Permittee
- Notice of Intent – Secondary Permittee
- Notice of Intent – Tertiary Permittee
- Notice of Intent – Blanket Secondary Permittee
- Notice of Termination
- Notice of Termination – Blanket Secondary Permittee

Tab 5. Checklist Procedures

- Presentation
- Stand Alone Checklist
- Infrastructure Checklist
- Common Development Checklist
- Appendix 1
- Alternative BMP Guidance Document
- Appendix A-2

Tab 6. Stormwater Management

- Presentation

Tab 7. Vegetative Measures

- Presentation
- Vegetative BMPs Field Manual

Tab 8. Structural Measures

- Presentation
- Structural BMPs Field Manual

Tab 9. Sample Plan Review

- Presentation
- Sample Plan
- Plan Review Checklist

Tab 10. Resource Information

- Commonly Used Acronyms
- Glossary
- Agency Contact Information
- Local Issuing Authority List
- Local Issuing Authority w/ MOA List
- List of SWCD Supervisors

Education & Training Certification Requirements for Persons Involved with Land Disturbing Activity

Level II: Introduction to Design

Day 1

7:30 a.m.	Registration & Program Introduction
8:00 a.m.	Basics of Erosion & Sedimentation
8:30 a.m.	The Georgia Erosion & Sedimentation Act
9:30 a.m.	Break
9:45 a.m.	Stream Impacts
10:45 a.m.	NPDES Permit Requirements
12:00 p.m.	Lunch
1:00 p.m.	Checklist Procedures
2:15 p.m.	Break
2:30 p.m.	Stormwater Management
3:30 p.m.	Q&A
4:30 p.m.	Adjourn

Day 2

8:00 a.m.	Vegetative Measures
9:30 a.m.	Break
9:45 a.m.	Structural Measures
12:00 p.m.	Lunch
1:00 p.m.	Sample Plan Review
2:30 p.m.	Q&A
3:00 p.m.	Break
3:15 p.m.	Exam Procedures
3:30 p.m.	Exam
4:30 p.m.	Adjourn

Checking My Exam Score

- If you receive a score of 70% or greater, you will receive you certification card in the mail within 60 days
- You may check you score on the Georgia Soil & Water Conservation Commission website: www.gaswcc.org. Please allow time for exams to be scored
- Scores will be posted according to the ID Number you created, your DOB and Last 4 digits of your Social Security # (MMDDYY####)
- If you do not receive communication regarding your certification in 60 days, please contact the:

Education & Certification Program

P.O. Box 8024

Athens, GA 30603

(706) 552-4474

Email: certification@gaswcc.org

Insert Tab 1

Basics of Erosion & Sedimentation

Back of Tab

1

BASICS OF

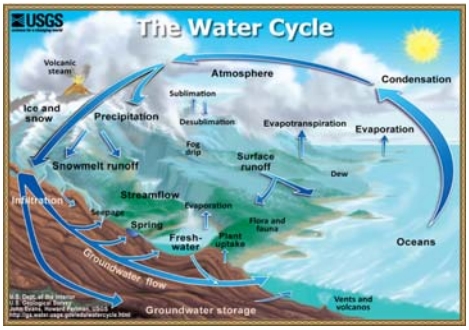
EROSION & SEDIMENTATION

GSWCC

Level II: Introduction to Design July 2016

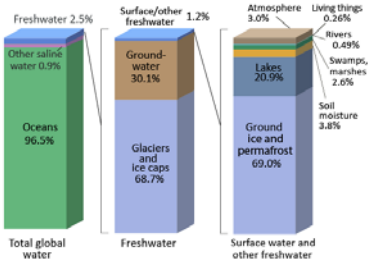
Hydrologic Cycle

2



Where is Earth's Water?

3



Source: Igor Shiklomanov's chapter "World fresh water resources" in Peter H. Gleick (editor), 1993, Water in Crisis: A Guide to the World's Fresh Water Resources.
NOTE: Numbers are rounded, so percent summations may not add to 100.

Water Quality

4

- Sediment is the #1 non-point source pollutant

5

EROSION

Definition

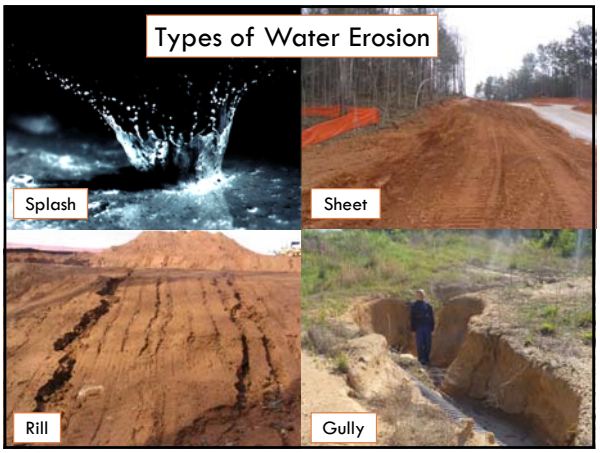
Types

Factors

Definition

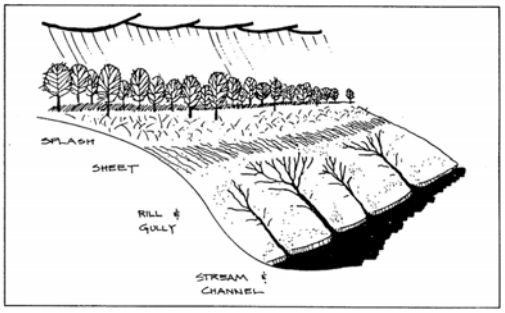
6

- The process by which the land surface is worn away by the action of water, wind, ice and gravity



Water Erosion

8



Natural (Geologic) Erosion

9

- Definition
  - Erosion without the interference of human activity that has been occurring since the earth was formed
- Except in some cases of shore and stream channel erosion, the rate is very slow and uniform

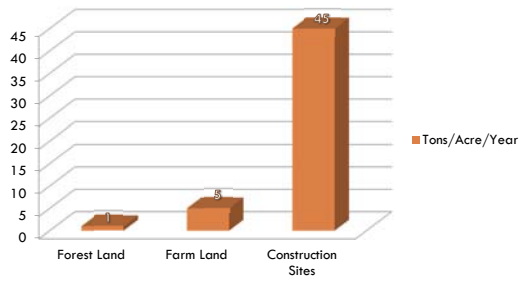
Accelerated Erosion

10

- Definition
  - Alteration of the land surface intensified by human activities (i.e. Farming & Construction)

Expected Erosion Rates

11



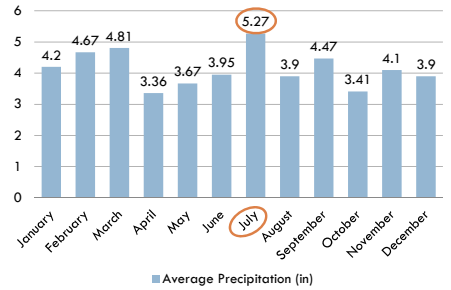
Factors Influencing Erosion

12

- Climate
  - The frequency, intensity and duration of rainfall and temperature extremes are principle factors influencing the volume of runoff
- Topography
  - The size, shape, and slope characteristics of a watershed influence the amount and duration of runoff

30-yr Average Rainfall Data - Atlanta

13



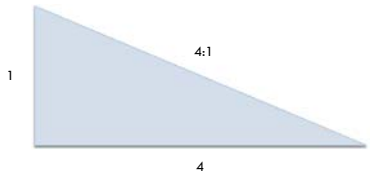
www.srh.noaa.gov

Gradient

14

- Definition
  - The number of horizontal units per vertical units (i.e. 4:1 or 25%)

The greater the slope length and gradient
=
the greater the potential for runoff and erosion



Factors Influencing Erosion

15

- Soils
  - The soil type will determine its vulnerability to erosion

Most Erodible → Least Erodible

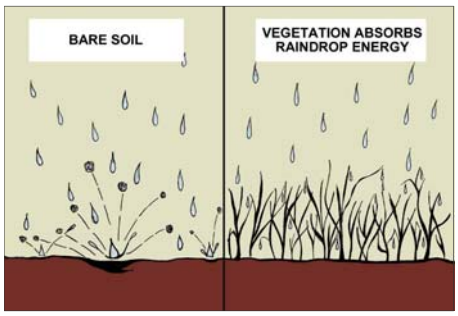
Factors Influencing Erosion

16

- Vegetative Cover
  - Extremely important factor in reducing erosion
  - It will:
    - Absorb energy of rain drops
    - Bind soil particles
    - Slow velocity of runoff
    - Increase ability to absorb water
    - Remove subsurface water between rainfalls

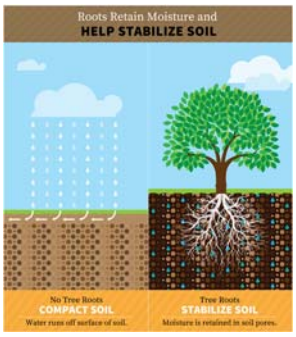
Absorb energy of rain drops

17



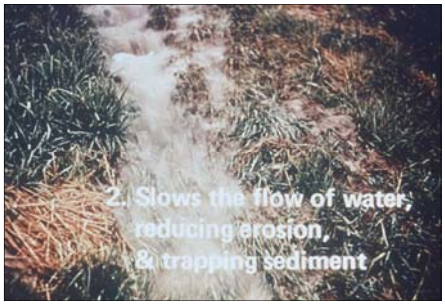
Bind soil particles

18



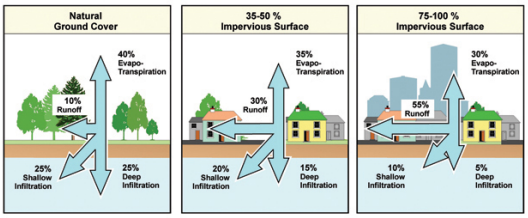
Slow velocity of runoff

19



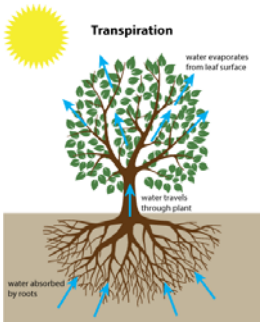
Increase absorption

20



Remove subsurface water

21



22

SEDIMENTATION

Definition
Process
Everyday Impacts

Definition

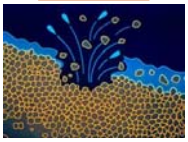
23

- The process by which the eroded material is transported and deposited by water, wind, ice and gravity

3 Step Process

24

Detachment



Transport

Deposition

1 → 2 → 3

Sediment Transport

25

Everyday Impacts of Sedimentation

26

1. Increased likelihood of flooding
2. Loss of soil productivity
3. Decreased recreational value
4. Deterioration of water quality
5. Increase costs and maintenance
6. Impacts to wildlife and habitat

Increased Likelihood of Flooding

27

Loss of Soil Productivity

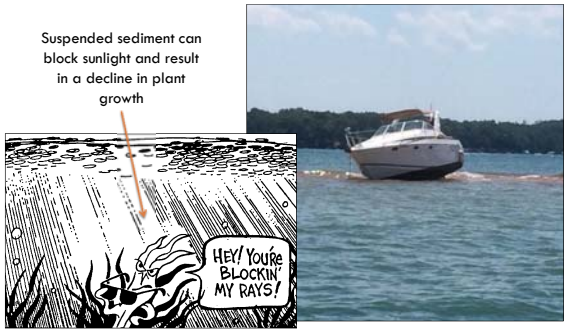
28

Decreased Recreational Value

29

Decreased Recreational Value

30



Deterioration of Water Quality

31

Deterioration of Water Quality

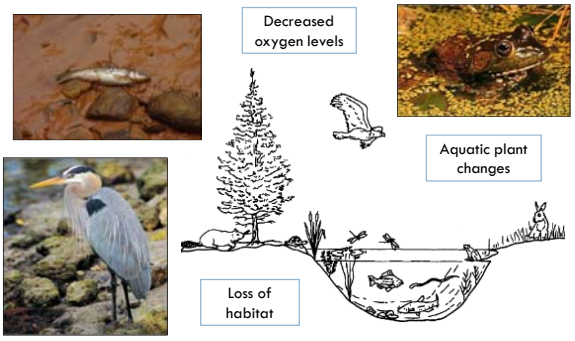
32

Increased Costs & Maintenance

33

Impacts to Wildlife & Habitat

34



Summary

35

- Erosion & Sedimentation are natural processes that can be accelerated by human activities
- Erosion = Detachment
- Sedimentation = Deposition
- If accelerated erosion and sedimentation is not controlled properly on land disturbance sites, everyday resources will be impacted and costs will increase

36

Questions?

GSWCC
Urban Program
P.O. Box 8024
Athens, GA 30603
(706) 552-4474

GSWCC

Insert Tab 2

GESA

Back of Tab

1

THE GEORGIA EROSION & SEDIMENTATION ACT OF 1975, AS AMENDED 2015

O.C.G.A. TITLE 12 CHAPTER 7

GSWCC

Level II: Introduction to Design July 2016

2

Overview

Key Definitions – Slide 7
LIA Requirements – Slide 13
Permitting Process – Slide 19
Enforcement – Slide 25
Exemptions – Slide 33
Education & Training – Slide 47

Key Points

3

- Erosion in Georgia is the result of several activities including construction, agriculture, forestry, etc.… that convert land from one use to another
- Land disturbing activities are governed on the federal, state, and local level
- GESA is the State Law that may be incorporated into a local ordinance and enforced by a county or municipality
- Sometimes referred to as the "E&S Act"

History of GESA

4

- On April 24th, 1975, the Honorable George Busbee, Governor of the State of Georgia, signed into law as Act 599, the Erosion & Sedimentation Act of 1975 (O.C.G.A. 12-7-1 et. seq.)
- With the passage of the E&S Act, Georgia joined very few states that had adopted legislation specifically designed to protect soil and water resources

Intent of GESA

5

- To strengthen and extend the present erosion and sediment control activities and programs of this state
- To provide for the establishment and implementation of a state-wide comprehensive soil erosion and sediment control program
- To conserve and protect the land, water, air, and other resources of the state

O.C.G.A 12-7-2

Participating Agencies

6

- Local Issuing Authorities (LIA)
- Soil & Water Conservation Districts (SWCD)
- Georgia Soil & Water Conservation Commission (GSWCC)
- Georgia Environment Protection Division (GA EPD)
- Natural Resources Conservation Service (NRCS)

Contact information for each agency can be found in the "Resource Information" section

7

Key Definitions

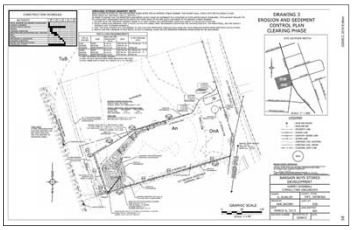
O.C.G.A. 12-7-3

*A complete listing of all Definitions can be found in the "Resource Information" section

"Plan"

8

- An "Erosion & Sediment Control Plan" is a plan for the control of soil erosion and sediment resulting from a land-disturbing activity



O.C.G.A. 12-7-3(8)

"Land-disturbing activity"

9

- Any activity which may result in soil erosion from water or wind and the movement of sediments into state water or onto lands within the state, including, but not limited to:
  - Clearing
  - Dredging
  - Grading
  - Excavating
  - Transporting
  - Filling of land

O.C.G.A. 12-7-3(9)

"Local Issuing Authority"

10

- The governing authority of any county or municipality which is certified pursuant to subsection (a) of Code Section 12-7-8 (Certified by GA EPD)

Please refer to the "Resource Information" in the back of this section for a complete listing of all local issuing authorities in the State of Georgia

O.C.G.A. 12-7-3(10)

"Manual"

11

- The "Manual for Erosion & Sediment Control in Georgia" is the published guidance of the GSWCC governing the design and practices to be utilized in the protection of this state's natural resources from erosion and sedimentation which shall be <u>based upon sound engineering principles and repeatable bench and field testing</u> of structural and vegetative best management practices

O.C.G.A. 12-7-3(10.2)

Overview Council

12

- Purpose
  - Approve the Manual for Erosion & Sediment Control in Georgia prior to publication by GSWCC
  - Provide guidance on the installation and maintenance of best management practices for the preparation of plans
- Composed of 9 members
  - House of Representatives
  - Senate
  - GA DOT
  - GA EPD
  - State & Road Tollway Authority
  - Environmental Engineer
  - Highway Contracting Industry
  - Electric Utility Industry
  - Chairperson

O.C.G.A. 12-7-7.1(f)(1-2)

13

LIA Requirements & Responsibilities

O.C.G.A. 12-7-4
O.C.G.A. 12-7-7
O.C.G.A. 12-7-8

Local Ordinance

14

- The EPD may certify a county or municipality as a Local Issuing Authority if the county or municipality enacts an ordinance which meets or exceeds the standards, requirements, and provisions of GESA and the State General Permit
- Any land-disturbing activities by a local issuing authority shall be subject to the same requirements of the ordinances such local issuing authority adopted pursuant to this chapter as are applied to private persons, and the division shall enforce such requirements upon the local issuing authority

O.C.G.A. 12-7-8(a)(3)

Local Ordinance

15

- Cannot be more stringent for:
  - Monitoring
  - Reporting
  - Inspections
  - Design standards
  - Turbidity standards
  - Education & Training requirements
- May be more stringent for:
  - Additional Buffers
  - Project size*
  - Other related ordinances such as
    - Tree protection
    - Flood plain protection
    - Stormwater management

*Project size thresholds with regard to education and training requirements cannot exceed the state general permit

O.C.G.A. 12-7-8(a)(1) O.C.G.A. 12-7-4(a)

Responsibilities of Certified LIA

16

- Process applications
- Forward ES&PC plans to SWCD for review
- Issue permits
- Maintain list of active permits
- Conduct inspections
- Enforce ordinance
- Collect fees
- Handle complaints

O.C.G.A. 12-7-7

Memorandum of Agreement (MOA)

17

- When a certified LIA demonstrates the capability to review and approve ES&PC plans AND requests an agreement with the SWCD to conduct such review and approval,
- The LIA enters into an agreement with the SWCD & GSWCC to conduct plan review "in-house"
  - Can result in a quicker turn around time

Please refer to the "Resource Information" for a complete listing of all LIA's with a Memorandum of Agreement

O.C.G.A. 12-7-7(2)(e)

LIA Oversight

18

- The SWCD and/or GSWCC shall review semi-annually the actions of certified LIA's
  - LIA w/MOA are required to submit additional quarterly reports
- The SWCD and/or GSWCC may provide technical assistance to any county or municipality to improve the effectiveness of their erosion and sedimentation control program
- The GA EPD may periodically review the actions of certified LIA's

O.C.G.A. 12-7-8(b)

19

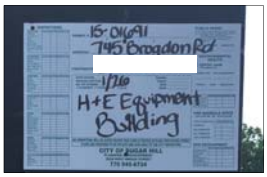
Permitting Process

O.C.G.A. 12-7-9

LDA Permit

20

- All land disturbing activities, not exempt from GESA, must first secure a Land Disturbing Activity (LDA) Permit from the LIA (if applicable)
- It is the responsibility of the property owner/operator to obtain the LDA Permit



*Local requirements can be more stringent

Plan Submittal

21

- An application for a LDA permit shall be accompanied by an Erosion & Sedimentation Control Plan
- The Plan shall contain a certification stating that the plan preparer or the designee thereof visited the site prior to the creation of the plan
- In any event, permits shall be issued no later than 45 days after the application has been filed with the LIA

O.C.G.A. 12-7-9(a-c)

Plan Submittal

22

LIA w/o MOA

- Owner/Operator
  - Submits application with Plan
- LIA
  - Receives application with Plan
  - Forwards Plan for review within 10 days
- SWCD
  - Technical review conducted by GSWCC or NRCS
  - Ratifies the Plan
  - 35 days upon receipt per submittal to approve or deny

LIA w/ MOA

- Owner/Operator
  - Submits application with Plan
- LIA
  - Receives application with Plan
  - Approves or denies the Plan
  - 45 days upon receipt to issue or deny permit application

Failure to act within timeframe constitutes an automatic approval

O.C.G.A. 12-7-10

Plan Submittal

23

No LIA

- Owner/Operator
  - Submits single copy of the Plan to the GA EPD Watershed Protection Branch
  - Submits second copy to the corresponding GA EPD District office
- GA EPD
  - GA EPD Watershed Protection Branch reviews the Plan for deficiencies and may provide comments
  - Enforcement conducted by GA EPD District office

EPD does not issue a LDA Permit

Plan Submittal

24

Project not regulated by a Local Issuing Authority
(GA DOT, GA Power, Poultry House, Public Drinking Reservoir)

- Owner/Operator
  - Submits single copy of the Plan to the GA EPD Watershed Protection Branch
  - Submits second copy to the corresponding GA EPD District office
- GA EPD
  - GA EPD Watershed Protection Branch reviews the Plan for deficiencies and may provide comments
  - Enforcement conducted by GA EPD District office

EPD does not issue a LDA Permit

25

Enforcement Options

O.C.G.A. 12-7-7
O.C.G.A. 12-7-11
O.C.G.A. 12-7-12
O.C.G.A. 12-7-15

Possible Actions

26

- Notice of Violation
- Issuance of Stop Work Order
- Suspension of LDA Permit
- Denial of future LDA Permit applications
- Imposition of civil penalties
- Forfeiture of bonding

Notice of Violation

27

- First & Second Violation
  1) A written warning is issued to the permittee
  2) The permittee shall have five (5) days to correct the violation
  3) If the violation is not corrected within five (5) days, a immediate stop work shall be issued
- Third Violation
  1) An immediate stop work order shall be issued

O.C.G.A. 12-7-12(c)

Stop Work Order

28

- Immediate Issuance
  - 3rd violation
  - Imminent threat to public health
  - Land disturbance without a permit
  - Failure to maintain stream buffer
  - Significant amounts of sediment discharged into state waters
  - Where BMPs have not been properly designed, installed, and maintained
- All Stop Work Orders
  - Effective immediately upon issuance
  - In effect until corrective action or mitigation has occurred
  - Apply to all land-disturbing activity on the site with the exception of the installation and maintenance of all erosion and sediment controls

O.C.G.A. 12-7-12(d)

Suspension of LDA Permit

29

- The LDA Permit may be suspended, revoked, or modified by the LIA if the permit holder is not in compliance with the approved Erosion & Sediment Control Plan or if there is any violation

O.C.G.A. 12-7-11(b)

Denial of Future LDA Permits

30

- If a permit applicant has had two (2) or more violations of previous permits within three (3) years prior to the date of filing of the application under consideration, the local issuing authority may deny the permit application.

O.C.G.A. 12-7-7(f)(1)

Civil Penalties

31

- A maximum penalty of $2500 for each violation shall be imposed by the municipal or magistrate courts
- Each day during which the violation or failure or refusal to comply continues shall be a separate violation

O.C.G.A. 12-7-15

Forfeiture of Bonding

32

- The LIA may require the permit applicant to post a bond in the form of:
  - Government security
  - Cash
  - Irrevocable letter of credit
  - Combination thereof
- Up to $3000/acre of the proposed land-disturbing activity
- If the applicant doesn't comply with permit, the bond may be forfeited and the proceeds may be used to hire a contractor to stabilize the site and bring it into compliance

O.C.G.A. 12-7-7(f)(2)

33

Exemptions

O.C.G.A. 12-7-17

Surface Mining

34

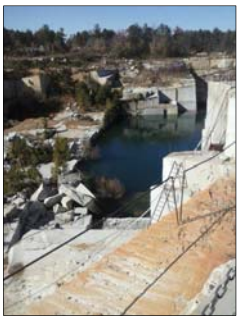
- "Surface mining" means any activity constituting all or part of a process for the removal of minerals, ores, and other solid matter for sale or for processing or for consumption in the regular operation of a business. Tunnels, shafts, borrow pits of less than 1.1 disturbed acres, and dimension stone quarries shall not be considered to be surface mining.

O.C.G.A. 12-4-72(15)

O.C.G.A. 12-7-17(1)

Granite Quarrying

35



- Granite quarrying and the land clearing for such quarrying

O.C.G.A. 12-7-17(2)

Minor Land-disturbing activities

36

- Home gardens
- Home Landscaping
- Repairs
- Maintenance
- Fences
- Other related activities which result in minor soil erosion

N/A for activities that are located within the State-mandated Buffer on sites covered by the State General Permits

O.C.G.A. 12-7-17(3)

Single-Family Residences

37

- When
  - Construction disturbs < one (1) acre
  - Not part of a larger common plan of development
- ES&PC Plan & Buffer requirements still apply

Exempt from LDA Permit only

O.C.G.A. 12-7-17(4)

Agricultural Operations

38

- Practices involving the establishment, cultivation, or harvesting of products of the field or orchard
- Preparation and planting of pasture land
- Farm ponds
- Dairy operations
- Livestock & Poultry management practices
- Construction of farm buildings (Not exempt from NPDES)

O.C.G.A. 1-3-3

O.C.G.A. 12-7-17(5)

Forestry Practices

39

Forestry Land Management Practices/Silvicultural Practices Exemption Guidelines – March 2010 (epd.georgia.gov)

- Forestry land management practices, including harvesting
- When such activities result in a buffer encroachment, a 3 year moratorium is placed on the <u>entire property</u>

O.C.G.A. 12-7-17(6)

NRCS Projects

40

- Projects carried out under the technical supervision of the USDA-NRCS

O.C.G.A. 12-7-17(7)

Projects < 1.0 Acre

41

- Any project involving less than one (1) acre of disturbed area unless the land-disturbing activity is:
  - Within a larger common plan of development with a planned disturbance equal to or greater than 1.0 acre
  - Or within 200 ft. of the bank of any perennial stream
- If a project, located in a area with no Certified LIA, is less than one (1) acre AND within 200 ft. of a perennial stream, no plan submittal is required but the buffer requirements would still be applicable

Check local requirements

O.C.G.A. 12-7-17(8)

Road Projects

Not exempt from NPDES

42

- Any projects undertaken or financed by:
  - Department of Transportation
  - GA Highway Authority
  - State Road & Tollway Authority
- Any road construction or maintenance project, or both, undertaken by any county or municipality
- Not exempt if located within a larger common plan of development
  - Becomes secondary permittee; Enforced by LIA

O.C.G.A. 12-7-17(9)

Utility Projects

Not exempt from NPDES

43

- Any land-disturbing activities conducted by:
  - Electric Membership Corporation
  - Municipal Electrical System
  - Public Utility under PSC jurisdiction (i.e. Solar Farms & Railroads)
  - Any utility under FERC jurisdiction
  - Cable television systems
- Not exempt if located within a larger common plan of development
  - Becomes secondary permittee; Enforced by LIA

O.C.G.A. 12-7-17(9)

Utility Projects

Not exempt from NPDES

44

Public Water System Reservoirs

45

Not exempt from NPDES

O.C.G.A. 12-7-17(11)

46

Education & Training Requirements

O.C.G.A. 12-7-19

Who must be certified?

47

- Persons involved in land development design, review, permitting, construction, monitoring, or inspection or any land-disturbing activity shall meet the education and training certification requirements, dependent on his or her level of involvement with the process as developed by the Commission in consultation with the GA EPD and the Stakeholder Advisory Board

O.C.G.A. 12-7-19(a)(1)

Who must be certified on site?

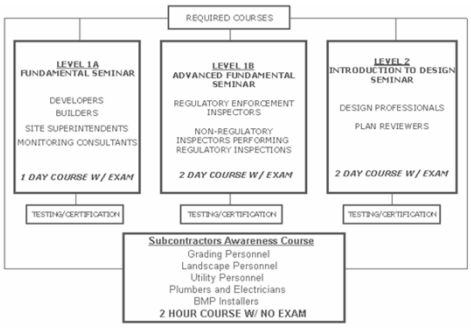
48

- Whenever land-disturbing activities are being conducted on site, each entity or person acting as either a primary, secondary, or tertiary permittee shall have as a minimum one (1) person who is responsible charge of erosion and sedimentation control activities
- Persons or entities involved in projects not requiring a state general permit but otherwise requiring certified personnel on site may contract with certified persons

O.C.G.A. 12-7-19(a)(2-3)

Courses

49



Certification Card Substitution

50

Subcontractor Awareness Seminar

51

- Required for individuals involved in land disturbing activities that are working in a subcontractor capacity for a primary, secondary or tertiary permittee
- Individuals working in a subcontractor capacity cannot be required to meet any educational requirements that exceed those of a Certified Subcontractor
- Certified Subcontractor status **DOES NOT** certify an individual to perform the duties of a "certified" person/personnel
- If an individual is performing "certified" duties, a Level 1A certification is required

Subcontractor Awareness Seminar

52

- If an individual is working in a subcontractor capacity and possesses a Level 1A certification they are not required to take the Subcontractor Awareness Seminar
- If an individual is working in a subcontractor capacity and has attended a Level 1A course, they are <u>not required</u> to take the Subcontractor Awareness Seminar. They can:
  - Complete a Subcontractor Awareness Application
  - Submit a Proof of Attendance form from the Level 1A course

Certification Cards

53

- Cards are color coded by level of certification for quick reference in the field
  - Level 1A – **Blue**
  - Level 1B – **Red**
  - Level II Plan Reviewer – **Gray**
  - Level II Design Professional – **Tan**
  - Subcontractor Awareness – **White**
- Regulatory inspectors should ask to see certification cards on-site

Certification Cards

54

Re-Certification Requirements

55

- A certification provided by achieving the requirements established by GSWCC shall expire no later than three (3) years after its issuance
- A certified individual shall be required to attend and participate in at least four (4) hours of approved continuing education courses, as established by GSWCC, every three (3) years
- Individuals may begin taking re-certification courses one (1) year before their initial certification expires
  - **Courses taken before the 1 year mark will not count as credit**

O.C.G.A. 12-7-19(e)(1-2)

Re-Certification Requirements

56

- An individual who wishes to renew their certification shall attend four (4) hours of continuing education (CE) for each certification they wish to renew
- Example
  - *John Doe is a Certified Inspector & Certified Plan Reviewer*
  - *He must attend 4 hours of CE for Level 1B & 4 hours of CE for Level II*
- There is no exam for any re-certification course
- Re-certification cards are mailed out two (2) weeks before expiration

Course Listings

57

- For additional information and a complete list of upcoming courses
  - http://www.gaswcc.org/esc-courses.php

Erosion and Sedimentation Certification Program
Recent and Upcoming Courses

Initial Certification	Recertification:
Awareness for Subcontractors	Level 1A
Level 1A	Level 1B
Level 1B	Level II
Level II	Trainer 1
Trainer 1	Trainer 2
Trainer 2	

Summary

58

- GESA is the State Law that governs land-disturbing activities
- All eligible activities must first secure a LDA permit
- Counties and municipalities can become a LIA when certified by the GA EPD
- One person from each entity shall meet the education and certification requirements dependent on their level of involvement

59

Questions?

GSWCC
Urban Program
P.O. Box 8024
Athens, GA 30603
(706) 552-4474

GSWCC

Insert Yellow Sheet

Back of Yellow Sheet

O.C.G.A. § 12-7-1

GEORGIA CODE
Copyright 2015 by The State of Georgia
All rights reserved.

***** Current Through the 2015 Regular Session *****

TITLE 12. CONSERVATION AND NATURAL RESOURCES
CHAPTER 7. CONTROL OF SOIL EROSION AND SEDIMENTATION

O.C.G.A. § 12-7-1 (2015)

§ 12-7-1. Short title

This chapter shall be known and may be cited as the "Erosion and Sedimentation Act of 1975."

§ 12-7-2. Legislative findings; policy of state and intent of chapter

It is found that soil erosion and sediment deposition onto lands and into waters within the watersheds of this state are occurring as a result of widespread failure to apply proper soil erosion and sedimentation control practices in land clearing, soil movement, and construction activities and that such erosion and sediment deposition result in pollution of state waters and damage to domestic, agricultural, recreational, fish and wildlife, and other resource uses. It is therefore declared to be the policy of this state and the intent of this chapter to strengthen and extend the present erosion and sediment control activities and programs of this state and to provide for the establishment and implementation of a state-wide comprehensive soil erosion and sediment control program to conserve and protect the land, water, air, and other resources of this state.

§ 12-7-3. Definitions

As used in this chapter, the term:

(1) "Board" means the Board of Natural Resources.

(2) "Buffer" means the area of land immediately adjacent to the banks of state waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat.

(2.1) "Coastal marshlands" shall have the same meaning as in Code Section 12-5-282.

(3) "Commission" means the State Soil and Water Conservation Commission.

(4) "Director" means the director of the Environmental Protection Division of the Department of Natural Resources.

(5) "District" means any one of the soil and water conservation districts of this state.

(6) "Division" means the Environmental Protection Division of the Department of Natural Resources.

(7) "Drainage structure" means a device composed of a virtually non-erodible material such as concrete, steel, plastic, or other such material that conveys water from one place to another by intercepting the flow and carrying it to a release point for storm-water management, drainage control, or flood control purposes.

(8) "Erosion and sediment control plan" or "plan" means a plan for the control of soil erosion and sediment resulting from a land-disturbing activity.

(9) "Land-disturbing activity" means any activity which may result in soil erosion from water or wind and the movement of sediments into state water or onto lands within the state, including, but not limited to, clearing, dredging, grading, excavating, transporting, and filling of land but not including agricultural practices as described in paragraph (5) of Code Section 12-7-17.

(9.1) "Larger common plan of development or sale" means a contiguous area where multiple separate and distinct construction activities are occurring under one plan of development or sale. For purposes of this paragraph, "plan" means an announcement; piece of documentation such as a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, or computer design; or physical demarcation such as boundary signs, lot stakes, or surveyor markings, indicating that construction activities may occur on a specific plot.

(10) "Local issuing authority" means the governing authority of any county or municipality which is certified pursuant to subsection (a) of Code Section 12-7-8.

(10.1) "Maintenance" means actions necessary or appropriate for retaining or restoring a currently serviceable improvement to the specified operable condition to achieve its maximum

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

useful life. Maintenance includes emergency reconstruction of recently damaged parts of a currently serviceable structure so long as it occurs within a reasonable period of time after damage occurs. Maintenance does not include any modification that changes the character, scope, or size of the original design.

(10.2) "Manual for Erosion and Sediment Control in Georgia" or "manual" means the published guidance of the commission governing the design and practices to be utilized in the protection of this state's natural resources from erosion and sedimentation which shall be based foremost upon sound engineering principles and repeatable bench and field testing of structural and vegetative best management practices and which shall have the annual approval of the Erosion and Sediment Control Overview Council established pursuant to Code Section 12-7-7.1.

(10.3) "Operator" means the party or parties that have:

(A) Operational control of construction project plans and specifications, including the ability to make modifications to those plans and specifications; or

(B) Day-to-day operational control of those activities that are necessary to ensure compliance with a storm-water pollution prevention plan for the site or other permit conditions, such as a person authorized to direct workers at a site to carry out activities required by the storm-water pollution prevention plan or to comply with other permit conditions.

(11) "Person" means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, state agency, municipality or other political subdivision of this state, any interstate body, or any other legal entity.

(12) "Qualified personnel" means any person who meets or exceeds the education and training requirements of Code Section 12-7-19.

(13) "Roadway drainage structure" means a device, such as a bridge, culvert, or ditch, composed of a virtually non-erodible material such as concrete, steel, plastic, or other such material that conveys water under a roadway by intercepting the flow on one side of a traveled way consisting of one or more defined lanes, with or without shoulder areas, and carrying water to a release point on the other side.

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

(13.1) "Serviceable" means usable in its current state or with minor maintenance but not so degraded as to essentially require reconstruction.

(14) "Soil and water conservation district approved plan" means an erosion and sediment control plan approved in writing by a soil and water conservation district.

(15) "State general permit" means the National Pollution Discharge Elimination System general permit or permits for storm-water runoff from construction activities as is now in effect or as may be amended or reissued in the future pursuant to the state's authority to implement the same through federal delegation under the Federal Water Pollution Control Act, as amended, 33 U.S.C. Section 1251, et seq., and subsection (f) of Code Section 12-5-30.

(16) "State waters" includes any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the state, which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

§ 12-7-4. Adoption of comprehensive ordinances relating to land-disturbing activities; delegation of responsibility to planning and zoning commission; other local ordinances relating to land development; effect of chapter on design professionals

(a) The governing authority of each county and each municipality shall adopt a comprehensive ordinance establishing the procedures governing land-disturbing activities which are conducted within their respective boundaries. Such ordinances shall be consistent with the standards provided by this chapter. Local governing authorities shall have the authority, by such ordinance, to delegate in whole or in part the responsibilities of the governing authorities, as set forth in this chapter, to any constitutional or statutory local planning and zoning commission. Where the local governing authority deems it appropriate, it may integrate such provisions with other local ordinances relating to land development including but not limited to tree protection, flood plain protection, stream buffers, or storm-water management; and the properties to which any of the types of ordinances identified in this Code section shall apply, whether or not such ordinances are integrated, shall include without limitation property owned by the local governing authority or by a local school district, except as otherwise provided by Code Section 12-7-17.

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

(b) Nothing in this chapter shall be construed as to limit or exclude any design professional, including but not limited to any professional engineer or registered land surveyor, or Natural Resource Conservation Service employee, within any county, municipality, or consolidated government in this state from performing such professional services as may be incidental to the practice of his or her profession, including any and all soil erosion and sedimentation control plans, storm-water management reports including hydrological studies, and site plans, when such professional has demonstrated competence through such qualifications, education, experience, and licensing as required for practice in this state by applicable provisions of Title 43 related to such profession; provided, however, that any such person shall be subject to the requirements of Code Section 12-7-19.

§ 12-7-5. Adoption of rules and regulations for localities without ordinances

The board, by appropriate rules and regulations, shall adopt the procedures governing land-disturbing activities which are conducted in those counties and municipalities which do not have in effect an ordinance conforming to this chapter. Such rules and regulations shall be developed by the division in consultation with the commission and shall contain provisions which meet those minimum requirements set forth in Code Section 12-7-6.

§ 12-7-6. Best management practices; minimum requirements for rules, regulations, ordinances, or resolutions

(a) (1) Best management practices as set forth in subsection (b) of this Code section shall be required for all land-disturbing activities. Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the director or to any other allegation of noncompliance with paragraph (2) of this subsection or any substantially similar terms contained in a permit for the discharge of storm water issued pursuant to subsection (f) of Code Section 12-5-30. As used in this subsection, the terms "proper design" and "properly designed" mean designed in accordance with the hydraulic design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" specified in subsection (b) of this Code section.

(2) A discharge of storm-water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation of any land-disturbing permit issued by a local issuing authority or of any state general permit issued by the division pursuant to subsection (f) of Code Section 12-5-30 for each day on which such discharge results in the turbidity of receiving waters being increased by more than 25 nephelometric turbidity units for waters supporting warm water fisheries or by more than ten nephelometric turbidity units for waters classified as trout waters. The turbidity of the receiving waters shall be measured in accordance with guidelines to be issued by the director. This

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

paragraph shall not apply to any land disturbance associated with the construction of single-family homes which are not part of a larger common plan of development or sale unless the planned disturbance for such construction is equal to or greater than five acres.

(3) Failure properly to design, install, or maintain best management practices shall constitute a violation of any land-disturbing permit issued by a local issuing authority or of any state general permit issued by the division pursuant to subsection (f) of Code Section 12-5-30 for each day on which such failure occurs.

(4) The director may require, in accordance with regulations adopted by the board, reasonable and prudent monitoring of the turbidity level of receiving waters into which discharges from land-disturbing activities occur.

(b) The rules and regulations, ordinances, or resolutions adopted pursuant to this chapter for the purpose of governing land-disturbing activities shall require, as a minimum, protections at least as stringent as the state general permit; and best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control In Georgia" published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:

(1) Stripping of vegetation, regrading, and other development activities shall be conducted in such a manner so as to minimize erosion;

(2) Cut and fill operations must be kept to a minimum;

(3) Development plans must conform to topography and soil type, so as to create the lowest practicable erosion potential;

(4) Whenever feasible, natural vegetation shall be retained, protected, and supplemented;

(5) The disturbed area and the duration of exposure to erosive elements shall be kept to a practicable minimum;

(6) Disturbed soil shall be stabilized as quickly as practicable;

(7) Temporary vegetation or mulching shall be employed to protect exposed critical areas

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

during development;

(8) Permanent vegetation and structural erosion control measures must be installed as soon as practicable;

(9) To the extent necessary, sediment in run-off water must be trapped by the use of debris basins, sediment basins, silt traps, or similar measures until the disturbed area is stabilized. As used in this paragraph, a disturbed area is stabilized when it is brought to a condition of continuous compliance with the requirements of this chapter;

(10) Adequate provisions must be provided to minimize damage from surface water to the cut face of excavations or the sloping surfaces of fills;

(11) Cuts and fills may not endanger adjoining property;

(12) Fills may not encroach upon natural watercourses or constructed channels in a manner so as to adversely affect other property owners;

(13) Grading equipment must cross flowing streams by the means of bridges or culverts, except when such methods are not feasible, provided, in any case, that such crossings must be kept to a minimum;

(14) Land-disturbing activity plans for erosion and sedimentation control shall include provisions for treatment or control of any source of sediments and adequate sedimentation control facilities to retain sediments on site or preclude sedimentation of adjacent waters beyond the levels specified in subsection (a) of this Code section;

(15) (A) There is established a 25 foot buffer along the banks of all state waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except:

(i) As provided by paragraphs (16) and (17) of this subsection;

(ii) Where the director determines to allow a variance that is at least as protective of natural resources and the environment;

(iii) Where otherwise allowed by the director pursuant to Code Section 12-2-8;

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

(iv) Where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented;

(v) Along any ephemeral stream. As used in this division, the term "ephemeral stream" means a stream:

(I) That under normal circumstances has water flowing only during and for a short duration after precipitation events;

(II) That has the channel located above the ground-water table year round;

(III) For which ground water is not a source of water; and

(IV) For which runoff from precipitation is the primary source of water flow; or

(vi) Where shoreline stabilization is installed; provided, however, that this exception shall be limited to the construction of bulkheads and sea walls only to the extent required to prevent the erosion of the shoreline. This exception shall be limited to Lake Oconee and Lake Sinclair and shall be limited to the duration of such construction.

Unless exempted under division (v) of this subparagraph, buffers of at least 25 feet established pursuant to Part 6 of Article 5 of Chapter 5 of this title shall remain in force unless a variance is granted by the director as provided in this paragraph.

(B) No land-disturbing activities shall be conducted within any such buffer; and a buffer shall remain in its natural, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed, except as otherwise provided by this paragraph. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed.

(C) On or before December 31, 2004, the board shall adopt rules which contain specific

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

criteria for the grant or denial by the director of requests for variances. After such date, no variance shall be granted by the director which is not consistent with the criteria contained in such rules. Such rules shall provide, at a minimum, that the director shall consider granting a variance in the following circumstances:

(i) Where a proposed land-disturbing activity within the buffer would require the landowner to acquire a permit from the United States Army Corps of Engineers under Section 404 of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, and the Corps of Engineers has approved a mitigation plan to be implemented as a condition of such a permit;

(ii) Where the landowner provides a plan satisfactory to the director that shows that, even with the proposed land-disturbing activity within the buffer, the completed project will result in maintained or improved water quality downstream of the project; or

(iii) Where a project with a proposed land-disturbing activity within the buffer is located in or upstream and within ten linear miles of a stream segment listed as impaired under Section 303(d) of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1313(d) and the landowner provides a plan satisfactory to the director that shows that the completed project will result in maintained or improved water quality in such listed stream segment and that the project has no adverse impact relative to the pollutants of concern in such stream segment.

All projects covered under divisions (i), (ii), and (iii) of this subparagraph shall meet all criteria set forth in rules for specific variance criteria adopted by the board by December 31, 2004.

(D) The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented:

(i) Stream crossings for water lines; or

(ii) Stream crossings for sewer lines;

(16) There is established a 50 foot buffer, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

state waters classified as "trout streams" pursuant to Article 2 of Chapter 5 of this title except where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as trout streams which discharge an average annual flow of 25 gallons per minute or less shall have a 25 foot buffer or they may be piped, at the discretion of the landowner, pursuant to the terms of a rule providing for a general variance promulgated by the board providing for notice to the division or local issuing authority of the location and extent of the piping and prescribed methodology for minimizing the impact of such piping and for measuring the volume of water discharged by the stream. Any such pipe must stop short of the downstream landowner's property, and the landowner must comply with the buffer requirement for any adjacent trout streams. The director may grant a variance from such buffer to allow land-disturbing activity, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. The following requirements shall apply to any such buffer:

(A) No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed;

(B) On or before December 31, 2000, the board shall adopt rules which contain specific criteria for the grant or denial by the director of requests for variances. After such date, no variance shall be granted by the director which is not consistent with the criteria contained in such rules; provided, however, that, should the board fail to adopt rules which contain specific criteria for the grant or denial of requests for variances by the director on or before December 31, 2000, the authority of the director to issue such variances shall be suspended until the board adopts such rules; and

(C) The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented:

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

(i) Stream crossings for water lines; or

(ii) Stream crossings for sewer lines; and

(17) (A) There is established a 25 foot buffer along coastal marshlands, as measured horizontally from the coastal marshland-upland interface, as determined in accordance with Part 4 of Article 4 of Chapter 5 of this title, the "Coastal Marshlands Protection Act of 1970," and the rules and regulations promulgated thereunder, except:

(i) Where the director determines to allow a variance that is at least as protective of natural resources and the environment;

(ii) Where otherwise allowed by the director pursuant to Code Section 12-2-8;

(iii) Where an alteration within the buffer area has been authorized pursuant to Code Section 12-5-286;

(iv) For maintenance of any currently serviceable structure, landscaping, or hardscaping, including bridges, roads, parking lots, golf courses, golf cart paths, retaining walls, bulkheads, and patios; provided, however, that if such maintenance requires any land-disturbing activity, adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented;

(v) Where a drainage structure or roadway drainage structure is constructed or maintained; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented;

(vi) On the landward side of any currently serviceable shoreline stabilization structure; and

(vii) For the maintenance of any manmade storm-water detention basin, golf course pond, or impoundment that is located entirely within the property of a single individual, partnership, or corporation; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented.

(B) No land-disturbing activity shall be conducted within any such buffer and a buffer shall remain in its current, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed, except as otherwise provided by this paragraph. Once the final

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation so long as a protective vegetative cover remains to protect water quality and aquatic habitat; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time so long as a protective vegetative cover remains to protect water quality and aquatic habitat.

(C) On or before December 31, 2015, the board shall promulgate rules and regulations that:

(i) Contain criteria for the grant or denial by the director of requests for variances pursuant to this paragraph, including where an alteration within the buffer area has been authorized pursuant to a permit issued by the United States Army Corps of Engineers under Section 404 of the Federal Water Pollution Control Act of 1972, as amended, or Section 10 of the Rivers and Harbors Act of 1899; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented; and

(ii) Provide for variances by rule, subject to specified conditions, for certain categories of activities within the buffer that will have minimal impact on the water quality or aquatic habitat of the adjacent marsh, including where the area within the buffer is not more than 500 square feet; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented.

(D) The board may adopt rules and regulations that provide for an expedited process for certain categories of activities within the buffer based on the size, scope, location, and character of the proposed activity within the buffer.

(E) The buffer requirements of this paragraph shall not apply to crossings for utility lines that cause a width of disturbance of not more than 50 feet within the buffer; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented.

(F) The buffer shall not apply to:

(i) Any land-disturbing activity conducted pursuant to and in compliance with a valid and effective land-disturbing permit issued subsequent to April 22, 2014, and prior to December 31, 2015; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented; or

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

(ii) Any lot for which the preliminary plat has been approved prior December 31, 2015, if roadways, bridges, or water and sewer lines have been extended to such lot prior December 31, 2015, and if the requirement to maintain a 25 foot buffer would consume at least 18 percent of the high ground of the platted lot otherwise available for development; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented.

(c) Nothing contained in this chapter shall prevent any local issuing authority from adopting rules and regulations, ordinances, or resolutions which contain stream buffer requirements that exceed the minimum requirements in subsection (b) of this Code section.

(d) The fact that land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of nor create a presumption of a violation of the standards provided for in this Code section or the terms of the permit.

§ 12-7-7. Permit or notice of intent required for land-disturbing activities; approval of application and issuance of permit; denial of permit; bond requirement

(a) No land-disturbing activities shall be conducted in this state, except those land-disturbing activities provided for in Code Section 12-7-17, without the operator first securing a permit from a local issuing authority or providing notice of intent to the division as required by this Code section.

(b) In those counties and municipalities which are certified as local issuing authorities pursuant to subsection (a) of Code Section 12-7-8:

(1) The application for such permit shall be made to and the permit shall be issued by the governing authority of the county wherein such land-disturbing activities are to occur, in the event that such activities will occur outside the corporate limits of a municipality;

(2) In those instances where such activities will occur within the corporate limits of any municipality, the application for such permit shall be made to and the permit shall be issued by the governing authority of the municipality in which such land-disturbing activities are to occur; and

(3) The local issuing authority shall conduct inspections and enforce the permits it issues.

(c) In those counties and municipalities which are not certified pursuant to subsection (a) of

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

Code Section 12-7-8, the terms of the state general permit shall apply, those terms shall be enforced by the division, and no individual land-disturbing activity permit under this Code section will be required; provided, however, that notice of intent shall be submitted to the division prior to commencement of any land-disturbing activities under the state general permit in any of such uncertified counties or municipalities.

(d) (1) Fees assessed pursuant to paragraph (5) of subsection (a) of Code Section 12-5-23 shall be calculated and paid by the primary permittee as defined in the state general permit for each acre of land-disturbing activity included in the planned development or each phase of development.

(2) In a jurisdiction that is certified pursuant to subsection (a) of Code Section 12-7-8, half of any such fees levied shall be submitted by the applicant to the local issuing authority and half of such fees shall be submitted to the division; except that any and all fees due from an entity which is required to give notice pursuant to paragraph (9) or (10) of Code Section 12-7-17 shall be submitted in full to the division, regardless of the existence of a local issuing authority in the jurisdiction. In a jurisdiction where there is no local issuing authority, the full fee shall be submitted to the division.

(e) Except as provided in this subsection, no permit shall be issued pursuant to subsection (b) of this Code section unless the erosion and sediment control plan has been approved by the appropriate district as is required by Code Section 12-7-10. When the governing authority of a county or municipality lying within the boundaries of the district demonstrates capabilities to review and approve an erosion and sediment control plan and requests an agreement with the district to conduct such review and approval, the district, with the concurrence of the commission, shall enter into an agreement which allows the governing authority to conduct review and approval without referring the application and plan to the district, if such governing authority meets the conditions specified by the district as set forth in the agreement. A district may not enter into an agreement authorized in this Code section with the governing authority of any county or municipality which is not certified pursuant to subsection (a) of Code Section 12-7-8.

(f) (1) If a permit applicant has had two or more violations of previous permits or this Code section within three years prior to the date of filing of the application under consideration, the local issuing authority may deny the permit application.

(2) The local issuing authority may require the permit applicant to post a bond in the form of government security, cash, irrevocable letter of credit, or any combination thereof up to, but

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

not exceeding, $3,000.00 per acre of the proposed land-disturbing activity, prior to issuing the permit. If the applicant does not comply with this Code section or with the conditions of the permit after issuance, the local issuing authority may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance. This subsection shall not apply unless there is in effect an ordinance or statute specifically providing for hearing and judicial review of any determination or order of the local issuing authority with respect to alleged permit violations.

§ 12-7-7.1. Erosion and sediment control plan prepared; completion; implementation

(a) As used in this Code section, the term "contractor" means the individual, firm, corporation, or combination thereof or governmental organization contracting with the Department of Transportation or State Road and Tollway Authority for the performance of prescribed work.

(b) (1) In addition to the requirements of Code Section 12-7-6, the Department of Transportation or the State Road and Tollway Authority after July 1, 2003, shall not contract for land-disturbing activity on any construction or maintenance project that will disturb one or more contiguous acres of land until an erosion and sediment control plan for such project has been prepared and accepted pursuant to this Code section.

(2) Through its own forces or by means of the acquisition of professional service pursuant to the provisions of Chapter 22 of Title 50, the Department of Transportation or the State Road and Tollway Authority shall be responsible for the preparation of an erosion and sediment control plan for any construction or maintenance project as required by paragraph (1) of this subsection. Any consultant providing such professional service shall be prequalified by the Department of Transportation as a responsible bidder for the design of erosion and sediment control plans. The division shall assist the Department of Transportation in developing the prequalification approval process for purposes of this subsection.

(c) Upon completion of a proposed plan, the same shall be submitted to the division for review and comment as required by the state general permit.

(d) (1) All bidders for any construction or maintenance project subject to this Code section shall review and submit with their bid proposal a cost estimate as a separate bid for the implementation of the plan, it being understood that the contractor may utilize either its own personnel and resources, qualified subcontractors, or both for implementation of the plan. All contractors and subcontractors for such project shall be prequalified by the Department of Transportation as a responsible bidder for the installation of erosion and sediment control devices in accordance with a plan. The division shall assist the Department of Transportation in

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

developing the prequalification approval process for purposes of this subsection.

(2) The contractor for a construction or maintenance project subject to this Code section shall be responsible for implementing the plan on the awarded project. Payment to any contractor under any contract for implementing any part or all of any plan shall not be on a lump sum basis; rather, such payment shall be based upon unit prices for specific quantities of work performed pursuant to the approved erosion and sediment control plan plus any additional quantities of completed work necessitated by project conditions affecting erosion and sediment control, including without limitation soil types and weather conditions. Charges for all maintenance and cleaning of erosion and sediment control devices shall likewise be paid on a unit price basis.

(e) (1) Through the services of independent consultants, contractors, or subcontractors, or by its own forces, the Department of Transportation shall monitor the water quality and inspect the installation and maintenance of the best management practices in accordance with the plan. All such consultants, contractors, or subcontractors shall be prequalified by the Department of Transportation as a responsible bidder for the inspection of such best management practices and shall have the necessary expertise to determine that such practices are being installed and maintained in accordance with the plan. The division shall assist the Department of Transportation in developing the prequalification approval process for purposes of this subsection.

(2) Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the director or to any other allegation of noncompliance with paragraph (2) of subsection (a) of Code Section 12-7-6.

(3) If deficiencies in the plan or installation or maintenance of best management practices are discovered during the inspection, the Department of Transportation or the State Road and Tollway Authority shall determine the appropriate corrective action. Further, the Department of Transportation or State Road and Tollway Authority may require the consultant to amend the plan or the contractor to change its procedures by change order or supplemental agreement in order to institute such changes as may be necessary to correct any errors or deficiencies in the plan, the implementation of the plan, or the maintenance of the best management practices.

(4) The division, the Department of Transportation, or the State Road and Tollway Authority shall control or coordinate the work of its employees inspecting any project so as to prevent any delay of, interference with, or hindrance to any contractor performing land-disturbing

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

activity on any project subject to the provisions of this Code section.

(f) (1) There shall be an Erosion and Sediment Control Overview Council which shall approve the Manual for Erosion and Sediment Control in Georgia prior to publication by the commission. In addition, the council shall provide guidance on the best management practices for implementing any erosion and sediment control plan for purposes of this Code section. The council shall be composed of nine members, including one member of the House of Representatives who shall be appointed by the Speaker of the House of Representatives and serve at the pleasure thereof; one member of the Senate who shall be appointed by the Lieutenant Governor and serve at the pleasure thereof; and seven members who shall be appointed by the Governor and serve at the pleasure thereof, including one employee each from the Department of Transportation, the Environmental Protection Division of the Department of Natural Resources, and the State Road and Tollway Authority, a professional engineer licensed to practice in this state from a private engineering consulting firm practicing environmental engineering, one representative of the highway contracting industry certified by the Department of Transportation, one representative of the electric utility industry, and a chairperson. The council shall meet prior to December 1, 2015, to approve the most current version of the manual and at all other times as necessary to approve any subsequent changes or updates to the manual prior to its implementation. Such meetings shall be held at the call of the chairperson. Each councilmember shall receive a daily allowance in the amount specified in subsection (b) of Code Section 45-7-21; provided, however, that any full-time state employee serving on the council shall draw no compensation but shall receive necessary expenses. The commissioner is authorized to pay such compensation and expenses from department funds.

(2) The council may develop recommendations governing the preparation of plans and the installation and maintenance of best management practices. If a dispute concerning the requirements of this Code section should arise, the Erosion and Sediment Control Overview Council shall mediate the dispute.

(g) Nothing in this Code section shall be construed to affect the division's authority under Article 2 of Chapter 5 of this title, the "Georgia Water Quality Control Act."

§ 12-7-8. Certification of locality as local issuing authority; periodic review; procedure for revoking certification; enforcement actions

(a) (1) If a county or municipality has enacted ordinances which meet or exceed the standards, requirements, and provisions of this chapter and the state general permit, except that the standards, requirements, and provisions of the ordinances for monitoring, reporting, inspections, design standards, turbidity standards, education and training, and project size

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

thresholds with regard to education and training requirements shall not exceed the state general permit requirements, and which are enforceable by such county or municipality, and if a county or municipality documents that it employs qualified personnel to implement enacted ordinances, the director may certify such county or municipality as a local issuing authority for the purposes of this chapter.

(2) A local issuing authority shall regulate both primary and secondary permittees as such terms are defined in the state general permit. Primary permittees shall be responsible for installation and maintenance of best management practices where the primary permittee is conducting land-disturbing activities. Secondary permittees shall be responsible for installation and maintenance of best management practices where the secondary permittee is conducting land-disturbing activities. A local issuing authority must review, revise, or amend its ordinances within 12 months of any amendment to this chapter.

(3) Any land-disturbing activities by a local issuing authority shall be subject to the same requirements of the ordinances such local issuing authority adopted pursuant to this chapter as are applied to private persons, and the division shall enforce such requirements upon the local issuing authority.

(b) The districts or the commission or both shall review semi-annually the actions of counties and municipalities which have been certified as local issuing authorities pursuant to subsection (a) of this Code section. The districts or the commission or both may provide technical assistance to any county or municipality for the purpose of improving the effectiveness of the county's or municipality's erosion and sedimentation control program. The districts or the commission shall notify the division and request investigation by the division if any deficient or ineffective local program is found.

(c) The board, on or before December 31, 2003, shall promulgate rules and regulations setting forth the requirements and standards for certification and the procedures for decertification of a local issuing authority. The division may periodically review the actions of counties and municipalities which have been certified as local issuing authorities pursuant to subsection (a) of this Code section. Such review may include, but shall not be limited to, review of the administration and enforcement of and compliance with a governing authority's ordinances and review of conformance with an agreement, if any, between the district and the governing authority. If such review indicates that the governing authority of any county or municipality certified pursuant to subsection (a) of this Code section has not administered, enforced, or complied with its ordinances or has not conducted the program in accordance with any agreement entered into pursuant to subsection (e) of Code Section 12-7-7, the division shall

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

notify the governing authority of the county or municipality in writing. The governing authority of any county or municipality so notified shall have 90 days within which to take the necessary corrective action to retain certification as a local issuing authority. If the county or municipality does not take necessary corrective action within 90 days after notification by the division, the division shall revoke the certification of the county or municipality as a local issuing authority.

(d) The director may determine that the public interest requires initiation of an enforcement action by the division. Where such a determination is made and the local issuing authority has failed to secure compliance, the director may implement the board's rules and seek compliance under provisions of Code Sections 12-7-12 through 12-7-15. For purposes of this subsection, enforcement actions taken by the division pursuant to Code Sections 12-7-12 through 12-7-15 shall not require prior revocation of certification of the county or municipality as a local issuing authority.

§ 12-7-9. Applications for permits; erosion and sediment control plans and data; time for issuance or denial

(a) Applications for permits shall be submitted in accordance with this chapter and the rules and regulations, ordinances, and resolutions adopted pursuant to this chapter. Such applications shall be accompanied by the applicant's erosion and sediment control plans and by such supportive data as will affirmatively demonstrate that the land-disturbing activity proposed will be carried out in such a manner that the minimum requirements set forth in Code Section 12-7-6 shall be met. All applications shall contain a certification stating that the plan preparer or the designee thereof visited the site prior to creation of the plan or that such a visit was not required in accordance with rules and regulations established by the board.

(b) No permit shall be issued to any applicant unless the local issuing authority affirmatively determines that the plan embracing such activities meets the requirements of Code Section 12-7-6. All applicable fees shall be paid prior to issuance of the land disturbance permit by the local issuing authority.

(c) Permits shall be issued or denied as soon as practicable after the application therefor has been filed with the local issuing authority, but in any event not later than 45 days thereafter.

§ 12-7-10. Referral of application and plan to district; time for action

Except as otherwise provided by Code Section 12-7-7, immediately upon receipt of an application for a permit the application and plan for sediment and erosion control shall be referred to the appropriate district wherein such land-disturbing activities are proposed to take

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

place, for its review and approval or disapproval concerning the adequacy of the erosion and sediment control plan proposed by the applicant. A district shall approve or disapprove a plan within 35 days of receipt. Failure of a district to act within 35 days shall be considered an approval of the pending plan.

§ 12-7-11. Statement of reasons for denial of permit required; conditions for approval; suspension, revocation, or modification of permit

(a) Within the time specified by Code Section 12-7-9, the local issuing authority shall issue or deny the permit. The local issuing authority, upon denial of a permit, shall state its reasons for the denial, setting forth specifically wherein such application is found to be deficient. Any land-disturbing activity permitted under this chapter shall be carried out in accordance with this chapter and the ordinance, resolution, or rules and regulations adopted and promulgated pursuant to this chapter. The local issuing authority shall specify on the permit the conditions under which the activity may be undertaken.

(b) The permit may be suspended, revoked, or modified by the local issuing authority, as to all or any portion of the land affected by the plan, upon a finding that the holder or his or her successor in title is not in compliance with the approved erosion and sediment control plan or that the holder or his or her successor in title is in violation of this chapter or any ordinance, resolution, rule, or regulation adopted or promulgated pursuant to this chapter. A holder of a permit shall notify any successor in title to him or her as to all or any portion of the land affected by the approved plan of the conditions contained in the permit.

§ 12-7-12. Orders directed to violators; stop work order procedures

(a) Except as provided in subsection (d) of this Code section, whenever the director has reason to believe that a violation of any provision of this chapter, any rule or regulation of the board, or any order of the director has occurred in a county or municipality which is not certified pursuant to subsection (a) of Code Section 12-7-8, the director may issue an order directed to such violator or violators. The order shall specify the provisions of this chapter or the rules or regulations or order alleged to have been violated and may require that land-disturbing activity be stopped until necessary corrective action and mitigation have been taken or may require that necessary corrective action and mitigation be taken within a reasonable time to be prescribed in the order. Any order issued by the director under this Code section shall be signed by the director. Any such order shall become final unless the person or persons named therein request, in writing, a hearing pursuant to Code Section 12-7-16.

(b) Except as provided in subsection (d) of this Code section, whenever a local issuing

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

authority has reason to believe that a violation of any provision of a local ordinance or resolution has occurred within the jurisdiction of the local issuing authority, the local issuing authority may require that land-disturbing activity be stopped until necessary corrective action and mitigation have been taken or may require that necessary corrective action and mitigation be taken within a reasonable time.

(c) The following procedures shall apply to the issuances of stop work orders:

(1) For the first and second violations of the provisions of this chapter, the director or the local issuing authority shall issue a written warning to the violator. The violator shall have five days to correct the violation. If the violation is not corrected within five days, the director or local issuing authority shall issue a stop work order requiring that land-disturbing activities be stopped until necessary corrective action or mitigation has occurred; provided, however, that, if the violation presents an imminent threat to public health or waters of the state, the director or local issuing authority shall issue an immediate stop work order in lieu of a warning;

(2) For a third and each subsequent violation, the director or local issuing authority shall issue an immediate stop work order; and

(3) All stop work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred.

(d) When a violation of this chapter in the form of taking action without a permit, failure to maintain a stream buffer, or significant amounts of sediment, as determined by the local issuing authority or by the director or his or her designee, have been or are being discharged into state waters and where best management practices have not been properly designed, installed, and maintained, a stop work order shall be issued by the local issuing authority or by the director or his or her designee. All such stop work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred. Such stop work orders shall apply to all land-disturbing activity on the site with the exception of the installation and maintenance of temporary or permanent erosion and sediment controls.

§ 12-7-13. Injunctions

Whenever, in the judgment of the director, any person has engaged in or is about to engage in any act or practice which constitutes or would constitute a violation of this chapter, the rules and regulations adopted pursuant to this chapter, or any order or permit conditions in a county or municipality which is not certified pursuant to subsection (a) of Code Section 12-7-8, he or she may make application to the superior court of the county where such person resides or, if

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

such person is a nonresident of the state, to the superior court of the county in which the violative act or practice has been or is about to be engaged in for an order enjoining such act or practice or for an order requiring compliance with this chapter, the rules and regulations adopted pursuant to this chapter, or the order or permit condition. Upon a showing by the director that such person has engaged in or is about to engage in any such violative act or practice, a permanent or temporary injunction, restraining order, or other order shall be granted without the necessity of showing the lack of an adequate remedy at law.

§ 12-7-14. Actions to restrain imminent danger; emergency orders; duration of effectiveness of orders

(a) Notwithstanding any other provision of this chapter to the contrary, upon receipt of evidence that certain land-disturbing activities occurring in a municipality or county which is not certified pursuant to subsection (a) of Code Section 12-7-8 are presenting an imminent and substantial danger to the environment or to the health of humans, the director may bring an action as provided in Code Section 12-7-13 to restrain immediately any person causing or contributing to the danger caused by such land-disturbing activities or to take such other action as may be necessary.

(b) If it is not practicable to assure prompt protection of the environment or the health of humans solely by commencement of such a civil action, the director may issue such emergency orders as may be necessary to protect the environment or the health of humans who are or may be affected by such land-disturbing activities. Notwithstanding any other provision of this chapter, such order shall be immediately effective for a period of not more than 48 hours, unless the director brings an action under subsection (a) of this Code section before the expiration of such period. Whenever the director brings such an action within such period, such order shall be effective for such period of time as may be authorized by the court pending litigation or thereafter.

§ 12-7-15. Civil penalty

Any person who violates any provision of this chapter, the rules and regulations adopted pursuant to this chapter, or any permit condition or limitation established pursuant to this chapter or who negligently or intentionally fails or refuses to comply with any final or emergency order of the director issued as provided in this chapter shall be liable for a civil penalty not to exceed $2,500.00 per day. For the purpose of enforcing the provisions of this chapter, notwithstanding any provision in any city charter to the contrary, municipal courts shall be authorized to impose a penalty not to exceed $2,500.00 for each violation. Notwithstanding any limitation of law as to penalties which can be assessed for violations of

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

county ordinances, any magistrate court or any other court of competent jurisdiction trying cases brought as violations of this chapter under county ordinances approved under this chapter shall be authorized to impose penalties for such violations not to exceed $2,500.00 for each violation. Each day during which the violation or failure or refusal to comply continues shall be a separate violation.

§ 12-7-16. Hearings and review

All hearings on and review of contested matters, orders, or permits issued by or filed against the director and all hearings on and review of any other enforcement actions or orders initiated by the director under this chapter shall be provided and conducted in accordance with subsection (c) of Code Section 12-2-2. The hearing and review procedure provided in this Code section is to the exclusion of all other means of hearings or review.

§ 12-7-17. Exemptions

This chapter shall not apply to the following activities:

(1) Surface mining, as the same is defined in Code Section 12-4-72;

(2) Granite quarrying and land clearing for such quarrying;

(3) Such minor land-disturbing activities as home gardens and individual home landscaping, repairs, maintenance work, fences, and other related activities which result in minor soil erosion;

(4) The construction of single-family residences, when such construction disturbs less than one acre and is not a part of a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre and not otherwise exempted under this paragraph; provided, however, that construction of any such residence shall conform to the minimum requirements as set forth in subsection (b) of Code Section 12-7-6 and this paragraph. For single-family residence construction covered by the provisions of this paragraph, there shall be a buffer zone between the residence and any state waters classified as trout streams pursuant to Article 2 of Chapter 5 of this title. In any such buffer zone, no land-disturbing activity shall be constructed between the residence and the point where vegetation has been wrested by normal stream flow or wave action from the banks of the trout waters. For primary trout waters, the buffer zone shall be at least 50 horizontal feet, and no variance to a smaller buffer shall be granted. For secondary trout waters, the buffer zone shall be at least 50 horizontal feet, but the director may grant variances to no less than 25 feet. Regardless of

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

whether a trout stream is primary or secondary, for first order trout waters, which are streams into which no other streams flow except for springs, the buffer shall be at least 25 horizontal feet, and no variance to a smaller buffer shall be granted. The minimum requirements of subsection (b) of Code Section 12-7-6 and the buffer zones provided by this paragraph shall be enforced by the issuing authority;

(5) Agricultural operations as defined in Code Section 1-3-3 to include those practices involving the establishment, cultivation, or harvesting of products of the field or orchard; the preparation and planting of pasture land; farm ponds; dairy operations; livestock and poultry management practices; and the construction of farm buildings;

(6) Forestry land management practices, including harvesting; provided, however, that when such exempt forestry practices cause or result in land-disturbing or other activities otherwise prohibited in a buffer, as established in paragraphs (15) and (16) of subsection (b) of Code Section 12-7-6, no other land-disturbing activities, except for normal forest management practices, shall be allowed on the entire property upon which the forestry practices were conducted for a period of three years after the completion of such forestry practices;

(7) Any project carried out under the technical supervision of the Natural Resources Conservation Service of the United States Department of Agriculture;

(8) Any project involving less than one acre of disturbed area; provided, however, that this exemption shall not apply to any land-disturbing activity within a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre or within 200 feet of the bank of any state waters, and for purposes of this paragraph, "state waters" excludes channels and drainage ways which have water in them only during and immediately after rainfall events and intermittent streams which do not have water in them year round; provided, however, that any person responsible for a project which involves less than one acre, which involves land-disturbing activity, and which is within 200 feet of any such excluded channel or drainage way must prevent sediment from moving beyond the boundaries of the property on which such project is located and provided, further, that nothing contained in this chapter shall prevent a city or county which is a local issuing authority from regulating any such project which is not specifically exempted by paragraph (1), (2), (3), (4), (5), (6), (7), (9), or (10) of this Code section;

(9) Construction or maintenance projects, or both, undertaken or financed in whole or in part, or both, by the Department of Transportation, the Georgia Highway Authority, or the State Road and Tollway Authority; or any road construction or maintenance project, or both,

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

undertaken by any county or municipality; provided, however, that construction or maintenance projects of the Department of Transportation or the State Road and Tollway Authority which disturb one or more contiguous acres of land shall be subject to the provisions of Code Section 12-7-7.1; except where the Department of Transportation, the Georgia Highway Authority, or the State Road and Tollway Authority is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case a copy of a notice of intent under the state general permit shall be submitted to the local issuing authority, the local issuing authority shall enforce compliance with the minimum requirements set forth in Code Section 12-7-6 as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders;

(10) Any land-disturbing activities conducted by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power; except where an electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case the local issuing authority shall enforce compliance with the minimum requirements set forth in Code Section 12-7-6 as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders; and

(11) Public water system reservoirs.

§ 12-7-18. Effect of chapter on requirements of the "Georgia Water Quality Control Act."

No provision of this chapter shall authorize any person to violate Article 2 of Chapter 5 of this title, the "Georgia Water Quality Control Act," or the rules and regulations promulgated and approved under said article or to pollute any waters of this state as defined in said article.

§ 12-7-19. Education and training requirements; required programs; instructor qualifications; expiration of certification

(a) (1) Persons involved in land development design, review, permitting, construction,

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

monitoring, or inspection or any land-disturbing activity shall meet the education and training certification requirements, dependent on his or her level of involvement with the process, as developed by the commission in accordance with this Code section and in consultation with the division and the Stakeholder Advisory Board created pursuant to Code Section 12-7-20.

(2) On or after May 14, 2007, for each site on which land-disturbing activity occurs, each entity or person acting as either a primary, secondary, or tertiary permittee, as defined in the state general permit, shall have as a minimum one person who is in responsible charge of erosion and sedimentation control activities on behalf of said entity or person and meets the applicable education or training certification requirements developed by the commission present on site whenever land-disturbing activities are conducted on that site. A project site shall herein be defined as any land disturbance site or multiple sites within a larger common plan of development or sale permitted by an owner or operator for compliance with the state general permit.

(3) Persons or entities involved in projects not requiring a state general permit but otherwise requiring certified personnel on site may contract with certified persons to meet the requirements of this chapter.

(4) If a state general permittee who has operational control of land-disturbing activities for a site has met the certification requirements of paragraph (1) of subsection (b) of this Code section, then any person or entity involved in land-disturbing activity at that site and operating in a subcontractor capacity for such permittee shall have until December 31, 2007, to meet those educational requirements specified in paragraph (4) of subsection (b) of Code Section 12-7-19 and shall not be required to meet any educational requirements that exceed those specified in said paragraph.

(b) No less than the following training programs shall be established:

(1) A fundamentals seminar (Level 1) will be established which provides sufficient training to all participants as to the applicable laws, requirements, processes, and latest means and methods recognized by this state to effectively control erosion and sedimentation;

(2) An advanced fundamentals seminar (Level 1) will be established which provides additional details of installation and maintenance of best management practices for both regulatory and non-regulatory inspectors and others;

(3) An introduction to design seminar (Level 2) will be established which provides required

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

training to design and review a successful erosion, sedimentation, and pollution control plan;

(4) An awareness seminar (Level 1) will be established which does not exceed two hours in duration and which provides information regarding the erosion and sediment control practices and processes in the state and which will include an overview of the systems, laws, and roles of the participants; and

(5) A trainer and instructor seminar will be established for both Level 1 and Level 2 trainers and instructors which will provide the minimum training as to applicable laws and best management practices and design of erosion, sedimentation, and pollution control plans in this state.

(c) Trainer and instructor qualifications will be established with the following minimum requirements:

(1) Level 1 trainers and instructors shall meet at least the following minimum requirements and any other requirements as set by the commission:

(A) Education: four-year college degree or five years' experience in the field of erosion and sediment control;

(B) Experience: five-years' experience in the field of erosion and sediment control. Where years of experience is used in lieu of the education requirement of subparagraph (A) of this paragraph, a total of ten years' field experience is required;

(C) Approval by the commission and the Stakeholder Advisory Board; and

(D) Successful completion of the Level 1 trainer and instructor seminar found in paragraph (5) of subsection (b) of this Code section; and

(2) Level 2 trainers and instructors shall meet at least the minimum requirements of a Level 1 trainer or instructor, any other requirements as set by the commission, and successful completion of the Level 2 trainer and instructor seminar created under paragraph (5) of subsection (b) of this Code section.

(d) In addition to the requirements of subsection (c) of this Code section, the commission shall establish and any person desirous of holding certification must obtain a passing grade as established by the Stakeholder Advisory Board on a final exam covering the material taught in

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

each mandatory seminar; provided, however, that there shall be no final exam requirement for purposes of paragraph (4) of subsection (b) of this Code section. Final exams may, at the discretion of the commission, serve in lieu of attendance at the seminar. Any person shall be authorized to administer a final examination for any seminar for which he or she was the instructor.

(e) (1) A certification provided by achieving the requirements established by the commission shall expire no later than three years after its issuance.

(2) A certified individual shall be required to attend and participate in at least four hours of approved continuing education courses, as established by the commission, every three years.

(3) A certification may be extended or renewed by meeting requirements established by the commission.

(4) Revocation procedures may be established by the commission in consultation with the division and the Stakeholder Advisory Board.

§ 12-7-20. Creation of Stakeholder Advisory Board; responsibilities; procedures

(a) There shall be a Stakeholder Advisory Board to consist of not more than 13 members.

(b) Members shall be appointed by the Governor, shall serve at the pleasure thereof, and shall represent the following interests:

(1) The division;

(2) The commission;

(3) Soil and water conservation districts;

(4) The Department of Transportation;

(5) Municipal governments;

(6) County governments;

(7) Public utilities;

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

(8) The engineering and design community;

(9) The construction community;

(10) The development community;

(11) The environmental community;

(12) The Erosion and Sediment Control Overview Council; and

(13) Educators.

(c) The Stakeholder Advisory Board shall elect one of its members as chairperson. The chairperson shall call all meetings of the Stakeholder Advisory Board.

(d) The Stakeholder Advisory Board shall be responsible for working together with the division and the commission to establish, evaluate, and maintain the education and training program established pursuant to Code Section 12-7-19, including but not limited to reviewing course curricula, educational materials, and exam and testing procedures; evaluating trainer and instructor qualifications; and reviewing audit results performed by the commission.

(e) The Stakeholder Advisory Board may conduct such meetings at such places and at such times as it may deem necessary or convenient to enable it to exercise fully and effectively its powers, perform its duties, and accomplish the objectives and purposes of this Code section. Meetings shall be held on the written notice of the chairperson. The notice of a meeting shall set forth the date, time, and place of the meeting. Minutes shall be kept of all meetings.

(f) A majority of the members shall constitute a quorum of the Stakeholder Advisory Board. The powers and duties of the Stakeholder Advisory Board shall be transacted, exercised, and performed only pursuant to an affirmative vote of a majority of those members present at a meeting at which a quorum is present.

(g) Members of the Stakeholder Advisory Board shall not be entitled to any compensation for the rendering of their services to the Stakeholder Advisory Board.

12-7-21. Appointment of panel to study controls implemented pursuant to chapter; procedure and operation of panel

Reserved

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

12-7-22. Electronic filing and reporting system

In order to achieve efficiencies and economies for both the division and the regulated community by the use of electronic filing for certain application and reporting requirements of this chapter and National Pollution Discharge Elimination System permits, the division and the Pollution Prevention Assistance Division of the department shall jointly work toward implementing such an electronic filing and reporting system as soon as practicable and allowable under federal regulations.

This is an unofficial copy prepared by the Georgia Soil and Water Conservation Commission. Its sole purpose is expediency in copying and distribution. The reader should refer to the Official Code of Georgia for the official text of this statute.

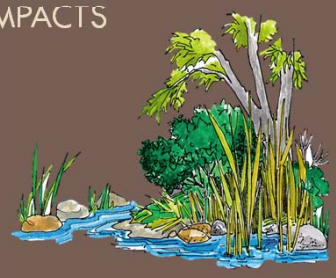
Insert Tab 3

Stream Impacts

Back of Tab

1

STREAM IMPACTS



BUFFERS, PERMITS, VARIANCES

GSWCC

Level II: Introduction to Design July 2016

2

State Waters

State Level

Definition

3

- Per O.C.G.A. 12-7-3(16)
  - *"State waters" includes any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the state, which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.*

Agency Roles

4

- GA Environmental Protection Division
  - Reviews buffer variance applications
  - Issues buffer variances for state-mandated buffers
  - State waters determinations (where there is no certified LIA)
- Local Issuing Authority
  - Can incorporate additional stream buffers (more stringent than state buffers)
  - Can issue variances for their own buffers
  - State water determinations

Who Determines State Waters?

5

- For projects regulated by the Local Issuing Authority (LIA), the LIA is responsible for determining State Waters.
- The Buffer Variance application must include a letter from the LIA, stating that the LIA has visited the site and determined the presence of State Waters that require a buffer.

Who Determines State Waters?

6

- For projects that are exempt from local Erosion & Sediment Control Ordinances and not regulated by a LIA, the GA EPD is responsible for determining State Waters.
- The GA EPD is responsible for reviewing the ES&PC plan, conducting any complaint investigations, and initiating any enforcement actions.

Perennial Stream Characteristics

7

- Base flow that maintains stream flow throughout the year under normal circumstances
- Well-developed stream banks
- A channel that is almost always sinuous (winding)
- Evidence of fluctuating high water marks
- Evidence of soil and debris movement (scour) in the channel
- Presence of hydric soils
- Presence of wetland vegetation

Perennial Stream Characteristics

8

Intermittent Stream Characteristics

9

- Base flow that is seasonally present
- Presence of crayfish burrows and aquatic insects
- Well-developed stream banks
- Evidence of fluctuating high water marks
- Evidence of soil and debris movement (scour) in the channel
- Presence of hydric soils
- Presence of wetland vegetation

Intermittent Stream Characteristics

10

Ephemeral Stream Characteristics

11

- Flows only in direct response to precipitation
- If there is no flowing water within 48 hours of a rain event, the drainage feature is most probably ephemeral
- No well-defined channel
- Absence of riffles/pools
- A flow area that is almost always straight
- Lack of groundwater-induced base flows
- Lack of hydric soils that dominate the banks
- Lack of wetland vegetation

Ephemeral Stream Characteristics

12

Common Misconceptions

13

- These factors are <u>not to be considered</u> in State Water Determinations:
  - Whether a stream appears on a topo map as a solid or dashed blue line
  - Whether the stream originates on the property
  - Whether a stream that originates on the property flows into another stream before it leaves the property
  - The duration of flow in the stream
  - The absence of observable aquatic life

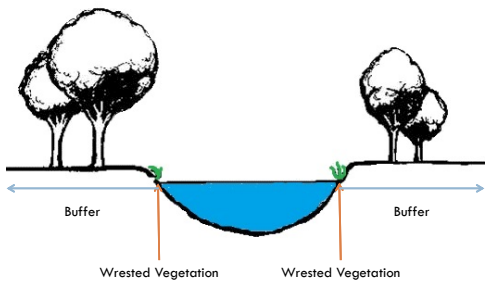
"Buffer"

14

- Per O.C.G.A. 12-7-3(2)
  - *The area of land immediately adjacent to the banks of State Waters in its natural state of vegetation, which facilitates, when properly vegetated, the protection of water quality and aquatic habitat*
- The State-mandated stream buffers are measured horizontally from the point <u>where vegetation has been wrested by "normal stream flow" or "wave action"</u>

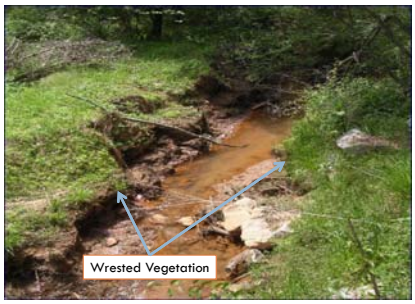
Wrested Vegetation

15



Wrested Vegetation

16



Normal Stream Flow

17

- Per Rule 391-3-7-.01(w):
  - For non-trout waters only, any stream flow that consists solely of base flow or consists of both base flow and direct runoff during any period of the year.
  - Base Flow – the discharge that enters the stream channel through the soil. This includes spring flow into streams.
  - Direct runoff – the water entering stream channels promptly after rainfalls or snow melts.

Stream Buffer Requirements

18

Non-trout	Trout
Warm water perennial and intermittent streams: 25-ft buffer	Cold water perennial, intermittent and ephemeral streams: 50-ft buffer

Trout Streams

19

- Primary Trout Waters
  - Streams supporting a self-sustaining population of Rainbow, Brown, or Brook Trout
- Secondary Trout Waters
  - Streams with no evidence of natural trout reproduction but capable of supporting trout throughout the year (i.e. water temperatures will support introduced trout, whether or nor the fish reproduce)
- The list of Primary & Secondary trout waters is maintained by the GA EPD. Designations are listed by individual stream segments or watershed.

Stream Buffer Exemptions

20

- Stream crossings for water & sewer lines provided
  - It is within 25° of perpendicular to the stream
  - And the disturbance is not more than 50 ft. within the buffer
- Construction of public water system reservoirs
- Drainage Structures – warm water streams only
- Roadway Drainage Structures
- Construction of bulkheads or seawalls on:
  - Lake Sinclair & Lake Oconee

Drainage Structure

21

- A device composed of a virtually non-erodible material such as concrete, steel, plastic or other such material that conveys water from one place to another by intercepting the flow and carrying it to a release point for storm water management, drainage control, or flood control purposes.

Roadway Drainage Structure

22

- A device such as a bridge, culvert, or ditch, composed of a virtually non-erodible material such as concrete, steel, plastic, or other such material that conveys water under a roadway by intercepting the flow on one side of a traveled roadway consisting of one or more defined lanes, with or without shoulder areas, and carrying water to a release point on the other side.

Buffer Variance

23

- The minimum 25-ft or 50-ft undisturbed State-mandated stream buffers shall be maintained, except where the GA EPD Director determines to allow a variance that is at least as protective of natural resources and the environment.
- An buffer variance application must be submitted and will only be considered for the applicable criteria (a-k) delineated in the E&SC Rules & Regulations.
- The GA EPD receives ~220 buffer variance applications/year.

Stream Buffer Variance Criteria

24

- (a) The project involves the construction or repair of an existing infrastructure project or a structure that, by its nature, must be located within the buffer. Such structures include, include but are not limited to, dams, public water supply intake structures, detention/retention ponds, waste water discharges, docks including access ways, boat launches including access ways, and stabilization of areas of public access to water

Stream Buffer Variance Criteria

25

- (b) The project will result in the restoration or enhancement to improve water quality and/or aquatic habitat quality
- (c) Buffer intrusion is necessary to provide reasonable access to a property or properties
- (d) The intrusion is for water and sewer lines that cannot reasonably be placed outside the buffer, and stream crossings and vegetative disturbance are minimized

Stream Buffer Variance Criteria

26

- (e) Crossing for utility lines, including but not limited to gas, liquid, power, telephone, and other pipelines, provided that the number of crossings and the amount of vegetative disturbance are minimized
- (f) Recreational foot trails and viewing areas, providing that impacts to the buffer are minimal

Stream Buffer Variance Criteria

27

- (g) The project involves construction of one (1) single family home for residential use by the owner of the subject property and, at the time of adoption of this rule, there is no opportunity to develop the home under any reasonable design configuration unless a buffer variance is granted. Variances will be considered for such single family homes only if construction is initiated or local government approval is obtained prior to January 10, 2005

Stream Buffer Variance Criteria

28

- (h) For non-trout waters, the proposed land disturbing activity within the buffer will require a permit from the United States Army Corps of Engineers under Section 404 of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, and the Corps of Engineers has approved a mitigation plan to be implemented as a condition of such a permit
- (i) For non-trout waters, a plan is provided for buffer intrusion that shows that, even with the proposed land disturbing activity within the buffer, the completed project will result in maintained or improved water quality downstream of the project

Stream Buffer Variance Criteria

29

- (j) For non-trout waters, the project with a proposed land disturbing activity within the buffer is located in, or upstream and within ten linear miles of, a stream segment listed as impaired under Section 303(d) of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1313(d) and a plan is provided that shows that the completed project will result in maintained or improved water quality in such listed stream segment and that the project has no adverse impact relative to the pollutants of concern in such stream segment

Stream Buffer Variance Criteria

30

- (k) The proposed land disturbing activity within the buffer is not eligible for a permit from the United States Army Corps of Engineers under Section 404 of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, but includes required mitigation in accordance with current EPD "Stream Buffer Variance Mitigation Guidance" document , and involves:
  1. piping, filling, or re-routing of non-trout waters that are not jurisdictional Waters of the U.S.
  2. stream buffer impacts due to new infrastructure projects adjacent to state waters (jurisdictional and non-jurisdictional Waters of the U.S.). This criterion shall not apply to maintenance and/or modification to existing infrastructure, which are covered under 391-3-7.05(2)(a).

General Variance

31

- A general variance is provided for the piping of trout streams with an average annual flow of 25 GPM or less provided
  - The total length of stream that is piped on any one property shall not exceed 200 ft
  - The downstream end of the pipe shall terminate at least 25 ft. before the property
  - Piping of more than 200 ft. will require an individual variance for the entire project

Public Notice

32

- Within 60 days of receipt of a complete buffer variance application, the GAEPD will either provide written comments to the applicant or propose to issue a variance.
- The public shall have 30 days from the date of publication of the public notice to comment on the proposed buffer variance.
- The public notice shall describe:
  1. The proposed buffer encroachment
  2. The location of the project
  3. Where the public can view the site plans
  4. Where comments should be sent

Coastal Marshlands

33

- Marshlands – any marshland intertidal area, mud flat, tidal water bottom, or salt marsh in the State within the estuarine area of the state, whether or not the tidewaters reach the littoral areas through natural or artificial watercourses
- The established 25-foot buffer along coastal marshlands is measured horizontally from the coastal-marshlands-upland interface as determined in accordance with the Coastal Marshlands Protection Act of 1970

Coastal Marshlands Exemptions

34

- For the maintenance of any currently serviceable structure, landscaping, or hardscaping
- Construction or maintenance of any drainage or roadway drainage structure
- On the landward side of any currently serviceable shoreline stabilization structure
- The maintenance of any man-made stormwater detention basin, golf course pond, or impoundment located on the property of a single individual, partnership, or corporation

Coastal Marshlands Exemptions

35

- Utility line crossings that cause a width of disturbance less than 50 ft within the buffer
- Any land-disturbing activity conducted with a vaild LDA permit issued between April 22, 2014 and December 31, 2015
- Any lot where the preliminary plat has been approved prior to December 31, 2015 provided
  - Roadways, bridges, or water and sewer lines have been extended to such lot prior to the effective date of this Act
  - If the requirement to maintain a 25 ft buffer would consume at least 18% of the high ground of the platted lot

Coastal Areas

36

37

Waters of the U.S.

Federal Level

Agency Roles

38

- U.S. Army Corps of Engineers
  - Administers day-to-day program
  - Individual and general permit decisions/issuance
  - Jurisdictional determinations
  - Enforcement
- U.S. Environmental Protection Agency
  - Develops and interprets policy, guidance, and environmental criteria used in permit applications
  - Determines scope of geographic jurisdiction and applicability of exemptions
  - Has authority to prohibit, deny, or restrict the use of any defined area

Waters of the U.S.

39

- Navigable waters
  - Oceans, bays, inlets
- Tributaries
  - Rivers, creeks, ephemeral & intermittent streams, lakes, ponds
- Interstate bodies of water or wetlands
- Wetlands adjacent to the waters listed here
- Special aquatics sites
  - Sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, riffle and pool complexes

Definitions

40

- Navigable waters
  - Waters subject to the ebb and flow of the tide
  - Has a connection to transportation of interstate commerce
- Interstate commerce
  - Defined as had been used, being used presently, or potential to be used for interstate commerce

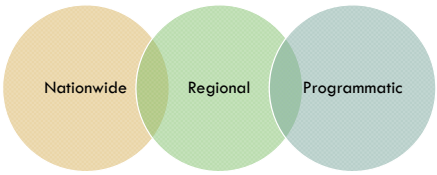
Savannah General Permits

41

Permitting

42

- The Corps issues three types of General Permits



Permitting

43

- Nationwide Permits
  - Most authorize wetland impacts less than ½ an acre and stream impacts of less than 300 linear feet.
  - Examples of projects authorized with nationwide permits:
    - Minor road crossings
    - Buried utility lines
    - Private residences
    - Bank stabilization

Nationwide permitting can take up to 45 days

Permitting

44

- Regional Permits
  - Not cover by nationwide permits
  - Cause small impacts to waters or wetlands
  - Example:
    - Boat docks
    - Recreation Ponds
    - County Road Improvements
- Generally take 45 days to process

Permitting

45

- Programmatic General Permits
  - Have small impacts to waters or wetlands but they are issued by another agency on behalf of the Corps.
  - Example:
    - Dock going thru Georgia DNR Coastal Resource Division

Section 10 Rivers & Harbors Act

46

- Purpose
  - To protect and preserve the navigability of navigable waters
- Requires that you obtain a permit from the USACE Regulatory Branch for:
  - Any structure or work in, over or under a navigable water of the U.S.
- The list of Section 10 waters in Georgia is maintained by the USACE

Section 10 Regulated Activities

47

- Buoys
- Floats
- Marinas
- Bulkheads
- Breakwaters
- Dredging
- Fill
- Piers
- Piling
- Boatlifts
- Boat ramps
- Marine railways
- Disposal dredged material

Section 404 Clean Water Act

48

- Objective
  - To restore and maintain the chemical, physical, and biological integrity of the waters of the U.S.
- Establishes a program to regulates the discharge of dredged or fill material into waters of the U.S., including wetlands
- A permit must be obtained before any dredged or fill material may be discharged into waters of the U.S.

Discharge of Fill Material

49

- Material that has the effect of:
  - Replacing any portion of a water of the U.S. with dry land
  - Changing the bottom elevation of any portion of a water of the U.S.

- Fill Material includes:
  - Rock
  - Sand
  - Soil
  - Clay
  - Plastics
  - Construction debris
  - Wood chips
  - Overburden from excavation

Discharge of Dredged Material

50

- Mechanized land clearing
- Grading
- Excavation with associated discharge

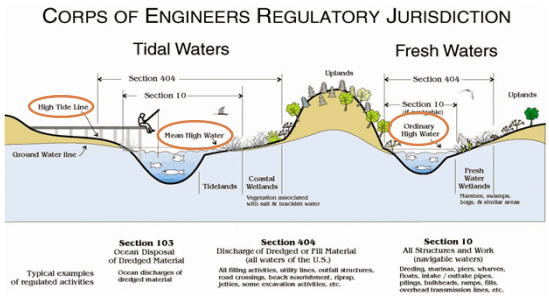
404 Regulated Activities

51

- Placement of fill material
- Ditching activities when the excavated material is cast aside
- Levee and dike construction
- Mechanized land clearing
- Land leveling
- Most road construction
- Dam construction
- Slab-on-grade foundations
- Grading and Landscaping
- Certain pile-supported structures

USACE Jurisdiction

52



Definitions

53

- High Tide Line (Section 404)
  - Shoreward limit of jurisdiction for all tidal waters
  - Intersection of land and water at the maximum height reached by a rising tide
- Mean High Water (Section 10)
  - Shoreward limit of jurisdiction for all tidal waters
  - Line on the shore reached by the plane of the average high water
- Ordinary High Water Mark
  - Shoreward limit of jurisdiction for all non-tidal waters
  - Line on the shore established by the normal fluctuations in the water level

Jurisdictional Determinations

54

- Preliminary
  - Valid for a specific project
  - Only applicable to Waters of the U.S.
  - Not appealable
  - Coordination with other agencies is not required
- Approved
  - Valid for 5 years
  - Applicable to Waters of the U.S. & non-waters of the U.S.
  - Appealable
  - In some circumstances, coordination with the EPA and USACE is required

JD Line

55

Wetland

56

- Definition
  - Those areas inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support a prevalence of vegetation adapted for life in saturated soil conditions
  - Wetlands generally include marshes, swamps, bogs, and similar areas; also includes special aquatic sites such as riffle and pool complexes and submerged vegetation

Important Wetland Functions

57

- Food chain production
- Habitat, spawning sites, rearing and resting sites for both land and aquatic species
- Protection from wave action and erosion
- Storage area for storm and flood waters
- Natural recharge areas
- Provide natural water filtration and purification

Wetland

58

How are wetlands determined?

59

- Vegetation Indicators – Hydrophytic Vegetation
  - Cattails, bulrushes, cordgrass, sphagnum moss, arrowheads, willows, mangroves, sedges, rushes, and water plantains
  - Also includes tree that have a shallow root systems, swollen trunks (i.e. bald cypress & tupelo gum) or roots found growing from the plant stem or trunk above the soil surface

Hydrophytic Vegetation

60

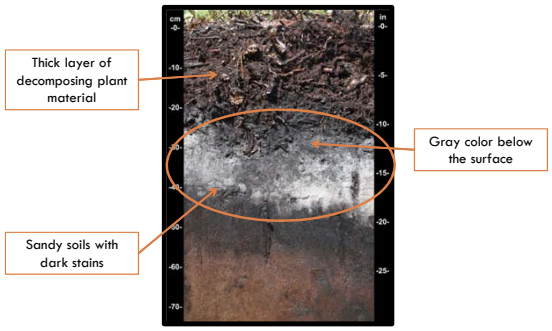
How are wetlands determined?

61

- Soil Indicators – Hydric soils
  - Soils that were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season
  - Characteristics include:
    - Consists predominantly of decomposed plant material
    - Thick layer of decomposing plant material on surface
    - Bluish-gray or gray color below the surface
    - Rotten egg odor
    - Sandy soil with dark stains or dark streaks in the upper layer below the surface

Hydric Soil

62



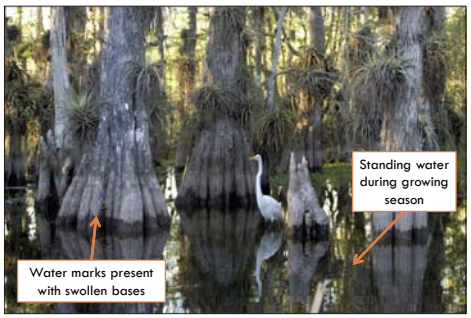
How are wetlands determined?

63

- Hydrology Indicators
  - The presence of water at or above the soil surface for a sufficient period of the year to significantly influence the plant types and soils in the area
  - Evidence of soil saturation
    - Standing or flowing water is observed during the growing season
    - Soil is waterlogged during the growing season
    - Water marks present on trees
    - Small piles of debris oriented in the direction of flow
    - Thin layer of sediment that has been deposited on leaves

Wetland Hydrology

64



Summary

65

- Make no assumption when it comes to working near "State waters" or "Waters of the U.S."
- Plan Ahead
  - Most buffer variances and permits take 3-4 months to be issued
- Buffer variances are issued by the GA EPD
- Permits for working within the flow of the water are issued by the USACE
- Contact information for each Regulatory agency can be found in the "Resource Information" section

66

Questions?

GSWCC
Urban Program
P.O. Box 8024
Athens, GA 30603
(706) 552-4474

GSWCC

Insert Yellow Sheet

Back of Yellow Sheet

RULES
OF
GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

CHAPTER 391-3-7
EROSION AND SEDIMENTATION CONTROL

TABLE OF CONTENTS

391-3-7-.01 Definitions
391-3-7-.02 Repealed
391-3-7-.03 Repealed
391-3-7-.04 Repealed
391-3-7-.05 Buffer Variance Procedures and Criteria
391-3-7-.06 Turbidity Limits for Stormwater Runoff Discharges
391-3-7-.07 Inspection and Compliance
391-3-7-.08 Enforcement
391-3-7-.09 Local Issuing Authorities
391-3-7-.10 Site Visit Required
391-3-7-.11 Coastal Marshlands Buffer Variance Procedures and Criteria.

391-3-7-.01 Definitions

The following definitions shall apply in the interpretation and enforcement of these rules and regulations unless otherwise specifically stated.

(a) "Best Management Practices" means a collection of structural measures and vegetative practices which, when properly designed, installed and maintained, will provide effective erosion and sedimentation control and are designed in accordance with the design specifications contained in the "Manual for Erosion and Sediment Control in Georgia." Best Management Practices also include, but are not limited to, design specifications from the most recent publications of the Georgia Stormwater Management Manual and Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.

(b) "Certification" means an action by the Division that states in writing that a local issuing authority has met the criteria established in these rules and regulations.

(c) "Certified Personnel" means any person who meets or exceeds the education and training requirements of Code Section 12-7-19.

(d) "Coastal Marshlands" shall have the same meaning as in Code Section 12-5-282.

(e) "Complaint Investigation Process" means a process followed by a local issuing authority or the Division when dealing with inquiries, complaints or concerns about land disturbing activities.

(f) "Decertification" means an action by the Division that states in writing that a local issuing authority has failed to meet the criteria established in these rules and regulations.

(g) "Department" means the Department of Natural Resources of the State of Georgia.

(h) "Director" means the Director of the Environmental Protection Division.

(i) "District" means the appropriate local Soil and Water Conservation District.

(j) "Division" means the Environmental Protection Division of the Department of Natural Resources.

(k) "Erosion" means the process by which land surface is worn away by the action of wind, water, ice, or gravity.

(l) "Erosion, Sedimentation and Pollution Control Plan" or "Plan" means a plan for the control of soil erosion and sediment resulting from a land disturbing activity.

(m) "Infrastructure Project" means construction activities that are not part of a common development that include the construction, installation and maintenance of roadway and railway projects and conduits, pipes, pipelines, substations, cables, wires, trenches, vaults, manholes, and similar or related structures or devices for the conveyance of natural gas (or other types of gas), liquid petroleum products, electricity, telecommunications (telephone, data television, etc.), water or sewage.

(n) "Land Disturbing Activity" means any activity which may result in soil erosion and the movement of sediments into State waters or onto lands within the State, including but not limited to clearing, dredging, grading, excavating, transporting, and filling of land, but not including those practices to the extent described in O.C.G.A. 12-7-17.

(o) "Local Issuing Authority" means the governing authority of any county or municipality that is certified pursuant to these rules and regulations and O.C.G.A. 12- 7-8(a).

(p) "Maintenance" means actions necessary or appropriate for retaining or restoring a currently serviceable improvement to the specified operable condition to achieve its maximum useful life. Maintenance includes emergency reconstruction of recently damaged parts of a currently serviceable structure so long as it occurs within a reasonable period of time after damage occurs. Maintenance does not include any modification that changes the character, scope or size of the original design.

(q) "Major Buffer Impact" means any impact that does not meet the definition of "Minor Buffer Impact."

(r) "Minor Buffer Impact" means an impact that upon completion yields no additional above ground, man-made materials or structures within the buffer, maintains the original grade, and results in less than 5,000 square feet of buffer impacts per stream crossing and/or less than 5,000 square feet of buffer impacts per individual area of encroachment for each project.

(s) "Permit" means the authorization necessary to conduct a land disturbing activity under the provisions of these rules and regulations.

(t) "Person" means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, State agency, municipality or other political subdivision or the State, any interstate body or any other legal entity.

(u) "Project" means the entire area of the proposed development site, regardless of the size of the area to be disturbed.

(v) "Sediment" means solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by wind, water, ice, or gravity as a product of erosion.

(w) "Sedimentation" means the action or process of forming or depositing sediment.

(x) "Serviceable" means usable in its current state or with minor maintenance but not so degraded as to essentially require reconstruction.

(y) "Soil and Water Conservation District Approved Plan" means an erosion, sedimentation and pollution control plan approved in writing by the Soil and Water Conservation District in which the proposed land disturbing activity will take place.

(z) "Stabilization" means the process of establishing an enduring soil cover of vegetation and/or mulch or other ground cover and/or installing temporary or permanent structures for the purpose of reducing to a minimum the erosion process and the resultant transport of sediment by wind, water, ice or gravity.

(aa) "State Waters" means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface or subsurface water, natural and artificial, lying within or forming a part of the boundaries of the State which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation, except as may be defined in O.C.G.A. 12-7-17(7).

(bb) "Stream Bank" means the confining cut of a stream channel and is usually identified as the point where the normal stream flow has wrested the vegetation. For nontrout waters, the normal stream flow is any stream flow that consists solely of base flow or consists

of both base flow and direct runoff during any period of the year. Base flow results from groundwater that enters the stream channel through the soil. This includes spring flows into streams. Direct runoff is the water entering stream channels promptly after rainfalls or snow melts.

(cc) "Trout Streams" means all streams or portions of streams within the watershed as designated by the Division under the provisions of the Georgia Water Quality Control Act, O.C.G.A. 12-5-20 et seq. Streams designated as primary trout waters are defined as water supporting a self-sustaining population of rainbow, brown or brook trout. Streams designated as secondary trout waters are those in which there is no evidence of natural trout reproduction, but are capable of supporting trout throughout the year. First order trout waters are streams into which no other streams flow except springs.

(dd) "Watercourse" means any natural or artificial waterway, stream, river, creek, channel, ditch, canal, conduit, culvert, drain, gully, ravine, or wash in which water flows either continuously or intermittently, having a definite channel, bed and bank, and includes any area adjacent thereto which is subject to inundation by reason of overflow or floodwater.

(ee) "Water Quality" means the chemical, physical, and biological characteristics of the State's water resources.

Authority: O.C.G.A. Secs. 12-7-1 et seq.

391-3-7-.05 Buffer Variance Procedures and Criteria

(1) Buffers on state waters are valuable in protecting and conserving land and water resources; therefore, buffers should be protected. The buffer variance process will apply to all projects legally eligible for variances and to all state waters having vegetation wrested from the channel by normal stream flow,

provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. Rule 391-3-7-.05 does not apply to coastal marshlands. The following activities do not require application to or approval from the Division:

(a) stream crossings for water lines or stream crossing for sewer lines that occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer; or

(b) where drainage structures must be constructed within the twenty-five (25) foot buffer area of any state water not classified as a trout stream; or

(c) where roadway drainage structures must be constructed within the twenty-five (25) foot buffer area of any state waters or the fifty (50) foot buffer of any trout stream; or

(d) construction of bulkheads or sea walls on Lake Oconee and Lake Sinclair where required to prevent erosion at the shoreline; or

(e) construction of public water system reservoirs.

(2) Variance applications will be reviewed by the Director only where the applicant provides reasonable evidence that impacts to the buffer have been avoided or minimized to the fullest extent practicable and only in the following cases:

(a) The project involves the construction or repair of an existing infrastructure project or a structure that, by its nature, must be located within the buffer. Such structures include, but are not limited to, dams, public water supply intake structures, detention/retention ponds, waste water discharges, docks including access ways, boat launches including access ways, and stabilization of areas of public access to water; or

(b) The project will result in the restoration or enhancement to improve water quality and/or aquatic habitat quality; or

(c) Buffer intrusion is necessary to provide reasonable access to a property or properties; or

(d) The intrusion is for water and sewer lines that cannot reasonably be placed outside the buffer, and stream crossings and vegetative disturbance are minimized; or

(e) Crossing for utility lines, including but not limited to gas, liquid, power, telephone, and other pipelines, provided that the number of crossings and the amount of vegetative disturbance are minimized; or

(f) Recreational foot trails and viewing areas, providing that impacts to the buffer are minimal; or

(g) The project involves construction of one (1) single family home for residential use by the owner of the subject property and, at the time of adoption of this rule, there is no opportunity to develop the home under any reasonable design configuration unless a buffer variance is granted. Variances will be considered for such single family homes only if construction is initiated or local government approval is obtained prior to January 10, 2005; or

(h) For non-trout waters, the proposed land disturbing activity within the buffer will require a permit from the United States Army Corps of Engineers under Section 404 of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, and the Corps of Engineers has approved a mitigation plan to be implemented as a condition of such a permit; or

(i) For non-trout waters, a plan is provided for buffer intrusion that shows that, even with the proposed land disturbing activity within

the buffer, the completed project will result in maintained or improved water quality downstream of the project; or

(j) For non-trout waters, the project with a proposed land disturbing activity within the buffer is located in, or upstream and within ten linear miles of, a stream segment listed as impaired under Section 303(d) of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1313(d) and a plan is provided that shows that the completed project will result in maintained or improved water quality in such listed stream segment and that the project has no adverse impact relative to the pollutants of concern in such stream segment; or

(k) The proposed land disturbing activity within the buffer is not eligible for a permit from the United States Army Corps of Engineers under Section 404 of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, but includes required mitigation in accordance with current EPD "Stream Buffer Variance Mitigation Guidance" document, and involves:

1. piping, filling, or re-routing of non-trout waters that are not jurisdictional Waters of the U.S.; or

2. stream buffer impacts due to new infrastructure projects adjacent to state waters (jurisdictional and non-jurisdictional Waters of the U.S.). This criterion shall not apply to maintenance and/or modification to existing infrastructure, which are covered under 391-3-7.05(2)(a).

(3) If the buffer impact will be minor, the buffer variance request shall include the following information at a minimum:

(a) Site map that includes locations of all state waters, wetlands, floodplain boundaries and other natural features, as determined by field survey.

(b) Description of the shape, size, topography, slope, soils, vegetation and other physical characteristics of the property.

(c) Dated and numbered detailed site plan that shows the locations of all structures, impervious surfaces, and the boundaries of the area of soil disturbance, both inside and outside of the buffer. The exact area of the buffer to be impacted shall be accurately and clearly indicated.

(d) Description of the project, with details of the buffer disturbance, including estimated length of time for the disturbance and justification for why the disturbance is necessary.

(e) Calculation of the total area and length of the buffer disturbance.

(f) Letter from the issuing authority (if other than the Division and as applicable) stating that the issuing authority has visited the site and determined the presence of state waters that require a buffer and that a stream buffer variance is required as per the local erosion and sedimentation control ordinance.

(g) Erosion, sedimentation and pollution control plan.

(h) Re-vegetation plan as described in the most recent publication of the Division's guidance book, "Streambank and Shoreline Stabilization" and/or a plan for permanent vegetation as per the "Manual for Erosion and Sedimentation Control in Georgia."

(i) For projects within the buffer of or upstream and within one linear mile of impaired stream segments on Georgia's "305(b)/303(d) List Documents (Final)," documentation that the project will have no adverse impacts relative to the pollutants of concern and if applicable, documentation that the project will be in compliance with the TMDL Implementation Plan(s).

(j) Any other reasonable information related to the project that the Division deems necessary to effectively evaluate the variance request.

(k) Applications must be on the most current forms provided by the Division.

(4) If the buffer impact will be major, the buffer variance request shall include all of the information in Sections (3)(a) thru (k) above, with the exception of (3)(h). A buffer variance request for major buffer impacts shall also include the following additional information:

(a) For variance requests made under Section (2)(h):

1. Joint Public Notice (JPN), if it is an individual permit;
2. Pre-Construction Notification (PCN), if it is a Nationwide Permit;
3. Mitigation calculations; and
4. Permit approval from the United States Army Corps of Engineers.

(b) Buffer mitigation plan addressing impacts to critical buffer functions, including water quality and floodplain, watershed and ecological functions based on an evaluation of existing buffer conditions and predicted post construction buffer conditions pursuant to Section (7)(c) herein.

(c) Plan for stormwater control once site stabilization is achieved, when required by a local stormwater ordinance.

(d) For variance requests made under Sections (2)(i) and (2)(j), the application shall include the following water quality information:

1. Documentation that post-development stormwater management systems to conform to the minimum standards for water quality, channel protection, overbank flood protection and extreme flood protection as established in the Georgia Stormwater Management Manual or the equivalent and if applicable, the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.

2. Documentation that existing water quality will be maintained or improved based on predicted pollutant loading under pre- and post-development conditions as estimated by models accepted by the Division.

(e) For variance requests made under Section (2)(j), if the proposed project is in, or upstream and within ten linear miles of impaired stream segments on Georgia's "305(b)/303(d) List Documents (Final)," documentation that the project will have no adverse impacts relative to the pollutants of concern and if applicable, documentation that the project will be in compliance with the TMDL Implementation Plan(s).

(f) For variance requests made under Section (2)(k)1., the application shall include documentation from the United States Army Corps of Engineers verifying the water bodies identified in the application are non-jurisdictional waters of the United States under Section 404 of the Clean Water Act.

(5) Upon receipt of a completed application in accordance with Sections 391-3-7-.05(3) or 391-3-7-.05(4), the Division shall consider the completed application and the following factors in determining whether to issue a variance:

(a) Locations of state waters, wetlands, floodplain boundaries and other natural features as determined by field surveys.

(b) Shape, size, topography, slope, soils, vegetation and other physical characteristics of the property.

(c) Location and extent of buffer intrusion.

(d) Whether reasonable alternative project designs, such as the use of retaining walls, are possible which do not require buffer intrusion or which require less buffer intrusion.

(e) Whether issuance of the variance, with the required mitigation plan, re-vegetation plan and/or plan for permanent vegetation, is at least as protective of natural resources and the environment (including wildlife habitat).

(f) The current condition of the existing buffer, to be determined by:

1. The extent to which existing buffer vegetation is disturbed;

2. The hydrologic function of the buffer; and

3. Stream characteristics such as bank vegetative cover, bank stability, prior channel alteration or sediment deposition.

(g) The extent to which the encroachment into the buffer may reasonably impair buffer functions.

(h) The value of mitigation activities conducted pursuant to this rule, particularly Subsections 391-3-7-.05(7)(c) and 391-3-7-.05(7)(d) herein, and shall take regional differences into consideration on-site or downstream, to be determined by development techniques or other measures that will contribute to the maintenance or improvement of water quality, including the use of low impact designs and integrated best management practices, and reduction in effective impervious surface area.

(i) The long-term water quality impacts of the proposed variance, as well as the construction impacts. And for applications made

under Subsections 391-3- 7.05(2)(i) and 391-3-7-.05(2)(j), the following criteria, which reflect regional differences in the state, shall be used by the Director to assist in determining whether the project seeking a variance will, when completed and with approved mitigation, result in maintained or improved water quality downstream of the project and minimal net impact to the buffer:

1. Division will assume that the existing water quality conditions are commensurate with an undeveloped forested watershed unless the applicant provides documentation to the contrary. If the applicant chooses to provide baseline documentation, site and/or stream reach specific water quality, habitat, and/or biological data would be needed to document existing conditions. If additional data are needed to document existing conditions, the applicant may need to submit a monitoring plan and have it approved by the Division prior to collecting any monitoring data. Existing local data may be used, if available and of acceptable quality to the Division.

2. The results of the predicted pollutant loading under pre- and post-development conditions as estimated by models accepted by the Division indicate that existing water quality conditions will be maintained or improved.

(j) For applications made under Section 391-3-7-.05(2)(j), for which a land disturbing activity is proposed within the buffer of a 303(d) listed stream, or upstream and within 10 linear miles of a 303(d) listed stream, the results of the model demonstrate that the project has no adverse impact relative to the pollutants of concern in such stream segment.

(6) Within 60 days of receipt of a complete buffer variance application, the Division will either provide written comments to the applicant or propose to issue a variance. When the Division proposes to issue a variance, it will issue a public notice. The public notice shall describe the proposed buffer encroachment, the

location of the project, where the public can review site plans, and where comments should be sent. The public shall have 30 days from the date of publication of the public notice to comment on the proposed buffer variance.

(7) In all cases in which a buffer variance is issued, the following conditions shall apply:

(a) The variance shall be the minimum reduction in buffer width necessary to provide relief. Streams shall not be piped if a buffer width reduction is sufficient to provide relief.

(b) Disturbance of existing buffer vegetation shall be minimized.

(c) Mitigation is required for all major buffer impacts and shall offset the buffer encroachment and any loss of buffer functions. Where lost functions cannot be replaced, mitigation shall provide other buffer functions that are beneficial. Buffer functions include, but are not limited to:

1. temperature control (shading);

2. streambank stabilization;

3. trapping of sediments, if any;

4. removal of nutrients, heavy metals, pesticides and other pollutants;

5. aquatic habitat and food chain;

6. terrestrial habitat, food chain and migration corridor; and

7. buffering of flood flows.

(d) Mitigation should be on-site when possible. Depending on site conditions, acceptable forms of mitigation may include but are not limited to:

1. Restoration of the buffer to a naturally vegetated state to the extent practicable, or to current existing conditions;

2. Bioengineering of channels to reduce bank erosion and improve habitat;

3. Creation or restoration of wetlands;

4. Stormwater management systems to better maintain the pre-development flow regime (with consideration given to downstream effects) that exceeds the requirements of applicable ordinances at the time of application;

5. Reduction in pollution sources, such as on-site water quality treatment or improving the level of treatment of septic systems;

6. Other forms of mitigation that protect or improve water quality and/or aquatic wildlife habitat;

7. An increase in buffer width elsewhere on the property;

8. Mitigation as required under a Clean Water Act Section 404 or Nationwide permit issued by the U.S. Army Corps of Engineers;

9. Stormwater management systems described in the most recent publication of the Georgia Stormwater Management Manual and the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual;

10. Mitigation as described in the most recent publication of the Division's guidance document, Stream Buffer Mitigation Guidance.

(e) Forms of mitigation that are *not* acceptable include:

1. Activities that are already required by the Georgia Erosion and Sedimentation Act, such as the minimal use of best management practices;

2. Activities that are already required by other federal, state and local laws, except as described in 391-3-7.05(7)(d) above. U.S. Army Corps of Engineers mitigation is acceptable.

(f) The Division will not place a condition on a variance that requires a landowner to deed property or the development rights of property to the state or to any other entity. The landowner may voluntarily preserve property or the development rights of property as a mitigation option with the agreement of the Division.

(8) If the approved buffer impacts are not completed within five years of the date issued, buffer variances issued on or after the effective date of this rule will become null and void.

The applicant may request a buffer variance time extension only if the approved buffer impacts will not be completed prior to the buffer variance expiration date. The buffer variance time extension, if granted, can be for a period of up to five years. If the applicant can demonstrate that a time extension for a period of greater than five years is reasonable, the Director may grant a buffer variance time extension for a reasonable period of greater than five years. A buffer variance time extension may be issued only once.

The buffer variance time extension must be requested in writing at least 90 calendar days prior to the buffer variance expiration date with justifiable cause demonstrated. Once an approved buffer variance expires, it is no longer eligible for a time extension.

Time extension requests will be reviewed by the Division. The Division will either provide written comments to the applicant or propose to issue a buffer variance time extension within 60 days of receipt of a time extension request. If there are any other changes to the original buffer variance application, the Division shall issue a public notice in accordance with Section 391-3-7-.05(6).

If a variance issued by the Director is acceptable to the issuing authority, the variance shall be included as a condition of permitting and therefore becomes a part of the permit for the proposed land disturbing activity project. If a stream buffer variance is not acceptable to the issuing authority, the issuing authority may issue a land disturbing permit without allowing encroachment into the buffer.

(9) A general variance is provided for piping of trout streams with an average annual flow of 25 gpm or less.

(10) To obtain this general variance in Section 391-3-7.05(9) for encroaching on the buffer of a trout stream, the applicant must submit information to the issuing authority or EPD if there is no issuing authority demonstrating that the average annual flow in the stream is 25 gpm or less. There are two acceptable methods for making this determination.

(a) The USGS unit area runoff map may be used to determine the threshold acreage that will produce an average annual flow of 25 gpm or less.

(b) The applicant may submit a hydrologic analysis certified by a Registered Professional Engineer or Geologist that presents information sufficient to estimate that the average annual flow of each stream to be piped is 25 gpm or less with a high level of certainty.

(11) Any stream piping performed in accordance with this general variance in Section 391-3- 7.05(9) shall be subject to the following terms:

(a) The total length of stream that is piped in any one property shall not exceed 200 feet.

(b) Any project that involves more than 200 ft of piping will require an individual variance for the entire project. The general variance may not be applied to a portion of a project; e.g., it is not permissible to pipe 200 ft of a stream under the general variance and seek an individual variance for an additional length of pipe.

(c) The downstream end of the pipe shall terminate at least 25 ft before the property boundary.

(d) The applicant for a Land Disturbing Activity Permit shall notify the appropriate issuing authority of the precise location and extent of all streams piping as part of the land disturbing activity permit application. The issuing authority (if other than the Division) shall compile this information and convey it to the Division annually.

(e) Where piping of a stream increases the velocity of stream flow at the downstream end of the pipe, appropriate controls shall be employed to reduce flow velocity to the predevelopment level. Plans for such controls must be submitted as part of the land disturbing activity permit.

Authority: O.C.G.A. Sec. 12-7-6.

391-3-7-.11 Coastal Marshlands Buffer Variance Procedures and Criteria.

(1) Buffers on state waters are valuable in protecting and conserving land and water resources. Therefore, there is

established a 25 foot buffer along coastal marshlands, as measured horizontally from the coastal marshland-upland interface, except:

(a) Where the Director determines to allow a variance that is at least as protective of natural resources and the environment under the variance criteria in 391-3-7-.11(2) through (7) or under the variance by rule criteria in 391-3-7-.11(9); or

(b) Where otherwise allowed by the Director pursuant to O.C.G.A §12-2-8; or

(c) Where an alteration within the buffer area has been authorized pursuant to O.C.G.A. §12-5-286; or

(d) For maintenance of any currently serviceable structure, landscaping, or hardscaping, including bridges, roads, parking lots, golf courses, golf cart paths, retaining walls, bulkheads, and patios; provided, however, that if such maintenance requires any land-disturbing activity, adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented; or

(e) Where a drainage structure or roadway drainage structure is constructed or maintained; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented; or

(f) On the landward side of any currently serviceable shoreline stabilization structure; or

(g) For the maintenance of any manmade storm-water detention basin, golf course pond, or impoundment that is located entirely within the property of a single individual, partnership, or corporation; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented; or

(h) Crossings for utility lines that cause a width of disturbance of not more than 50 feet within the buffer; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented; or

(i) Any land-disturbing activity conducted pursuant to and in compliance with a valid and effective land-disturbing permit issued subsequent to April 22, 2014, and prior to December 31, 2015; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented; or

(j) Any lot for which the preliminary plat has been approved prior to December 31, 2015 if roadways, bridges, or water and sewer lines have been extended to such lot prior to the effective date of this Act and if the requirement to maintain a 25 foot buffer would consume at least 18 percent of the high ground of the platted lot otherwise available for development; provided, however, that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented.

(2) The buffer variance process will apply to all projects legally eligible for variances, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. Variance applications will be reviewed by the Director only in the following cases:

(a) The project involves the construction or repair of an existing infrastructure project or a structure that, by its nature, must be located within the buffer. Such structures include, but are not limited to, dams, public water supply intake structures, detention/retention ponds, waste water discharges, docks including access ways, boat launches including access ways and stabilization of areas of public access to water; or

(b) The project will result in the restoration or enhancement to improve water quality and/or aquatic habitat quality; or

(c) Buffer intrusion is necessary to provide reasonable access to a property or properties; or

(d) The intrusion is for utility lines within or adjacent to existing utility or transportation right of ways or that cannot reasonably be placed outside the buffer, and crossings and vegetative disturbance are minimized; or

(e) Crossing for utility lines, including but not limited to gas, liquid, power, telephone, and other pipelines, provided that the number of crossings and the amount of vegetative disturbance are minimized; or

(f) Recreational foot trails and viewing areas, providing that impacts to the buffer are minimal; or

(g) The project involves construction of one (1) single family home for residential use by the owner of the subject property and, at the time of adoption of this rule, there is no opportunity to develop the home under any reasonable design configuration unless a buffer variance is granted. Variances will be considered for such single family homes only if construction is initiated or local government approval is obtained prior to January 10, 2005; or

(h) The proposed land disturbing activity within the buffer will require a permit from the United States Army Corps of Engineers under Section 404 of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, and the Corps of Engineers has approved a mitigation plan to be implemented as a condition of such a permit; or

(i) A plan is provided for buffer intrusion that shows that, even with the proposed land disturbing activity within the buffer, the completed project will result in maintained or improved water quality; or

(j) The proposed land disturbing activity includes an alteration within the buffer that has been authorized pursuant to a permit issued by the United States Army Corps of Engineers under Section 404 of the Federal Water Pollution Control Act of 1972, as amended, or Section 10 of the Rivers and Harbors Act of 1899; or

(k) The proposed land disturbing activity within the buffer is not eligible for a permit from the United States Army Corps of Engineers under Section 404 of the federal Water Pollution Control Act Amendment of 1972, 33 U.S.C. Section 1344, and involves:

1. Piping, filling, or re-routing of waters that are not jurisdictional Waters of the U.S.; or

2. Buffer impacts due to new infrastructure projects adjacent to state waters (jurisdictional and non-jurisdictional Waters of the U.S.). This criterion shall not apply to maintenance and/or modification to existing infrastructure.

(3) Except as provided in 391-3-7-.11(9), if the buffer impact will be minor, the buffer variance request shall include the following information at a minimum:

(a) Site map that includes locations of all state waters, wetlands, floodplain boundaries and other natural features, as determined by field survey.

(b) Description of the shape, size, topography, slope, soils, vegetation and other physical characteristics of the property.

(c) Dated and numbered detailed site plan that shows the locations of all structures, impervious surfaces, and the boundaries of the area of soil disturbance, both inside and outside of the buffer. The exact area of the buffer to be impacted shall be accurately and clearly indicated.

(d) Description of the project, with details of the buffer disturbance, including estimated length of time for the disturbance and justification for why the disturbance is necessary.

(e) Calculation of the total area and length of the buffer disturbance.

(f) Letter from the issuing authority (if other than the Division and as applicable) stating that the issuing authority has visited the site and determined the presence of coastal marshlands that require a buffer and that a buffer variance is required.

(g) Erosion, sedimentation and pollution control plan.

(h) Re-vegetation plan as described in the most recent publication of the Division's guidance book, "Streambank and Shoreline Stabilization", or the "Hydromodification Best Management Practice Manual for Coastal Georgia," and/or a plan for permanent vegetation as per the "Manual for Erosion and Sedimentation Control in Georgia."

(i) For projects within the buffer of or upstream and within one linear mile of an impaired water body on Georgia's "305(b)/303(d) List Documents (Final)," documentation that the project will have no adverse impacts relative to the pollutants of concern and if applicable, documentation that the project will be in compliance with the TMDL Implementation Plan(s).

(j) Applications must be on the most current forms provided by the Division.

(4) If the buffer impact will be major, the buffer variance request shall include all of the information in 391-3-7-.11(3)(a) through (j) above, with the exception of 391-3-7-.11(3)(h). A buffer variance request for major buffer impacts shall also include the following additional information:

(a) For variance requests made under 391-3-7-.11(2)(h) or (j):

1. Joint Public Notice (JPN), if it is an individual permit;
2. Pre-Construction Notification (PCN), if it is a Nationwide Permit;
3. Mitigation calculations; and
4. Permit approval from the United States Army Corps of Engineers.

(b) Buffer mitigation plan addressing impacts to critical buffer functions, including water quality and floodplain, watershed and ecological functions based on an evaluation of existing buffer conditions and predicted post construction buffer conditions pursuant to 391-3-7-.11(7)(c) herein.

(c) Plan for stormwater control once site stabilization is achieved, when required by a local stormwater ordinance.

(d) For variance requests made under 391-3-7-.11(2)(i), the application shall include the following water quality information:

1. Documentation that post-development stormwater management systems to conform to the minimum standards for water quality, channel protection, overbank flood protection and extreme flood protection as established in the Georgia Stormwater Management Manual or the equivalent and if applicable, the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.

2. Documentation that existing water quality will be maintained or improved based on predicted pollutant loading under pre- and post-development conditions as estimated by models accepted by the Division.

(e) For variance requests made under 391-3-7-.11(2)(k)1., the application shall include documentation from the United States Army Corps of Engineers verifying the water bodies identified in the application are non-jurisdictional waters of the United States under Section 404 of the Clean Water Act.

(5) Upon receipt of a complete application, the Division shall consider the complete application and the following factors in determining whether to issue a variance:

(a) Locations of state waters, wetlands, coastal marshlands, floodplain boundaries and other natural features as determined by field surveys.

(b) Shape, size, topography, slope, soils, vegetation and other physical characteristics of the property.

(c) Location and extent of buffer intrusion.

(d) Whether reasonable alternative project designs, such as the use of retaining walls are possible which do not require buffer intrusion or which require less buffer intrusion.

(e) Whether issuance of the variance, with the required mitigation plan, re-vegetation plan and/or plan for permanent vegetation, is at least as protective of natural resources and the environment.

(f) The current condition of the existing buffer, to be determined by:

1. The extent to which existing buffer vegetation is disturbed;

2. The hydrologic function of the buffer; and

3. Hydrologic functional characteristics such as bank vegetative cover, bank stability, or prior channel alteration.

(g) The extent to which the encroachment into the buffer may reasonably impair buffer functions.

(h) The value of mitigation activities conducted pursuant to this rule, particularly 391-3-7-.11(7)(c) and (d) herein, development techniques or other measures that will contribute to the maintenance or improvement of water quality, including the use of low impact designs and integrated best management practices, and reduction in effective impervious surface area.

(i) The long-term water quality impacts of the proposed variance, as well as the construction impacts. And for applications made under 391-3-7-.11(2)(i), the following criteria shall be used by the Director to assist in determining whether the project seeking a variance will, when completed and with approved mitigation, result in maintained or improved water quality downstream of the project and minimal net impact to the buffer:

1. The Division will assume that the existing water quality conditions are commensurate with an undeveloped maritime forested watershed unless the applicant provides documentation to the contrary. If the applicant chooses to provide baseline documentation, site specific water quality, habitat, and /or biological data would be needed to document existing conditions. If additional data are needed to document existing conditions, the applicant may need to submit a monitoring plan and have it approved by the Division prior to collecting any monitoring data. Existing local data may be used, if available and of acceptable quality to the Division.

2. The results of the predicted pollutant loading under pre- and post-development conditions as estimated by models accepted by the Division indicate that existing water quality conditions will be maintained or improved.

(j) For applications made under 391-3-7-.11(2)(i), for which a land disturbing activity is proposed within the buffer of a 303(d) listed water body, or upstream and within one linear mile of a 303(d) listed water body, the results of the model demonstrate that the project has no adverse impact relative to the pollutants of concern.

(6) Within 60 days of receipt of a complete buffer variance application, the Division will either provide written comments to the applicant or propose to issue a variance. When the Division proposes to issue a variance, it will issue a public notice. The public notice shall describe the proposed buffer encroachment, the location of the project, where the public can review site plans, and where comments should be sent. The public shall have 30 days from the date of publication of the public notice to comment on the proposed buffer variance.

(7) In all cases in which a buffer variance is issued, the following conditions shall apply:

(a) The variance shall be the minimum reduction in buffer width necessary to provide relief.

(b) Disturbance of existing buffer vegetation shall be minimized.

(c) Mitigation is required for all major buffer impacts and shall offset the buffer encroachment and any loss of buffer functions. Where lost functions cannot be replaced, mitigation shall provide other buffer functions that are beneficial. Buffer functions include, but are not limited to:

1. temperature control (shading);

2. bank stabilization;

3. trapping of sediments, if any;

4. removal of nutrients, heavy metals, pesticides and other pollutants;

5. aquatic habitat and food chain;

6. terrestrial habitat, food chain and migration corridor;

7. buffering of flood flows; and

8. maintenance of salinity through buffering of freshwater flows.

(d) Mitigation should be on-site when possible. Depending on site conditions, acceptable forms of mitigation may include, but are not limited to:

1. Restoration of the buffer to a naturally vegetated state to the extent practicable, or to current existing conditions. Information on natural vegetation in Coastal Georgia is available from the University of Georgia Marine Extension Service at http://marex.uga.edu/ecoscapes/ or http://www.caes.uga.edu/extension/bryan/anr/documents/nativeplantlist.pdf;

2. Bioengineering of channels to reduce bank erosion and improve habitat;

3. Creation or restoration of wetlands;

4. Stormwater management systems to better maintain the pre-development flow regime (with consideration given to downstream

effects) that exceeds the requirements of applicable ordinances at the time of application;

5. Reduction in pollution sources, such as on-site water quality treatment or improving the level of treatment of septic systems;

6. Other forms of mitigation that protect or improve water quality and/or aquatic wildlife habitat;

7. An increase in buffer width elsewhere on the property;

8. Mitigation as required under a Clean Water Act Section 404 or Nationwide permit issued by the U.S. Army Corps of Engineers; or

9. Stormwater management systems described in the most recent publication of the Georgia Stormwater Management Manual and the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.

(e) Forms of mitigation that are *not* acceptable include:

1. Activities that are already required by the Georgia Erosion and Sedimentation Act, such as the minimal use of best management practices;

2. Activities that are already required by other federal, state and local laws, except as described in 391-3-7-.11(7)(d) above. U.S. Army Corps of Engineers mitigation is acceptable.

(f) The Division will not place a condition on a variance that requires a landowner to deed property or the development rights of property to the state or to any other entity. The landowner may voluntarily preserve property or the development rights of property as a mitigation option with the agreement of the Division.

(g) If a variance issued by the Director is acceptable to the issuing authority, the variance shall be included as a condition of permitting and therefore becomes a part of the permit for the proposed land disturbing activity project. If a buffer variance is not acceptable to the issuing authority, the issuing authority may issue a land disturbing permit without allowing encroachment into the buffer.

(8) A buffer variance will expire five years after the effective date, unless a request for an extension is submitted prior to the expiration date, with justifiable cause demonstrated.

The applicant may request a buffer variance time extension only if the approved buffer impacts will not be completed prior to the buffer variance expiration date. The buffer variance time extension, if granted, can be for a period of up to five years. If the applicant can demonstrate that a time extension for a period of greater than five years is reasonable, the Director may grant a buffer variance time extension for a reasonable period of greater than five years.

Time extension requests will be reviewed by the Division. The Division will either provide written comments to the applicant or propose to issue a buffer variance time extension within 60 days of receipt of a time extension request. If there are any significant changes to the original buffer variance application, the Division shall issue a public notice in accordance with 391-3-7-.11(6).

(9) Variance By Rule

(a) Notwithstanding any other provision of these Rules, the following activities have minimal impact on the water quality or aquatic habitat of the adjacent coastal marshland and therefore are deemed to have an approved buffer variance.

1. Activities where the area within the buffer is not more than 500 square feet.

2. Activities that have a "Minor Buffer Impact" as defined in 391-3-7-.01(r), provided that the total area of buffer impacts is less than 5,000 square feet. A proposed development site may not be subdivided into smaller projects or phases to circumvent the 5,000 square feet limitation.

(b) Bank and shoreline stabilization structures are not eligible for coverage under the variance by rule.

(c) Notification shall be made at least 14 days prior to the commencement of land-disturbing activities to provide the Division an opportunity to review the activity to ensure it meets the applicable criteria. Unless notified by the Division to the contrary, an applicant who submits a notification in accordance with 391-3-7-.11(9) is authorized to encroach into the buffer 14 days after the notification form is received by the Division. A buffer variance by rule expires if the buffer impacts are not completed within two years after the notification form is received by the Division. The Director may deny coverage under this variance by rule and require submittal of an application for an individual variance based on the review of the documentation submitted or other information. Persons failing to notify the Director of such activities shall be deemed to be operating without a variance.

(d) Notification for a variance by rule is to be submitted by return receipt certified mail (or similar service that provides confirmation of receipt) to both the Division and to the Local Issuing Authority in jurisdictions authorized to issue Land Disturbance Permits.

(e) An individual variance will be required for any activity that does not qualify for a variance by rule.

(f) Any notification for a variance by rule shall include the following:

1. Description of the activity, with details of the buffer disturbance, including area and length of the buffer to be impacted and estimated length of time for the disturbance.

2. Photographs of the area that will be affected by the proposed activity.

3. Notice of a land-disturbing activity to be covered by a variance by rule must be on the most current forms provided by the Division.

(g) Any variance by rule shall be subject to the following requirements:

1. The following information shall be maintained onsite until final stabilization of the site is complete:

i. Site plan that shows the locations of all structures, impervious surfaces, and the boundaries of the area of soil disturbance, both inside and outside of the buffer. The exact area and length of the buffer to be impacted shall be accurately and clearly indicated.

ii. Documentation that adequate erosion control measures are incorporated into the project plans and specifications.

2. Disturbance of existing buffer vegetation shall be minimized.

3. Final stabilization of the site must include a re-vegetation plan as described in the most recent publication of the Division's guidance book, "Streambank and Shoreline Stabilization." It is recommended that vegetation be native riparian vegetation.

4. Temporary vegetative measures must be implemented within 14 calendar days following the completion of any soil disturbance and the site shall be stabilized at the end of every day until project completion.

5. Proper and full implementation of the erosion control measures in 391-3-7-.11(9)(g)1.ii.

6. Post construction stormwater management practices should be considered. Best management practices can be found in the latest edition of the Georgia Stormwater Management Manual or the Coastal Supplement to the Georgia Stormwater Management Manual.

7. All other applicable federal, state, and local laws, rules and ordinances, including erosion and sedimentation control must be fully complied with prior to commencement of project construction.

8. For a variance by rule under 391-3-7-.11(9)(a)1., cumulative impacts shall not exceed 500 square feet within a 5 year period.

9. Any activity that does not meet the requirements of 391-3-7-.11(9)(g) is in violation of the variance by rule.

Authority: O.C.G.A. Sec. 12-7-6.

Insert Tab 4

NPDES

Back of Tab

1

NPDES GENERAL PERMITS

STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITY

GSWCC

Level II: Introduction to Design July 2016

2

Overview

Coverage – Slide 5
Notice of Intent – Slide 20
Special Conditions – Slide 31
ES&PC Plan – Slide 42
Notice of Termination – Slide 85

What is NPDES?

3

National Pollutant Discharge Elimination System

Created by the Federal Clean Water Act to control water pollution by regulating the discharge of pollutants to surface waters

The GA EPD has been "authorized" by the U.S. EPA to issue NPDES General Permits within the State

3 NPDES General Permits

4

GAR100001 – Stand Alone
GAR100002 – Infrastructure
GAR100003 – Common Development

- The Permits became effective on September 24, 2013
  - Revised July 1, 2016
  - Valid for 5 years (Expires July 31, 2018)
- Permits are available @
  - www.epd.georgia.gov
  - www.gaswcc.georgia.gov

5

Part I. Coverage Under The Permit

Permit Area
Eligibility
Definitions

Coverage Under the Permit

6

- Permit Area
  - These permits regulate point source discharges of storm water to the waters of the State of Georgia from construction activities
- Eligibility
  (1) Construction activities that will result in land disturbance equal to or greater than one (1) acre
  (2) Construction activities involving less than one (1) acre which are a part of a larger common development (i.e. greater than one (1) acre)

Part I.A. Part I.C.

"Construction Activity"

7

- The disturbance of soils associated with clearing, grading, excavating, filling of land, or other similar activities
- Does not include agricultural and silvicultural practices, but does include agricultural buildings

Part I.B.

"Stand Alone Construction" (GAR100001)

8

- Construction activities that are not part of a common development where the primary permittee chooses not to use secondary permittees

Part I.B.

"Infrastructure Construction" (GAR100002)

9

- Construction activities that are not part of a common development that include the construction, installation, and maintenance of roadway and railway projects and conduits, pipes, pipelines, substations, cables, wires, trenches, vaults, manholes, and similar or related structures for the conveyance of natural gas, liquid petroleum products, electricity, telecommunications, water, storm water, or sewage

Part I.B.

"Infrastructure Construction"

10

Infrastructure Eligibility

11

- Infrastructure construction projects that will result in contiguous land disturbance equal to or greater than one (1) acre
- Contiguous areas of land disturbances includes those areas of land disturbances solely separated by:
  - Drilling & Boring activities
  - Waters of the State and adjacent State buffers
  - Roadways and/or Railways and/or Intersections

Part I.C.1(a)

Infrastructure Eligibility

12

- Coverage under this permit is not required for infrastructure construction projects that consist solely of routine maintenance for the original purpose of the facility that is performed to maintain the original line and grade and the hydraulic capacity
- Must comply with the following conditions:
  1. No mass grading
  2. Stabilized by the end of each day
  3. Duration of < 120 calendar days
  4. Final Stabilization at the end of the project

Part I.C.1(c)

Infrastructure Eligibility

13

- Coverage under this permit is not required for infrastructure road construction projects that consist solely of routine maintenance for the original purpose of the facility that is performed to maintain the original line and grade and vehicular capacity
- Must comply with the following conditions:
  1. No mass grading
  2. Stabilized by the end of each day
  3. Duration of < 120 calendar days
  4. Final Stabilization at the end of the project

Part I.C.1(d)

"Common Development" (GAR100003)

14

- A contiguous area where multiple, separate, and distinct construction activities will be taking place at different times on different schedules under one plan of development on or after August 1, 2000

Part I.B.

Permittees

15

- "Primary Permittee"
  - The Owner or Operator or both of a tract of land for a construction project subject to the permit
- "Secondary Permittee"
  - An owner, individual builder, utility company, or utility contractor that conducts a construction activity within a common development with an existing primary permittee
- "Tertiary Permittee"
  - The Owner or Operator of remaining lot(s) within a common development conducting a construction activity where the primary permittee and all secondary permittees have submitted a Notice of Termination or where a primary permittee no longer exists

Part I.B.

"Best Management Practices" (BMPs)

16

- Schedules of activities
- Prohibitions of practices
- Maintenance procedures
- Treatment requirements
- Operating procedures
- Practices to control spillage or leaks, sludge or waste disposal, or drainage from raw material storage
- **Sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation**
- These practices are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion & Sediment Control in Georgia" (Manual) published by the State Soil & Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia

Part I.B.

"Design Professional"

17

- A professional licensed in the State of Georgia in the field of:
  - Engineering
  - Architecture
  - Landscape Architecture
  - Forestry
  - Geology
  - Land Surveying

- A person that is a Certified Professional in Erosion & Sediment Control (**CPESC**) with a current certification by EnviroCert International, Inc.

Part I.B.

"Certified Personnel"

18

- A person who has successfully completed the appropriate certification course approved by GSWCC
  - Level 1A – Contractors, Builders, Superintendents, Consultants
  - Level 1B – Regulatory Inspectors
  - Level II – Design Professionals or Plan Reviewers

A "Certified Person" shall be on-site at all times when land-disturbing activities are being conducted

Part I.B.

"Normal Business Hours"

19

- Monday thru Friday, 8:00 a.m. to 5:00 p.m.
- Excluding:
  - Non-working Saturday
  - Non-working Sunday
  - Non-working Federal Holiday

Part I.B.

20

Part II. Notice of Intent Requirements

Deadlines

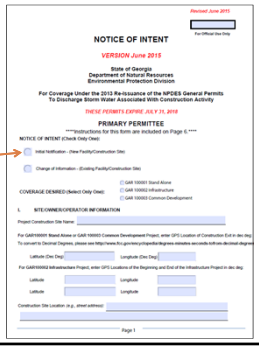
Submittal

Fees

Deadlines – Initial NOI

21

- For new construction sites, the permittee shall submit a Notice of Intent (NOI) at least 14 days prior to the commencement of construction activities
- The "Initial Notification" should be checked
- Applicable to primary, secondary, and tertiary permittees



Revised June 2015

For Official Use Only

NOTICE OF INTENT

VERSION June 2015

State of Georgia
Department of Natural Resources
Environmental Protection Division

For Coverage Under the 2013 Reissuance of the NPDES General Permits
To Discharge Storm Water Associated With Construction Activity

THESE PERMITS EXPIRE JULY 31, 2018

PRIMARY PERMITTEE

****Instructions for this form are included on Page 6.****

NOTICE OF INTENT (Check Only One):

☐ Initial Notification – (New Facility/Construction Site)

☐ Change of Information – (Existing Facility/Construction Site)

COVERAGE DESIRED (Select Only One):

☐ GAR 100001 Stand Alone
☐ GAR 100002 Infrastructure
☐ GAR 100003 Common Development

I. SITE/OWNER/OPERATOR INFORMATION

Project Construction Site Name:

For GAR100001 Stand Alone or GAR 100003 Common Development Project, enter GPS Location of Construction Exit in dec deg.
To convert to Decimal Degrees, please see http://www.fcc.gov/encyclopedia/degrees-minutes-seconds-to-from-decimal-degrees

Latitude (Dec Deg): Longitude (Dec Deg):

For GAR100002 Infrastructure Project, enter GPS Locations of the Beginning and End of the Infrastructure Project in dec deg.

Latitude Longitude
Latitude Longitude

Construction Site Location (e.g., street address):

Page 1

Part II.A.1.

Deadlines – Re-issuance NOI

22

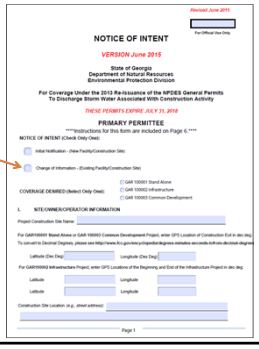
- After July 31, 2018, permittees with existing construction sites will be required to submit a re-issuance NOI for continued permit coverage
- No additional fees are required if they had already been paid

Part II.A.2.

Deadlines – Change of Information

23

- Where the permittee changes or a secured creditor (i.e. Foreclosure) acquires legal title to the construction site after an NOI has been filed, a change of information NOI shall be filed within
  - 7days before work begins at the site **OR**
  - 30 days from acquiring legal title to the site



Part II.A.4.

Submittal

24

- All NOIs types for primary, secondary, and tertiary permittees are to be submitted by **return receipt certified mail** (or similar service) to both the:
  - GA EPD - District Office
  - Local Issuing Authority
- The permittee shall retain a copy of the proof of submittal at the construction site or be readily available at a designated alternative location

Part II.C.

Tertiary Permittee Submittal Options

25

- Option (1)
  - The permittee may submit a NOI for each individual lot and a new ES&PC Plan for each individual lot. For each NOI submitted, the Tertiary Permittee must submit a Notice of Termination
- Option (2)
  - If the permittee's total land disturbance with the construction site is less than 5 acres and the total land disturbance within the individual lot(s) is less than 1 acre, the permittee may submit a single NOI and ES&PC Plan for a typical individual lot(s). A Notice of Termination is required for each individual lot

Tertiary Permittee Submittal Options

26

- Option (3)
  - The permittee may submit a single NOI – Initial Notification for the entire construction site and a new ES&PC plan for the entire construction site
  - The permittee may submit the NOI – Initial Notification as either a Primary or Tertiary
  - A single Notice of Termination is required at the end
- The Primary Permittee must notify the legal title holders of each remaining lot(s) that these lot Owners will become Tertiary Permittee(s) – applicable to all lots, including lots that are less than one acre

Utility Companies Submittal Options

27

- A Utility Company may submit an annual Blanket Notice of Intent covering all construction activities within common developments statewide on or before January 15th of the year in which coverage is desired
- A copy of the Blanket NOI shall be provided to the primary permittee not more than seven (7) days prior to the commencement of construction activities by the Utility Company at each site

Part II.B.2(l)

NPDES General Permit Fees

28

- The Primary Permittee is solely responsible for the payment of fees for all planned land disturbing activities, including all land disturbing activities within a Common Development that will be conducted by the Secondary Permittees and/or Tertiary Permittees.

Part II.D.

NPDES General Permit Fees

29

II. CONSTRUCTION SITE ACTIVITY INFORMATION AND FEE CALCULATIONS

Start Date: Completion Date:

Is this construction activity regulated by a certified Local Issuing Authority? ☐ Yes ☐ No

If Yes, Name of Local Issuing Authority:

NOTE: Instructions for fee calculations have been provided on Pages 6 - 7

						TOTAL FEE
☐ Acres Disturbed (to the nearest 1/10th acre) regulated by a certified Local Issuing Authority	Acres		X	40	Fee	$0.00
☐ Acres Disturbed (to the nearest 1/10th acre) in an area with no certified Local Issuing Authority	Acres		X	80	Fee	$0.00
☐ Acres Disturbed (to the nearest 1/10th acre) By an entity or activity exempt from a certified Local Issuing Authority's regulation pursuant to statute	Acres		X	80	Fee	$0.00

PLEASE MAKE CHECKS PAYABLE TO: **Department of Natural Resources - EPD**

Do not mail cash.

Do not include fees payable to the Local Issuing Authority.

NAME ON CHECK/MONEY ORDER

CHECK/MONEY ORDER NUMBER

CHECK/MONEY ORDER AMOUNT

Page 2

NPDES General Permit Fees

30

Project within certified LIA → $40 per disturbed acre to GA EPD; $40 per disturbed acre to LIA

Project not within certified LIA → $80 per disturbed acre to GA EPD

Project exempt under GESA that disturbs ≥1 acre → $80 per disturbed acre to GA EPD

31

Part III. Special Conditions

Biota Impaired Stream Segment
TMDL Implementation Plan

Criteria

32

Discharges into, or within One Mile Upstream of and within the Same Watershed as, Any Portion of a Biota Impaired Stream Segment

- Impaired Stream Segment(s) with criteria:
  - **Bio F** (Impaired Fish Community) and/or
  - **Bio M** (Impaired Macroinvertebrate Community) within
  - **Category 4a, 4b, or 5** and the potential cause is
  - Either "**NP**" (nonpoint source) or "**UR**" (urban runoff)

Part III.C.

Impaired Streams

33

- The ES&PC Plan must include at least four (4) BMPs for those areas of the site which discharge to the Impaired Stream Segment
- Part III.C.2. (a) – (u)

Additional Plan Requirements

34

a. During all construction activities as defined in this permit, double the width of the 25 foot undisturbed vegetated buffer along all State waters requiring a buffer and the 50 foot undisturbed vegetated buffer along all State waters classified as "trout streams" requiring a buffer. During construction activities, EPD will not grant variances to any such buffers that are increased in width pursuant to this section.

b. Increase all temporary sediment basins and retrofitted storm water management basins to provide sediment storage of at least 3600 cubic feet (134 cubic yards) per acre drained.

c. Use baffles in all temporary sediment basins and retrofitted storm water management basins to at least double the conventional flow path length to the outlet structure.

d. A large sign (minimum 4 feet x 8 feet) must be on the site on the actual start date of construction visible from a public roadway identifying the construction site, the permittee(s), and the contact person(s) and telephone number(s) until a NOT has been submitted.

e. Use anionic polyacrylamide (PAM) and/or mulch to stabilize all areas left disturbed for more than seven (7) calendar days in accordance with Part III.D.1. of this permit.

f. Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24 hour period, recognizing the exceptions specified in Part IV.D.6.d. of this permit.

Part III.C.2.

Additional Plan Requirements

35

g. Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as provided for in O.C.G.A. 12-7-6(a)(1).

h. Reduce the total planned site disturbance to less than 50% impervious surfaces (excluding any State-mandated buffer areas from such calculations). All calculations must be included on the Plan.

i. Limit the amount of disturbed area at any one time to no greater than 25 acres or 50% of the total planned site, whichever is less. All calculations must be included on the Plan.

j. Use "Dirt II" techniques available on the EPD website, www.gaepd.org (e.g., seep berms, sand filters, anionic PAM) to model and manage construction storm water runoff (including sheet flow). All calculations must be included on the Plan.

k. Add appropriate organic soil amendments (e.g., compost) and conduct pre- and post-construction soil sampling to a depth of 6 (six) inches to document improved levels of soil carbon after final stabilization of the construction site.

l. Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever construction storm water (including sheet flow) may be discharged. Mulch filter berms cannot be placed in waterways or areas of concentrated flow.

m. Apply the appropriate Georgia Department of Transportation approved erosion control matting or blankets or bonded fiber matrix to all slopes steeper than 3:1. All graphical illustrations must be included on the Plan.

Part III.C.2.

Additional Plan Requirements

36

n. Use appropriate erosion control matting or blankets instead of concrete in all construction storm water ditches and storm drainages designed for a 25 year, 24 hour rainfall event.

o. Use anionic PAM under a passive dosing method (e.g., flocculant blocks) within all construction storm water ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.

p. Install sod for a minimum 20 foot width (in lieu of seeding) after final grade has been achieved, along the site perimeter wherever construction storm water (including sheet flow) may be discharged.

q. Conduct soil tests to identify and to implement site-specific fertilizer needs.

r. Certified personnel shall conduct inspections at least twice every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV.D.4.a.(3).(a) – (c), Part IV.D.4.b.(3). (a) – (c) or Part IV.D.4.c.(3).(a) – (c) of this permit, as applicable.

s. 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.

t. Use alternative BMPs whose performance has been documented to be superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the State Soil and Water Conservation Commission).

u. 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.

Part III.C.2.

Exclusions

37

- These impaired stream requirements are not applicable to the following:
  - Tertiary permittees with a Plan(s) for a typical individual lot(s), if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each lot is less than one (1) acre
  - Those discharges located within one (1) linear mile, but are not located within the watershed of any portion of that impaired stream segment

Part III.C.

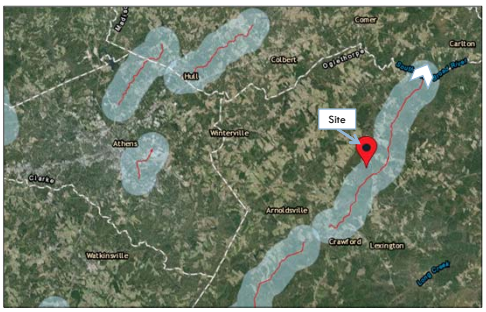
Resource Information

38

- Georgia's *305(b)/303(d) List Documents (Final)* can be viewed @ http://epd.georgia.gov/georgia-305b303d-list-documents
- Georgia's 305(b)/303(d) Impaired Streams can be viewed @ http://www.gaswcc.org/maps2/
- GIS Data Sets are available on the GA EPD website in ESRI Geodatabase 9.1 & ESRI Shapefile format @ http://epd.georgia.gov/geographic-information-systems-gis-databases-and-documentation

305(b)/303(d) Map

39



TMDL Implementation Plan

40

Total Maximum Daily Load

The ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan if the TMDL Implementation Plan for sediment was finalized at least 6 moths prior to the permittee's submittal of the NOI

The list of TMDL Implementation Plans can viewed on the GA EPD website @ www.epd.georgia.gov

Part II.C.1.

TMDL Implementation Plan

41

Total Maximum Daily Load

If no site-specific conditions or requirements have been included in the TMDL Implementation Plan for the applicable stream segments:

"NPDES construction activities are considered a significant source of pollution and compliance with the Permits should lead to sediment loading for construction sites at or below applicable targets"

Part II.C.1.

42

Part IV. ES&PC Plan

Stream Buffer Exemptions
Compliance
Contents of the ES&PC Plan
Inspections
Sampling

Stream Buffer Exemptions

43

- Stream crossings for water & sewer lines provided
  - It is within 25° of perpendicular to the stream
  - And the disturbance is not more than 50 ft. within the buffer
- Ephemeral Streams – excluding Trout streams
- Drainage Structures – warm water streams only
- Roadway Drainage Structures
- Construction of bulkheads or seawalls on:
  - Lake Sinclair & Lake Oconee

Part IV.(i)

Stream Buffer Exemptions

44

Stream Buffer Exemptions

45

Stream Buffer Exemptions

46

- Public Drinking Water System Reservoirs

Part IV.(i)(1)

Stream Buffer Exemptions

47

- Stream crossings for Utility Lines for any EMC, municipal electrical system (MES) or public utility under the regulatory jurisdiction of the PSC and/or FERC or any Cable Television System
- Right-of-Way Posts, Guy Wires, Anchors, Survey Markers and the replacement or maintenance of existing utility structures (1) undertaken by any EMC/MES or public utility under the regulatory jurisdiction of the PSC and/or FERC or (2) undertaken by DOT, GA Highway Authority, State Road & Tollway Authority or any municipality or county.

Part IV.(i)

Stream Buffer Exemptions

48

- Maintenance, repair and/or upgrade of SWCD Watershed Dams when under the technical supervision of USDA-NRCS

Part IV.(i)(8)

Coastal Marshlands Exemptions

49

- Public drinking water system reservoirs
- Utility line crossings
  - Not more than 50 ft. width of disturbance within the buffer
- Aerial utility line crossings
  - Does not exceed 100 linear ft.
  - Constructed to minimize the number of crossings
  - Disturbance to underlying vegetation is minimized
  - Vegetation is re-established in bare areas
- Fences

Coastal Marshlands Exemptions

50

- Right-of-Way Posts, Guy Wires, Anchors, Survey Markers and the replacement or maintenance of existing utility structures (1) undertaken by any EMC/MES or public utility under the regulatory jurisdiction of the PSC and/or FERC or (2) undertaken by DOT, GA Highway Authority, State Road & Tollway Authority or any municipality or county.

ES&PC Plan

51

- A site-specific Erosion, Sedimentation and Pollution Control Plan shall be designed, installed, and maintained for the entire construction activity
- The ES&PC Plan must be prepared by a certified *"design professional"* as defined by the permit

Signature

52

- The ES&PC Plan shall be signed in accordance with Part IV. and be retained on site (or a readily accessible location)
- The primary permittee of a common development shall ensure
  - That each secondary permittee is provided with a copy of the Plan
  - That each secondary permittee signs the Plan
  - That each secondary permittee understand their role in implementing the Plan

Part IV.B.1.

Keeping Plans Current

53

- The primary permittee(s) shall amend their Plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on BMPs with a hydraulic component
- Amendments must be certified by the "design professional"
- Hydraulic Component
  - BMPs where the design is based upon rainfall intensity, duration and return frequency of storms

Part IV.C.

50+ Acre Sites

54

- For sites that are equal to or greater than 50 acres disturbed, regardless of the existence of a LIA, the following is required:
  - A single copy of the Plan shall be submitted to the appropriate GA EPD District Office

Part IV.A.4.b.

50+ Acre Sites

55

- Stand Alone
  - The Plan shall limit the amount of disturbed area to no greater than 50 acres at any one time
- Infrastructure
  - There is no limitation on the amount of disturbed area
- Common Development
  - The Plan shall limit the amount of disturbed area to no greater than 50 acres for each individual permittee at any one time, and no more than 50 contiguous acres total at any one time

Part IV.D.3.

50+ Acre Sites

56

- The GA EPD will approve or disapprove such requests within 35 days of receipt
- If the GA EPD approves a request to disturb 50 acres or more at any one time, at least four (4) BMPs from Part III.C.2. (a) – (u) shall be included on the Plan

Part IV.D.3.

7-Day Letter

57

- For Stand Alone, Common Development & non-linear Infrastructure construction activities, the "design professional" who prepared the ES&PC Plan must inspect the installation of the initial sediment storage requirements and perimeter control BMPs within seven (7) days after installation
- The "design professional" must 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.

Part IV.A.5.

7-Day Letter

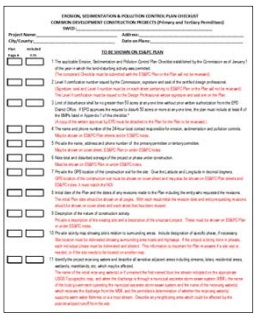
58

- Alternatively, for linear Infrastructure construction activities, the "design professional" who prepared the ES&PC Plan must inspect the installation of the sediment storage requirements and perimeter control BMPs for the INITIAL PHASED SUB-PART OR SEGMENT (> 10% of total disturbed area but not < one (1) acre) of the linear infrastructure project and ALL SEDIMENT BASINS within seven (7) days after installation.
- The "design professional" must 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.

Part IV.A..5.

Contents of the Plan

59



- The ES&PC Plan shall include "*BMPs*", including sound conservation and engineering practices, which are consistent with, and no less stringent than the "*Manual*"

Part IV.D.

Permittee Inspections

60

Daily

- Petroleum storage areas
- Locations where vehicles enter and exit the site
- Measure rainfall every 24 hours except any non-working Saturday, Sunday and Federal Holiday until a NOT is filed (*N/A for Secondary Permittee*)

Weekly & After ≥½" Rainfall

- Disturbed areas
- Areas used for storage of materials that are exposed to precipitation
- Structural control measures (BMPs)
- Discharge points

For Infrastructure Construction projects, these inspections are required every 14 days and after ≥½ rainfall

Monthly

- Areas of the site that have undergone "final stabilization"
- Discharge Points

Part IV.D.4.a-c.(1-4)

Rainfall Log

61

Daily Rainfall Log

Project Name:
Project Location:
Month: Year:
Type of Device Used to Measure Rainfall:
Device Location:

Daily Rainfall Monitoring

Date	Rainfall Amount, Inches	Time	Reported By

SAMPLE

Secondary Permittee Daily Inspections

62

- Utility Companies & Contractors
  - a) Areas disturbed by the utility company or contractor which have not undergone final stabilization.
  - b) Areas used by the utility company or contractor for storage of materials exposed to precipitation that have not undergone final stabilization
  - c) Structural control measures identified in the ES&PC Plan

Part IV.D.4.b.(2)

Permittee Inspection Results

63

- If BMP deficiencies are identified during an inspection, the BMP deficiencies should be documented and corrected as soon as practical
  - If corrective action requires a revision to the Plan, the Plan must be revised within 7 calendar days of the inspection.
  - Any Plan revisions must be implemented within 7 calendar days of the inspection.

Part IV.D.4.a-c.(5)

Permittee Inspection Results

64

- If BMP deficiencies are identified during a Secondary Permittee inspection, the Secondary Permittee must notify the Primary Permittee of any suspected BMP design deficiencies within 24 hours
  - Primary Permittee must evaluate any suspected BMP design deficiencies within 48 hours of notice.
  - Any Plan revisions affecting their site(s) must be implemented by the Secondary Permittee within 48 hours of notice.

Part IV.D.4.a-c.(5)

Permittee Inspection Reports

65

1) Name(s) of certified personnel
2) Signature of certified personnel
3) Date(s) of each inspection
4) Phase of construction
5) Observations relating to the implementation of the Plan
6) Corrective actions
7) Incidents of non-compliance
8) Where reports do not identify any incidents of non-compliance, the report must contain a certification statement that the site in is compliance with the ES&PC Plan and the Permit.

- All inspection reports must be retained at the site (or readily available at a designated alternative location)
- All permit violations (Part V.A.(2)) must be documented in the site records within 7 days of discovery and a report of these violations must be submitted to the appropriate GA EPD District Office within 14 days of discovery.

Part IV.D.4.a-c.(6)

Weekly Inspection Report

Inspection performed by certified personnel at least once every seven calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater

Project Information

Date: | Project Name:

Project Location:

Name of Inspector:

Inspection Event

Regular weekly inspection: ☐ | Inspection within 24 hours of 0.5" storm event: ☐

Inspection Observations

Disturbed areas that have not undergone final stabilization:

Are all of the temporary and permanent controls contained in Plan in place and properly maintained? ☐ Yes ☐ No

If no, describe the location(s) of deficiencies and corrective actions that must be taken.

Corrective Action Taken and Date:

Material storage areas exposed to precipitation:

Are all of the temporary and permanent controls contained in Plan in

If no, describe the location(s) of deficiencies and corrective actions

Corrective Action Taken and Date:

Discharge locations or points.

Are erosion control measures preventing impacts to receiving waters? ☐ Yes ☐ No

If no, describe observations.

Structural control measures:

Are all of the temporary and permanent controls contained in Plan in place and properly maintained? ☐ Yes ☐ No

If no, describe the location(s) of deficiences and corrective actions that must be taken.

Control Measures	Location	Deficiency	Date Corrected

Other observations:

Is an Erosion, Sedimentation and Pollution Control Plan revision required? ☐ Yes ☐ No Date of revision:

Signature of Certified Personnel: | Printed name of Certified Personnel:

SAMPLE

66

Sampling Requirements

67

- These permits require the sampling of nephelometric turbidity in receiving water(s), outfalls, or combination thereof
- Applicable to
  - Primary permittees – Total planned disturbance equal to or greater than one (1) acre
  - Secondary permittees – **N/A**
  - Tertiary permittees – Total planned disturbance equal to or greater than five (5) acres

Part IV.D.6.

Nephelometric Turbidity Units

68

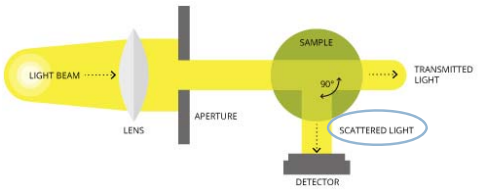
10 NTU

1000 NTU

Nephelometric Turbidity Units

69

Measurement of the amount of light passing through a sample of water



Sampling Methodology

70

- The analytical method included on the ES&PC Plan must include quality control/quality assurance procedures
- The narrative on the ES&PC Plan must include a precise sampling methodology for each sampling location
- All sampling shall be collected by "grab samples" and analyzed in accordance with the methodology and test procedures established by 40 CFR Part 136 & "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-011"

Part IV.D.6.

Sampling

71

- Containers should be labeled prior to collection
- Large, well cleaned glass or plastic jars should be used for collecting samples
- The samples should be taken from the center of the receiving water
- The container should be held so that it faces upstream
- The samples should be kept free of floating debris
- Samples should be analyzed within 48 hours after collection

Part IV.D.6.

Sample Methodology

72

Outfall Sampling Methodology

- A rationale must be included on the Plan for the NTU limit(s) selected from Appendix B rationale

Part III.D.5.

Receiving Waters Methodology

- The <u>increase</u> in turbidity from the Upstream sample to the Downstream sample shall not be more than:
  - **≤ 10 NTUs (Cold Water)**
  - **≤ 25 NTUs (Warm Water)**

Part III.D.4.

Appendix B Rationale

73

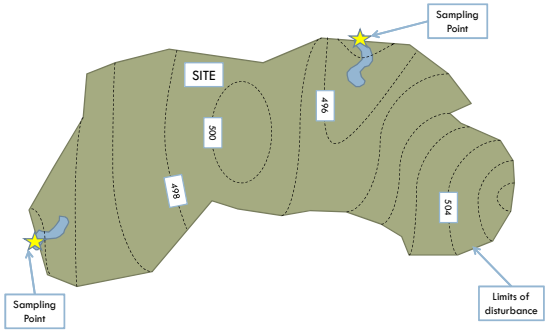
Waters Supporting Warm Water Fisheries

Surface Water Drainage Area square miles

Site Size, acres	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	75	150	200	400	750	750	750	750
10.01-25	50	100	100	200	300	500	750	750
25.01-50	50	50	100	100	200	300	750	750
50.01-100	50	50	50	100	100	150	300	600
100.01 +	50	50	50	50	50	100	200	100

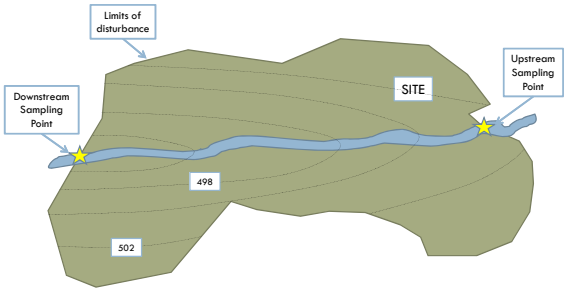
Sampling Points - Outfall

74



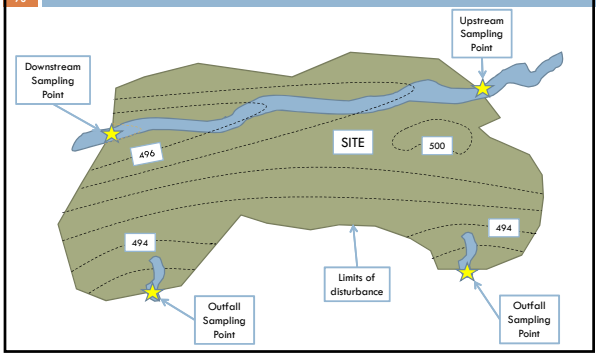
Sampling Points – Receiving Waters

75



Sampling Points – Combination

76



Sampling Frequency

77

- Samples from the following qualifying events shall be taken <u>no more than twelve (12) hours</u> after the beginning of the storm water discharge:
  1) The first rain event that reaches or exceeds 0.5 inch <u>after all clearing and grubbing operations</u> have been completed, but prior to completion of mass grading operations
  2) The first rain event that reaches or exceeds 0.5 inch either ninety (90) days after the first sampling event or <u>after all mass grading operations</u> have been completed, but prior to submittal of a NOT

Part IV.D.6.d.3(a-b)

Additional Sampling

78

- If any BMPs on site are not properly designed, installed, and maintained, turbidity samples shall be taken for <u>each subsequent</u> rain event that reaches or exceeds 0.5 inch until the selected turbidity standard is attained or inspections determine that BMPs have been installed and maintained properly

Part IV.D.6.d.3(c)

Sampling Frequency

79

- Where sampling is required but not possible (or not required because there was no discharge), the primary permittee, or the tertiary permittee, 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

Part IV.D.6.d.3(d)

Reporting of Results

80

- Reports should include the following:
  - The rainfall amount, date, location and time of sampling
  - The name of the certified personnel who performed the sampling
  - The date and time the analyses were performed
  - The name of the certified personnel who performed the analyses
  - References and written procedures
  - Results of the analyses, including instrument readouts
  - Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU"
  - Certification statement that sampling was conducted per the plan

Part IV.E.2.(a-i)

Reporting of Results

81

- The permittee is required to submit sampling results to the GA EPD District Office by the 15th day of the month following the sampling event
- Reports should be submitted by return receipt certified mail (or similar service)

Part IV.E.1.

Stormwater Monitoring Records

Month:_____ Year: _____ Sheet ___ of___

Submit to EPD by 15th of Following Month

Project Name: _____ Project Location: _____

Date Sampled	Rainfall Amount, Inches	Exact Location of Samples	Time Sampled	Sampling Technique Manual or Automatic	Sampled By	Date of Analysis	Time of Analysis	Analyzed By	Analytical Method	Results (NTU)

SAMPLE

I, (Name), certify that sampling procedures were conducted per the ES&PC Plan

_____
(Signature)

82

Retention of Records

83

- The following records shall be retained at the site or be made readily available at a alternative location:
  - Notice of Intent
  - ES&PC Plan
  - Design Professional 7-Day Inspection Letter (N/A for Secondary)
  - Sampling Results & Reports (N/A for Secondary)
  - Inspection Reports
  - Violation Reports
  - Daily Rainfall Information (N/A for Secondary)

Part IV.F.1.(a-g) Part IV.F.2.(a-d)

Retention of Records

84

- All of the previous records plus the Notice of Termination must be retained by the permittee who either produced or used it for a period of at least <u>three (3) years</u> from the date the NOT is submitted
- This period may be extended by request of the GA EPD at any time

Part IV.F.4.

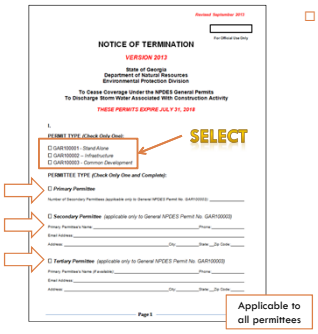
85

Part VI. Termination of Coverage

Eligibility
Contents
Submittal

Notice of Termination

86


Revised September 2012

For Official Use Only

NOTICE OF TERMINATION

VERSION 2012

State of Georgia
Department of Natural Resources
Environmental Protection Division

To Cease Coverage Under the NPDES General Permits
To Discharge Storm Water Associated With Construction Activity

THESE PERMITS EXPIRE JULY 31, 2014

I,

PERMIT TYPE (Check Only One):

☐ GAR100001 - Stand Alone
☐ GAR100002 – Infrastructure
☐ GAR100003 - Common Development

PERMITTEE TYPE (Check Only One and Complete):

☐ Primary Permittee

Number of Secondary Permittees (applicable only to General NPDES Permit No. GAR100003) _____

☐ Secondary Permittee (applicable only to General NPDES Permit No. GAR100003)

Primary Permittee's Name _____ Phone _____
Email Address _____
Address _____ City _____ State ___ Zip Code _____

☐ Tertiary Permittee (applicable only to General NPDES Permit No. GAR100003)

Primary Permittee's Name (if available) _____ Phone _____
Email Address _____
Address _____ City _____ State ___ Zip Code _____

Page 1

SELECT

Applicable to all permittees

- Eligibility
  - All planned construction activities have been completed
  - Where the entire site has undergone final stabilization
  - All storm water discharges have ceased
  - The site is in compliance with the permit
  - All temporary BMPs have been removed

Part VI.A.1.

"Final Stabilization"

87

- All soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures, <u>100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater</u>, 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 seeding of target perennials appropriate for the regions)

Part I.B.

Termination Eligibility

88

- The primary permittee of a Common Development may submit a Notice of Termination, even if all planned construction activities have not been completed, if and only if:
  - Construction activities have ceased for ninety (90) days
  - Final stabilization has been implemented by the primary and all secondary permittees
  - All secondary permittees have submitted a NOT
  - The site is in compliance with the Permit
  - All temporary BMPs have been removed

Part VI.A.1.

Termination Eligibility

89

- The primary permittee of a Infrastructure Construction project may submit a Notice of Termination for each phase of the project, not to exceed four (4) phases
- The disturbed acreage for each phase must be equal or greater than 25% of the total disturbed acreage – except for the final phase
- For the final phase, the disturbed acreage must be equal to or greater than 10% of the total estimated disturbed acreage

Part VI.A.1.

Contents

90

- The project site name and location – must correspond to NOI
- The owner/operator's legal name, address, telephone, and email
- Indication whether permittee is primary, secondary, or tertiary
- The name of the receiving water(s)
- Copies of all sampling reports
- Copy of NOI
- Signed Certification Statement

Part VI.B.

Submittal

91

- All Notices of Termination shall be submitted by return receipt mail to the appropriate GA EPD District Office **AND** Local Issuing Authority (LIA) in jurisdictions authorized to issue Land Disturbing Activity (LDA) permits

Part VI.C.

Summary

92

- NPDES Permits govern land disturbance of one (1) acre or more and individual lots within a common development
- Notice of Intent has to be submitted fourteen (14) days prior to the commencement of construction activities
- All ES&PC Plan contents can be found in Part IV. of the permits
- Notice of Termination can only be filed once the site has reached final stabilization

93

Questions?

GSWCC
Urban Program
P.O. Box 8024
Athens, GA 30603
(706) 552-4474

GSWCC

Insert Yellow Sheet

Back of Yellow Sheet

General Permit
No. GAR100001

State of Georgia
Department of Natural Resources
Environmental Protection Division

Authorization To Discharge Under The National Pollutant Discharge Elimination System Storm Water Discharges Associated With Construction Activity For Stand Alone Construction Projects

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the "State Act," the Federal Clean Water Act, as amended (33 U.S.C.1251 et seq.), hereinafter called the "Clean Water Act," and the Rules and Regulations promulgated pursuant to each of these Acts, new and existing storm water point sources within the State of Georgia that are required to have a permit, upon submittal of a Notice of Intent, are authorized to discharge storm water associated with construction activity to the waters of the State of Georgia in accordance with the limitations, monitoring requirements and other conditions set forth in Parts I through VI hereof.

This permit shall become effective on September 24, 2013.

This permit and the authorization to discharge shall expire at midnight, July 31, 2018.

Signed this 23rd day of September 2013

Director,
Environmental Protection Division

TABLE OF CONTENTS

Section **Page**

Part I. COVERAGE UNDER THIS PERMIT

A. Permit Area 4
B. Definitions 4
C. Eligibility 7
D. Authorization 8
E. Continuing Obligations of Permittees 9

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification 9
B. Notice of Intent Contents 10
C. Notice of Intent Submittal 11
D. Fees 11
E. Renotification 11

Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, PERMIT VIOLATIONS AND OTHER LIMITATIONS

A. Prohibition on Non-Storm Water Discharges 11
B. Releases in Excess of Reportable Quantities 12
C. Discharges into, or within One Mile Upstream of and within the Same Watershed as, Any Portion of a Biota Impaired Stream Segment 12
D. Management Practices and Permit Violations 14

Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

A. Deadlines for Plan Preparation and Compliance 18
B. Signature and Plan Review 19
C. Keeping Plans Current 19
D. Contents of Plan 19
1. Checklist 19
2. Site Description 19
3. Controls 20
4. Inspections 23
5. Maintenance 24

6. Sampling Requirements 24
7. Non-storm Water Discharges 27
E. Reporting 27
F. Retention of Records 28

Part V. STANDARD PERMIT CONDITIONS

A. Duty to Comply 28
B. Continuation of the Expired General Permit 29
C. Need to Halt or Reduce Activity Not a Defense 29
D. Duty to Mitigate 29
E. Duty to Provide Information 29
F. Other Information 29
G. Signatory Requirements 29
H. Oil and Hazardous Substance Liability 30
I. Property Rights 30
J. Severability 30
K. Other Applicable Environmental Regulations and Laws 30
L. Proper Operation and Maintenance 30
M. Inspection and Entry 31
N. Permit Actions 31

Part VI. TERMINATION OF COVERAGE

A. Notice of Termination Eligibility 31
B. Notice of Termination Contents 31
C. Notice of Termination Submittal 32

APPENDIX A. EPD District Offices 33

APPENDIX B. Nephelometric Turbidity Unit (NTU) Table 35

Part I. COVERAGE UNDER THIS PERMIT

A. Permit Area.

This permit regulates point source discharges of storm water to the waters of the State of Georgia from construction activities, as defined in this permit.

B. Definitions. All terms used in this permit shall be interpreted in accordance with the definitions as set forth in the Georgia Water Quality Control Act (Act) and the Georgia Rules and Regulations for Water Quality Control Chapter 391-3-6 (Rules), unless otherwise defined in this permit:

1. "Best Management Practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

2. "Buffer" means the area of land immediately adjacent to the banks of State waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat.

3. "Certified Personnel" means a person who has successfully completed the appropriate certification course approved by the State Soil and Water Conservation Commission.

4. "Commencement of Construction" means the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

5. "Common Development" means a contiguous area where multiple, separate, and distinct construction activities will be taking place at different times on different schedules under one plan of development.

6. "Construction Activity" means the disturbance of soils associated with clearing, grading, excavating, filling of land, or other similar activities which may result in soil erosion. Construction activity does not include agricultural and silvicultural practices, but does include agricultural buildings.

7. "CPESC" means Certified Professional in Erosion and Sediment Control with current certification by EnviroCert International, Inc. (www.EnviroCertIntl.org).

8. "Design Professional" means a professional licensed by the State of Georgia in the field of: engineering, architecture, landscape architecture, forestry, geology, or land surveying; or a person that is a Certified Professional in Erosion and Sediment Control (CPESC) with a current certification by EnviroCert International, Inc. Design Professionals shall practice in a manner that complies with applicable Georgia law governing professional licensure.

9. "CWA" means Federal Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972).

10. "Director" means the Director of the Environmental Protection Division or an authorized representative.

11. "Division" means the Environmental Protection Division of the Department of Natural Resources.

12. "Erosion" means the process by which land surface is worn away by the action of wind, water, ice or gravity.

13. "Erosion, Sedimentation and Pollution Control Plan" or "Plan" means a plan for the control of soil erosion, sediment and pollution resulting from a construction activity.

14. "Filling" means the placement of any soil or solid material either organic or inorganic on a natural ground surface or an excavation.

15. "Final Stabilization" means that all soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by 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). .

16. "General Contractor" means the operator of the stand alone construction or site.

17. "Impossible" means the monitoring location(s) are either physically or legally inaccessible, or access would cause danger to life or limb.

18. "Landfill" means an area of land or an excavation in which waste materials are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well or waste pile as defined by Georgia NPDES General Permit GAR000000, and which area of land or excavation must be certified by EPD before it can begin waste disposal operations.

19. "Landfill Cell(s)" means a defined area within a landfill where waste materials are permanently disposed and that must be certified by EPD for use before such cell(s) can begin receiving waste materials after which those activities associated with waste receipt and disposal in the landfill cell(s) shall not be considered construction activity as defined by this permit.

20. "Local Issuing Authority" means the governing authority of any county or municipality which is certified pursuant to Official Code of Georgia Section 12-7-8(a).

21. "Mass Grading" means the movement of earth by mechanical means to alter the gross topographic features (elevations, slopes, etc.) to prepare a site for final grading and the construction of facilities (buildings, roads, parking, etc.).

22. "Nephelometric Turbidity Unit (NTU)" means a numerical unit of measure based upon photometric analytical techniques for measuring the light scattered by fine particles of a substance in suspension.

23. "NOI" means Notice of Intent to be covered by this permit (see Part II).

24. "Normal Business Hours" means Monday thru Friday, 8:00 AM to 5:00 PM, excluding any non-working Saturday, non-working Sunday and non-working Federal holiday.

25. "NOT" means Notice of Termination (see Part VI).

26. "Operator" means the entity that has the primary day-to-day operational control of those activities at the construction site necessary to ensure compliance with Erosion, Sedimentation and Pollution Control Plan requirements and permit conditions.

27. "Other Water Bodies" means ponds, lakes, marshes and swamps which are waters of the State.

28. "Outfall" means the location where storm water, in a discernible, confined and discrete conveyance, leaves a facility or construction site or, if there is a receiving water on site, becomes a point source discharging into that receiving water.

29. "Owner" means the legal title holder to the real property on which is located the facility or site where construction activity takes place.

30. "Permittee" means any entity that has submitted a Notice of Intent.

31. "Phase" or "Phased" means sub-parts or segments of construction projects where the sub-part or segment is constructed and stabilized prior to completing the entire construction site.

32. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure or container from which pollutants are or may be discharged. This term also means sheetflow which is later conveyed via a point source to waters of the State. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

33. "Primary Permittee" means the Owner or the Operator or both of a tract of land for a construction project subject to this permit.

34. "Proper design" and "properly designed" means designed in accordance with the design requirements and specifications contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and amendments to the Manual as approved by the State Soil and Water Conservation Commission up until the date of NOI submittal.

35. "Receiving Water(s)" means all perennial and intermittent waters of the State into which the runoff of storm water from a construction activity will actually discharge, either directly or indirectly.

36. "Roadway Project(s)" means traveled ways including but not limited to roads, sidewalks, multi-use paths and trails, and airport runways and taxiways. This term also includes the accessory components to a roadway project that are necessary for the structural integrity of the roadway and the applicable safety requirements. These accessory components include but are not limited to slopes, shoulders, storm water drainage ditches and structures, guardrails, lighting, signage, cameras and fences and exclude subsequent landscaping and beautification projects.

37. "Sediment" means solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by, wind, water, ice, or gravity as a product of erosion.

38. "Sedimentation" means the action or process of forming or depositing sediment.

39. "Sheetflow" means runoff which flows over the ground surface as a thin, even layer, not concentrated in a channel.

40. "Site" or "Construction Site" means a facility of any type on which construction activities are occurring or are to occur which may result in the discharge of pollutants from a point source into the waters of the State.

41. "Stand Alone Construction" or "Stand Alone Construction Project" means construction activities that are not part of a common development where the primary permittee chooses not to use secondary permittees.

42. "Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

43. "Structural Erosion and Sediment Control Practices" means measures for the stabilization of erosive or sediment producing areas by utilizing the mechanical properties of matter for the purpose of either changing the surface of the land or storing, regulating or disposing of runoff to prevent excessive sediment loss.

44. "Sub-contractor" means an entity employed or retained by the permittee to conduct any type of construction activity (as defined in this permit) at a stand alone construction site. Sub-contractors must complete the appropriate certification course approved by the Georgia Soil and Water Conservation Commission in accordance with the provisions of O.C.G.A. 12-7-19. Sub-contractors are not permittees unless they meet the definition of either a primary, secondary or tertiary permittee.

45. "Surface Water Drainage Area" means the hydrologic area starting from the lowest downstream point where the storm water from the construction activity enters the receiving water(s) and following the receiving water(s) upstream to the highest elevation of land that divides the direction of water flow. This boundary will connect back with the storm water entrance point. Boundary lines follow the middle of the highest ground elevation or halfway between contour lines of equal elevation.

46. "Trout Streams" means waters of the State classified as either primary trout waters or secondary trout waters, as designated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org.

47. "Utility Company or Utility Contractor" means, for purposes of this Permit, an entity or sub-contractor that is responsible, either directly or indirectly, for the construction, installation, and maintenance of conduits, pipes, pipelines, cables, wires, trenches, vaults, manholes, and similar structures or devices for the conveyance of natural gas (or other types of gas), liquid petroleum products, electricity, telecommunications (telephone, data, television, etc.), water, storm water or sewage.

48. "USGS Topographic Map" means a current quadrangle, 7½ minute series map prepared by the United States Department of the Interior, Geological Survey.

49. "Vegetative Erosion and Sediment Control Practices" means measures for the stabilization of erosive or sediment producing areas by covering the soil with: (1) permanent seeding, sprigging or planting, producing long-term vegetative cover; (2) temporary seeding, producing short-term vegetative cover; or (3) sodding, covering areas with a turf of perennial sod forming grass.

50. "Waters Supporting Warm Water Fisheries" means all waters of the State that sustain, or have the potential to sustain, aquatic life but excluding trout streams.

51. "Waters of Georgia" or "Waters of the State" means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, wetlands, and all other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

C. Eligibility.

1. Construction Activities. This permit authorizes, subject to the conditions of this permit:

a. all discharges of storm water associated with stand alone construction projects that will result in land disturbance equal to or greater than one (1) acre occurring on or before, and continuing after, the effective date of this permit, (henceforth referred to as existing storm water discharges from construction activities) except for discharges identified under Part I.C.3.;

b. all discharges of storm water associated with stand alone construction projects that will result in land disturbance equal to or greater than one (1) acre occurring after the effective date of this permit, (henceforth referred to as storm water discharges from construction activities); and

c. coverage under this permit is not required for discharges of storm water associated with minor land disturbing activities (such as home gardens and individual home landscaping, repairs, maintenance work, fences and other related activities which result in minor soil erosion) conducted outside of the 25 foot buffer along the banks of all State waters requiring a buffer and outside of the 50 foot buffer along the banks of all State waters classified as 'trout streams' requiring a buffer on individual residential lots sold to homeowners where all planned construction activities on that lot have been completed and have undergone final stabilization.

2. Mixed Storm Water Discharges. This permit may only authorize a storm water discharge from a construction site or construction activities mixed with a storm water discharge from an industrial source or activity other than construction where:

a. 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;

b. the storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and

c. storm water 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.

3. Limitations on Coverage. The following storm water discharges from construction sites are not authorized by this permit:

a. storm water discharges associated with an industrial activity that originate from the site after construction activities have been completed and the site has undergone final stabilization;

b. discharges that are mixed with sources of non-storm water other than discharges which are identified in Part III.A.2. of this permit and which are in compliance with Part IV.D.7. (non-storm water discharges) of this permit;

c. storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges; and

d. storm water discharges from construction sites that the Director (EPD) has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard.

4. Compliance with Water Quality Standards. 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.

D. Authorization.

1. Any person desiring coverage under this permit must submit a Notice of Intent (NOI) to the EPD and the NOI must be received by the EPD in accordance with the requirements of Part II, using NOI forms provided by the EPD (or an exact photocopy thereof), in order for storm water discharges from construction sites to be authorized.

2. Unless notified by the Director to the contrary, a permittee who submits an NOI in accordance with the requirements of this permit is authorized to discharge storm water from construction sites under the terms and

conditions of this permit fourteen (14) days after the date that the NOI is postmarked. The Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit or alternative general NPDES permit based on a review of the NOI or other information. Should the Director deny coverage under this permit, coverage under this permit is authorized until the date specified in the notice of denial by the Director.

3. Where a new permittee is to begin work on-site after an NOI for the facility/construction site has been submitted, that new permittee must submit a new NOI in accordance with Part II.

E. Continuing Obligations of Permittees. Unless and until responsibility for a site covered under this permit is properly terminated according to the terms of the permit, the current permittee remains responsible for compliance with all applicable terms of the permit and for any violations of said terms.

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification.

1. Except as provided in Part II.A.2., II.A.3. and II.A.5., Owners or Operators or both who intend to obtain coverage under this general permit for storm water discharges from a construction site (where construction activities begin after issuance of this permit), shall submit a Notice of Intent (NOI) in accordance with the requirements of this Part at least fourteen (14) days prior to the commencement of construction activities.

2. For sites where construction activities, subject to this permit, are occurring on the effective date of this permit, the Owner or Operator or both shall submit a re-issuance NOI for an existing construction site in accordance with the requirements of this part no later than ninety (90) days after the effective date of this permit. Failure to comply with this requirement shall constitute a violation of the Georgia Water Quality Control Act for each day until the Owner or Operator or both submit an initial NOI for a new construction site in accordance with Part II.A.1., comply with the special conditions in Part III., prepare and submit a new Erosion, Sedimentation and Pollution Control Plan in accordance with Part IV., and pay all applicable fees in accordance with Part II.D.

3. A discharger is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Parts II.A.1. or II.A.2. of this permit. In such instances, EPD may bring an enforcement action for failure to submit an NOI in a timely manner or for any unauthorized discharges of storm water associated with construction activity that have occurred on or after the dates specified in Part II.A.1. and II.A.2.

4. Where an Owner or an Operator or both changes after an NOI has been filed, the subsequent Owner or Operator or both must file a change of information NOI in accordance with this Part by the earlier to occur of (a) seven (7) days before beginning work at the facility/construction site or (b) thirty (30) days from acquiring legal title to the facility/construction site. In the event a lender or other secured creditor acquires legal title to the facility/construction site, such party must file a change of information NOI in accordance with this Part by the earlier to occur of (a) seven (7) days before beginning work at the facility/construction site; or (b) thirty (30) days from acquiring legal title to the facility/construction site. Stabilization and BMP installation and/or maintenance measures of a disturbed site, by the subsequent Owner or Operator, may occur in advance of filing a new NOI, without violation of this permit. Failure to comply with this requirement shall constitute a violation of the Georgia Water Quality Control Act for each day until the Owner or Operator or both submit an initial NOI for a new construction site in accordance with Part II.A.1., comply with the special conditions in Part III., prepare and submit a new Erosion, Sedimentation and Pollution Control Plan in accordance with Part IV., and pay all applicable fees in accordance with Part II.D.

5. For sites where construction activities will result in land disturbance equal to or greater than one (1) acre that are required as a result of storm- or emergency-related repair work, the Owner or Operator or both shall notify the appropriate EPD District Office within three (3) days of commencement of said construction activities. The Owner

or Operator or both shall submit the NOI to the appropriate EPD district office as soon as possible after the storm- or emergency-related event but no later than fourteen (14) days after the commencement of construction activities and shall submit the Plan in accordance with Part IV.A.6.

B. Notice of Intent Contents.

1. Primary Permittee. A single Notice of Intent for the primary permittee (i.e., one NOI signed by the Owner or the Operator or both) shall be signed in accordance with Part V.G.1. of this permit and shall include the following information:

a. The project construction site name, GPS location (decimal degrees) of construction exit, construction site location (e.g., street address), city (if applicable) and county of the construction site for which the notification is submitted. The construction site location information must be sufficient to accurately locate the construction site;

b. The Owner's legal name, address, telephone number and email address; and if available, the Operator's legal name, address, telephone number and email address; and if applicable, the Duly Authorized Representative's legal name and/or position name, telephone number and email address;

c. The name, telephone number and email address of the individual to whom the permittee has assigned the responsibility for the daily operational control (i.e., construction superintendent, etc.) of the construction site;

d. The name of the initial receiving water(s) or if unnamed the first named blue line stream indicated on the appropriate USGS Topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org;

e. The name of the receiving water(s) located within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s) shown on Georgia's most current "305(b)/303(d) List Documents (Final)" for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff) at www.gaepd.org/Documents/305b.html;

f. An estimate of project start date and completion date, a schedule for the timing of the various construction activities, the number of acres of the site on which soil will be disturbed, and the surface water drainage area (if applicable). For projects that began on or before the effective date of this permit, the start date must be the actual start date of construction;

g. The following certification shall be signed in accordance with Part V.G.1. of this permit:

> "I certify that to the best of my knowledge and belief, that the Erosion, Sedimentation and Pollution Control Plan (Plan) was prepared by a design professional, as defined by this permit, that has completed the appropriate certification course approved by the Georgia Soil and Water Conservation Commission in accordance with the provisions of O.C.G.A. 12-7-19 and that I will adhere to the Plan and comply with all requirements of this permit."

h. The type of construction activity category (from those listed on the NOI) conducted at the site;

i. The location of the receiving water(s) or outfall(s) or a combination of receiving water(s) and outfall(s) to be sampled on a map or drawing of appropriate scale. When it is determined by the primary permittee that some or all of the outfall(s) will be sampled, the applicable nephelometric turbidity unit (NTU) selected from Appendix B (i.e., based upon the size of the construction site and the surface water drainage area) must be shown for each outfall to be sampled.

j. For stand alone construction disturbing more than 50 acres, which began after the effective date of this permit, include a single copy of the Erosion, Sedimentation, and Pollution Control Plan;

k. NOIs may be submitted for separate phases of projects with a total planned disturbance greater than 5.0 acres, provided that each phase shall not be less than 1.0 acre. Phased NOIs shall include all documentation required by this permit for each phase, including fees; and

l. Any other information specified on the NOI in effect at the time of submittal.

C. Notice of Intent Submittal. NOIs are to be submitted by return receipt certified mail (or similar service) to both the appropriate EPD District Office according to the schedule in Appendix A of this permit and to the Local Issuing Authority in jurisdictions authorized to issue a Land Disturbance Activity permit for the permittee's construction site pursuant to O.C.G.A. 12-7-1, et seq. If an electronic submittal service is provided by EPD then the NOI may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service. 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 alternative location from commencement of construction until such time as a Notice of Termination (NOT) is submitted in accordance with Part VI.

D. Fees. Any applicable fees shall be submitted by the **Primary Permittee** in accordance with Rules and Regulations for Water Quality Control (Rules) promulgated by the Board of Natural Resources. By submitting an NOI for coverage under this permit the primary permittee agrees to pay any fees required, now or in the future, by such Rules authorized under O.C.G.A. Section 12-5-23(a)(5)(A), which allows the Board of Natural Resources to establish a fee system. Fees may be assessed on land disturbing activity proposed to occur on or after the effective date of this permit and shall be paid in accordance with such Rules.

E. Renotification. Upon issuance of a new or different general permit for some or all of the storm water discharges covered by this permit, the permittee is required to notify the EPD of their intent to be covered by the new or different general permit. The permittee must submit a new Notice of Intent in accordance with the notification requirements of the new or different general permit.

PART III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, PERMIT VIOLATIONS AND OTHER LIMITATIONS

A. Prohibition on Non-Storm Water Discharges.

1. Except as provided in Part I.C.2. and III.A.2., all discharges covered by this permit shall be composed entirely of storm water.

2. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharge is explicitly listed in the Erosion, Sedimentation and Pollution Control Plan and is in compliance with Part IV.D.7.; discharges from fire fighting activities; fire hydrant flushing; potable water sources including water line flushing; irrigation drainage; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials or pollutants.

3. This permit does not authorize the discharge of soaps or solvents used in vehicle and equipment washing.

4. This permit does not authorize the discharge of wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.

B. Releases in Excess of Reportable Quantities.

1. The discharge of hazardous substances or oil in the storm water discharge(s) from a site shall be prevented. This permit does not relieve the permittee of the reporting requirements of Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR Part 117 and 40 CFR Part 302. Where a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR 117 or 40 CFR 302 occurs during a 24 hour period, the permittee is required to notify EPD at (404) 656-4863 or (800) 241-4113 and the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR 117 and 40 CFR 302 as soon as he/she has knowledge of the discharge.

2. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

C. Discharges into, or within One Mile Upstream of and within the Same Watershed as, Any Portion of a Biota Impaired Stream Segment.

Any permittee who intends to obtain coverage under this permit for storm water discharges associated with construction activity into an Impaired Stream Segment, or within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s), as shown on Georgia's most current "305(b)/303(d) List Documents (Final)" at the time of NOI submittal, must satisfy the requirements of Part III.C. of this permit if the Impaired Stream Segment has been listed for criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff). Those discharges that are located within one (1) linear mile of an Impaired Stream Segment, but are not located within the watershed of any portion of that stream segment, are excluded from this requirement. Georgia's 305(b)/303(d) List Documents (Final)" can be viewed on the EPD website, www.gaepd.org/Documents/305b.html.

1. If a Total Maximum Daily Load (TMDL) Implementation Plan for sediment has been finalized at least six (6) months prior to the permittee's submittal of the NOI, the Erosion, Sedimentation and Pollution Control Plan (Plan) must address any site-specific conditions or requirements included in the TMDL Implementation Plan that are applicable to the permittee's discharge(s) to the Impaired Stream Segment within the timeframe specified in the TMDL Implementation Plan. If the TMDL Implementation Plan establishes a specific numeric wasteload allocation that applies to a permittee's discharge(s) to the Impaired Stream Segment, then the permittee must incorporate that allocation into the Erosion, Sedimentation and Pollution Control Plan and implement all necessary measures to meet that allocation. A list of TMDL Implementation Plans can be viewed on the EPD website, www.gaepd.org.

2. In order to ensure that the permittee's discharge(s) do not cause or contribute to a violation of State water quality standards, the Plan must include at least four (4) of the following best management practices (BMPs) for those areas of the site which discharge into or within one (1) linear mile upstream and within the same watershed as the Impaired Stream Segment:

a. During all construction activities as defined in this permit, double the width of the 25 foot undisturbed vegetated buffer along all State waters requiring a buffer and the 50 foot undisturbed vegetated buffer along all State waters classified as "trout streams" requiring a buffer. During construction activities, EPD will not grant variances to any such buffers that are increased in width pursuant to this section.

b. Increase all temporary sediment basins and retrofitted storm water management basins to provide sediment storage of at least 3600 cubic feet (134 cubic yards) per acre drained.

c. Use baffles in all temporary sediment basins and retrofitted storm water management basins to at least double the conventional flow path length to the outlet structure.

d. A large sign (minimum 4 feet x 8 feet) must be on the site on the actual start date of construction visible from a public roadway identifying the construction site, the permittee(s), and the contact person(s) and telephone number(s) until a NOT has been submitted.

e. Use anionic polyacrylamide (PAM) and/or mulch to stabilize all areas left disturbed for more than seven (7) calendar days in accordance with Part III.D.1. of this permit.

f. Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24 hour period, recognizing the exceptions specified in Part IV.D.6.d. of this permit.

g. Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as provided for in O.C.G.A. 12-7-6(a)(1).

h. Reduce the total planned site disturbance to less than 50% impervious surfaces (excluding any State-mandated buffer areas from such calculations). All calculations must be included on the Plan.

i. Limit the amount of area disturbed at any one time to no greater than 25 acres or 50% of the total planned site, whichever is less. All calculations must be included on the Plan.

j. Use "Dirt II" techniques available on the EPD website, www.gaepd.org, (e.g., seep berms, sand filters, anionic PAM) to model and manage all construction storm water runoff (including sheet flow). All calculations must be included on the Plan.

k. Add appropriate organic soil amendments (e.g., compost) and conduct pre- and post-construction soil sampling to a depth of 6 (six) inches to document improved levels of soil carbon after final stabilization of the construction site.

l. Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever construction storm water (including sheet flow) may be discharged. Mulch filter berms cannot be placed in waterways or areas of concentrated flow.

m. Apply the appropriate Georgia Department of Transportation approved erosion control matting or blankets or bonded fiber matrix to all slopes steeper than 3:1. All graphical illustrations must be included on the Plan.

n. Use appropriate erosion control matting or blankets instead of concrete in all construction storm water ditches and storm drainages designed for a 25 year, 24 hour rainfall event.

o. Use anionic PAM under a passive dosing method (e.g., flocculant blocks) within all construction storm water ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.

p. Install sod for a minimum 20 foot width (in lieu of seeding) after final grade has been achieved, along the site perimeter wherever construction storm water (including sheet flow) may be discharged.

q. Conduct soil tests to identify and to implement site-specific fertilizer needs.

r. Certified personnel shall conduct inspections at least twice every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV.D.4.a.(3). (a) – (c) of this permit.

s. 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.

t. Use alternative BMPs whose performance has been documented to be superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the State Soil and Water Conservation Commission).

u. 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.

D. Management Practices and Permit Violations.

1. Best management practices, as set forth in this permit, are required for all construction activities, and must be implemented in accordance with the design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia. Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the Director or to any other allegation of noncompliance with Part III.D.3. and Part III.D.4.

2. Except as required to install the initial sediment storage requirements and perimeter control BMPs as described in Part IV.D.3., the initial sediment storage requirements and perimeter control BMPs must be installed and implemented prior to conducting any other construction activities (e.g., clearing, grubbing and grading) within the construction site or when applicable, within phased sub-parts or segments of the construction site. Failure to comply shall constitute a violation of this permit for each day on which construction activities occur. The design professional who prepared the Plan must inspect the initial sediment storage requirements and perimeter control BMPs in accordance with Part IV.A.5. within seven (7) days after installation.

3. Failure to properly design, install, or maintain best management practices shall constitute a violation of this permit for each day on which such failure occurs. BMP maintenance as a result of the permittee's routine inspections shall not be considered a violation for the purposes of this paragraph. If during the course of the permittees routine inspection BMP failures are observed which have resulted in sediment deposition into Waters of the State, the permittee shall correct the BMP failures and shall submit a summary of the violations to EPD in accordance with Part V.A.2. of this permit.

4. A discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on which such discharge results in the turbidity of receiving water(s) being increased by more than ten (10) nephelometric turbidity units for waters classified as trout streams or more than twenty-five (25) nephelometric turbidity units for waters supporting warm water fisheries, regardless of a permittee's certification under Part II.B.1.i. This paragraph shall not apply to any land disturbance associated with the construction of single-family homes which are not part of a subdivision or planned common development unless five (5) acres or more will be disturbed.

5. When the permittee has elected to sample outfall(s), the discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on which such condition results in the turbidity of the discharge exceeding the value selected from Appendix B applicable to the construction site. As set forth therein, the nephelometric turbidity unit (NTU) value shall be selected from Appendix B based upon the size of the construction site, the surface water drainage area and whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org.

Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

A site-specific Erosion, Sedimentation and Pollution Control Plan (Plan) shall be designed, installed and maintained for the entire construction activity covered by this permit. The Erosion, Sedimentation and Pollution Control Plan must be prepared by a design professional as defined by this permit. All persons involved in Plan preparation shall have completed the appropriate certification course, pursuant to O.C.G.A. 12-7-19 (b), approved by the State Soil and Water Conservation Commission. The design professional preparing the Plan must include and sign the following certification in the Plan:

> "I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR 100001."

The Plan shall include any additional certifications regarding the design professional's site visit in accordance with the Rules for Erosion and Sedimentation Control promulgated by the Board of Natural Resources:

> "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 supervision."

The Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and O.C.G.A. 12-7-6, as well as the following:

(i). Except as provided in Part IV.(iii). below, no construction activities shall be conducted within a 25 foot buffer along the banks of all State waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the Director has determined to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7-6, or where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented, or along any ephemeral stream, or where bulkheads and seawalls must be constructed to prevent the erosion of the shoreline on Lake Oconee and Lake Sinclair.. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

(1) public drinking water system reservoirs,
(2) stream crossings for water lines and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer
(3) stream crossings for any utility lines of any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, (b) native riparian vegetation is re-

established in any bare or disturbed areas within the buffer and (c) the entity is not a secondary permittee for a project located within a common development or sale under this permit,

(4) buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer

(5) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification;

(6) right-of-way posts, guy-wires, anchors, survey markers and the replacement and maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit;

(7) right-of-way posts, guy-wires, anchors, survey markers and the replacement and maintenance of existing utility structures within the current right-of-way by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and

(8) Maintenance (excluding dredging), repair and/or upgrade of Soil and Water Conservation District watershed dams when under the technical supervision of the USDA Natural Resources Conservation Service.

(ii). No construction activities shall be conducted within a 50 foot buffer, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any State waters classified as 'trout streams' except when approval is granted by the Director for alternate buffer requirements in accordance with the provisions of O.C.G.A. 12-7-6, or where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as 'trout streams' which discharge an average annual flow of 25 gallons per minute or less shall have a 25 foot buffer or they may be piped, at the discretion of the permittee, pursuant to the terms of a rule providing for a general variance promulgated by the Board of Natural Resources including notification of such to EPD and the Local Issuing Authority of the location and extent of the piping and prescribed methodology for minimizing the impact of such piping and for measuring the volume of water discharged by the stream. Any such pipe must stop short of the downstream permittee's property, and the permittee must comply with the buffer requirement for any adjacent trout streams. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

(1) public drinking water system reservoirs,

(2) stream crossings for water lines and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width

of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer

(3) stream crossings for any utility lines of any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, (b) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (c) the entity is not a secondary permittee for a project located within a common development or sale under this permit,

(4) buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer

(5) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification,

(6) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit ,

(7) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken by any electric membership corporation or municipal electrical system or any public utility under the, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and

(8) Maintenance (excluding dredging), repair and/or upgrade of Soil and Water Conservation District watershed dams when under the technical supervision of the USDA Natural Resources Conservation Service.

(iii). Except as provided above, for buffers required pursuant to Part IV.(i). and (ii)., no construction activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. During coverage under this permit, a buffer cannot be thinned or trimmed of vegetation and a protective vegetative cover must remain to protect water quality and aquatic habitat and a natural canopy must be left in sufficient quantity to keep shade on the stream bed.

The Erosion, Sedimentation and Pollution Control Plan shall identify all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. In addition, the Plan shall describe and the applicable permittee shall ensure the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with construction activity at the site and to assure compliance with the terms and conditions of this permit. The applicable permittee must implement and maintain the provisions of the Plan required under this part as a condition of this permit.

Except as provided in Part IV.A.2., a single Erosion, Sedimentation and Pollution Control Plan must be prepared by the primary permittee for the stand alone construction project.

A. Deadlines for Plan Preparation and Compliance.

1. Except as provided in Part IV.A.2. and Part IV.A.6., the Erosion, Sedimentation and Pollution Control Plan shall be completed prior to submitting the NOI and prior to conducting any construction activity by any permittee.

2. For construction activities that began on or before the effective date of this permit and were subject to the regulations under the previous permit, the permittee(s) shall continue to operate under the existing Plan.

3. For construction activities that begin after the effective date of this permit, the primary permittee shall be required to prepare the Plan for that phase of the stand alone development that corresponds with the NOI being submitted and the primary permittee(s) shall implement the Plan on or before the day construction activities begin.

4. Additional Plan Submittals.

a. For all projects identified under Part I.C.1.b., which begin after the effective date of this permit, in a jurisdiction where there is no certified Local Issuing Authority regulating that project, a single copy of the Plan must be submitted to the EPD Watershed Protection Branch and a second copy of the Plan must be submitted to the appropriate EPD District Office prior to or concurrent with the NOI submittal. The second copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device. The EPD Watershed Protection Branch will review Plans for deficiencies using the applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted.

b. For sites that are equal to or greater than 50 acres of disturbed area, regardless of the existence of a certified Local Issuing Authority in the jurisdiction, one of the following submissions is also required:

(i) for all projects which begin after the effective date of this permit a single copy of the NOI and a single copy of the Plan shall be submitted to the appropriate EPD District Office. This copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device.

(ii) for all projects which began on or before the effective date of this permit single copy of the NOI and a single copy of the Plan, if amended, shall be submitted to the appropriate EPD District Office. This copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device.

c. For all projects where the construction activity as indicated on the existing NOI has changed, the amended Plans must be submitted in accordance with Part IV.A.4.a. In addition, the permittee must file a change of information NOI in accordance with Part II.

5. For stand alone projects that begin construction activity after the effective date of this permit, the primary permittee must retain the design professional who prepared the Erosion, Sedimentation and Pollution Control Plan, or an alternative design professional approved by EPD in writing, 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 primary 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.

6. For storm- or emergency-related repair work, the permittee shall implement appropriate BMPs and certified personnel (provided by the primary permittee) shall inspect 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. If the storm- or emergency-related repair work will not be completed within sixty (60) days of commencement of construction activity, a single copy of the Plan shall be submitted to EPD and the permittee shall comply with all requirements of this permit on the sixty-first (61st) day.

B. Signature and Plan Review.

1. The Erosion, Sedimentation and Pollution Control Plan shall be signed in accordance with Part IV., and be retained on the site (or, if not possible, at a readily accessible location) which generates the storm water discharge in accordance with Part IV.F. of this permit.

2. The primary permittee shall make Plans available upon request to the EPD; to designated officials of the local government reviewing soil erosion and sediment control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system.

3. EPD may notify the primary permittee at any time that the Plan does not meet one or more of the minimum requirements of this Part. Within seven (7) days of such notification (or as otherwise provided by EPD), the primary permittee shall make the required changes to the Plan and shall submit to EPD either the amended Plan or a written certification that the requested changes have been made.

C. Keeping Plans Current. The primary permittee(s) shall amend their Plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on BMPs with a hydraulic component (i.e., those BMPs where the design is based upon rainfall intensity, duration and return frequency of storms) or if the Plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.3. Amendments to the Plan must be certified by a design professional as provided in this permit.

D. Contents of Plan. The Erosion, Sedimentation and Pollution Control Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:

1. Checklist. Each plan shall include a completed Erosion, Sedimentation and Pollution Control Plan Checklist established by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and amendments to the applicable Checklist as approved by the State Soil and Water Conservation Commission up until the date of the NOI submittal. The applicable checklists are available on the EPD website, www.gaepd.org.

2. Site description. Each site-specific Plan shall provide a description of pollutant sources and other information as indicated:

a. A description of the nature of the construction activity;

b. A detailed description and chart or timeline of the intended sequence of major activities which disturb soils for major portions of the site (i.e., initial sediment storage requirements and perimeter BMPs, clearing and grubbing activities, excavation activities, grading activities, infrastructure activities, immediate and final stabilization activities);

c. Estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other activities;

d. An estimate of the runoff coefficient or peak discharge flow of the site prior to the construction activities and after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;

e. A site-specific map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the Plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water; and

f. Identify the receiving water(s) and areal extent of wetland acreage at the site;

3. Controls. Each Plan shall include 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 sediment storage requirements and 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 Plan. The Plan will include appropriate staging and access requirements for construction equipment. Plans submitted after the effective date of this permit shall limit the amount of disturbed area to no greater than 50 acres at any one time without prior written authorization from the appropriate EPD District Office according to the schedule in Appendix A of this permit. EPD will approve or disapprove such requests within 35 days of receipt. Failure of EPD to act within 35 days shall be considered an approval of such requests. If the EPD District Office approves a request to disturb 50 acres or more at any one time, the Plan must include at least four (4) of the best management practices listed in Part III.C.2. of this permit.

The Plan will clearly describe for each major activity identified in Part IV.D.2.b. appropriate control measures and the timing during the construction process that the measures will be implemented. The primary permittee is encouraged to utilize the document, Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites, EPA 833-R-060-04, May 2007 (www.epa.gov/npdes/pubs/sw_swppp_guide.pdf), when preparing the Plan. The description and implementation of controls shall address the following minimum components:

a. Erosion and sediment controls.

(1). Stabilization measures. A description of interim and permanent stabilization measures, including site-specific scheduling of the implementation of the measures. Site plans should ensure that existing vegetation is preserved and that disturbed portions of the site are stabilized. Stabilization measures may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the Plan. Except as provided in paragraphs IV.D.3.(a).(1).(a). and (b). below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

(a). Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently cease is precluded by snow cover or other adverse weather conditions, stabilization measures shall be initiated as soon as practicable.

(b). Where construction activity will resume on a portion of the site within 21 days from when activities ceased, (e.g., the total time period that construction activity is temporarily ceased is less than 21 days) then stabilization measures do not have to be initiated on that portion of site by the 14th day after construction activity temporarily ceased.

(2). Structural practices. A description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

(3). Sediment basins. For common drainage locations a temporary (or permanent) sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site. The 1800 cubic feet (67 cubic yards) of storage area per acre drained does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. For drainage locations where a temporary sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent controls is not attainable, sediment traps, silt fences, wood mulch berms or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area. When the sediment fills to a volume at most of 22 cubic yards per acre for each acre of drainage area, the sediment shall be removed to restore the original design volume. This sediment must be properly disposed. Sediment basins may not be feasible at some construction projects. Careful consideration must be used to determine when a sediment basin cannot be used and/or when 67 cubic yards of storage per acre drained is not attainable and a written justification explaining the decision(s) must be included in the Plan. Perennial and intermittent waters of the State shall not be used for temporary or permanent sediment detention.

When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan. Outlet structures that withdraw water from the surface are temporary BMPs and must be removed prior to submitting a Notice of Termination. For construction activities where the NOI was submitted prior to January 1, 2014, this requirement of the permit is not applicable.

(4). Alternative BMPs. The use of alternative BMPs whose performance has been documented to be equivalent or superior to conventional BMPs as certified by a Design Professional may be allowed (unless disapproved by EPD or the State Soil and Water Conservation Commission).

(5). High performance BMPs. The use of infiltration trenches, seep berms, sand filters, dry wells, polyacrylamide, etc. for minimizing point source discharges except for large rainfall events is encouraged.

b. Storm water management. A description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of

such structures after the construction activities have been completed and the site has undergone final stabilization. Operators are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with construction activity have been eliminated from the site.

(1). Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site; and sequential systems (which combine several practices). The Plan shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.

(2). 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 so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water(s)).

(3). Installation and use of Green Infrastructure approaches and practices that mimic natural processes and direct storm water where it can be infiltrated, evapotranspirated or re-used with significant utilization of soils and vegetation rather than traditional hardscape collection, conveyance and storage structures are encouraged to the maximum extent practicable. Green Infrastructure practices or approaches include permeable or porous paving, vegetated swales instead of curbs and gutters, green roofs, tree boxes, rain gardens, constructed wetlands, infiltration planters, vegetated median strips, protection and enhancement of riparian buffers and floodplains, and the overall reduction in site disturbance and impervious area. Design information on Green Infrastructure practices and other ways to manage storm water can be found in the Georgia Stormwater Management Manual (www.georgiastormwater.com) and the Georgia Green Growth Guidelines (www.coastalgadnr.org/cm/green/guide). Additional information on Green Infrastructure can be found at water.epa.gov/infrastructure/greeninfrastructure/index.cfm.

c. Other controls.

(1). Waste disposal. Locate waste collection areas away from streets, gutters, watercourses and storm drains. Waste collection areas, such as dumpsters, are often best located near construction site entrances to minimize traffic on disturbed soils. The Plan should include secondary containment around liquid waste collection areas to further minimize the likelihood of contaminated discharges. Solid materials, including building materials, shall not be discharged to waters of the State, except as authorized by a Section 404 permit.

(2). Off-site vehicle tracking of dirt, soils, and sediments and the generation of dust shall be minimized or eliminated to the maximum extent practical. The Plan shall include the best management practice to be implemented at the site or construction activity.

(3). Nothing in this permit relieves a permittee from any obligation to comply with all applicable State and local regulations of waste disposal, sanitary sewer, septic and petroleum storage systems.

(4). The Plan shall include best management practices for the remediation of all petroleum spills and leaks as appropriate.

(5). The Plan shall include best management practices for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of vehicles. Washout of the drum at the construction site is

prohibited. Additional information about best management practices for concrete washout is available at www.epa.gov/npdes/pubs/concretewashout.pdf.

(6) All permittees are required to minimize the discharge of pollutants from dewatering trenches and excavations. Discharges are prohibited unless managed by appropriate controls.

4. Inspections.

a. 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 rainfall once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday until a Notice of Termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials 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 non-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): (a) disturbed areas of the primary permittee's construction site ; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation ; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.(4). These inspections must be conducted until a Notice of Termination is submitted.

(4). Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is received by EPD) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).

(5). Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution Control Plan, the Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following each inspection.

(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 project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit.

5. Maintenance. The Plan shall include a description of procedures to ensure the timely maintenance of vegetation, erosion and sediment control measures and other protective measures identified in the site plan.

6. Sampling Requirements. This permit requires the monitoring of nephelometric turbidity in receiving water(s) or outfalls in accordance with this permit. This paragraph shall not apply to any land disturbance associated with the construction of single-family homes which are not part of a subdivision or planned common development unless five (5) acres or more will be disturbed. The following procedures constitute EPD's guidelines for sampling turbidity.

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 storm water is discharged and (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 storm water(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 location;

(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 Storm Water

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.

c. *Sampling Points.*

(1). For construction activities the primary permittee must sample all receiving water(s), or all outfall(s), or a combination of receiving water(s) and outfall(s). Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the storm water outfalls using the following minimum guidelines:

(a). The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge from the permitted activity (i.e., the discharge farthest upstream at the site) but downstream of any other storm water discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the 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 storm water discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other storm water discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value.

(c). Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the storm water outfall channel(s).

(d). Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel.

(e). The sampling container should be held so that the opening faces upstream.

(f). The samples should be kept free from floating debris.

(g). Permittees do not have to sample sheetflow that flows onto undisturbed natural areas or areas stabilized by the project. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by EPD for waste disposal, 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned 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 storm water runoff from the construction site is in compliance with the standard set forth in Parts III.D.3. or III.D.4.., whichever is applicable.

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 storm water discharge to a monitored receiving water and/or from a monitored outfall location within in forty-five (45) minutes or as soon as possible.

(2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge.

(3). Sampling by the permittee shall occur for the following qualifying events:

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the sampling location;

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the sampling location, whichever comes first;

(c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there was no discharge), the permittee, in accordance with Part IV.D.4.a.(6), must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations under (a), (b) or (c) above; and

(e). Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

*Note that the permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

7. Non-storm water discharges. Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. of this permit that are combined with storm water discharges associated with construction activity must be identified in the Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

E. Reporting.

1. The applicable permittees are required to submit the sampling results to the EPD at the address shown in Part II.C. by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittee to submit the sampling results on a more frequent basis. Sampling and analysis of any storm water discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. The sampling reports must be signed in accordance with Part V.G.2. Sampling reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI.

2. All sampling reports shall include the following information:

a. The rainfall amount, date, exact place and time of sampling or measurements;
b. The name(s) of the certified personnel who performed the sampling and measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were initiated;
e. The name(s) of the certified personnel who performed the analyses;
f. References and written procedures, when available, for the analytical techniques or methods used;
g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results;
h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU;" and
i. Certification statement that sampling was conducted as per the Plan.

3. All written correspondence required by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate District Office of the EPD according to the schedule in Appendix A of this permit. The permittee shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated location from commencement of construction until such time as a NOT is submitted in accordance with Part VI. If an electronic submittal is provided by EPD then the written correspondence may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service.

F. Retention of Records.

1. The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

a. A copy of all Notices of Intent submitted to EPD;
b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;
d. A copy of all sampling information, results, and reports required by this permit;
e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of this permit;
f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and
g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2). of this permit.

2. Copies of all Notices of Intent, Notices of Termination, inspection reports, sampling reports (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) or other reports requested by the EPD, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the NOT is submitted in accordance with Part VI. of this permit. These records must be maintained at the permittee's primary place of business or at a designated alternative location once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

Part V. STANDARD PERMIT CONDITIONS

A. Duty to Comply.

1. Each permittee must comply with all applicable conditions of this permit. Any permit noncompliance constitutes a violation of the Georgia Water Quality Control Act (O.C.G.A. §§12-5-20, et seq.) and is grounds for enforcement action; for permit termination; or for denial of a permit renewal application. Failure of a primary permittee to comply with any applicable term or condition of this permit shall not relieve any other primary permittee from compliance with their applicable terms and conditions of this permit.

2. Each permittee must document in their records any and all known violations of this permit at his/her site within seven (7) days of his/her knowledge of the violation. A summary of these violations must be submitted to EPD by the permittee at the addresses shown in Part II.C. within fourteen (14) days of his/her discovery of the violation.

3. Penalties for violations of permit conditions. The Federal Clean Water Act and the Georgia Water Quality Control Act (O.C.G.A. §§12-5-20, et seq.) provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Acts, any permit condition or limitation established pursuant to the Acts, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director.

B. Continuation of the Expired General Permit. This permit expires on the date shown on the cover page of this permit. However, an expired general permit continues in force and effect until a new general permit is issued, final and effective.

C. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Duty to Provide Information. The permittee shall furnish to the Director; a State or local agency approving soil erosion and sedimentation control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system, any information which is requested to determine compliance with this permit. In the case of information submitted to the EPD such information shall be considered public information and available under the Georgia Open Records Act.

F. Other Information. When the permittee becomes aware that he failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report required to be submitted to the EPD, the permittee shall promptly submit such facts or information.

G. Signatory Requirements. All Notices of Intent, Notice of Terminations, inspection reports, sampling reports or other reports requested by the EPD shall be signed as follows:

1. All Notices of Intent and Notices of Termination shall be signed as follows:

   a. For a corporation: by a responsible corporate officer. For the purpose of this permit, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

   c. For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official; and

   d. Changes to authorization. If an authorization under Part II.B. is no longer accurate, a change of information NOI satisfying the requirements of Part II.B. must be submitted to the EPD prior to or together with any inspection reports, sampling reports, or other reports requested by the EPD to be signed by a person described above or by a duly authorized representative of that person.

2. All inspection reports, sampling reports, or other reports requested by the EPD shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person(s) described above and submitted to the EPD;

b. The authorization specifies either an individual or a position having responsibility for specified operation(s) of the regulated facility or activity, such as the position of manager, Operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a named individual or any individual occupying a named position); and

c. *Certification.* Reports delineated in Part V.G.2. shall be signed by the permittee or duly authorized representative and shall make the following certification:

"I certify under penalty of law that this report and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the Georgia Hazardous Waste Management Act, O.C.G.A. § 12-8-60, et seq. or under Chapter 14 of Title 12 of the Official Code of Georgia Annotated; nor is the Operator relieved from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act or Section 106 of Comprehensive Environmental Response Compensation And Liability Act.

I. Property Rights. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

J. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Other Applicable Environmental Regulations and Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act. Nothing in this permit, unless explicitly stated, exempts the permittee from compliance with other applicable local, state and federal ordinances, rules, regulations, and laws. Furthermore, it is not a defense to compliance with this permit that a local government authority has approved the permittee's Erosion, Sedimentation and Pollution Control Plan or failed to take enforcement action against the permittee for violations of the Erosion, Sedimentation and Pollution Control Plan, or other provisions of this permit.

No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

L. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the

permittee to achieve compliance with the conditions of this permit and with the required plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

M. Inspection and Entry. The permittee shall allow the Director or an authorized representative of EPA, EPD or to designated officials of the local government reviewing soil erosion and sediment control plans, grading plans, or storm water management plans; or, in the case of a construction site which discharges through a municipal separate storm sewer system, an authorized representative of the municipal operator of the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit; and

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

N. Permit Actions. This permit may be revoked and reissued, or terminated for cause including but not limited to changes in the law or regulations. The filing of a request by the permittee for termination of the permit, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

Part VI. TERMINATION OF COVERAGE

A. Notice of Termination Eligibility. Notice of Termination signed in accordance with Part V.G.1. of this permit must be submitted:

1. For construction activities, by the permittee where the entire stand alone development has undergone final stabilization, all storm water discharges associated with construction activity that are authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed. For construction activities where the primary permittee has elected to submit NOIs for separate phases of the stand alone development, the phase or phases of the stand alone development on the NOT shall correspond to the phase or phases on the NOI.

2. By the Owner or Operator when the Owner or Operator of the site changes. Where storm water discharges will continue after the identity of the Owner or Operator changes, the permittee must, prior to filing the Notice of Termination, notify any subsequent Owner or Operator of the permitted site as to the requirements of this permit.

B. Notice of Termination Contents:

1. The NPDES permit number for the storm water discharge associated with construction activity identified by the Notice of Termination (i.e., GAR100001 – Stand Alone);

2. The project construction site name, GPS location (decimal degrees) of construction exit t, construction site location, city (if applicable) and county of the construction site for which the notification is submitted. This information must correspond to the similar information as provided on the NOI. Where an address for the construction site is not available, the construction site location information must be sufficient to accurately locate the construction site;

3. The owner's legal name, address, telephone number and email address and the operator's legal name, address, telephone and email address;

4. The name of the initial receiving water(s), and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4;

5. Copies of all sampling reports and/or a written justification why sampling was not conducted. Copies of all sampling reports may be submitted as a Portable Document Format (PDF) file on CD-ROM or other storage device;

6. Copy of the permittee's most current Notice of Intent;

7. Any other information specified on the NOT in effect at the time of submittal; and

8. The following certification signed in accordance with Part V.G.1. (signatory requirements):

> "I certify under penalty of law that either: (a) all storm water discharges associated with construction activity authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed or (b) I am no longer an Owner or Operator at the construction site and a new Owner or Operator has assumed operational control of the permitted construction site where I previously had ownership or operational control; and that discharging pollutants in storm water associated with construction activity to waters of Georgia is unlawful under the Georgia Water Quality Control Act and the Clean Water Act where the discharge is not authorized by a NPDES permit."

C. Notice of Termination Submittal. All Notices of Termination by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate EPD District Office according to the schedule in Appendix A of this permit and to the Local Issuing Authority in jurisdictions authorized to issue a Land Disturbance Activity permit for the permittee's construction site pursuant to O.C.G.A. 12-7-1, et seq. If an electronic submittal service is provided by the EPD then the Notice of Termination may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service.

APPENDIX A

EPD DISTRICT OFFICES

All required correspondence, including but not limited to the Notice of Intents, Notice of Terminations, certifications, Erosion, Sedimentation and Pollution Control Plans and any other reports, shall be sent to the following District Offices of EPD.

A. For facilities/construction sites located in the following counties: Bibb, Bleckley, Chattahoochee, Crawford, Dooly, Harris, Houston, Jones, Lamar, Macon, Marion, Meriwether, Monroe, Muscogee, Peach, Pike, Pulaski, Schley, Talbot, Taylor, Troup, Twiggs, Upson

Information shall be submitted to:

West Central District Office
Georgia Environmental Protection Division
2640 Shurling Drive
Macon, GA 31211-3576
(478) 751-6612

B. For facilities/construction sites located in the following counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Johnson, Laurens, McDuffie, Montgomery, Richmond, Screven, Treutlen, Warren, Washington, Wheeler, Wilkinson

Information shall be submitted to:

East Central District Office
Georgia Environmental Protection Division
3525 Walton Way Extension
Augusta, GA 30909-1821
(706) 667-4343

C. For facilities/construction sites located in the following counties: Baldwin, Banks, Barrow, Butts, Clarke, Elbert, Franklin, Greene, Hall, Hancock, Hart, Jackson, Jasper, Lincoln, Madison, Morgan, Newton, Oconee, Oglethorpe, Putnam, Stephens, Taliaferro, Walton, Wilkes

Information shall be submitted to:

Northeast District Office
Georgia Environmental Protection Division
745 Gaines School Road
Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:

Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:

Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:

Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8687
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(912) 430-4144

H. For facilities/construction sites required to submit Plans required under Part IV.A.4.a. of this Permit:

Information shall be submitted to:

Watershed Protection Branch
Environmental Protection Division
4220 International Parkway, Suite 101
Atlanta, Georgia 30354
(404) 675-6240

APPENDIX B

Nephelometric Turbidity Unit (NTU) TABLES

Trout Streams

Surface Water Drainage Area, square miles

Site Size, acres	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	25	50	75	150	300	500	500	500
10.01-25	25	25	50	75	150	200	500	500
25.01-50	25	25	25	50	75	100	300	500
50.01-100	20	25	25	35	59	75	150	300
100.01+	20	20	25	25	25	50	60	100

Waters Supporting Warm Water Fisheries

Surface Water Drainage Area, square miles

Site Size, acres	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	75	150	200	400	750	750	750	750
10.01-25	50	100	100	200	300	500	750	750
25.01-50	50	50	100	100	200	300	750	750
50.01-100	50	50	50	100	100	150	300	600
100.01+	50	50	50	50	50	100	200	100

To use these tables, select the size (acres) of the construction site. Then, select the surface water drainage area (square miles). The NTU matrix value arrived at from the above tables is the one to use in Part III.D.4.

Example 1: For a site size of 12.5 acres and a "trout stream" drainage area of 37.5 square miles, the NTU value to use in Part III.D.4. is 75 NTU.

Example 2: For a site size of 51.7 acres and "waters supporting warm water fisheries" drainage area of 72 square miles, the NTU value to use in Part III.D.4. is 100 NTU.

of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer

(3) stream crossings for any utility lines of any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, (b) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (c) the entity is not a secondary permittee for a project located within a common development or sale under this permit,

(4) buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer

(5) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification,

(6) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit

(7) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken by any electric membership corporation or municipal electrical system or any public utility under the, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and

(8) Maintenance (excluding dredging), repair and/or upgrade of Soil and Water Conservation District watershed dams when under the technical supervision of the USDA Natural Resources Conservation Service.

<u>(iii). Except as provided in Part IV(iv) below, no construction activities shall be conducted within a 25 foot buffer along coastal marshlands, as measured horizontally from the coastal marshland-upland interface, as determined in accordance with Part 4 of Article 4 of Chapter 5 of Title 12, the "Coastal Marshlands Protection Act of 1970, and the rules and regulations promulgated thereunder, except where the director determines to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7-6, or where otherwise allowed by the director pursuant to Code Section 12-2-8, or where an alteration within the buffer area has been authorized pursuant to Code Section 12-5-286, or for maintenance of any currently serviceable structure, landscaping, or hardscaping, including bridges, roads, parking lots, golf courses, golf cart paths, retaining walls,</u>

DRAFT

bulkheads, and patios, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented, or where a drainage structure or roadway drainage structure is constructed or maintained, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented, or on the landward side of any currently serviceable shoreline stabilization structure, or for the maintenance of any manmade storm-water detention basin, golf course pond, or impoundment that is located entirely within the property of a single individual, partnership, or corporation, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented:

(1) Public drinking water system reservoirs,
(2) Crossings for utility lines that cause a width of disturbance of not more than 50 feet within the buffer
(3) Any land-disturbing activity conducted pursuant to and in compliance with a valid and effective land-disturbing permit issued subsequent to April 22, 2014, and prior to December 31, 2015,
(4) Any lot for which the preliminary plat has been approved prior to December 31, 2015 if roadways, bridges, or water and sewer lines have been extended to such lot prior to the effective date of this Act and if the requirement to maintain a 25 foot buffer would consume at least 18 percent of the high ground of the platted lot otherwise available for development,
(5) Buffer crossings for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the Jurisdictional Line and cause a width of disturbance of not more than 50 feet within the buffer, and vegetation is re-established in any bare or disturbed areas within the buffer.
(6) Crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification;
(7) Right-of-way posts, guy wires, anchors, survey markers and the replacement and maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit;
(8) Right-of-way posts, guy wires, anchors, survey markers and the replacement and maintenance of existing utility structures within the current right-of-way by any electric membership corporation or municipal electrical system or any public utility under the regulator jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) vegetation is re-established in any bare or disturbed areas within the buffer

and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and

(9) Maintenance (excluding dredging), repair and/or upgrade of Soil and Water Conservation District watershed dams when under the technical supervision of the USDA Natural Resources Conservation Service

(~~iii.~~iv.) Except as provided above, for buffers required pursuant to Part IV.(i), (ii) and (iii), no construction activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. During coverage under this permit, a buffer cannot be thinned or trimmed of vegetation and a protective vegetative cover must remain to protect water quality and aquatic habitat and a natural canopy must be left in sufficient quantity to keep shade on the stream bed or marsh.

The Erosion, Sedimentation and Pollution Control Plan shall identify all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. In addition, the Plan shall describe and the applicable permittee shall ensure the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with construction activity at the site and to assure compliance with the terms and conditions of this permit. The applicable permittee must implement and maintain the provisions of the Plan required under this part as a condition of this permit.
Except as provided in Part IV.A.2., a single Erosion, Sedimentation and Pollution Control Plan must be prepared by the primary permittee for the stand alone construction project.

A. Deadlines for Plan Preparation and Compliance.

1. Except as provided in Part IV.A.2. and Part IV.A.6., the Erosion, Sedimentation and Pollution Control Plan shall be completed prior to submitting the NOI and prior to conducting any construction activity by any permittee.

2. For construction activities that began on or before the effective date of this permit and were subject to the regulations under the previous permit, the permittee(s) shall continue to operate under the existing Plan.

3. For construction activities that begin after the effective date of this permit, the primary permittee shall be required to prepare the Plan for that phase of the stand alone development that corresponds with the NOI being submitted and the primary permittee(s) shall implement the Plan on or before the day construction activities begin.

4. Additional Plan Submittals.

Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to: Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114

DRAFT

Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:

Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:

Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8687
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(912) 430-4144

H. For facilities/construction sites required to submit Plans required under Part IV.A.4.a. of this Permit:

Information shall be submitted to:

Watershed Protection Branch
Environmental Protection Division
~~4220 International Parkway, Suite 101~~
~~Atlanta, Georgia 30354~~
~~(404) 675-6240~~
2 Martin Luther King Jr. Drive
Suite 1152 East
Atlanta, Georgia 30334
404-463-1511

DRAFT

Insert Yellow Sheet

Back of Yellow Sheet

General Permit
No. GAR100002

State of Georgia
Department of Natural Resources
Environmental Protection Division

Authorization To Discharge Under The National Pollutant Discharge Elimination System Storm Water Discharges Associated With Construction Activity For Infrastructure Construction Projects

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the "State Act," the Federal Clean Water Act, as amended (33 U.S.C.1251 et seq.), hereinafter called the "Clean Water Act," and the Rules and Regulations promulgated pursuant to each of these Acts, new and existing storm water point sources within the State of Georgia that are required to have a permit, upon submittal of a Notice of Intent, are authorized to discharge storm water associated with construction activity to the waters of the State of Georgia in accordance with the limitations, monitoring requirements and other conditions set forth in Parts I through VI hereof.

This permit shall become effective on September 24 2013.

This permit and the authorization to discharge shall expire at midnight, July 31, 2018.

Signed this 23rd day of September 2013.

Director,
Environmental Protection Division

TABLE OF CONTENTS

Section **Page**

Part I. COVERAGE UNDER THIS PERMIT

A. Permit Area 4
B. Definitions 4
C. Eligibility 7
D. Authorization 9
E. Continuing Obligations of Permittees 9

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification 9
B. Notice of Intent Contents 10
C. Notice of Intent Submittal 11
D. Fees 11
E. Renotification 11

Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, PERMIT VIOLATIONS AND OTHER LIMITATIONS

A. Prohibition on Non-Storm Water Discharges 12
B. Releases in Excess of Reportable Quantities 12
C. Discharges into, or within One Mile Upstream of and within the Same Watershed as, Any Portion of a Biota Impaired Stream Segment 12
D. Management Practices and Permit Violations 14

Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

A. Deadlines for Plan Preparation and Compliance 18
B. Signature and Plan Review 19
C. Keeping Plans Current 19
D. Contents of Plan 19
1. Checklist 19
2. Site Description 19
3. Controls 20
4. Inspections 23
5. Maintenance 24

6. Sampling Requirements 24
7. Non-storm Water Discharges 28
E. Reporting 28
F. Retention of Records 28

Part V. STANDARD PERMIT CONDITIONS

A. Duty to Comply 29
B. Continuation of the Expired General Permit 29
C. Need to Halt or Reduce Activity Not a Defense 29
D. Duty to Mitigate 29
E. Duty to Provide Information 29
F. Other Information 30
G. Signatory Requirements 30
H. Oil and Hazardous Substance Liability 31
I. Property Rights 31
J. Severability 31
K. Other Applicable Environmental Regulations and Laws 31
L. Proper Operation and Maintenance 31
M. Inspection and Entry 31
N. Permit Actions 32

Part VI. TERMINATION OF COVERAGE

A. Notice of Termination Eligibility 32
B. Notice of Termination Contents 32
C. Notice of Termination Submittal 33

APPENDIX A. EPD District Offices 34

APPENDIX B. Nephelometric Turbidity Unit (NTU) Table 36

Part I. COVERAGE UNDER THIS PERMIT

A. Permit Area.

This permit regulates point source discharges of storm water to the waters of the State of Georgia from construction activities, as defined in this permit.

B. Definitions. All terms used in this permit shall be interpreted in accordance with the definitions as set forth in the Georgia Water Quality Control Act (Act) and the Georgia Rules and Regulations for Water Quality Control Chapter 391-3-6 (Rules), unless otherwise defined in this permit:

1. "Best Management Practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

2. "Buffer" means the area of land immediately adjacent to the banks of State waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat.

3. "Certified Personnel" means a person who has successfully completed the appropriate certification course approved by the State Soil and Water Conservation Commission.

4. "Commencement of Construction" means the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

5. "Construction Activity" means the disturbance of soils associated with clearing, grading, excavating, filling of land, or other similar activities which may result in soil erosion. Construction activity does not include agricultural and silvicultural practices, but does include agricultural buildings.

6. "CPESC" means Certified Professional in Erosion and Sediment Control with current certification by EnviroCert International, Inc. (www.EnviroCertIntl.org).

7. "CWA" means Federal Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972).

8. "Design Professional" means a professional licensed by the State of Georgia in the field of: engineering, architecture, landscape architecture, forestry, geology, or land surveying; or a person that is a Certified Professional in Erosion and Sediment Control (CPESC) with a current certification by EnviroCert International, Inc. Design Professionals shall practice in a manner that complies with applicable Georgia law governing professional licensure.

9. "Director" means the Director of the Environmental Protection Division or an authorized representative.

10. "Division" means the Environmental Protection Division of the Department of Natural Resources.

11. "Erosion" means the process by which land surface is worn away by the action of wind, water, ice or gravity.

12. "Erosion, Sedimentation and Pollution Control Plan" or "Plan" means a plan for the control of soil erosion, sediment and pollution resulting from a construction activity.

13. "Filling" means the placement of any soil or solid material either organic or inorganic on a natural ground surface or an excavation.

14. "Final Stabilization" means that all soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures, 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). For infrastructure construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by stabilizing the disturbed land for its agricultural or silvicultural use.

15. "General Contractor" means the operator of the infrastructure construction or site.

16. "Impossible" means the monitoring location(s) are either physically or legally inaccessible, or access would cause danger to life or limb.

17. "Infrastructure Construction" or "Infrastructure Construction Project" means construction activities that are not part of a common development that include the construction, installation and maintenance of roadway and railway projects and conduits, pipes, pipelines, substations, cables, wires, trenches, vaults, manholes and similar or related structures for the conveyance of natural gas (or other types of gas), liquid petroleum products, electricity, telecommunications (telephone, data, television, etc.), water, storm water or sewage.

18. "Infrastructure Company" or "Infrastructure Contractor" means, for the purposes of this Permit, an entity or sub-contractor that is responsible, either directly or indirectly, for infrastructure construction or an infrastructure construction project.

19. "Local Issuing Authority" means the governing authority of any county or municipality which is certified pursuant to Official Code of Georgia Section 12-7-8(a).

20. "Mass Grading" means the movement of earth by mechanical means to alter the gross topographic features (elevations, slopes, etc.) to prepare a site for final grading and the construction of facilities (buildings, roads, parking, etc.).

21. "Nephelometric Turbidity Unit (NTU)" means a numerical unit of measure based upon photometric analytical techniques for measuring the light scattered by fine particles of a substance in suspension.

22. "NOI" means Notice of Intent to be covered by this permit (see Part II).

23. "Normal Business Hours" means Monday thru Friday, 8:00 AM to 5:00 PM, excluding any non-working Saturday, non-working Sunday and non-working Federal holiday.

24. "NOT" means Notice of Termination (see Part VI).

25. "Operator" means the entity that has the primary day-to-day operational control of those activities at the construction site necessary to ensure compliance with Erosion, Sedimentation and Pollution Control Plan requirements and permit conditions.

26. "Other Water Bodies" means ponds, lakes, marshes and swamps which are waters of the State.

27. "Outfall" means the location where storm water, in a discernible, confined and discrete conveyance, leaves a facility or construction site or, if there is a receiving water on site, becomes a point source discharging into that receiving water.

28. "Owner" means the legal title holder to the real property on which is located the facility or site where construction activity takes place. For purposes of this permit, this definition does not include the legal title holder to property on which the only construction activity planned and being conducted is by a infrastructure company or infrastructure contractor and the legal title holder has no significant control over design and implementation of the construction activity.

29. "Permittee" means any entity that has submitted a Notice of Intent.

30. "Phase" or "Phased" means sub-parts or segments of infrastructure construction projects where the sub-part or segment is constructed and stabilized prior to completing the entire construction site.

31. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure or container from which pollutants are or may be discharged. This term also means sheetflow which is later conveyed via a point source to waters of the State. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

32. "Primary Permittee" means the Owner or the Operator or both of a tract of land for a construction project subject to this permit.

33. "Proper design" and "properly designed" means designed in accordance with the design requirements and specifications contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and amendments to the Manual as approved by the State Soil and Water Conservation Commission up until the date of NOI submittal.

34. "Receiving Water(s)" means all perennial and intermittent waters of the State into which the runoff of storm water from a construction activity will actually discharge, either directly or indirectly.

35. "Roadway Project(s)" means traveled ways including but not limited to roads, sidewalks, multi-use paths and trails, and airport runways and taxiways. This term also includes the accessory components to a roadway project that are necessary for the structural integrity of the roadway and the applicable safety requirements. These accessory components include but are not limited to slopes, shoulders, storm water drainage ditches and structures, guardrails, lighting, signage, cameras and fences and exclude subsequent landscaping and beautification projects.

36. "Sediment" means solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by, wind, water, ice, or gravity as a product of erosion.

37. "Sedimentation" means the action or process of forming or depositing sediment.

38. "Sheetflow" means runoff which flows over the ground surface as a thin, even layer, not concentrated in a channel.

39. "Site" or "Construction Site" means a facility of any type on which construction activities are occurring or are to occur which may result in the discharge of pollutants from a point source into the waters of the State.

40. "Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

41. "Structural Erosion and Sediment Control Practices" means measures for the stabilization of erosive or sediment producing areas by utilizing the mechanical properties of matter for the purpose of either changing the surface of the land or storing, regulating or disposing of runoff to prevent excessive sediment loss.

42. "Sub-contractor" means an entity employed or retained by the permittee to conduct any type of construction activity (as defined in this permit) at an infrastructure construction site. Sub-contractors must complete the

appropriate certification course approved by the Georgia Soil and Water Conservation Commission in accordance with the provisions of O.C.G.A. 12-7-19. Sub-contractors are not permittees unless they meet the definition of either a primary, secondary or tertiary permittee.

43. "Surface Water Drainage Area" means the hydrologic area starting from the lowest downstream point where the storm water from the construction activity enters the receiving water(s) and following the receiving water(s) upstream to the highest elevation of land that divides the direction of water flow. This boundary will connect back with the storm water entrance point. Boundary lines follow the middle of the highest ground elevation or halfway between contour lines of equal elevation.

44. "Trout Streams" means waters of the State classified as either primary trout waters or secondary trout waters, as designated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org.

45. "USGS Topographic Map" means a current quadrangle, 7½ minute series map prepared by the United States Department of the Interior, Geological Survey.

46. "Vegetative Erosion and Sediment Control Practices" means measures for the stabilization of erosive or sediment producing areas by covering the soil with: (1) permanent seeding, sprigging or planting, producing long-term vegetative cover; (2) temporary seeding, producing short-term vegetative cover; or (3) sodding, covering areas with a turf of perennial sod forming grass.

47. "Waters Supporting Warm Water Fisheries" means all waters of the State that sustain, or have the potential to sustain, aquatic life but excluding trout streams.

48. "Waters of Georgia" or "Waters of the State" means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, wetlands, and all other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

C. Eligibility.

1. Construction Activities. This permit authorizes, subject to the conditions of this permit:

a. all discharges of storm water associated with infrastructure construction projects that will result in contiguous land disturbances equal to or greater than one (1) acre occurring on or before, and continuing after, the effective date of this permit, (henceforth referred to as existing storm water discharges from construction activities) except for discharges identified under Part I.C.3. Contiguous means areas of land disturbances that are in actual contact to create a connected, uninterrupted area of land disturbance. However, for purposes of this permit, contiguous areas of land disturbances include those areas of land disturbances solely separated by drilling and boring activities, waters of the State and adjacent State-mandated buffers, roadways and/or railways. In addition, contiguous areas of land disturbances include all areas of land disturbances at a sole roadway intersection and/or junction;

b. all discharges of storm water associated with infrastructure construction projects that will result in contiguous land disturbances equal to or greater than one (1) acre occurring after the effective date of this permit, (henceforth referred to as storm water discharges from construction activities), except for discharges identified under Part I.C.3. Contiguous means areas of land disturbances that are in actual contact to create a connected, uninterrupted area of land disturbance. However, for purposes of this permit, contiguous areas of land disturbances include those areas of land disturbances solely separated by drilling and boring activities, waters of the State and adjacent State-mandated buffers, roadways and/or railways. In addition, contiguous areas of land disturbances include all areas of land disturbances at a sole roadway intersection and/or junction;

c. coverage under this permit is not required for discharges of storm water associated with infrastructure construction projects that consist solely of routine maintenance for the original purpose of the facility that is performed to maintain the original line and grade and the hydraulic capacity, as applicable. The permittee shall, as a minimum, implement and maintain best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity is being conducted. In order to be eligible for this exemption the project must comply with the following conditions: (1) no mass grading shall occur on the project, (2) the project shall be stabilized by the end of each day with temporary or permanent stabilization measures, (3) the project shall have a duration of less than 120 calendar days, and (4) final stabilization must be implemented at the end of the maintenance project; and

d. coverage under this permit is not required for discharge of storm water associated with railroad construction projects and emergency re-construction conducted pursuant to the Federal Railway Safety Act, the Interstate Commerce Commission Termination Act and which consist solely of routine maintenance for the original purpose of the facility that is performed to maintain the original line and grade and the hydraulic capacity, as applicable. The construction activity should, at a minimum, implement and maintain best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation consistent with the requirements of the Federal Railway Safety Act and applicable requirements of the Clean Water Act.

2. Mixed Storm Water Discharges. This permit may only authorize a storm water discharge from a construction site or construction activities mixed with a storm water discharge from an industrial source or activity other than construction where:

a. 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;

b. the storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and

c. storm water 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.

3. Limitations on Coverage. The following storm water discharges from construction sites are not authorized by this permit:

a. storm water discharges associated with an industrial activity that originate from the site after construction activities have been completed and the site has undergone final stabilization;

b. discharges that are mixed with sources of non-storm water other than discharges which are identified in Part III.A.2. of this permit and which are in compliance with Part IV.D.7. (non-storm water discharges) of this permit;

c. storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges; and

d. storm water discharges from construction sites that the Director (EPD) has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard.

4. Compliance with Water Quality Standards. 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.

D. Authorization.

1. Any person desiring coverage under this permit must submit a Notice of Intent (NOI) to the EPD and the NOI must be received by the EPD in accordance with the requirements of Part II, using NOI forms provided by the EPD (or an exact photocopy thereof), in order for storm water discharges from construction sites to be authorized.

2. Unless notified by the Director to the contrary, a permittee who submits an NOI in accordance with the requirements of this permit is authorized to discharge storm water from construction sites under the terms and conditions of this permit fourteen (14) days after the date that the NOI is postmarked. The Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit or alternative general NPDES permit based on a review of the NOI or other information. Should the Director deny coverage under this permit, coverage under this permit is authorized until the date specified in the notice of denial by the Director.

3. Where a new permittee is to begin work on-site after an NOI for the facility/construction site has been submitted, that new permittee must submit a new NOI in accordance with Part II.

E. Continuing Obligations of Permittees. Unless and until responsibility for a site covered under this permit is properly terminated according to the terms of the permit, the current permittee remains responsible for compliance with all applicable terms of the permit and for any violations of said terms.

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification.

1. Except as provided in Part II.A.2., II.A.3. and II.A.5., Owners or Operators or both who intend to obtain coverage under this general permit for storm water discharges from a construction site (where construction activities begin after issuance of this permit), shall submit a Notice of Intent (NOI) in accordance with the requirements of this Part at least fourteen (14) days prior to the commencement of construction activities.

2. For sites where construction activities, subject to this permit, are occurring on the effective date of this permit, the Owner or Operator or both shall submit a re-issuance NOI for an existing construction site in accordance with the requirements of this part no later than ninety (90) days after the effective date of this permit. Failure to comply with this requirement shall constitute a violation of the Georgia Water Quality Control Act for each day until the Owner or Operator or both submit an initial NOI for a new construction site in accordance with Part II.A.1., comply with the special conditions in Part III., prepare and submit a new Erosion, Sedimentation and Pollution Control Plan in accordance with Part IV., and pay all applicable fees in accordance with Part II.D.

3. A discharger is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Parts II.A.1. or II.A.2. of this permit. In such instances, EPD may bring an enforcement action for failure to submit an NOI in a timely manner or for any unauthorized discharges of storm water associated with construction activity that have occurred on or after the dates specified in Part II.A.1. and II.A.2.

4. Where an Owner or an Operator or both changes after an NOI has been filed, the subsequent Owner or Operator or both must file a change of information NOI in accordance with this Part by the earlier to occur of (a) seven (7) days before beginning work at the facility/construction site; or (b) thirty (30) days from acquiring legal title to the facility/construction site. In the event a lender or other secured creditor acquires legal title to the facility/construction site, such party must file a change of information NOI in accordance with this Part by the earlier to occur of (a) seven (7) days before beginning work at the facility/construction site; or (b) thirty (30) days

from acquiring legal title to the facility/construction site. Stabilization and BMP installation and/or maintenance measures of a disturbed site, by the subsequent Owner or Operator, may occur in advance of filing a new NOI, without violation of this permit. Failure to comply with this requirement shall constitute a violation of the Georgia Water Quality Control Act for each day until the Owner or Operator or both submit an initial NOI for a new construction site in accordance with Part II.A.1., comply with the special conditions in Part III., prepare and submit a new Erosion, Sedimentation and Pollution Control Plan in accordance with Part IV., and pay all applicable fees in accordance with Part II.D.

5. For sites where construction activities will result in land disturbance equal to or greater than one (1) acre that are required as a result of storm- or emergency-related repair work, the Owner or Operator or both shall notify the appropriate EPD District Office within three (3) days of commencement of said construction activities. The Owner or Operator or both shall submit the NOI to the appropriate EPD District Office as soon as possible after the storm- or emergency-related event but no later than fourteen (14) days after the commencement of construction activities and shall submit the Plan in accordance with Part IV.A.6.

B. Notice of Intent Contents.

1. Primary Permittee. A single Notice of Intent for the primary permittee (i.e., one NOI signed by the Owner or the Operator or both) shall be signed in accordance with Part V.G.1. of this permit and shall include the following information:

a. The project construction site name, GPS locations (decimal degrees) of the beginning and end of the infrastructure project, construction site location, city (if applicable) and county of the construction site for which the notification is submitted. The construction site location information must be sufficient to accurately locate the construction site;

b. The Owner's legal name, address, telephone number and email address; and if available, the Operator's legal name, address, telephone number and email address; and if applicable, the Duly Authorized Representative's legal name and/or position name, telephone number and email address;

c. The name, telephone number and email address of the individual to whom the permittee has assigned the responsibility for the daily operational control (i.e., construction superintendent, etc.) of the construction site;

d. The name of the initial receiving water(s) or if unnamed, the first named blue line stream indicated on the appropriate USGS Topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org.

e. The name of the receiving water(s) located within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s) shown on Georgia's most current "305(b)/303(d) List Documents (Final)" for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff) at www.gaepd.org/Documents/305b.html;

f. An estimate of project start date and completion date, a schedule for the timing of the various construction activities, the number of acres of the site on which soil will be disturbed, and the surface water drainage area (if applicable). For projects that began on or before the effective date of this permit, the start date must be the actual start date of construction;

g. The following certification shall be signed in accordance with Part V.G.1. of this permit:

> "I certify that to the best of my knowledge and belief, that the Erosion, Sedimentation and Pollution Control Plan (Plan) was prepared by a design professional, as defined by this permit, that has completed the appropriate certification course approved by the Georgia Soil and Water Conservation Commission in accordance with the provisions of O.C.G.A. 12-7-19 and that I will adhere to the Plan and comply with all permit requirements."

h. The type of construction activity category (from those listed on the NOI) conducted at the site;

i. The location of the receiving water(s) or outfall(s) or a combination of receiving water(s) and outfall(s) to be sampled on a map or drawing of appropriate scale. When it is determined by the primary permittee that some or all of the outfall(s) will be sampled, the applicable nephelometric turbidity unit (NTU) selected from Appendix B (i.e., based upon the size of the construction site and the surface water drainage area) must be shown for each outfall to be sampled.

j. For infrastructure projects disturbing more than 50 acres, which began after the effective date of this permit, include a single copy of the Erosion, Sedimentation and Pollution Control Plan;

k. NOIs may be submitted for separate phases of projects with a total planned disturbance greater than 5.0 acres, provided that each phase shall not be less than 1.0 acre. Phased NOIs shall include all documentation required by this permit for each phase, including fees; and

l. Any other information specified on the NOI in effect at the time of submittal.

C. Notice of Intent Submittal. NOIs are to be submitted by ***return receipt certified mail*** (or similar service) to both the appropriate EPD District Office according to the schedule in Appendix A of this permit and to the Local Issuing Authority in jurisdictions authorized to issue a Land Disturbance Activity permit for the permittee's construction site pursuant to O.C.G.A. 12-7-1, et seq. If an electronic submittal service is provided by EPD then the NOI may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service. 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 alternative location from commencement of construction until such time as a Notice of Termination (NOT) is submitted in accordance with Part VI.

D. Fees. Any applicable fees shall be submitted by the **Primary Permittee** in accordance with Rules and Regulations for Water Quality Control (Rules) promulgated by the Board of Natural Resources. By submitting an NOI for coverage under this permit the primary permittee agrees to pay any fees required, now or in the future, by such Rules authorized under O.C.G.A. Section 12-5-23(a)(5)(A), which allows the Board of Natural Resources to establish a fee system. Fees may be assessed on land disturbing activity proposed to occur on or after the effective date of this permit and shall be paid in accordance with such Rules.

E. Renotification. Upon issuance of a new or different general permit for some or all of the storm water discharges covered by this permit, the permittee is required to notify the EPD of their intent to be covered by the new or different general permit. The permittee must submit a new Notice of Intent in accordance with the notification requirements of the new or different general permit.

PART III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, PERMIT VIOLATIONS AND OTHER LIMITATIONS

A. Prohibition on Non-Storm Water Discharges.

1. Except as provided in Part I.C.2. and III.A.2., all discharges covered by this permit shall be composed entirely of storm water.

2. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharge is explicitly listed in the Erosion, Sedimentation and Pollution Control Plan and is in compliance with Part IV.D.7.; discharges from fire fighting activities; fire hydrant flushing; potable water sources including water line flushing; irrigation drainage; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials or pollutants.

3. This permit does not authorize the discharge of soaps or solvents used in vehicle and equipment washing.

4. This permit does not authorize the discharge of wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.

B. Releases in Excess of Reportable Quantities.

1. The discharge of hazardous substances or oil in the storm water discharge(s) from a site shall be prevented. This permit does not relieve the permittee of the reporting requirements of Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR Part 117 and 40 CFR Part 302. Where a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR 117 or 40 CFR 302 occurs during a 24 hour period, the permittee is required to notify EPD at (404) 656-4863 or (800) 241-4113 and the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR 117 and 40 CFR 302 as soon as he/she has knowledge of the discharge.

This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

C. Discharges into, or within One Mile Upstream of and within the Same Watershed as, Any Portion of a Biota Impaired Stream Segment.

Any permittee who intends to obtain coverage under this permit for storm water discharges associated with construction activity into an Impaired Stream Segment, or within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s), as shown on Georgia's most current "305(b)/303(d) List Documents (Final)" at the time of NOI submittal, must satisfy the requirements of Part III.C. of this permit if the Impaired Stream Segment has been listed for criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff). Those discharges that are located within one (1) linear mile of an Impaired Stream Segment, but are not located within the watershed of any portion of that stream segment, are excluded from this requirement. Georgia's 305(b)/303(d) List Documents (Final)" can be viewed on the EPD website, www.gaepd.org/Documents/305b.html.

1. If a Total Maximum Daily Load (TMDL) Implementation Plan for sediment has been finalized at least six (6) months prior to the permittee's submittal of the NOI, the Erosion, Sedimentation and Pollution Control Plan (Plan) must address any site-specific conditions or requirements included in the TMDL Implementation Plan that are applicable to the permittee's discharge(s) to the Impaired Stream Segment within the timeframe specified in the TMDL Implementation Plan. If the TMDL Implementation Plan establishes a specific numeric wasteload allocation that applies to an permittee's discharge(s) to the Impaired Stream Segment, then the permittee must

incorporate that allocation into the Erosion, Sedimentation and Pollution Control Plan and implement all necessary measures to meet that allocation. A list of TMDL Implementation Plans can be viewed on the EPD website, www.gaepd.org.

2. In order to ensure that the permittee's discharge(s) do not cause or contribute to a violation of State water quality standards, the Plan must include at least four (4) of the following best management practices (BMPs) for those areas of the site which discharge into or within one (1) linear mile upstream and within the same watershed as the Impaired Stream Segment:

a. During all construction activities as defined in this permit, double the width of the 25 foot undisturbed vegetated buffer along all State waters requiring a buffer and the 50 foot undisturbed vegetated buffer along all State waters classified as "trout streams" requiring a buffer. During construction activities, EPD will not grant variances to any such buffers that are increased in width pursuant to this section.

b. Increase all temporary sediment basins and retrofitted storm water management basins to provide sediment storage of at least 3600 cubic feet (134 cubic yards) per acre drained.

c. Use baffles in all temporary sediment basins and retrofitted storm water management basins to at least double the conventional flow path length to the outlet structure.

d. A large sign (minimum 4 feet x 8 feet) must be on the site on the actual start date of construction visible from a public roadway identifying the construction site, the permittee(s), and the contact person(s) and telephone number(s) until a NOT has been submitted.

e. Use anionic polyacrylamide (PAM) and/or mulch to stabilize all areas left disturbed for more than seven (7) calendar days in accordance with Part III.D.1. of this permit.

f. Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24 hour period, recognizing the exceptions specified in Part IV.D.6.d. of this permit.

g. Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as provided for in O.C.G.A. 12-7-6(a)(1).

h. Reduce the total planned site disturbance to less than 50% impervious surfaces (excluding any State-mandated buffer areas from such calculations). All calculations must be included on the Plan.

i. Limit the amount of disturbed area at any one time to no greater than 25 acres or 50% of the total planned site, whichever is less. All calculations must be included on the Plan.

j. Use "Dirt II" techniques available on the EPD website, www.gaepd.org (e.g., seep berms, sand filters, anionic PAM) to model and manage all construction storm water runoff (including sheet flow). All calculations must be included on the Plan.

k. Add appropriate organic soil amendments (e.g., compost) and conduct pre- and post-construction soil sampling to a depth of 6 (six) inches to document improved levels of soil carbon after final stabilization of the construction site.

l. Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever construction storm water (including sheet flow) may be discharged. Mulch filter berms cannot be placed in waterways or areas of concentrated flow.

m. Apply the appropriate Georgia Department of Transportation approved erosion control matting or blankets or bonded fiber matrix to all slopes steeper than 3:1. All graphical illustrations must be included on the Plan.

n. Use appropriate erosion control matting or blankets instead of concrete in all construction storm water ditches and storm drainages designed for a 25 year, 24 hour rainfall event.

o. Use anionic PAM under a passive dosing method (e.g., flocculant blocks) within all construction storm water ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.

p. Install sod for a minimum 20 foot width (in lieu of seeding) after final grade has been achieved, along the site perimeter wherever construction storm water (including sheet flow) may be discharged.

q. Conduct soil tests to identify and to implement site-specific fertilizer needs.

r. Certified personnel shall conduct inspections at least once every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV.D.4.a.(3).. (a) – (c) of this permit.

s. 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.

t. Use alternative BMPs whose performance has been documented to be superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the State Soil and Water Conservation Commission).

u. 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 on the Plan.

D. Management Practices and Permit Violations.

1. Best management practices, as set forth in this permit, are required for all construction activities, and must be implemented in accordance with the design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia. Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the Director or to any other allegation of noncompliance with Part III.D.3. and Part III.D.4.

2. Except as required to install the initial sediment storage requirements and perimeter control BMPs as described in Part IV.D.3., the initial sediment storage requirements and perimeter control BMPs must be installed and implemented prior to conducting any other construction activities (e.g., clearing, grubbing and grading) within the construction site or when applicable, within phased sub-parts or segments of the construction site. Failure to comply shall constitute a violation of this permit for each day on which construction activities occur. The design professional who prepared the Plan must inspect the initial sediment storage requirements and perimeter control BMPs in accordance with Part IV.A.5. within seven (7) days after installation.

3. Failure to properly design, install, or maintain best management practices shall constitute a violation of this permit for each day on which such failure occurs. BMP maintenance as a result of the permittee's routine inspections shall not be considered a violation for the purposes of this paragraph. If during the course of the permittee's routine inspection BMP failures are observed which have resulted in sediment deposition into waters of the State, the permittee shall correct the BMP failures and shall submit a summary of the violations to EPD in accordance with Part V.A.2. of this permit.

4. A discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on which such discharge results in the turbidity of receiving water(s) being increased by more than ten (10) nephelometric

turbidity units for waters classified as trout streams or more than twenty-five (25) nephelometric turbidity units for waters supporting warm water fisheries, regardless of a permittee's certification under Part II.B.1.i.

5. When the permittee has elected to sample outfall(s), the discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on which such condition results in the turbidity of the discharge exceeding the value selected from Appendix B applicable to the construction site. As set forth therein, the nephelometric turbidity unit (NTU) value shall be selected from Appendix B based upon the size of the construction site, the surface water drainage area and whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org.

Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

A site-specific Erosion, Sedimentation and Pollution Control Plan (Plan) shall be designed, installed and maintained for the entire construction activity covered by this permit. The Erosion, Sedimentation and Pollution Control Plan must be prepared by a design professional as defined by this permit. All persons involved in Plan preparation shall have completed the appropriate certification course, pursuant to O.C.G.A. 12-7-19 (b), approved by the State Soil and Water Conservation Commission. The design professional preparing the Plan must include and sign the following certification in the Plan:

> "I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR 100002."

The Plan shall include any additional certifications regarding the design professional's site visit in accordance with the Rules for Erosion and Sedimentation Control promulgated by the Board of Natural Resources;

> "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 supervision."

The Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and O.C.G.A. 12-7-6, as well as the following:

(i). Except as provided in Part IV.(iii). below, no construction activities shall be conducted within a 25 foot buffer along the banks of all State waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the Director has determined to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7-6, or where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented, or along any ephemeral stream, or where bulkheads and seawalls must be constructed to prevent the erosion of the shoreline on Lake Oconee and Lake Sinclair. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

(1) public drinking water system reservoirs,
(2) fences,
(3) stream crossings for water lines and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer
(4) stream crossings for any utility lines of any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, (b) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (c) the entity is not a secondary permittee for a project located within a common development or sale under this permit,,
(5) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 200 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification;
(6) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and
(7) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit.

(ii). No construction activities shall be conducted within a 50 foot buffer, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any State waters classified as 'trout streams' except when approval is granted by the Director for alternate buffer requirements in accordance with the provisions of O.C.G.A. 12-7-6, or where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as 'trout streams' which discharge an average annual flow of 25 gallons per minute or less shall have a 25 foot buffer or they may be piped, at the discretion of the permittee, pursuant to the terms of a rule providing for a general variance promulgated by the Board of Natural Resources including notification of such to EPD and the Local Issuing Authority of the location and extent of the piping and prescribed methodology for minimizing the impact of such piping and for measuring the volume of water discharged by the stream. Any such pipe must stop short of the downstream permittee's property, and the permittee must comply with the buffer requirement for any adjacent trout streams. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

(1) public drinking water system reservoirs,
(2) fences,
(3) stream crossings for water lines and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer
(4) stream crossings for any utility lines of any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, (b) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (c) the entity is not a secondary permittee for a project located within a common development or sale under this permit,
(5) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 200 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) I native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification; and
(6) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and
(7) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit.

(iii). Except as provided above, for buffers required pursuant to Part IV.(i). and (ii)., no construction activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. During coverage under this permit, a buffer cannot be thinned or trimmed of vegetation and a protective vegetative cover must remain to protect water quality and aquatic habitat and a natural canopy must be left in sufficient quantity to keep shade on the stream bed.

The Erosion, Sedimentation and Pollution Control Plan shall identify all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. In addition, the Plan shall describe and the applicable permittee shall ensure the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with construction activity at the site and to assure compliance with the terms and conditions of this permit. The applicable permittee must implement and maintain the provisions of the Plan required under this part as a condition of this permit.

Except as provided in Part IV.A.2., a single Erosion, Sedimentation and Pollution Control Plan must be prepared by the primary permittee for the infrastructure construction project.

A. Deadlines for Plan Preparation and Compliance.

1. Except as provided in Part IV.A.2. and Part IV.A.6., the Erosion, Sedimentation and Pollution Control Plan shall be completed prior to submitting the NOI and prior to conducting any construction activity by any permittee.

2. For construction activities that began on or before the effective date of this permit and were subject to the regulations under the previous permit, the permittee(s) shall continue to operate under the existing Plan.

3. For construction activities that begin after the effective date of this permit, the primary permittee shall be required to prepare the Plan for that phase of the infrastructure development that corresponds with the NOI being submitted and the primary permittee(s) shall implement the Plan on or before the day construction activities begin.

4. Additional Plan Submittals.

a. For all projects identified under Part I.C.1.b., in a jurisdiction where there is no certified Local Issuing Authority regulating that project, a single copy of the Plan must be submitted to the EPD Watershed Protection Branch and a second copy of the Plan must be submitted to the appropriate EPD District Office prior to or concurrent with the NOI submittal. The second copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device. The EPD Watershed Protection Branch will review Plans for deficiencies using the applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted

b. For sites that are equal to or greater than 50 acres of disturbed area, regardless of the existence of a certified Local Issuing Authority in the jurisdiction, one of the following submissions is also required:

(i) for all projects which begin after the effective date of this permit a single copy of the NOI and a single copy of the Plan shall be submitted to the appropriate EPD District Office. This copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device.

(ii) for all projects which began on or before the effective date of this permit single copy of the NOI and a single copy of the Plan, if amended, shall be submitted to the appropriate EPD District Office. This copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device.

c. For all projects where the construction activity as indicated on the existing NOI has changed, the amended Plans must be submitted in accordance with Part IV.A.4.a. In addition, the permittee must file a change of information NOI in accordance with Part II.

5. For infrastructure projects that begin construction activity after the effective date of this permit, the primary permittee must retain the design professional who prepared the Erosion, Sedimentation and Pollution Control Plan, or an alternative design professional approved by EPD in writing, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within seven (7) days after installation. Alternatively, for linear infrastructure projects, the primary permittee must retain the design professional who prepared the Erosion, Sedimentation and Pollution Control Plan, or an alternative design professional approved by EPD in writing, to inspect (a) the installation of the sediment storage requirements and perimeter control BMPs for the *"initial segment"* of the linear infrastructure project and (b) all sediment basins within the entire linear infrastructure project within seven (7) days after installation. For the purposes of the specific requirements in Part IV.A.5., the disturbed acreage of the *"initial segment"* of a linear infrastructure project must be equal to or greater than 10% of the total estimated disturbed acreage for the linear infrastructure project but not less than one (1) acre. 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 primary 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.

6. For storm- or emergency-related repair work, the permittee shall implement appropriate BMPs and certified personnel (provided by the primary permittee) shall inspect 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. If the storm- or emergency-related repair work will not be completed within sixty (60) days of commencement of construction activity, a single copy of the Plan shall be submitted to EPD and the permittee shall comply with all requirements of this permit on the sixty-first (61st) day.

B. Signature and Plan Review.

1. The Erosion, Sedimentation and Pollution Control Plan shall be signed in accordance with Part IV., and be retained on the site (or, if not possible, at a readily accessible location) which generates the storm water discharge in accordance with Part IV.F. of this permit.

2. The primary permittee shall make Plans available upon request to the EPD; to designated officials of the local government reviewing soil erosion and sedimentation control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system.

3. EPD may notify the primary permittee at any time that the Plan does not meet one or more of the minimum requirements of this Part. Within seven (7) days of such notification (or as otherwise provided by EPD), the primary permittee shall make the required changes to the Plan and shall submit to EPD either the amended Plan or a written certification that the requested changes have been made.

C. Keeping Plans Current. The primary permittee(s) shall amend their Plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on BMPs with a hydraulic component (i.e., those BMPs where the design is based upon rainfall intensity, duration and return frequency of storms) or if the Plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.3. of this permit. Amendments to the Plan must be certified by a design professional as provided in this permit.

D. Contents of Plan. The Erosion, Sedimentation and Pollution Control Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:

1. Checklist. Each plan shall include a completed Erosion, Sedimentation and Pollution Control Plan Checklist established by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and amendments to the applicable Checklist as approved by the State Soil and Water Conservation Commission up until the date of the NOI submittal. The applicable checklists are available on the EPD website, www.gaepd.org.

2. Site description. Each site-specific Plan shall provide a description of pollutant sources and other information as indicated:

a. A description of the nature of the construction activity;

b. A detailed description and chart or timeline of the intended sequence of major activities which disturb soils for major portions of the site (i.e., initial sediment storage requirements and perimeter BMPs, clearing and grubbing activities, excavation activities, grading activities, infrastructure activities, immediate and final stabilization activities);

c. Estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other activities;

d. An estimate of the runoff coefficient or peak discharge flow of the site prior to the construction activities and after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;

e. A site-specific map or series of drawings indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the Plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water; and

f. Identify the receiving water(s) and areal extent of wetland acreage at the site;

3. Controls. Each Plan shall include 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 sediment storage requirements and 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 Plan. The Plan will include appropriate staging and access requirements for construction equipment. The Plan will clearly describe for each major activity identified in Part IV.D.2.b., appropriate control measures and the timing during the construction process that the measures will be implemented. The primary permittee is encouraged to utilize the document, Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites, EPA 833-R-060-04, May 2007 (www.epa.gov/npdes/pubs/sw_swppp_guide.pdf), when preparing the Plan. The description and implementation of controls shall address the following minimum components:

a. Erosion and sediment controls.

(1). Stabilization measures. A description of interim and permanent stabilization measures, including site-specific scheduling of the implementation of the measures. Site plans should ensure that existing vegetation is preserved and that disturbed portions of the site are stabilized. Stabilization measures may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the Plan. Except as provided in paragraphs IV.D.3.(a).(1).(a). and (b). below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

(a). Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently cease is precluded by snow cover or other adverse weather conditions, stabilization measures shall be initiated as soon as practicable.

(b). Where construction activity will resume on a portion of the site within 21 days from when activities ceased, (e.g., the total time period that construction activity is temporarily

ceased is less than 21 days) then stabilization measures do not have to be initiated on that portion of site by the 14th day after construction activity temporarily ceased.

(2). Structural practices. A description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

(3). Sediment basins. For common drainage locations a temporary (or permanent) sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site. The 1800 cubic feet (67 cubic yards) of storage area per acre drained does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. For drainage locations where a temporary sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent controls is not attainable, sediment traps, silt fences, wood mulch berms or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area. When the sediment fills to a volume at most of 22 cubic yards per acre for each acre of drainage area, the sediment shall be removed to restore the original design volume. This sediment must be properly disposed. Sediment basins may not be feasible at some construction projects. Careful consideration must be used to determine when a sediment basin cannot be used and/or when 67 cubic yards of storage per acre drained is not attainable and a written justification explaining the decision(s) must be included in the Plan. Perennial and intermittent waters of the State shall not be used for temporary or permanent sediment detention.

When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan. Outlet structures that withdraw water from the surface are temporary BMPs and must be removed prior to submitting Notice of Termination. For construction activities where the NOI was submitted prior to January 1, 2014, this requirement of the permit is not applicable.

(4). Alternative BMPs. The use of alternative BMPs whose performance has been documented to be equivalent or superior to conventional BMPs as certified by a Design Professional may be allowed (unless disapproved by EPD or the State Soil and Water Conservation Commission).

(5). High performance BMPs. The use of infiltration trenches, seep berms, sand filters, dry wells, polyacrylamide, etc. for minimizing point source discharges except for large rainfall events is encouraged.

b. Storm water management. A description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Operators are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with construction activity have been eliminated from the site.

(1). Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site; and sequential systems (which combine several practices). The Plan shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.

(2). 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 so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water(s)).

(3). Installation and use of Green Infrastructure approaches and practices that mimic natural processes and direct storm water where it can be infiltrated, evapotranspirated or re-used with significant utilization of soils and vegetation rather than traditional hardscape collection, conveyance and storage structures are encouraged to the maximum extent practicable. Green Infrastructure practices or approaches include permeable or porous paving, vegetated swales instead of curbs and gutters, green roofs, tree boxes, rain gardens, constructed wetlands, infiltration planters, vegetated median strips, protection and enhancement of riparian buffers and floodplains, and the overall reduction in site disturbance and impervious area. Design information on Green Infrastructure practices and other ways to manage storm water can be found in the Georgia Stormwater Management Manual (www.georgiastormwater.com) and the Georgia Green Growth Guidelines (www.coastalgadnr.org/cm/green/guide). Additional information on Green Infrastructure can be found at water.epa.gov/infrastructure/greeninfrastructure/index.cfm .

c. Other controls.

(1). Waste disposal. Locate waste collection areas away from streets, gutters, watercourses and storm drains. Waste collection areas, such as dumpsters, are often best located near construction site entrances to minimize traffic on disturbed soils. The Plan should include secondary containment around liquid waste collection areas to further minimize the likelihood of contaminated discharges. Solid materials, including building materials, shall not be discharged to waters of the State, except as authorized by a Section 404 permit.

(2). Off-site vehicle tracking of dirt, soils, and sediments and the generation of dust shall be minimized or eliminated to the maximum extent practical. The Plan shall include the best management practice to be implemented at the site or construction activity.

(3). Nothing in this permit relieves a permittee from any obligations to comply with all applicable State and/or local regulations of waste disposal, sanitary sewer, septic and petroleum storage systems.

(4). The Plan shall include best management practices for the remediation of all petroleum spills and leaks as appropriate.

(5). The Plan shall include best management practices for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of vehicles. Washout of the drum at the construction site is prohibited. Additional information about best management practices for concrete washout is available at www.epa.gov/npdes/pubs/concretewashout.pdf.

(6) All permittees are required to minimize the discharge of pollutants from dewatering trenches and excavations. Discharges are prohibited unless managed by appropriate controls.

4. Inspections.

a. 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 rainfall once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday until a Notice of Termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.

(3). Certified personnel (provided by the primary permittee) shall inspect the following at least once every fourteen (14) 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 non-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): (a) disturbed areas of the primary permittee's construction site ; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation ; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.(4). These inspections must be conducted until a Notice of Termination is submitted.

(4). Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).

(5). Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution Control Plan, the Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following each inspection.

(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 project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily

available by end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a statement 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.

5. Maintenance. The Plan shall include a description of procedures to ensure the timely maintenance of vegetation, erosion and sediment control measures and other protective measures identified in the site plan.

6. Sampling Requirements. This permit requires the monitoring of nephelometric turbidity in receiving water(s) or outfalls in accordance with this permit. The following procedures constitute EPD's guidelines for sampling turbidity.

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 infrastructure 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 storm water is discharged and (b) the receiving water and/or outfall sampling locations for each representative stormwater outfall. 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 storm water(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 and analyze the samples including quality control/quality assurance procedures. This narrative must include precise sampling methodology for each sampling location;

(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 Storm Water 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.

c. *Sampling Points.*

(1). For construction activities the primary permittee must sample all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, or all outfalls into such streams and other water bodies, or a combination thereof. However, provided for in and in accordance with Part IV.D.6.c.(2). of this permit, primary permittees on an infrastructure construction project may sample the representative perennial and intermittent streams, other water bodies or outfalls, or a combination thereof. Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the storm water outfalls using the following minimum guidelines:

(a). The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge from the permitted activity (i.e., the discharge farthest upstream at the site) but downstream of any other storm water discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the 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 storm water discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other storm water discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value.

(c). Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the storm water outfall channel(s).

(d). Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel.

(e). The sampling container should be held so that the opening faces upstream.

(f). The samples should be kept free from floating debris.

(g). Permittees do not have to sample sheetflow that flows onto undisturbed natural areas or areas stabilized by the project. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures,, 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). For infrastructure construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by stabilizing the disturbed land for its agricultural or silvicultural use.

(h). All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether storm water runoff from the construction site is in compliance with the standard set forth in Parts III.D.3. or III.D.4., whichever is applicable.

(2). For infrastructure construction projects, the permittee is not required to sample a perennial or intermittent stream or other water bodies (or the associated outfall, if applicable) if the design professional preparing the Plan certifies that an increase in the turbidity of a specific identified receiving water to be sampled will be representative of the increase in the turbidity of a specific identified un-sampled receiving water. A written justification and detailed analysis shall be prepared by the design professional justifying such proposed sampling. A summary chart of the justification and analysis for the representative sampling must be included on the Plan. The justification and analysis shall include the location and description of the specified sampled and un-sampled receiving water and shall contain a detailed comparison and discussion of each such receiving water in the following areas:

(a). site land disturbances and characteristics;

(b). receiving water watershed sizes and characteristics; and

(c). site and watershed runoff characteristics utilizing the methods in Appendix A-1 (United States Department of Agriculture Soil Conservation Service's TR-55, Urban Hydrology for Small Watersheds) of the most recent version of the "Manual for Erosion and Sedimentation Control in Georgia" for the various precipitation events and any other such considerations necessary to show that the increase in the turbidity of a specific identified sampled receiving water will be representative of the increases in the turbidity of a specific identified un-sampled receiving waters.

(3). For infrastructure construction projects, when the permittee determines that some receiving water(s) will not be sampled due to representative sampling, the design professional making this determination and preparing the Plan must include and sign the following certification in the Plan:

> "I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of: (a) all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent steams and other water bodies, or (b) where any such specific identified perennial or intermittent stream and other water body is not proposed to be sampled, I have determined in my professional judgment, utilizing the factors required in the General NPDES Permit No. GAR 100002, that the increase in the turbidity of each specific identified sampled receiving water will be representative of the increase in the turbidity of a specific identified un-sampled receiving water."

(4). For infrastructure construction projects, if at any time during the life of the project a selected receiving water no longer represents another receiving water, then the permittee shall sample the latter receiving water until selection of an alternative representative receiving water.

(5). For infrastructure construction projects, if at any time during the life of the project a receiving water is determined not to be represented as certified in the Plan, the permittee shall sample that receiving water until a Notice of Termination is submitted or until the applicable phase is stabilized in accordance with this permit.

(6). For infrastructure construction projects, monitoring obligations shall cease for any phase of the project that has been stabilized in accordance with Part IV.D.6.c.(1).(g).

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 storm water discharge to a monitored receiving water and/or from a monitored outfall location within forty-five (45) minutes or as soon as possible. .

(2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge.

(3). Sampling by the permittee shall occur for the following qualifying events:

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit. after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the representative sampling location;

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the representative sampling location, whichever comes first;

(c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there was no discharge), the permittee, in accordance with Part IV.D.4.a.(6), must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations under (a), (b) or (c) above; and

(e).. Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

*Note that the Permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

7. Non-storm water discharges. Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. of this permit that are combined with storm water discharges associated with construction activity must be identified in the Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

E. Reporting.

1. The applicable permittees are required to submit the sampling results to the EPD at the address shown in Part II.C. by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittee to submit the sampling results on a more frequent basis. Sampling and analysis of any storm water discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. The sampling reports must be signed in accordance with Part V.G.2. Sampling reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI.

2. All sampling reports shall include the following information:

a. The rainfall amount, date, exact place and time of sampling or measurements;
b. The name(s) of the certified personnel who performed the sampling and measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were initiated;
e. The name(s) of the certified personnel who performed the analyses;
f. References and written procedures, when available, for the analytical techniques or methods used;
g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results;
h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU;" and
i. Certification statement that sampling was conducted as per the Plan.

3.. All written correspondence required by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate District Office of the EPD according to the schedule in Appendix A of this permit. The permittee shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated location from commencement of construction until such time as a NOT is submitted in accordance with Part VI. If an electronic submittal is provided by EPD then the written correspondence may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service.

F. Retention of Records

1. The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

a. A copy of all Notices of Intent submitted to EPD;
b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;
d. A copy of all sampling information, results, and reports required by this permit;
e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of this permit;

f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and
g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2). of this permit.

2. Copies of all Notices of Intent, Notices of Termination, inspection reports, sampling reports (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), or other reports requested by the EPD, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the NOT is submitted in accordance with Part VI of this permit. These records must be maintained at the permittee's primary place of business or at a designated alternative location once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

Part V. STANDARD PERMIT CONDITIONS

A. Duty to Comply.

1. Each permittee must comply with all applicable conditions of this permit. Any permit noncompliance constitutes a violation of the Georgia Water Quality Control Act (O.C.G.A. §§12-5-20, et seq.) and is grounds for enforcement action; for permit termination; or for denial of a permit renewal application. Failure of a primary permittee to comply with any applicable term or condition of this permit shall not relieve any other primary permittee from compliance with their applicable terms and conditions of this permit.

2. Each permittee must document in their records any and all known violations of this permit at his/her site within seven (7) days of his/her knowledge of the violation. A summary of these violations must be submitted to EPD by the permittee at the addresses shown in Part II.C. within fourteen (14) days of his/her discovery of the violation.

3. Penalties for violations of permit conditions. The Federal Clean Water Act and the Georgia Water Quality Control Act (O.C.G.A. §§12-5-20, et seq.) provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Acts, any permit condition or limitation established pursuant to the Acts, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director.

B. Continuation of the Expired General Permit. This permit expires on the date shown on the cover page of this permit. However, an expired general permit continues in force and effect until a new general permit is issued, final and effective.

C. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Duty to Provide Information. The permittee shall furnish to the Director; a State agency approving soil erosion and sedimentation control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm

sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system, any information which is requested to determine compliance with this permit. In the case of information submitted to the EPD such information shall be considered public information and available under the Georgia Open Records Act.

F. Other Information. When the permittee becomes aware that he/she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report required to be submitted to the EPD, the permittee shall promptly submit such facts or information.

G. Signatory Requirements. All Notices of Intent, Notice of Terminations, inspection reports, sampling reports, or other reports requested by the EPD shall be signed as follows:

1. All Notices of Intent and Notices of Termination shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this permit, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official; and

d. Changes to authorization. If an authorization under Part II.B. is no longer accurate, a change of information NOI satisfying the requirements of Part II.B. must be submitted to the EPD prior to or together with any inspection reports, sampling reports, or other reports requested by the EPD to be signed by a person described above or by a duly authorized representative of that person.

2. All inspection reports, sampling reports, or other reports requested by the EPD shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person(s) described above and submitted to the EPD;

b. The authorization specifies either an individual or a position having responsibility for specified operation(s) of the regulated facility or activity, such as the position of manager, Operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a named individual or any individual occupying a named position); and

c. *Certification.* Reports delineated in Part V.G.2. shall be signed by the permittee or duly authorized representative and shall make the following certification:

"I certify under penalty of law that this report and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who

manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the Georgia Hazardous Waste Management Act, O.C.G.A. § 12-8-60, et seq. or under Chapter 14 of Title 12 of the Official Code of Georgia Annotated; nor is the Operator relieved from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act or Section 106 of Comprehensive Environmental Response Compensation And Liability Act.

I. Property Rights. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

J. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Other Applicable Environmental Regulations and Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act. Nothing in this permit, unless explicitly stated, exempts the permittee from compliance with other applicable local, state and federal ordinances, rules, regulations, and laws. Furthermore, it is not a defense to compliance with this permit that a local government authority has approved the permittee's Erosion, Sedimentation and Pollution Control Plan or failed to take enforcement action against the permittee for violations of the Erosion, Sedimentation and Pollution Control Plan, or other provisions of this permit.

No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

L. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the required plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

M. Inspection and Entry. The permittee shall allow the Director or an authorized representative of EPA or EPD or, in the case of a construction site which discharges through a municipal separate storm sewer system with an NPDES permit, an authorized representative of the municipal operator of the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

N. Permit Actions. This permit may be revoked and reissued, or terminated for cause including but not limited to changes in the law or regulations. The filing of a request by the permittee for termination of the permit, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

Part VI. TERMINATION OF COVERAGE

A. Notice of Termination Eligibility. Notice of Termination signed in accordance with Part V.G.1. of this permit must be submitted:

1. For infrastructure construction projects, by the permittee where the entire project has undergone final stabilization, all storm water discharges associated with construction activity that are authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed. The permittee may also submit a Notice of Termination for each phase of the infrastructure project, not to exceed four (4) phases, that have undergone final stabilization and all storm water discharges associated with construction activity for that phase authorized by this permit have ceased. Except for the final phase, the disturbed acreage for each phase must be equal to or greater than 25% of the total estimated disturbed acreage for the infrastructure project. For the final phase, the disturbed acreage for the final phase must be equal to or greater than 10% of the total estimated disturbed acreage for the infrastructure project. The Notice of Termination for each phase of the infrastructure project must include the GPS locations (decimal degrees) of the beginning and end of each phase and if applicable, a map identifying significant landmarks.

2. By the Owner or Operator or both when the Owner or Operator or both of the site changes. Where storm water discharges will continue after the identity of the Owner or Operator or both changes, the permittee must, prior to filing the Notice of Termination, notify any subsequent Owner or Operator or both of the permitted site as to the requirements of this permit.

B. Notice of Termination Contents:

1. The NPDES permit number for the storm water discharge associated with construction activity identified by the Notice of Termination (i.e., GAR100002 – Infrastructure);

2. The project construction site name, site location, GPS locations (decimal degrees) of the beginning and end of the infrastructure construction project or if applicable, of each phase in accordance with Part VI.A.1.,construction site location and if applicable, a map identifying significant landmarks, city (if applicable) and county of the site for which the notification is submitted. This information must correspond to the similar information as provided on the NOI. The construction site location information must be sufficient to accurate locate the construction site;

3. The owner's legal name, address, telephone number and email address and the operator's legal name, address, telephone and email address;

4. The name of the receiving water(s), and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4;

5. Copies of all sampling reports and/or a written justification why sampling was not conducted. Copies of all sampling reports may be submitted as a Portable Document Format (PDF) file on CD-ROM or other storage device;

6. Copy of the permittee's most current Notice of Intent;

7. Any other information specified on the NOT in effect at the time of submittal; and

8. The following certification signed in accordance with Part V.G.1. (signatory requirements):

"I certify under penalty of law that either: (a) all storm water discharges associated with construction activity authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed or ; (b) I am no longer an Owner or Operator at the construction site and a new Owner or Operator has assumed operational control of the permitted construction site where I previously had ownership or operational control; and that discharging pollutants in storm water associated with construction activity to waters of Georgia is unlawful under the Georgia Water Quality Control Act and the Clean Water Act where the discharge is not authorized by a NPDES permit."

C. Notice of Termination Submittal. All Notices of Termination by this permit shall be submitted by ***return receipt certified mail*** (or similar service) to the appropriate EPD District Office according to the schedule in Appendix A of this permit and to the Local Issuing Authority in jurisdictions authorized to issue a Land Disturbance Activity permit for the permittee's construction site pursuant to O.C.G.A. 12-7-1, et seq. If an electronic submittal service is provided by the EPD then the Notice of Termination may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service.

APPENDIX A

EPD DISTRICT OFFICES

All required correspondence, including but not limited to the Notice of Intents, Notice of Terminations, certifications, Erosion, Sedimentation and Pollution Control Plans and any other reports, shall be sent to the following District Offices of EPD.

A. For facilities/construction sites located in the following counties: Bibb, Bleckley, Chattahoochee, Crawford, Dooly, Harris, Houston, Jones, Lamar, Macon, Marion, Meriwether, Monroe, Muscogee, Peach, Pike, Pulaski, Schley, Talbot, Taylor, Troup, Twiggs, Upson

Information shall be submitted to:

West Central District Office
Georgia Environmental Protection Division
2640 Shurling Drive
Macon, GA 31211-3576
(478) 751-6612

B. For facilities/construction sites located in the following counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Johnson, Laurens, McDuffie, Montgomery, Richmond, Screven, Treutlen, Warren, Washington, Wheeler, Wilkinson

Information shall be submitted to:

East Central District Office
Georgia Environmental Protection Division
3525 Walton Way Extension
Augusta, GA 30909-1821
(706) 667-4343

C. For facilities/construction sites located in the following counties: Baldwin, Banks, Barrow, Butts, Clarke, Elbert, Franklin, Greene, Hall, Hancock, Hart, Jackson, Jasper, Lincoln, Madison, Morgan, Newton, Oconee, Oglethorpe, Putnam, Stephens, Taliaferro, Walton, Wilkes

Information shall be submitted to:

Northeast District Office
Georgia Environmental Protection Division
745 Gaines School Road
Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:

Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:

Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:

Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8251
(912) 264-7284

G. For facilities/construction **sites located in the following counties:** Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(912) 430-4144

H. For facilities/construction sites required to submit Plans required under Part IV.A.4.a. of this Permit:

Information shall be submitted to:

Watershed Protection Branch
Environmental Protection Division
4220 International Parkway, Suite 101
Atlanta, Georgia 30354
(404) 675-6240

APPENDIX B

Nephelometric Turbidity Unit (NTU) TABLES

Trout Streams

Surface Water Drainage Area, square miles

Site Size, acres	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	25	50	75	150	300	500	500	500
10.01-25	25	25	50	75	150	200	500	500
25.01-50	25	25	25	50	75	100	300	500
50.01-100	20	25	25	35	59	75	150	300
100.01+	20	20	25	25	25	50	60	100

Waters Supporting Warm Water Fisheries

Surface Water Drainage Area, square miles

Site Size, acres	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	75	150	200	400	750	750	750	750
10.01-25	50	100	100	200	300	500	750	750
25.01-50	50	50	100	100	200	300	750	750
50.01-100	50	50	50	100	100	150	300	600
100.01+	50	50	50	50	50	100	200	100

To use these tables, select the size (acres) of the construction site. Then, select the surface water drainage area (square miles). The NTU matrix value arrived at from the above tables is the one to use in Part III.D.4.

Example 1: For a site size of 12.5 acres and a "trout stream" drainage area of 37.5 square miles, the NTU value to use in Part III.D.4. is 75 NTU.

Example 2: For a site size of 51.7 acres and "waters supporting warm water fisheries" drainage area of 72 square miles, the NTU value to use in Part III.D.4. is 100 NTU.

(1) public drinking water system reservoirs,
(2) fences,
(3) stream crossings for water lines and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer
(4) stream crossings for any utility lines of any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, (b) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (c) the entity is not a secondary permittee for a project located within a common development or sale under this permit,
(5) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 200 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) l native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification; and
(6) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and
(7) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit.

<u>(iii). Except as provided in Part IV(iv) below, no construction activities shall be conducted within a 25 foot buffer along coastal marshlands, as measured horizontally from the coastal marshland-upland interface, as determined in accordance with Part 4 of Article 4 of Chapter 5 of Title 12, the "Coastal Marshlands Protection Act of 1970, and the rules and regulations promulgated thereunder, except where the director determines to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7-6, or where otherwise allowed by the director pursuant to Code Section 12-2-8, or where an alteration within the buffer area has been authorized pursuant to Code Section 12-5-286, or for maintenance of any currently serviceable structure, landscaping, or hardscaping, including bridges, roads, parking lots, golf courses, golf cart paths, retaining walls,</u>

DRAFT

bulkheads, and patios, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented, or where a drainage structure or roadway drainage structure is constructed or maintained, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented, or on the landward side of any currently serviceable shoreline stabilization structure, or for the maintenance of any manmade storm-water detention basin, golf course pond, or impoundment that is located entirely within the property of a single individual, partnership, or corporation, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented:

(1) Public drinking water system reservoirs,
(2) Crossings for utility lines that cause a width of disturbance of not more than 50 feet within the buffer
(3) Any land-disturbing activity conducted pursuant to and in compliance with a valid and effective land-disturbing permit issued subsequent to April 22, 2014, and prior to December 31, 2015,
(4) Any lot for which the preliminary plat has been approved prior to December 31, 2015 if roadways, bridges, or water and sewer lines have been extended to such lot prior to the effective date of this Act and if the requirement to maintain a 25 foot buffer would consume at least 18 percent of the high ground of the platted lot otherwise available for development,
(5) Fences
(6) Crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification;
(7) Right-of-way posts, guy wires, anchors, survey markers and the replacement and maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit;
(8) Right-of-way posts, guy wires, anchors, survey markers and the replacement and maintenance of existing utility structures within the current right-of-way by any electric membership corporation or municipal electrical system or any public utility under the regulator jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and

(~~iii.~~iv.) Except as provided above, for buffers required pursuant to Part IV.(i), (ii) and (iii), no construction activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. During coverage under this permit, a buffer cannot be thinned or trimmed of vegetation and a protective vegetative cover must remain to protect water quality and aquatic habitat and a natural canopy must be left in sufficient quantity to keep shade on the stream bed or marsh.

The Erosion, Sedimentation and Pollution Control Plan shall identify all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. In addition, the Plan shall describe and the applicable permittee shall ensure the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with construction activity at the site and to assure compliance with the terms and conditions of this permit. The applicable permittee must implement and maintain the provisions of the Plan required under this part as a condition of this permit.
Except as provided in Part IV.A.2., a single Erosion, Sedimentation and Pollution Control Plan must be prepared by the primary permittee for the infrastructure construction project.

A. Deadlines for Plan Preparation and Compliance.

1. Except as provided in Part IV.A.2. and Part IV.A.6., the Erosion, Sedimentation and Pollution Control Plan shall be completed prior to submitting the NOI and prior to conducting any construction activity by any permittee.

2. For construction activities that began on or before the effective date of this permit and were subject to the regulations under the previous permit, the permittee(s) shall continue to operate under the existing Plan.

3. For construction activities that begin after the effective date of this permit, the primary permittee shall be required to prepare the Plan for that phase of the infrastructure development that corresponds with the NOI being submitted and the primary permittee(s) shall implement the Plan on or before the day construction activities begin.

4. Additional Plan Submittals.

c. coverage under this permit is not required for discharges of storm water associated with infrastructure construction projects that consist solely of routine maintenance for the original purpose of the facility that is performed to maintain the original line and grade and the hydraulic capacity, as applicable. The permittee shall, as a minimum, implement and maintain best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity is being conducted. In order to be eligible for this exemption the project must comply with the following conditions: (1) no mass grading shall occur on the project, (2) the project shall be stabilized by the end of each day with temporary or permanent stabilization measures, (3) the project shall have a duration of less than 120 calendar days, and (4) final stabilization must be implemented at the end of the maintenance project; and

DRAFT

d. coverage under this permit is not required for discharges of storm water associated with infrastructure road construction projects that consist solely of routine maintenance for the original purpose of the facility that is performed to maintain the original line and grade and vehicular capacity, as applicable. The permittee shall, as a minimum, implement and maintain best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity is being conducted. In order to be eligible for this exemption the project must comply with the following conditions: (1) no mass grading shall occur on the project, (2) the project shall be stabilized by the end of each day with temporary or permanent stabilization measures, (3) the project shall have a duration of less than 120 calendar days, and (4) final stabilization must be implemented at the end of the maintenance project; and

~~d~~e. coverage under this permit is not required for discharge of storm water associated with railroad construction projects and emergency re-construction conducted pursuant to the Federal Railway Safety Act, the Interstate Commerce Commission Termination Act and which consist solely of routine maintenance for the original purpose of the facility that is performed to maintain the original line and grade and the hydraulic capacity, as applicable. The construction activity should, at a minimum, implement and maintain best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation consistent with the requirements of the Federal Railway Safety Act and applicable requirements of the Clean Water Act.

2. Mixed Storm Water Discharges. This permit may only authorize a storm water discharge from a construction site or construction activities mixed with a storm water discharge from an industrial source or activity other than construction where:

a. 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;

b. the storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and

c. storm water 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

Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:

Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:

Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:

Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8687
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(912) 430-4144

H. For facilities/construction sites required to submit Plans required under Part IV.A.4.a. of this Permit:

Information shall be submitted to:

Watershed Protection Branch
Environmental Protection Division
~~4220 International Parkway, Suite 101~~
~~Atlanta, Georgia 30354~~
~~(404) 675-6240~~
2 Martin Luther King Jr. Drive
Suite 1152 East
Atlanta, Georgia 30334
404-463-1511

Draft

Insert Yellow Sheet

Back of Yellow Sheet

General Permit
No. GAR100003

State of Georgia
Department of Natural Resources
Environmental Protection Division

Authorization To Discharge Under The National Pollutant Discharge Elimination System Storm Water Discharges Associated With Construction Activity For Common Developments

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the "State Act," the Federal Clean Water Act, as amended (33 U.S.C.1251 et seq.), hereinafter called the "Clean Water Act," and the Rules and Regulations promulgated pursuant to each of these Acts, new and existing storm water point sources within the State of Georgia that are required to have a permit, upon submittal of a Notice of Intent, are authorized to discharge storm water associated with construction activity to the waters of the State of Georgia in accordance with the limitations, monitoring requirements and other conditions set forth in Parts I through VI hereof.

This permit shall become effective on September 24, 2013.

This permit and the authorization to discharge shall expire at midnight, July 31, 2018.

Signed this 23rd day of September 2013.

Director,
Environmental Protection Division

TABLE OF CONTENTS

Section **Page**

Part I. COVERAGE UNDER THIS PERMIT

A. Permit Area 4
B. Definitions 4
C. Eligibility 7
D. Authorization 9
E. Continuing Obligations of Permittees 9

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification 9
B. Notice of Intent Contents 10
C. Notice of Intent Submittal 13
D. Fees 14
E. Renotification 14

Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, PERMIT VIOLATIONS AND OTHER LIMITATIONS

A. Prohibition on Non-Storm Water Discharges 14
B. Releases in Excess of Reportable Quantities 14
C. Discharges into, or within One Mile Upstream of and within the Same Watershed as, Any Portion of a Biota Impaired Stream Segment 15
D. Management Practices and Permit Violations 17

Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

A. Deadlines for Plan Preparation and Compliance 20
B. Signature and Plan Review 21
C. Keeping Plans Current 21
D. Contents of Plan 22
1. Checklist 22
2. Site Description 22
3. Controls 23
4. Inspections 25
5. Maintenance 29

6. Sampling Requirements 29
7. Non-storm Water Discharges 32
E. Reporting 32
F. Retention of Records 33

Part V. STANDARD PERMIT CONDITIONS

A. Duty to Comply 34
B. Continuation of the Expired General Permit 34
C. Need to Halt or Reduce Activity Not a Defense 34
D. Duty to Mitigate 35
E. Duty to Provide Information 35
F. Other Information 35
G. Signatory Requirements 35
H. Oil and Hazardous Substance Liability 36
I. Property Rights 36
J. Severability 36
K. Other Applicable Environmental Regulations and Laws 36
L. Proper Operation and Maintenance 36
M. Inspection and Entry 36
N. Permit Actions 37

Part VI. TERMINATION OF COVERAGE

A. Notice of Termination Eligibility 37
B. Notice of Termination Contents 38
C. Notice of Termination Submittal 39

APPENDIX A. EPD District Offices 40

APPENDIX B. Nephelometric Turbidity Unit (NTU) Table 42

Part I. COVERAGE UNDER THIS PERMIT

A. Permit Area.

This permit regulates point source discharges of storm water to the waters of the State of Georgia from construction activities, as defined in this permit.

B. Definitions. All terms used in this permit shall be interpreted in accordance with the definitions as set forth in the Georgia Water Quality Control Act (Act) and the Georgia Rules and Regulations for Water Quality Control Chapter 391-3-6 (Rules), unless otherwise defined in this permit:

1. "Best Management Practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

2. "Blanket NOI" means a Notice of Intent to be used by utility companies and/or utility contractors acting as secondary permittees that covers all construction activities in common developments during the calendar year for which the NOI is submitted.

3. "Buffer" means the area of land immediately adjacent to the banks of State waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat.

4. "Certified Personnel" means a person who has successfully completed the appropriate certification course approved by the State Soil and Water Conservation Commission.

5. "Commencement of Construction" means the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

6. "Common Development" means a contiguous area where multiple, separate, and distinct construction activities will be taking place at different times on different schedules under one plan of development on or after August 1, 2000.

7. "Construction Activity" means the disturbance of soils associated with clearing, grading, excavating, filling of land, or other similar activities which may result in soil erosion. Construction activity does not include agricultural and silvicultural practices, but does include agricultural buildings.

8. "CPESC" means Certified Professional in Erosion and Sediment Control with current certification by EnviroCert International, Inc. (www.EnviroCertIntl.org).

9. "CWA" means Federal Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972).

10. "Design Professional" means a professional licensed by the State of Georgia in the field of: engineering, architecture, landscape architecture, forestry, geology, or land surveying; or a person that is a Certified Professional in Erosion and Sediment Control (CPESC) with a current certification by EnviroCert International, Inc. Design Professionals shall practice in a manner that complies with applicable Georgia law governing professional licensure.

11. "Director" means the Director of the Environmental Protection Division or an authorized representative.

12. "Division" means the Environmental Protection Division of the Department of Natural Resources.

13. "Erosion" means the process by which land surface is worn away by the action of wind, water, ice or gravity.

14. "Erosion, Sedimentation and Pollution Control Plan" or "Plan" means a plan for the control of soil erosion, sediment and pollution resulting from a construction activity.

15. "Filling" means the placement of any soil or solid material either organic or inorganic on a natural ground surface or an excavation.

16. "Final Stabilization" means that all soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by 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 seeding of target crop perennials appropriate for the region).

17. "General Contractor" means the operator of the common development or site.

18. "Impossible" means the monitoring location(s) are either physically or legally inaccessible, or access would cause danger to life or limb.

19. "Landfill" means an area of land or an excavation in which waste materials are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well or waste pile as defined by Georgia NPDES General Permit GAR000000, and which area of land or excavation must be certified by EPD before it can begin waste disposal operations.

20. "Landfill Cell(s)" means a defined area within a landfill where waste materials are permanently disposed and that must be certified by EPD for use before such cell(s) can begin receiving waste materials after which those activities associated with waste receipt and disposal in the landfill cell(s) shall not be considered construction activity as defined by this permit.

21. "Local Issuing Authority" means the governing authority of any county or municipality which is certified pursuant to Official Code of Georgia Section 12-7-8(a).

22. "Mass Grading" means the movement of earth by mechanical means to alter the gross topographic features (elevations, slopes, etc.) to prepare a site for final grading and the construction of facilities (buildings, roads, parking, etc.).

23. "Nephelometric Turbidity Unit (NTU)" means a numerical unit of measure based upon photometric analytical techniques for measuring the light scattered by fine particles of a substance in suspension.

24. "NOI" means Notice of Intent to be covered by this permit (see Part II).

25. "NOT" means Notice of Termination (see Part VI).

26. "Operator" means the entity that has the primary day-to-day operational control of those activities at the construction site necessary to ensure compliance with Erosion, Sedimentation and Pollution Control Plan and permit conditions.

27. "Other Water Bodies" means ponds, lakes, marshes and swamps which are waters of the State.

28. "Outfall" means the location where storm water, in a discernible, confined and discrete conveyance, leaves a facility or site or, if there is a receiving water on site, becomes a point source discharging into that receiving water.

29. "Owner" means the legal title holder to the real property on which is located the facility or site where construction activity takes place.

30. "Permittee" means any entity that has submitted a Notice of Intent.

31. "Phase" or "Phased" means sub-parts or segments of construction projects where the sub-part or segment is constructed and stabilized prior to completing the entire construction site.

32. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure or container from which pollutants are or may be discharged. This term also means sheetflow which is later conveyed via a point source to waters of the State. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

33. "Primary Permittee" means the Owner or the Operator or both of a tract of land for a construction project subject to this permit.

34. "Proper design" and "properly designed" means designed in accordance with the design requirements and specifications contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and amendments to the Manual as approved by the State Soil and Water Conservation Commission up until the date of NOI submittal.

35. "Receiving Water(s)" means all perennial and intermittent waters of the State into which the runoff of storm water from a construction activity will actually discharge, either directly or indirectly.

36. "Secondary Permittee" means an owner, individual builder, utility company, or utility contractor that conducts a construction activity within a common development with an existing primary permittee.

37. "Sediment" means solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by, wind, water, ice, or gravity as a product of erosion.

38. "Sedimentation" means the action or process of forming or depositing sediment.

39. "Service Line" means the final connection installed by a utility company or utility contractor between a structure and the closest main and/or trunk line.

40. "Sheetflow" means runoff which flows over the ground surface as a thin, even layer, not concentrated in a channel.

41. "Site" or "Construction Site" means a facility of any type on which construction activities are occurring or are to occur which may result in the discharge of pollutants from a point source into the waters of the State.

42. "Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

43. "Structural Erosion and Sediment Control Practices" means measures for the stabilization of erosive or sediment producing areas by utilizing the mechanical properties of matter for the purpose of either changing the surface of the land or storing, regulating or disposing of runoff to prevent excessive sediment loss.

44. "Sub-contractor" means an entity employed or retained by the permittee to conduct any type of construction activity (as defined in this permit) at a site or common development. Sub-contractors must complete the appropriate certification course approved by the Georgia Soil and Water Conservation Commission in accordance

with the provisions of O.C.G.A. 12-7-19. Sub-contractors are not permittees unless they meet the definition of either a primary, secondary or tertiary permittee.

45. "Surface Water Drainage Area" means the hydrologic area starting from the lowest downstream point where the storm water from the construction activity enters the receiving water(s) and following the receiving water(s) upstream to the highest elevation of land that divides the direction of water flow. This boundary will connect back with the storm water entrance point. Boundary lines follow the middle of the highest ground elevation or halfway between contour lines of equal elevation.

46. "Tertiary Permittee" means either the Owner or Operator of a remaining lot(s) within a common development (as defined in this permit) conducting a construction activity where the primary permittee and all secondary permittees have submitted a Notice of Termination in accordance with Part VI.A.2. of this permit (excluding utility companies and/or utility contractors working under a Blanket NOI) or where a primary permittee no longer exists.

47. "Trout Streams" means waters of the State classified as either primary trout waters or secondary trout waters, as designated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org.

48. "USGS Topographic Map" means a current quadrangle, 7½ minute series map prepared by the United States Department of the Interior, Geological Survey.

49. "Utility Company or Utility Contractor" means, for purposes of this Permit, an entity or sub-contractor that is responsible, either directly or indirectly, for the construction, installation, and maintenance of conduits, pipes, pipelines, cables, wires, trenches, vaults, manholes, and similar structures or devices for the conveyance of natural gas (or other types of gas), liquid petroleum products, electricity, telecommunications (telephone, data, television, etc.), water, storm water or sewage.

50. "Vegetative Erosion and Sediment Control Practices" means measures for the stabilization of erosive or sediment producing areas by covering the soil with: (1) permanent seeding, sprigging or planting, producing long-term vegetative cover; (2) temporary seeding, producing short-term vegetative cover; or (3) sodding, covering areas with a turf of perennial sod forming grass.

51. "Waters Supporting Warm Water Fisheries" means all waters of the State that sustain, or have the potential to sustain, aquatic life but excluding trout streams.

52. "Waters of Georgia" or "Waters of the State" means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, wetlands, and all other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

C. Eligibility.

1. Construction Activities. This permit authorizes, subject to the conditions of this permit:

a. all discharges of storm water associated with common plans of development, or other construction activity where the primary permittee chooses to use secondary permittees, that will result in land disturbance equal to or greater than one (1) acre occurring on or before, and continuing after, the effective date of this permit, (henceforth referred to as existing storm water discharges from construction activities) except for discharges identified under Part I.C.3. Storm water discharges from construction activities involving less than one (1) acre where the primary permittee used secondary or tertiary permittees which are part of a larger common development (i.e., greater than one (1) acre; henceforth referred to as existing common development) occurring on or before, and continuing after, the effective date of this permit are authorized subject to the conditions of this permit;

b. all discharges of storm water associated with common plans of development, or other construction activity where the primary permittee chooses to use secondary permittees, that will result in land disturbance equal to or greater than one (1) acre occurring after the effective date of this permit, (henceforth referred to as storm water discharges from construction activities), except for discharges identified under Part I.C.3. Storm water discharges from construction activities involving less than one (1) acre where the primary permittee uses secondary permittees or tertiary permittees which are part of a larger common development (i.e., greater than one (1) acre) are authorized subject to the conditions of this permit; and

c. coverage under this permit is not required for discharges of storm water associated with minor land disturbing activities (such as home gardens and individual home landscaping, repairs, maintenance work, fences and other related activities which result in minor soil erosion) conducted outside of the 25 foot buffer along the banks of all State waters requiring a buffer and outside of the 50 foot buffer along the banks of all State waters classified as 'trout streams' requiring a buffer on individual residential lots sold to homeowners where all planned construction activities on that lot have been completed and have undergone final stabilization.

2. Mixed Storm Water Discharges. This permit may only authorize a storm water discharge from a construction site or construction activities mixed with a storm water discharge from an industrial source or activity other than construction where:

a. 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;

b. the storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and

c. storm water 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.

3. Limitations on Coverage. The following storm water discharges from construction sites are not authorized by this permit:

a. storm water discharges associated with an industrial activity that originate from the site after construction activities have been completed and the site has undergone final stabilization;

b. discharges that are mixed with sources of non-storm water other than discharges which are identified in Part III.A.2. of this permit and which are in compliance with Part IV.D.7. (non-storm water discharges) of this permit;

c. storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges; and

d. storm water discharges from construction sites that the Director (EPD) has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard.

4. Compliance with Water Quality Standards. 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.

D. Authorization.

1. Any person desiring coverage under this permit as either a primary permittee, a secondary permittee or a tertiary permittee must submit a Notice of Intent (NOI) to the EPD and the NOI must be received by the EPD in accordance with the requirements of Part II, using NOI forms provided by the EPD (or an exact photocopy thereof), in order for storm water discharges from construction sites to be authorized. A Notice of Intent for secondary permittee coverage can be submitted either concurrently with or after the submittal of a Notice of Intent by the primary permittee.

2. Unless notified by the Director to the contrary, a permittee (either primary, secondary or tertiary) who submits an NOI in accordance with the requirements of this permit is authorized to discharge storm water from construction sites under the terms and conditions of this permit fourteen (14) days after the date that the NOI is postmarked. The Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit or alternative general NPDES permit based on a review of the NOI or other information. Should the Director deny coverage under this permit, coverage under this permit is authorized until the date specified in the notice of denial by the Director.

3. Where a new primary or secondary permittee is to begin work on-site after an NOI for the facility/construction site has been submitted, that new primary or secondary permittee must submit a new NOI in accordance with Part II. A secondary permittee is not required to submit a new NOI or re-submit an NOI when a new primary permittee is named.

E. Continuing Obligations of Permittees. Unless and until responsibility for a site covered under this permit is properly terminated according to the terms of the permit, the current permittee remains responsible for compliance with all applicable terms of the permit and for any violations of said terms.

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification.

1. Except as provided in Part II.A.2., II.A.3. and II.A.5., Owners or Operators or both who intend to obtain coverage under this general permit for storm water discharges from a construction site (where construction activities begin after issuance of this permit), shall submit a Notice of Intent (NOI) in accordance with the requirements of this Part at least fourteen (14) days prior to the commencement of construction activities.

2. For sites where construction activities, subject to this permit, are occurring on or before the effective date of this permit, the Owner or Operator or both shall submit a re-issuance NOI for an existing construction site in accordance with the requirements of this part no later than ninety (90) days after the effective date of this permit. Failure to comply with this requirement shall constitute a violation of the Georgia Water Quality Control Act for each day until the Owner or Operator or both submit an initial NOI for a new construction site in accordance with Part II.A.1., comply with the special conditions in Part III., prepare and submit a new Erosion, Sedimentation and Pollution Control Plan in accordance with Part IV., and pay all applicable fees in accordance with Part II.D.

3. A discharger is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Parts II.A.1. or II.A.2. of this permit. In such instances, EPD may bring an enforcement action for failure to submit an NOI in a timely manner or for any unauthorized discharges of storm water associated with construction activity that have occurred on or after the dates specified in Part II.A.1. and II.A.2.

4. Where an Owner or an Operator or both changes after an NOI has been filed, the subsequent Owner or Operator or both must file a change of information NOI in accordance with this Part by the earlier to occur of (a) seven (7) days before beginning work at the facility/construction site or (b) thirty (30) days from acquitting legal title to the facility/construction site. In the event a lender or other secured creditor acquires legal title to the facility/construction site, such party must file a change of information NOI in accordance with this Part by the

earlier to occur of (a) seven (7) days before beginning work at the facility/construction site; or (b) thirty (30) days from acquiring legal title to the facility/construction site. Stabilization and BMP installation and/or maintenance measures of a disturbed site, by the subsequent Owner or Operator, may occur in advance of filing a new NOI, without violation of this permit. A secondary permittee is not required to submit a change of information NOI when a new primary permittee is named. Failure to comply with this requirement shall constitute a violation of the Georgia Water Quality Control Act for each day until the Owner or Operator or both submit an initial NOI for a new construction site in accordance with Part II.A.1., comply with the special conditions in Part III., prepare and submit a new Erosion, Sedimentation and Pollution Control Plan in accordance with Part IV., and pay all applicable fees in accordance with Part II.D.

5. For sites where construction activities will result in land disturbance equal to or greater than one (1) acre that are required as a result of storm- or emergency-related repair work, the Owner or Operator or both shall notify the appropriate EPD District Office within three (3) days of commencement of said construction activities. The Owner or Operator or both shall submit the NOI to the appropriate EPD district office as soon as possible after the storm- or emergency-related event but no later than fourteen (14) days after the commencement of construction activities and shall submit the Plan in accordance with Part IV.A.6.

B. Notice of Intent Contents.

1. Primary Permittee. A single Notice of Intent for the primary permittee (i.e., one NOI signed by the Owner or the Operator or both) shall be signed in accordance with Part V.G.1. of this permit and shall include the following information:

a. The project construction site name, GPS location (decimal degrees) of construction exit, construction site location (e.g., street address), common development name (if applicable), city (if applicable) and county of the construction site for which the notification is submitted. The construction site location information must be sufficient to accurately locate the construction site;

b. The Owner's legal name, address, telephone number and email address; and if available, the operator's legal name, address, telephone number and email address; and if applicable, the Duly Authorized Representative's legal name and/or position name, telephone number and email address;

c. The name, telephone number and email address of the individual to whom the permittee has assigned the responsibility for the daily operational control (i.e., construction superintendent, etc.) of the construction site;

d. The name of the initial receiving water(s) or if unnamed the first named blue line stream indicated on the appropriate USGS Topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org.

e. The name of the receiving water(s) located within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s) shown on Georgia's most current "305(b)/303(d) List Documents (Final)" for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff) at www.gaepd.org/Documents/305b.html;

f. An estimate of project start date and completion date, a schedule for the timing of the various construction activities, the number of acres of the site on which soil will be disturbed and the surface

water drainage area (if applicable). For projects that began on or before the effective date of this permit, the start date must be the actual start date of construction;

g. The following certification shall be signed in accordance with Part V.G.1. of this permit:

> "I certify that to the best of my knowledge and belief, that the Erosion, Sedimentation and Pollution Control Plan (Plan) was prepared by a design professional, as defined by this permit, that has completed the appropriate certification course approved by the Georgia Soil and Water Conservation Commission in accordance with the provisions of O.C.G.A. 12-7-19 and that I will adhere to the Plan and comply with all requirements of this permit."

h. An estimate of the number of secondary permittees, if applicable;

i. The type of construction activity category (from those listed on the NOI) conducted at the site;

j. The location of the receiving water(s) or outfall(s) or a combination of receiving water(s) and outfall(s) to be sampled on a map or drawing of appropriate scale. When it is determined by the primary permittee that some or all of the outfall(s) will be sampled, the applicable nephelometric turbidity unit (NTU) selected from Appendix B (i.e., based upon the size of the common development construction site and the surface water drainage area) must be shown for each outfall to be sampled.

k. For construction activities disturbing more than 50 acres, which began after the effective date of this permit, include a single copy of the Erosion, Sedimentation, and Pollution Control Plan;

l. NOIs may be submitted for separate phases of projects with a total planned disturbance greater than 5.0 acres, provided that each phase shall not be less than 1.0 acre. Phased NOIs shall include all documentation required by this permit for each phase, including applicable fees, and

m. Any other information specified on the NOI in effect at the time of submittal.

2. Secondary Permittee. The Notice of Intent for each secondary permittee shall be signed in accordance with Part V.G.1. of this permit. The Notice of Intent shall include the following information:

a. The project construction site name, construction site location (e.g., street address), common development name (if applicable), lot number(s) (if applicable), city (if applicable) and county of the construction site for which the notification is submitted. The construction site location information must be sufficient to accurately locate the construction site;

b. The secondary permittee's legal name, address, telephone number and email address and if applicable, the Duly Authorized Representative's legal name and/or position name, telephone number and email address;

c. The name, address, telephone number and email address of the primary permittee (as shown on the primary permittee's NOI);

d. If this submittal is by a blanket secondary permittee, the legal name, address, telephone number and email address of the utility sub-contractor;

e. The name, telephone number and email address of the individual to whom the secondary permittee has assigned the responsibility for the daily operational control of the construction site;

f. The name of the initial receiving water(s) or if unnamed, the first named blue line stream indicated on the appropriate USGS Topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer

system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org.

g. The name of the receiving water(s) located within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s) shown on Georgia's most current "305(b)/303(d) List Documents (Final)" for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff) at www.gaepd.org/Documents/305b.html;

h. An estimate of project start date and completion date of the construction activity by the entity making this submission, and an estimate of the number of acres of the site on which soil will be disturbed by the entity making this submission. For projects that began on or before the effective date of this permit, the start date must be the actual start date of construction;

i. A certification that the provisions of the primary permittee's Erosion, Sedimentation and Pollution Control Plan applicable to the secondary permittee's activities will be adhered to while conducting any construction activity at this site. (A copy of the Plans should not be included with the NOI submission by the secondary permittee);

j. The type of construction activity category (from those listed on the NOI) conducted at the site for this submission;

k. Any other information specified on the NOI in effect at the time of submittal; and

l. As an alternative to submitting a project specific NOI in accordance with subparts a. through k. above, a utility company may submit an annual Blanket Notice of Intent covering all construction activities within common developments statewide on or before January 15 of the year in which coverage is desired, except for calendar year 2013 in which case the Blanket NOI shall be submitted within sixty (60) days of the permit effective date, but in no case less than seven (7) days before commencement of construction activities. The Blanket NOI will contain the information contained in subparts b, d, i and j above. A copy of the Blanket NOI or equivalent written contact information shall be provided to the primary permittee not more than seven (7) days prior to the commencement of construction activities by the secondary permittee at each site. The primary permittee shall provide appropriate means for posting this information or otherwise making it publicly accessible.

3. Tertiary Permittee. The Notice of Intent for each tertiary permittee shall be signed in accordance with Part V.G.1. of this permit and shall include the following information:

a. The project construction site name, GPS location (decimal degrees) of construction exit, construction site location (e.g., street address), common development name (if applicable), lot number(s) (if applicable), city (if applicable) and county of the construction site for which the notification is submitted. The construction site location information must be sufficient to accurately locate the construction site;

b. The Owner's legal name, address, telephone number and email address; and if available, the operator's legal name, address, telephone number and email address; and if applicable, the Duly Authorized Representative's legal name and/or position name, telephone number and email address;

c. If available, the original primary permittee's legal name, address, telephone number and email address;

d. The name, telephone number and email address of the individual to whom the permittee has assigned the responsibility for the daily operational control (i.e., construction superintendent, etc.) of the construction site;

e. The name of the initial receiving water(s) or if unnamed, the first named blue line stream indicated on the appropriate USGS Topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org;

f. The name of the receiving water(s) located within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "partially supporting" or "not supporting" its designated use(s) shown on Georgia's most current "305(b)/303(d) List Documents (Final)" listed for Biota due to sediment (i.e., "Bio F" or "Bio M") and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff) at www.gaepd.org/Documents/305b.html. This requirement of this permit is not applicable to tertiary permittees with a Plan(s) for a typical individual lot(s), if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each individual lot is less than one (1) acre;

g. An estimate of project start date and completion date, a schedule for the timing of the various construction activities, the number of acres of the site on which soil will be disturbed and the surface water drainage area (if applicable);

h. The following certification shall be signed in accordance with Part V.G.1. of this permit:

> "I certify that to the best of my knowledge and belief, that the Erosion, Sedimentation and Pollution Control Plan (Plan) was prepared by a design professional, as defined by this permit, that has completed the appropriate certification course approved by the Georgia Soil and Water Conservation Commission in accordance with the provisions of O.C.G.A. 12-7-19 and that I will adhere to the Plan and comply with all requirements of this permit."

i. The type of construction activity category (from those listed on the NOI) conducted at the site;

j. The location of the receiving water(s) or outfall(s) or a combination of receiving water(s) and outfall(s) to be sampled on a map or drawing of appropriate scale. When it is determined by the tertiary permittee that some or all of the outfall(s) will be sampled, the applicable nephelometric turbidity unit (NTU) selected from Appendix B (i.e., based upon the size of the construction site and the surface water drainage area) must be shown for each outfall to be sampled;

k. For construction activities disturbing more than 50 acres, which began after the effective date of this permit, include a single copy of the Erosion, Sedimentation, and Pollution Control Plan;

l. NOIs may be submitted for separate phases of projects with a total planned disturbance greater than 5.0 acres, provided that each phase shall not be less than 1.0 acre. Phased NOIs shall include all documentation required by this permit for each phase; and

m. Any other information specified on the NOI in effect at the time of submittal.

C. Notice of Intent Submittal. NOIs are to be submitted by ***return receipt certified mail*** (or similar service) to both the appropriate District office of the EPD according to the schedule in Appendix A of this permit and to the Local Issuing Authority in jurisdictions authorized to issue a Land Disturbance Activity permit for the permittee's construction site pursuant to O.C.G.A. 12-7-1, et seq. If an electronic submittal service is provided by EPD then

the NOI may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service. 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 Notice of Termination (NOT) is submitted in accordance with Part VI.

D. Fees. Any applicable fees shall be submitted by the **Primary Permittee** in accordance with Rules and Regulations for Water Quality Control (Rules) promulgated by the Board of Natural Resources. By submitting an NOI for coverage under this permit the primary permittee agrees to pay any fees required, now or in the future, by such Rules authorized under O.C.G.A. Section 12-5-23(a)(5)(A), which allows the Board of Natural Resources to establish a fee system. Fees may be assessed on land disturbing activity proposed to occur on or after the effective date of this permit and shall be paid in accordance with such Rules.

E. Renotification. Upon issuance of a new or different general permit for some or all of the storm water discharges covered by this permit, the permittee is required to notify the EPD of their intent to be covered by the new or different general permit. The permittee must submit a new Notice of Intent in accordance with the notification requirements of the new or different general permit.

PART III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, PERMIT VIOLATIONS AND OTHER LIMITATIONS

A. Prohibition on Non-Storm Water Discharges.

1. Except as provided in Part I.C.2. and III.A.2., all discharges covered by this permit shall be composed entirely of storm water.

2. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharge is explicitly listed in the Erosion, Sedimentation and Pollution Control Plan and is in compliance with Part IV.D.7.; discharges from fire fighting activities; fire hydrant flushing; potable water sources including water line flushing; irrigation drainage; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials or pollutants.

3. This permit does not authorize the discharge of soaps or solvents used in vehicle and equipment washing.

4. This permit does not authorize the discharge of wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.

B. Releases in Excess of Reportable Quantities.

1. The discharge of hazardous substances or oil in the storm water discharge(s) from a site shall be prevented. This permit does not relieve the permittee of the reporting requirements of Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR Part 117 and 40 CFR Part 302. Where a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR 117 or 40 CFR 302 occurs during a 24 hour period, the permittee is required to notify EPD at (404) 656-4863 or (800) 241-4113 and the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR 117 and 40 CFR 302 as soon as he/she has knowledge of the discharge.

2. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

C. Discharges into, or within One Mile Upstream of and within the Same Watershed as, Any Portion of a Biota Impaired Stream Segment.

The requirements of Part III.C. of this permit are not applicable to utility companies and utility contractors if they are secondary permittees provided that the utility companies and utility contractors implement the applicable best management practices detailed in the primary permittee's Plan. The requirements of Part III.C. of this permit are not applicable to tertiary permittes with a Plan(s) for a typical individual lot(s), if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each individual lot is less than one (1) acre.

Any permittee who intends to obtain coverage under this permit for storm water discharges associated with construction activity into an Impaired Stream Segment, or within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s), as shown on Georgia's most current "305(b)/303(d) List Documents (Final)" at the time of NOI submittal, must satisfy the requirements of Part III.C. of this permit if the Impaired Stream Segment has been listed for criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff). Those discharges that are located within one (1) linear mile of an Impaired Stream Segment, but are not located within the watershed of any portion of that stream segment, are excluded from this requirement. Georgia's 305(b)/303(d) List Documents (Final)" can be viewed on the EPD website, www.gaepd.org/Documents/305b.html.

1. If a Total Maximum Daily Load (TMDL) Implementation Plan for sediment has been finalized at least six (6) months prior to the permittee's submittal of the NOI, the Erosion, Sedimentation and Pollution Control Plan (Plan) must address any site-specific conditions or requirements included in the TMDL Implementation Plan that are applicable to the permittee's discharge(s) to the Impaired Stream Segment within the timeframe specified in the TMDL Implementation Plan. If the TMDL Implementation Plan establishes a specific numeric wasteload allocation that applies to a permittee's discharge(s) to the Impaired Stream Segment, then the permittee must incorporate that allocation into the Erosion, Sedimentation and Pollution Control Plan and implement all necessary measures to meet that allocation. A list of TMDL Implementation Plans can be viewed on the EPD website, www.gaepd.org.

2. In order to ensure that the permittee's discharge(s) do not cause or contribute to a violation of State water quality standards, the Plan must include at least four (4) of the following best management practices (BMPs) for those areas of the site which discharge to the Impaired Stream Segment:

a. During all construction activities as defined in this permit, double the width of the 25 foot undisturbed vegetated buffer along all State waters requiring a buffer and the 50 foot undisturbed vegetated buffer along all State waters classified as "trout streams" requiring a buffer. During construction activities, EPD will not grant variances to any such buffers that are increased in width pursuant to this section.

b. Increase all temporary sediment basins and retrofitted storm water management basins to provide sediment storage of at least 3600 cubic feet (134 cubic yards) per acre drained.

c. Use baffles in all temporary sediment basins and retrofitted storm water management basins to at least double the conventional flow path length to the outlet structure.

d. A large sign (minimum 4 feet x 8 feet) must be on the site on the actual start date of construction visible from a public roadway identifying the construction site, the permittee(s), and the contact person(s) and telephone number(s) until a NOT has been submitted.

e. Use anionic polyacrylamide (PAM) and/or mulch to stabilize all areas left disturbed for more than seven (7) calendar days in accordance with Part III.D.1. of this permit.

f. Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24 hour period, recognizing the exceptions specified in Part IV.D.6.d. of this permit.

g. Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as provided for in O.C.G.A. 12-7-6(a)(1).

h. Reduce the total planned site disturbance to less than 50% impervious surfaces (excluding any State-mandated buffer areas from such calculations). All calculations must be included on the Plan.

i. Limit the amount of disturbed area at any one time to no greater than 25 acres or 50% of the total planned site, whichever is less. All calculations must be included on the Plan.

j. Use "Dirt II" techniques available on the EPD website, www.gaepd.org (e.g., seep berms, sand filters, anionic PAM) to model and manage construction storm water runoff (including sheet flow). All calculations must be included on the Plan.

k. Add appropriate organic soil amendments (e.g., compost) and conduct pre- and post-construction soil sampling to a depth of 6 (six) inches to document improved levels of soil carbon after final stabilization of the construction site.

l. Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever construction storm water (including sheet flow) may be discharged. Mulch filter berms cannot be placed in waterways or areas of concentrated flow.

m. Apply the appropriate Georgia Department of Transportation approved erosion control matting or blankets or bonded fiber matrix to all slopes steeper than 3:1. All graphical illustrations must be included on the Plan.

n. Use appropriate erosion control matting or blankets instead of concrete in all construction storm water ditches and storm drainages designed for a 25 year, 24 hour rainfall event.

o. Use anionic PAM under a passive dosing method (e.g., flocculant blocks) within all construction storm water ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.

p. Install sod for a minimum 20 foot width (in lieu of seeding) after final grade has been achieved, along the site perimeter wherever construction storm water (including sheet flow) may be discharged.

q. Conduct soil tests to identify and to implement site-specific fertilizer needs.

r. Certified personnel shall conduct inspections at least twice every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV.D.4.a.(3).(a) – (c), Part IV.D.4.b.(3). (a) – (c) or Part IV.D.4.c.(3).(a) – (c) of this permit, as applicable.

s. 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.

t. Use alternative BMPs whose performance has been documented to be superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the State Soil and Water Conservation Commission).

u. 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.

D. Management Practices and Permit Violations.

1. Best management practices, as set forth in this permit, are required for all construction activities, and must be implemented in accordance with the design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia. Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the Director or to any other allegation of noncompliance with Part III.D.3. and Part III.D.4.

2. Except as required to install the initial sediment storage requirements and perimeter control BMPs as described in Part IV.D.3., the initial sediment storage requirements and perimeter control BMPs must be installed and implemented prior to conducting any other construction activities (e.g., clearing, grubbing and grading) within the construction site or when applicable, within phased sub-parts or segments of the construction site. Failure to comply shall constitute a violation of this permit for each day on which construction activities occur. The design professional who prepared the Plan must inspect the initial sediment storage requirements and perimeter control BMPs in accordance with Part IV.A.5. within seven (7) days after installation.

3. Failure to properly design, install, or maintain best management practices shall constitute a violation of this permit for each day on which such failure occurs. BMP maintenance as a result of the permittee's routine inspections shall not be considered a violation for the purposes of this paragraph. If during the course of the permittee's routine inspection BMP failures are observed which have resulted in sediment deposition into Waters of the State, the permittee shall correct the BMP failures and shall submit a summary of the violations to EPD in accordance with Part V.A.2. of this permit.

4. A discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on which such discharge results in the turbidity of receiving water(s) being increased by more than ten (10) nephelometric turbidity units for waters classified as trout streams or more than twenty-five (25) nephelometric turbidity units for waters supporting warm water fisheries, regardless of a permittee's certification under Part II.B.1.j. and Part II.B.3.j.

5. When the permittee has elected to sample outfall(s), the discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on which such condition results in the turbidity of the discharge exceeding the value selected from Appendix B applicable to the construction site. As set forth therein, the nephelometric turbidity unit (NTU) value shall be selected from Appendix B based upon the size of the construction site, the surface water drainage area and whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org.

Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

A site-specific Erosion, Sedimentation and Pollution Control Plan (Plan) shall be designed, installed and maintained for the phase or phases of the common development covered by this permit. The Erosion, Sedimentation and Pollution Control Plan must be prepared by a design professional as defined by this permit. All persons involved in Plan preparation shall have completed the appropriate certification course, pursuant to O.C.G.A. 12-7-19 (b), approved by the State Soil and Water Conservation Commission. The design professional preparing the Plan must include and sign the following certification in the Plan:

> "I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling

of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR 100003."

The Plan shall include any additional certifications regarding the design professional's site visit in accordance with the Rules for Erosion and Sedimentation Control promulgated by the Board of Natural Resources:

"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 supervision."

The Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and O.C.G.A. 12-7-6, as well as the following:

(i). Except as provided in Part IV.(iii). below, no construction activities shall be conducted within a 25 foot buffer along the banks of all State waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the Director has determined to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7-6, or where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented, or along any ephemeral stream, or where bulkheads and seawalls must be constructed to prevent the erosion of the shoreline on Lake Oconee and Lake Sinclair. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

(1) public drinking water system reservoirs,
(2) stream crossings for water and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer,
(3) buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer, and
(4) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification.

(ii). No construction activities shall be conducted within a 50 foot buffer, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any State waters classified as 'trout streams' except when approval is granted by the Director for alternate buffer requirements in accordance with the provisions of O.C.G.A. 12-7-6, or where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as 'trout streams' which discharge an average annual flow of 25 gallons per minute or less shall have a 25 foot buffer or they may be piped, at the discretion of the permittee, pursuant to the terms of a rule providing for a general variance promulgated by the Board of Natural Resources including notification of such to EPD and the Local Issuing Authority of the location and extent of the piping and prescribed methodology for minimizing the impact of such piping and for measuring the volume of water discharged by the stream. Any such pipe must stop short of the downstream permittee's property, and the permittee must comply with the buffer requirement for any adjacent trout streams. The buffer shall not apply to

the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

(1) public drinking water system reservoirs,
(2) stream crossings for water and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer,
(3) buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer,
(4) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification.

(iii). Except as provided above, for buffers required pursuant to Part IV.(i). and (ii)., no construction activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. During coverage under this permit, a buffer cannot be thinned or trimmed of vegetation and a protective vegetative cover must remain to protect water quality and aquatic habitat and a natural canopy must be left in sufficient quantity to keep shade on the stream bed.

The Erosion, Sedimentation and Pollution Control Plan shall identify all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. In addition, the Plan shall describe and the applicable permittee shall ensure the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with construction activity at the site and to assure compliance with the terms and conditions of this permit. The applicable permittee must implement and maintain the provisions of the Plan required under this part as a condition of this permit.

Except as provided in Part IV.A.2., a single Erosion, Sedimentation and Pollution Control Plan for a common development must be prepared by the primary permittee for all sites within the common development whether or not all of the sites within the common development are owned or operated by a single entity or by multiple entities. The Erosion, Sedimentation and Pollution Control Plan must address the best management practices for the phase or phases of the common development which includes all sites (i.e., individual home lots, out-parcels, etc) regardless of who owns or operates the individual sites.

The primary permittee must provide a copy of the Plan or applicable portions of the Plan and copy of the primary permittee's most current Notice of Intent to each secondary permittee prior to the secondary permittee conducting any construction activity. Any revisions to the Plan and/or the Notice of Intent must be provided to the secondary permittees in a timely manner. A written acknowledgment of receipt of the Plan and Notice of Intent must be made by the secondary permittee and a copy of such be retained in the primary permittee's records in accordance with Part IV.F. of this permit. If the primary permittee changes after the Plan is prepared and implemented, any subsequent primary permittee must ensure that the Plan complies with all terms and conditions of this permit and that each secondary permittee is provided with any revisions to the Plan and Notice of Intent made by the new primary permittee. A written acknowledgment of receipt of the Plan or amendments to the Plan and Notice of Intent must be made by the secondary permittee and a copy of such be retained in the new primary permittee's records in accordance with Part IV.F. of this permit.

A. Deadlines for Plan Preparation and Compliance.

1. Except as provided in Part IV.A.2. and Part IV.A.6., the Erosion, Sedimentation and Pollution Control Plan shall be completed prior to submitting the NOI and prior to conducting any construction activity by any permittee.

2. For construction activities that began on or before the effective date of this permit and were subject to regulations under the previous general permit, the permittee(s) shall continue to operate under the existing Plan.

3. For construction activities that begin after the effective date of this permit, the primary permittee shall be required to prepare the Plan for that phase of the common development that corresponds with the NOI being submitted and the primary and all secondary permittee(s) shall implement the applicable portion of the Plan on or before the day construction activities begin.

4. Additional Plan Submittals.

a. For all projects identified under Part I.C.1.b., which begin after the effective date of this permit, in a jurisdiction where there is no certified Local Issuing Authority regulating that project, a single copy of the Plan must be submitted to the EPD Watershed Protection Branch and a second copy of the Plan must be submitted to the appropriate EPD District Office prior to or concurrent with the NOI submittal. The second copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device. The EPD Watershed Protection Branch will review Plans for deficiencies using the applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted.

b. For sites that are equal to or greater than 50 acres of disturbed area, regardless of the existence of a certified Local Issuing Authority in the jurisdiction, one of the following submissions is also required:

(i) For all projects which begin after the effective date of this permit a single copy of the NOI and a single copy of the Plan shall be submitted to the appropriate EPD District Office. This copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device.

(ii) For all projects which began on or before the effective date of this permit single copy of the NOI and a single copy of the Plan, if amended, shall be submitted to the appropriate EPD District Office. This copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device.

c. For all projects where the construction activity as indicated on the existing NOI has changed, the amended Plans must be submitted in accordance with Part IV.A.4.a. In addition, the permittee must file a change of information NOI in accordance with Part II.

5. For common developments that begin construction activity after the effective date of this permit, the primary permittee and tertiary permittee(s) must retain the design professional who prepared the Erosion, Sedimentation and Pollution Control Plan, or an alternative design professional approved by EPD in writing, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs 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. This requirement of this permit is not applicable to tertiary permittes with a Plan(s) for a typical individual lot(s), if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each individual lot is less than one (1) acre.

6. For storm- or emergency-related repair work, the permittee shall implement appropriate BMPs and certified personnel (provided by the primary permittee) shall inspect at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater. If the storm- or emergency-related repair work will not be completed within sixty (60) days of commencement of construction activity, a single copy of the Plan shall be submitted to EPD and the permittee shall comply with all requirements of this permit on the sixty-first (61st) day.

B. Signature and Plan Review.

1. The Erosion, Sedimentation and Pollution Control Plan shall be signed in accordance with Part IV., and be retained on the site (or, if not possible, at a readily accessible location) which generates the storm water discharge in accordance with Part IV.F. of this permit. The primary permittee shall ensure, as provided for elsewhere in this permit, that each secondary permittee is provided with a copy of the Plan and that the secondary permittee understands their role in implementing the Plan. The secondary permittee shall sign the Plan or the portion of the Plan applicable to their site in accordance with Part V.G.1. and the Plan or applicable portion thereof shall be retained on the site or be readily available at a designated alternate location from the date of project initiation to the date of final stabilization.

2. The primary permittee and tertiary permittee(s) shall make Plans available upon request to the EPD; to designated officials of the local government reviewing soil erosion and sediment control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system. A secondary shall make the Plan or portion of the Plan applicable to their site available upon request to the EPD; to the local government reviewing soil erosion and sediment control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system. The Plan must be submitted to EPD or to the local government within three business days of such notification or within an alternate time frame established by EPD.

3. EPD may notify the primary, secondary or tertiary permittee at any time that the Plan does not meet one or more of the minimum requirements of this Part. Within seven (7) days of such notification (or as otherwise provided by EPD), the primary or tertiary permittee shall make the required changes to the Plan and shall submit to EPD either the amended Plan or a written certification that the requested changes have been made. For sites commencing construction on or before the effective date of this permit, EPD may notify the secondary permittee at any time that the Plan does not meet one or more of the minimum requirements of this permit. Within seven (7) days of such notification (or as otherwise provided by EPD), the secondary permittee shall implement the required changes to the Plan and shall submit to EPD either the amended Plan or a written certification that the requested changes have been made. For sites commencing construction after the effective date of this permit, when EPD notifies a secondary permittee of any Plan deficiencies, the secondary permittee must notify the primary permittee within 24-hours of the deficiencies. The primary permittee must amend the Plan in accordance with this paragraph to address those deficient BMPs within seven (7) days of being notified by the secondary permittee. When the Plan is amended, the primary permittee must notify and provide a copy of the amendment to any and all affected secondary permittees within this seven (7) day period. The secondary permittees must implement any new Plan requirements within 48-hours of notification by the primary permittee.

C. Keeping Plans Current. The primary, secondary or tertiary permittees, as applicable, shall amend their Plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on BMPs with a hydraulic component (i.e., those BMPs where the design is based upon rainfall intensity, duration and return frequency of storms) or if the Plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.3. of this permit. Amendments to the Plan must be certified by a design professional as provided in this permit. Secondary permittees must notify the primary permittee within 24-hours of becoming aware of any suspected BMP designed deficiencies which are not effective in controlling the discharge of pollutants from the secondary permittee's site. The primary permittee must evaluate whether these

deficiencies exist within 48-hours of such notice, and if these deficiencies are found to exist must amend the Plan in accordance with this paragraph to address those deficient BMPs within seven (7) days of being notified by the secondary permittee. When the Plan is amended, the primary permittee must notify and provide a copy of the amendment to all affected secondary permittees within this seven (7) day period. The secondary permittee(s) must implement any new Plan requirements affecting their site(s) within 48-hours of notification by the primary permittee. Notwithstanding the foregoing, the primary or tertiary permittee remains responsible for insuring that the Plan, as appropriate, meets the requirements of this permit.

D. Contents of Plan. The Erosion, Sedimentation and Pollution Control Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:

1. Checklist. Each plan shall include a completed Erosion, Sedimentation and Pollution Control Plan Checklist established by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and amendments to the applicable Checklist as approved by the State Soil and Water Conservation Commission up until the date of the NOI submittal. The applicable checklists are available on the EPD website, www.gaepd.org.

2. Site description. Each site-specific Plan shall provide a description of pollutant sources and other information as indicated:

a. A description of the nature of the construction activity;

b. A detailed description and chart or timeline of the intended sequence of major activities which disturb soils for major portions of the site (i.e., initial sediment storage requirements and perimeter BMPs, clearing and grubbing activities, excavation activities, grading activities, utility activities, immediate and final stabilization activities). This requirement of this permit is not applicable to tertiary permittes with Plan(s) for a typical individual lot(s), if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each individual lot is less than one (1) acre.;

c. Estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other activities;

d. An estimate of the runoff coefficient or peak discharge flow of the site prior to the construction activities and after construction activities are completed and existing data describing the soil or the quality of any discharge from the site. This requirement of this permit is not applicable to tertiary permittes with Plan(s) for a typical individual lot(s),if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each individual lot is less than one (1) acre;

e. A site-specific map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the Plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water;

f. Identify the receiving water(s) and areal extent of wetland acreage at the site; and

g. For Plans prepared by a primary permittee for a common development, a list of the names and addresses of all secondary permittees must be included in the Plan and be amended as appropriate. These amendments are not subject to the design professional certification requirements specified in Part IV.C.

3. Controls. Each Plan shall include 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 Plan. The Plan will include appropriate staging and access requirements for construction equipment. Plans submitted after the effective date of this permit shall limit the amount of disturbed area to no greater than 50 acres for each individual permittee (i.e., primary, secondary or tertiary permittees) at any one time, and to no more than 50 contiguous acres total at any one time, without prior written authorization from the appropriate EPD District Office according to the schedule in Appendix A of this permit. EPD will approve or disapprove such requests within 35 days of receipt. Failure of EPD to act within 35 days shall be considered an approval of such requests. If the EPD District Office approves a request to disturb 50 acres or more at any one time, the Plan must include at least four (4) of the best management practices listed in Part III.C.2. of this permit.

The Plan will clearly describe for each major activity identified in Part IV.D.1.b. appropriate control measures and the timing during the construction process that the measures will be implemented. The primary permittee and tertiary permittee(s) are encouraged to utilize the document, Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites, EPA 833-R-060-04, May 2007 (www.epa.gov/npdes/pubs/sw_swppp_guide.pdf), when preparing the Plan. The description and implementation of controls shall address the following minimum components:

a. Erosion and sediment controls.

(1). Stabilization measures. A description of interim and permanent stabilization measures, including site-specific scheduling of the implementation of the measures. Site plans should ensure that existing vegetation is preserved and that disturbed portions of the site are stabilized. Stabilization measures may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the Plan. Except as provided in paragraphs IV.D.3.(a).(1).(a). and (b). below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

(a). Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover or other adverse weather conditions, stabilization measures shall be initiated as soon as practicable.

(b). Where construction activity will resume on a portion of the site within 21 days from when activities ceased, (i.e., the total time period that construction activity is temporarily ceased is less than 21 days) then stabilization measures do not have to be initiated on that portion of site by the 14th day after construction activity temporarily ceased.

(2). Structural practices. A description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

(3). Sediment basins. For common drainage locations a temporary (or permanent) sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site. The 1800 cubic feet (67 cubic yards) of storage area per acre drained does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. For drainage locations where a temporary sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent controls is not attainable, sediment traps, silt fences, wood mulch berms or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area. When the sediment fills to a volume at most of 22 cubic yards per acre for each acre of drainage area, the sediment shall be removed to restore the original design volume. This sediment must be properly disposed. Sediment basins may not be feasible at some construction projects. Careful consideration must be used to determine when a sediment basin cannot be used and/or 67 cubic yards of storage per acre drained is not attainable and a written justification explaining the decision(s) must be included in the Plan. Perennial and intermittent waters of the State shall not be used for temporary or permanent sediment detention.

When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan. Outlet structures that withdraw water from the surface are temporary BMPs and must be removed prior to submitting a Notice of Termination. For construction activities where the NOI was submitted prior to January 1, 2014, this requirement of the permit is not applicable.

(4). Alternative BMPs. The use of alternative BMPs whose performance has been documented to be equivalent or superior to conventional BMPs as certified by a Design Professional may be allowed (unless disapproved by EPD or the State Soil and Water Conservation Commission).

(5). High performance BMPs. The use of infiltration trenches, seep berms, sand filters, dry wells, polyacrylamide, etc. for minimizing point source discharges except for large rainfall events is encouraged.

b. Storm water management. A description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Operators are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with construction activity have been eliminated from the site.

(1). Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site; and sequential systems (which combine several practices). The Plan shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.

(2). 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 so that the natural physical and biological characteristics and functions are

maintained and protected [e.g. no significant changes in the hydrological regime of the receiving water(s).

(3). Installation and use of Green Infrastructure approaches and practices that mimic natural processes and direct storm water where it can be infiltrated, evapotranspirated or re-used with significant utilization of soils and vegetation rather than traditional hardscape collection, conveyance and storage structures are encouraged to the maximum extent practicable. Green Infrastructure practices or approaches include permeable or porous paving, vegetated swales instead of curbs and gutters, green roofs, tree boxes, rain gardens, constructed wetlands, infiltration planters, vegetated median strips, protection and enhancement of riparian buffers and floodplains, and the overall reduction in site disturbance and impervious area. Design information on Green Infrastructure practices and other ways to manage storm water can be found in the Georgia Stormwater Management Manual (www.georgiastormwater.com) and the Georgia Green Growth Guidelines (www.coastalgadnr.org/cm/green/guide). Additional information on Green Infrastructure can be found at water.epa.gov/infrastructure/greeninfrastructure/index.cfm.

c. Other controls.

(1). Waste disposal. Locate waste collection areas away from streets, gutters, watercourses and storm drains. Waste collection areas, such as dumpsters, are often best located near construction site entrances to minimize traffic on disturbed soils. The Plan should include secondary containment around liquid waste collection areas to further minimize the likelihood of contaminated discharges. Solid materials, including building materials, shall not be discharged to waters of the State, except as authorized by a Section 404 permit.

(2). Off-site vehicle tracking of dirt, soils, and sediments and the generation of dust shall be minimized or eliminated to the maximum extent practical. The Plan shall include the best management practice to be implemented at the site or common development.

(3). Nothing in this permit relieves a permittee from any obligation to comply with all applicable State and local regulations of waste disposal, sanitary sewer, septic and petroleum storage systems.

(4). The Plan shall include best management practices for the remediation of all petroleum spills and leaks as appropriate.

(5). The Plan shall include best management practices for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of vehicles. Washout of the drum at the construction site is prohibited. Additional information about best management practices for concrete washout is available at www.epa.gov/npdes/pubs/concretewashout.pdf.

(6) All permittees are required to minimize the discharge of pollutants from dewatering trenches and excavations. Discharges are prohibited unless managed by appropriate controls.

4. Inspections.

a. Primary Permittee.

(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 rainfall once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday until a Notice of Termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials 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 non-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): (a) disturbed areas of the primary permittee's construction site ; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation ; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.(4).. These inspections must be conducted until a Notice of Termination is submitted.

(4). Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).

(5). Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution Control Plan, the Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following each inspection. The primary permittee must amend the Plan in accordance with Part IV.D.4.b.(5). when a secondary permittee notifies the primary permittee of any Plan deficiencies.

(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 project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify an incident, the inspection report shall contain a statement 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.

b. Secondary Permittee.

(1). Each day when any type of construction activity has taken place at a secondary permittee's site, certified personnel provided by the secondary permittee shall inspect: (a) all areas used by the secondary permittee where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment; and (b) all locations at the secondary permittee site where that permittee's 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. This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees.

(2). Certified personnel (provided by the utility companies and utility contractors if they are secondary permittees) shall inspect the following each day any type of construction activity has taken place at the construction site: (a) areas of the construction site disturbed by the utility companies and utility contractors that have not undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region; (b) areas used by the utility companies and utility contractors for storage of materials that are exposed to precipitation that have not undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region or established a crop of annual vegetation and a seeding of target perennials appropriate for the region; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the utility companies and utility contractors' construction activities 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). This paragraph is not applicable to utility companies and utility contractors when they are secondary permittees performing service line installations or when conducting repairs on existing line installations.

(3). Certified personnel (provided by the secondary permittee) shall inspect the following at least once every seven 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 non-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): (a) disturbed areas of the secondary permittee's construction site ; (b) areas used by the secondary 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 secondary 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.b.(4). These inspections must be conducted until a Notice of Termination is submitted. This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees.

(4). Certified personnel (provided by the secondary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of their sites 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). This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees.

(5). Based on the results of each inspection, the secondary permittee must notify the primary permittee within 24-hours of any suspected BMP design deficiencies. The primary permittee must evaluate whether these deficiencies exist within 48-hours of such notice, and if these deficiencies are found to exist must amend the Plan in accordance with Part IV.C. of this permit to address those deficient BMPs within seven (7) days of being notified by the secondary permittee. When the Plan is amended, the primary permittee must notify and provide a copy of the amendment to all affected secondary permittee(s) within this seven (7) day period. The secondary permittees must implement any new Plan requirements affecting their site(s) within 48-hours of notification by the primary permittee.

(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.b.(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 has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by the end of the second business day and /or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit. This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees performing only service line installations or when conducting repairs on existing line installations.

c. Tertiary Permittee.

(1). Each day when any type of construction activity has taken place at a tertiary permittee's site, certified personnel provided by the tertiary permittee shall inspect: (a) all areas used by the tertiary permittee where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment; and (b) all locations at the tertiary permittee site where that permittee's 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. This paragraph is not applicable to utility companies and utility contractors performing only service line installations or when conducting repairs on existing line installations.

(2).Measure rainfall once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday until a Notice of Termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.

(3). Certified personnel (provided by the tertiary permittee) shall inspect at least the following once every seven 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 non-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): (a) disturbed areas of the tertiary permittee's construction site ; (b) areas used by the tertiary 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 tertiary 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.c.(4). These inspections must be conducted until a Notice of Termination is submitted. This paragraph is not applicable to utility companies and utility contractors performing only service line installations or when conducting repairs on existing line installations.

(4). Certified personnel (provided by the tertiary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of their sites 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). This paragraph is not applicable to utility companies and utility contractors performing only service line installations or when conducting repairs on existing line installations.

(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 the 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.c.(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 has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by the end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit. This paragraph is not applicable to utility companies and utility contractors performing only service line installations or when conducting repairs on existing line installations.

5. Maintenance. The Plan shall include a description of procedures to ensure the timely maintenance of vegetation, erosion and sediment control measures and other protective measures identified in the site plan.

6. Sampling Requirements. 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. The following procedures constitute EPD's guidelines for sampling turbidity.

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 common development; (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 storm

water is discharged and (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 storm water(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). The analytical method used to collect and analyze the samples including quality control/quality assurance procedures. This narrative must include precise sampling methodology for each sampling location;

(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 Storm Water 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, clean 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 using a direct reading, 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.

c. *Sampling Points.*

(1). For construction activities the primary permittee with a total planned disturbance equal to or greater than one (1) acre and tertiary permittee with a total planned disturbance equal to or greater than five (5) acres must sample all receiving water(s), or all outfall(s), or a combination of receiving water(s) and outfall(s). Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the storm water outfalls using the following minimum guidelines:

(a). The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge from the permitted activity (i.e., the discharge farthest upstream at the site) but downstream of any other storm water discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the 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 storm water discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other storm water discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value.

(c). Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the storm water outfall channel(s).

(d). Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel.

(e). The sampling container should be held so that the opening faces upstream.

(f). The samples should be kept free from floating debris.

(g). Permittees do not have to sample sheetflow that flows onto undisturbed natural areas or areas stabilized by the project. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by EPD for waste disposal, 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas),or equivalent permanent stabilization measures as defined in the Manual (excluding a crop of annual vegetation and seeding of target crop perennials appropriate for the region).

(h). All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether storm water runoff from the construction site is in compliance with the standard set forth in Parts III.D.3. or III.D.4., whichever is applicable.

d. *Sampling Frequency.*

(1). The primary permittee with a total planned disturbance equal to or greater than one (1) acre and tertiary permittee with a total planned disturbance equal to or greater than five (5) acres must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, the permittee shall sample at the beginning of any storm water discharge to a monitored receiving water and/or from a monitored outfall within forty-five (45) minutes or as soon as possible. .

(2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge.

(3). Sampling by the permittee shall occur for the following qualifying events:

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that allows for sampling during normal business hours as defined in this permit after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the sampling location;

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the sampling location, whichever comes first;

(c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there was no discharge), the primary permittee, in accordance with Part IV.D.4.a.(6),, or the tertiary permittee, in accordance with Part IV.D.4.c.(6)., must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations under (a), (b) or (c) above; and

(e). Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

*Note that the Permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

7. Non-storm water discharges. Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. of this permit that are combined with storm water discharges associated with construction activity must be identified in the Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

E. Reporting.

1. The applicable permittees are required to submit the sampling results to the EPD at the address shown in Part II.C. by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittee to submit the sampling results on a more frequent basis. Sampling and analysis of any storm water discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. The sampling reports must be signed in accordance with Part V.G.2. Sampling reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI.

2. All sampling reports shall include the following information:

a. The rainfall amount, date, exact place and time of sampling or measurements;
b. The name(s) of the certified personnel who performed the sampling and measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were initiated;
e. The name(s) of the certified personnel who performed the analyses;
f. References and written procedures, when available, for the analytical techniques or methods used;
g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results;
h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU;" and
i. Certification statement that sampling was conducted as per the Plan.

3. All written correspondence required by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate District Office of the EPD according to the schedule in Appendix A of this permit. The applicable permittees shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated location from commencement of construction until such time as a NOT is submitted in accordance with Part VI. If an electronic submittal is provided by EPD then the written correspondence may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service.

F. Retention of Records.

1. The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

a. A copy of all Notices of Intent submitted to EPD;
b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;
d. A copy of all sampling information, results, and reports required by this permit;
e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of this permit;
f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and
g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2). of this permit.

2. 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:

a. A copy of all Notices of Intent submitted to EPD;
b. 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;
c. A copy of all inspection reports generated in accordance with Part IV.D.4.b. of this permit; and
d. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit.

3. 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 with Part VI:

a. A copy of all Notices of Intent submitted to EPD;
b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;
d. A copy of all sampling information, results, and reports required by this permit;
e. A copy of all inspection reports generated in accordance with Part IV.D.4.c. of this permit;
f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and.
g. Daily rainfall information collected in accordance with Part IV.D.4.c.(2). of this permit.

4. 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.

Part V. STANDARD PERMIT CONDITIONS

A. Duty to Comply.

1. Each permittee must comply with all applicable conditions of this permit. Any permit noncompliance constitutes a violation of the Georgia Water Quality Control Act (O.C.G.A. §§12-5-20, et seq.) and is grounds for enforcement action; for permit termination; or for denial of a permit renewal application. Failure of a primary permittee, secondary permittee or tertiary permittee to comply with any applicable term or condition of this permit shall not relieve any other primary, secondary or tertiary permittee from compliance with their applicable terms and conditions of this permit.

2. Each permittee must document in their records any and all known violations of this permit at his/her site within seven (7) days of his/her knowledge of the violation. A summary of these violations must be submitted to EPD by the permittee at the addresses shown in Part II.C. within fourteen (14) days of his/her discovery of the violation.

3. Penalties for violations of permit conditions. The Federal Clean Water Act and the Georgia Water Quality Control Act (O.C.G.A. §§12-5-20, et seq.) provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Acts, any permit condition or limitation established pursuant to the Acts, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director.

B. Continuation of the Expired General Permit. This permit expires on the date shown on the cover page of this permit. However, an expired general permit continues in force and effect until a new general permit is issued, final and effective.

C. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Duty to Provide Information. The permittee shall furnish to the Director; a State or local agency approving soil erosion and sedimentation control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system, any information which is requested to determine compliance with this permit. In the case of information submitted to the EPD such information shall be considered public information and available under the Georgia Open Records Act.

F. Other Information. When the permittee becomes aware that he/she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report required to be submitted to the EPD, the permittee shall promptly submit such facts or information.

G. Signatory Requirements. All Notices of Intent, Notice of Terminations, inspection reports, sampling reports, or other reports requested by the EPD shall be signed as follows:

1. All Notices of Intent and Notices of Termination shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this permit, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures; or

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official; and

d. Changes to authorization. If an authorization under Part II.B. is no longer accurate, a change of information NOI satisfying the requirements of Part II.B. must be submitted to the EPD prior to or together with any inspection reports, sampling reports, or other reports requested by the EPD to be signed by a person described above or by a duly authorized representative of that person.

2. All inspection reports, sampling reports, or other reports requested by the EPD shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person(s) described above and submitted to the EPD;

b. The authorization specifies either an individual or a position having responsibility for specified operation(s) of the regulated facility or activity, such as the position of manager, Operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a named individual or any individual occupying a named position); and

c. *Certification.* Reports delineated in Part V.G.2. shall be signed by the permittee or duly authorized representative and shall make the following certification:

"I certify under penalty of law that this report and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the Georgia Hazardous Waste Management Act, O.C.G.A. § 12-8-60, et seq. or under Chapter 14 of Title 12 of the Official Code of Georgia Annotated; nor is the Operator relieved from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act or Section 106 of Comprehensive Environmental Response Compensation And Liability Act.

I. Property Rights. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

J. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Other Applicable Environmental Regulations and Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act. Nothing in this permit, unless explicitly stated, exempts the permittee from compliance with other applicable local, state and federal ordinances, rules, regulations, and laws. Furthermore, it is not a defense to compliance with this permit that a local government authority has approved the permittee's Erosion, Sedimentation and Pollution Control Plan or failed to take enforcement action against the permittee for violations of the Erosion, Sedimentation and Pollution Control Plan, or other provisions of this permit.

No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

L. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the required plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by an permittee only when necessary to achieve compliance with the conditions of the permit.

M. Inspection and Entry. The permittee shall allow the Director or an authorized representative of EPA, EPD or to designated officials of the local government reviewing soil erosion and sediment control plans, grading plans, or storm water management plans; or, in the case of a construction site which discharges through a municipal separate storm sewer system, an authorized representative of the municipal operator of the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit; and

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

N. Permit Actions. This permit may be revoked and reissued, or terminated for cause including but not limited to changes in the law or regulations. The filing of a request by the permittee for termination of the permit, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

Part VI. TERMINATION OF COVERAGE

A. Notice of Termination Eligibility. Notice of Termination signed in accordance with Part V.G.1. of this permit must be submitted:

1. For construction activities, by the primary permittee where the entire common development has undergone final stabilization, all storm water discharges associated with construction activity that are authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed. For construction activities where the primary permittee has elected to submit NOIs for separate phases of the common development, the phase or phases of the common development on the NOT shall correspond to the phase or phases on the NOI.

In addition, if the primary permittee decides not to proceed with all permitted construction activities, the primary permittee may submit a Notice of Termination, if and only if, (a) all construction activities have ceased for a minimum of 90 days; (b) final stabilization has been implemented by the primary permittee and by all secondary permittee(s); (c) all secondary permittees have submitted a NOT signed in accordance with Part V.G.1. of this permit (excluding utility companies and/or utility contractors working under a Blanket NOI);(d) the site is in compliance with this permit; and (e) all temporary BMPs have been removed .

2. After the filing of the Notice of Termination, the primary permittee shall notify by written correspondence with ***return receipt certified mail*** (or similar service) to the subsequent legal title holder of each remaining lot(s) that these lot Owners or Operators will become tertiary permittees for purposes of this permit and these tertiary permittees will be responsible for off-site best management practices, as applicable.

(i). If a person currently owns or purchases one or more of the remaining undeveloped lots within a common development for the purpose of engaging in construction activity in which a Notice of Termination has been filed by the primary permittee and all secondary permittees (excluding utility companies and/or utility contractors working under a Blanket NOI) or where a primary permittee no longer exists, then the person must file a Notice of Intent as a tertiary permittee (as set forth in Part II.B.3.). Except as provided in Part IV.A.2., a tertiary permittee must prepare and submit a new Erosion, Sedimentation and Pollution Control Plan in accordance with Part IV. If the total land disturbance within the tertiary permittee's construction site is less than five (5) acres and the total land disturbance within the individual lot(s) is less than one (1) acre, a tertiary permittee may submit a single Notice of Intent and an Erosion, Sedimentation and Pollution Control Plan(s) for a typical individual lot(s).EPD may notify the tertiary permittee at any time that the Plan does not meet one or more of the minimum requirements of the permit. The tertiary permittee must correct and implement any required changes to the Plan in accordance with Part IV.B.3. of this permit within the time frame established by EPD.

(ii). Tertiary permittees must submit a Notice of Termination when their sites within a common development have undergone final stabilization, all storm water discharges from their construction activities have ceased, their construction sites are in compliance with this permit and all temporary BMPs have been removed. If the total land disturbance within the tertiary permittee's construction site is less than five (5) acres, tertiary permittees may also submit a Notice of Termination for each individual lot

resulting in land disturbance of less than one (1) acre with a Plan for a typical individual lot within the tertiary permittee's construction site.

3. By the Owner or Operator or both when the Owner or Operator of the site changes. Where storm water discharges will continue after the identity of the Owner or Operator or both changes, the permittee must, prior to filing the Notice of Termination, notify any subsequent Owner or Operator or both of the permitted site as to the requirements of this permit;

4. By secondary permittees when their sites within a common development have undergone final stabilization, all storm water discharges from their construction activities have ceased, their sites are in compliance with this permit and all temporary BMPs have been removed; and

5. By secondary permittees working under a Blanket NOI postmarked no later than January 15 of the subsequent year in which the NOI was filed. The NOT shall contain the information contained in Part II. B. 2. a., b., c. and h.

B. Notice of Termination Contents:

1. The NPDES permit number for the storm water discharge associated with construction activity identified by the Notice of Termination (i.e., GAR100003 – Common Development);

2. The project construction site name, GPS location (decimal degrees) of construction exit of the project or if applicable, of each typical lot in accordance with Part VI.A.6., construction site location, common development name (if applicable), lot number(s) (if applicable), city (if applicable) and county of the construction site for which the notification is submitted. This information must correspond to the similar information as provided on the NOI. Where an address for the construction site is not available, the construction site location information must be sufficient to accurately locate the construction site;

3. The owner's legal name, address, telephone number and email address and the operator's legal name, address, telephone and email address;

4. An indication as to whether the permittee is a primary, secondary or tertiary permittee;

5. When the NOT is submitted by a secondary permittee, the primary permittee's legal name, address, telephone number and email address;

6. A listing of the legal name, address, telephone number and email address of all secondary permittees at the site for which this notification is submitted, if applicable;

7. The name of the receiving water(s), and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4;

8. When sampling is required by this permit, copies of all sampling reports and/or a written justification why sampling was not conducted. Copies of all sampling reports may be submitted as a Portable Document Format (PDF) file on CD-ROM or other storage device;

9. Copy of the permittee's most current Notice of Intent;

10. Any other information specified on the NOT in effect at the time of submittal; and

11. The following certification signed in accordance with Part V.G.1. (signatory requirements):

"I certify under penalty of law that either: (a) all storm water discharges associated with construction activity authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed or (b) I am no longer an Owner or Operator at the construction site and a new Owner or Operator has assumed operational control of the permitted construction site where I previously had ownership or operational control. If I am a primary permittee filing this Notice of Termination under Part VI.A.2. of this permit, I will notify by written correspondence to the subsequent legal title holder of any remaining lots that these lot Owners or Operators will become tertiary permittees for purposes of this permit and I will provide these tertiary permittees with the primary permittee's Erosion, Sedimentation and Pollution Control Plan and Notice of Termination. I understand that by submitting this Notice of Termination, that I am no longer authorized to discharge storm water associated with construction activity by the general permit, and that discharging pollutants in storm water associated with construction activity to waters of Georgia is unlawful under the Georgia Water Quality Control Act and the Clean Water Act where the discharge is not authorized by a NPDES permit."

C. Notice of Termination Submittal. All Notices of Termination by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate EPD District Office according to the schedule in Appendix A of this permit and to the Local Issuing Authority in jurisdictions authorized to issue a Land Disturbance Activity permit for the permittee's construction site pursuant to O.C.G.A. 12-7-1, et seq. If an electronic submittal service is provided by the EPD then the Notice of Termination may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service.

APPENDIX A

EPD DISTRICT OFFICES

All required correspondence, including but not limited to the Notice of Intents, Notice of Terminations, certifications, Erosion, Sedimentation and Pollution Control Plans and any other reports, shall be sent to the following District Offices of EPD.

A. For facilities/construction sites located in the following counties: Bibb, Bleckley, Chattahoochee, Crawford, Dooly, Harris, Houston, Jones, Lamar, Macon, Marion, Meriwether, Monroe, Muscogee, Peach, Pike, Pulaski, Schley, Talbot, Taylor, Troup, Twiggs, Upson

Information shall be submitted to:

West Central District Office
Georgia Environmental Protection Division
2640 Shurling Drive
Macon, GA 31211-3576
(478) 751-6612

B. For facilities/construction sites located in the following counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Johnson, Laurens, McDuffie, Montgomery, Richmond, Screven, Treutlen, Warren, Washington, Wheeler, Wilkinson

Information shall be submitted to:

East Central District Office
Georgia Environmental Protection Division
3525 Walton Way Extension
Augusta, GA 30909-1821
(706) 667-4343

C. For facilities/construction sites located in the following counties: Baldwin, Banks, Barrow, Butts, Clarke, Elbert, Franklin, Greene, Hall, Hancock, Hart, Jackson, Jasper, Lincoln, Madison, Morgan, Newton, Oconee, Oglethorpe, Putnam, Stephens, Taliaferro, Walton, Wilkes

Information shall be submitted to:

Northeast District Office
Georgia Environmental Protection Division
745 Gaines School Road
Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:

Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:

Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:

Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8251
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(912) 430-4144

H. For facilities/construction sites required to submit Plans required under Part IV.A.4.a. of this Permit:

Information shall be submitted to:

Watershed Protection Branch
Environmental Protection Division
4220 International Parkway, Suite 101
Atlanta, Georgia 30354
(404) 675-6240

APPENDIX B

Nephelometric Turbidity Unit (NTU) TABLES

Trout Streams

Surface Water Drainage Area, square miles

Site Size, acres	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	25	50	75	150	300	500	500	500
10.01-25	25	25	50	75	150	200	500	500
25.01-50	25	25	25	50	75	100	300	500
50.01-100	20	25	25	35	59	75	150	300
100.01 +	20	20	25	25	25	50	60	100

Waters Supporting Warm Water Fisheries

Surface Water Drainage Area, square miles

Site Size, acres	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	75	150	200	400	750	750	750	750
10.01-25	50	100	100	200	300	500	750	750
25.01-50	50	50	100	100	200	300	750	750
50.01-100	50	50	50	100	100	150	300	600
100.01 +	50	50	50	50	50	100	200	100

To use these tables, select the size (acres) of the construction site. Then, select the surface water drainage area (square miles). The NTU matrix value arrived at from the above tables is the one to use in Part III.D.4.

Example 1: For a site size of 12.5 acres and a "trout stream" drainage area of 37.5 square miles, the NTU value to use in Part III.D.4. is 75 NTU.

Example 2: For a site size of 51.7 acres and "waters supporting warm water fisheries" drainage area of 72 square miles, the NTU value to use in Part III.D.4. is 100 NTU.

the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

(1) public drinking water system reservoirs,
(2) stream crossings for water and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer,
(3) buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer,
(4) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized); and (d) native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification.

(iii). Except as provided in Part IV(iv) below, no construction activities shall be conducted within a 25 foot buffer along coastal marshlands, as measured horizontally from the coastal marshland-upland interface, as determined in accordance with Part 4 of Article 4 of Chapter 5 of Title 12, the "Coastal Marshlands Protection Act of 1970, and the rules and regulations promulgated thereunder, except where the director determines to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7-6, or where otherwise allowed by the director pursuant to Code Section 12-2-8, or where an alteration within the buffer area has been authorized pursuant to Code Section 12-5-286, or for maintenance of any currently serviceable structure, landscaping, or hardscaping, including bridges, roads, parking lots, golf courses, golf cart paths, retaining walls, bulkheads, and patios, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented, or where a drainage structure or roadway drainage structure is constructed or maintained, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented, or on the landward side of any currently serviceable shoreline stabilization structure, or for the maintenance of any manmade storm-water detention basin, golf course pond, or impoundment that is located entirely within the property of a single individual, partnership, or corporation, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented:

(1) Public drinking water system reservoirs,
(2) Crossings for utility lines that cause a width of disturbance of not more than 50 feet within the buffer
(3) Any land-disturbing activity conducted pursuant to and in compliance with a valid and effective land-disturbing permit issued subsequent to April 22, 2014, and prior to December 31, 2015,
(4) Any lot for which the preliminary plat has been approved prior to December 31, 2015 if roadways, bridges, or water and sewer lines have been extended to such lot prior to the effective date of this Act and if the requirement to maintain a 25 foot buffer would consume at least 18 percent of the high ground of the platted lot otherwise available for development,

(5) Buffer crossings for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the Jurisdictional Line and cause a width of disturbance of not more than 50 feet within the buffer, and vegetation is re-established in any bare or disturbed areas within the buffer.

(6) Crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification;

(~~iii~~.iv.) Except as provided above, for buffers required pursuant to Part IV.(i), (ii) and (iii), no construction activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. During coverage under this permit, a buffer cannot be thinned or trimmed of vegetation and a protective vegetative cover must remain to protect water quality and aquatic habitat and a natural canopy must be left in sufficient quantity to keep shade on the stream bed or marsh.

The Erosion, Sedimentation and Pollution Control Plan shall identify all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. In addition, the Plan shall describe and the applicable permittee shall ensure the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with construction activity at the site and to assure compliance with the terms and conditions of this permit. The applicable permittee must implement and maintain the provisions of the Plan required under this part as a condition of this permit. Except as provided in Part IV.A.2., a single Erosion, Sedimentation and Pollution Control Plan must be prepared by the primary permittee for the common development construction project.

A. Deadlines for Plan Preparation and Compliance.

1. Except as provided in Part IV.A.2. and Part IV.A.6., the Erosion, Sedimentation and Pollution Control Plan shall be completed prior to submitting the NOI and prior to conducting any construction activity by any permittee.

2. For construction activities that began on or before the effective date of this permit and were subject to the regulations under the previous permit, the permittee(s) shall continue to operate under the existing Plan.

3. For construction activities that begin after the effective date of this permit, the primary permittee shall be required to prepare the Plan for that phase of the common development that corresponds with the NOI being submitted and the primary permittee(s) shall implement the Plan on or before the day construction activities begin.

4. Additional Plan Submittals.

(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:

Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:

Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:

Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8687
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(912) 430-4144

H. For facilities/construction sites required to submit Plans required under Part IV.A.4.a. of this Permit:

Information shall be submitted to:

Watershed Protection Branch
Environmental Protection Division
~~4220 International Parkway, Suite 101~~
~~Atlanta, Georgia 30354~~
~~(404) 675-6240~~
2 Martin Luther King Jr. Drive
Suite 1152 East
Atlanta, Georgia 30334
404-463-1511

DRAFT

Insert Yellow Sheet

Back of Yellow Sheet

Revised June 2015

For Official Use Only

NOTICE OF INTENT

VERSION June 2015

State of Georgia
Department of Natural Resources
Environmental Protection Division

For Coverage Under the 2013 Re-Issuance of the NPDES General Permits To Discharge Storm Water Associated With Construction Activity

THESE PERMITS EXPIRE JULY 31, 2018

PRIMARY PERMITTEE

****Instructions for this form are included on Page 6.****

NOTICE OF INTENT (Check Only One):

Initial Notification - (New Facility/Construction Site)

Change of Information - (Existing Facility/Construction Site)

COVERAGE DESIRED (Select Only One):

GAR 100001 Stand Alone
GAR 100002 Infrastructure
GAR 100003 Common Development

I. SITE/OWNER/OPERATOR INFORMATION

Project Construction Site Name: _____

For **GAR100001 Stand Alone** or **GAR 100003 Common Development** Project, enter GPS Location of Construction Exit in dec deg:

To convert to Decimal Degrees, please see **http://www.fcc.gov/encyclopedia/degrees-minutes-seconds-tofrom-decimal-degrees**

Latitude (Dec Deg) _____ Longitude (Dec Deg) _____

For **GAR100002 Infrastructure** Project, enter GPS Locations of the Beginning and End of the Infrastructure Project in dec deg:

Latitude _____ Longitude _____

Latitude _____ Longitude _____

Construction Site Location *(e.g., street address):* _____

_____

City *(applicable if the site is located within the jurisdictional boundaries of the municipality)*: _____

County or Counties: _____

Common Development Name *(applicable only to General NPDES Permit No. GAR100003)*: _____

Owner's Name: _____ Phone: _____

Email Address: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Duly Authorized Representative(s) *(optional)*: _____ Phone: _____

Email Address: _____

Operator's Name *(optional)*: Phone: _____

Email Address: _____

Address : _____ City: _____ State: _____ Zip Code: _____

Facility/Construction Site Contact: _____ Phone: _____

Email Address: _____

II. CONSTRUCTION SITE ACTIVITY INFORMATION AND FEE CALCULATIONS

Start Date: _____ Completion Date: _____

Is this construction activity regulated by a certified Local Issuing Authority? ◯ Yes ◯ No

If Yes, Name of Local Issuing Authority:

NOTE: Instructions for fee calculations have been provided on Pages 6 - 7

						TOTAL FEE
◯ Acres Disturbed (to the nearest 1/10th acre) regulated by a certified Local Issuing Authority	Acres		X	40	Fee	$0.00
◯ Acres Disturbed (to the nearest 1/10th acre) in an area with no certified Local Issuing Authority	Acres		X	80	Fee	$0.00
◯ Acres Disturbed (to the nearest 1/10th acre) By an entity or activity exempt from a certified Local Issuing Authority's regulation pursuant to statute	Acres		X	80	Fee	$0.00

PLEASE MAKE CHECKS PAYABLE TO: **Department of Natural Resources - EPD**

Do not mail cash.

Do not include fees payable to the Local Issuing Authority.

NAME ON CHECK/MONEY ORDER _____

CHECK/MONEY ORDER NUMBER _____

CHECK/MONEY ORDER AMOUNT _____

Number of Secondary Permittees *(applicable only to General NPDES Permit No. GAR100003):* _____

Does the Erosion, Sedimentation and Pollution Control Plan (Plan) provide for disturbing more than 50 acres at any one time for each individual permittee (i.e., primary, secondary or tertiary permittees), or more than 50 contiguous acres total at any one time ? (Check Only One):

◯ YES Date of EPD Written Authorization _____

◯ NO

◯ NA - If construction activities are covered under the General NPDES Permit No. GAR100002 for Infrastructure construction projects.

Construction Activity Type:

◯ Commercial ◯ Industrial ◯ Municipal/ Institutional ◯ Mixed Use ◯ Water Quality/Aquatic Habitat Restoration

◯ Linear ◯ Utility ◯ Residential ◯ Agricultural Buildings ◯ Other _____

III. RECEIVING WATER INFORMATION

A. Name of Initial Receiving Water(s): _____

☐ Trout Stream ☐ Water Supporting Warm Water Fisheries

B. Name of MS4 Owner/Operator *(if applicable)* _____

Name of Receiving Water(s): _____

☐ Trout Stream ☐ Water Supporting Warm Water Fisheries

C. Sampling of Receiving Stream(s): ☐ NA ☐ Trout Stream Δ 10 NTU ☐ Water Supporting Warm Water Fisheries Δ 25 NTU

D. Sampling of Outfall(s): ☐ NA ☐ Trout Stream ☐ Water Supporting Warm Water Fisheries

A summary chart (if applicable) delineating the following information for each outfall must be attached:

Number of Sampling Outfalls: _____ Construction Site Size (acres): _____

Appendix B NTU Value: _____ Surface Water Drainage Area (square miles): _____

E. Does the facility/construction site discharge storm water into an Impaired Stream Segment, or within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s), as shown on Georgia's most current "305(b)/303(d) List Documents (Final)" listed for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff)? (Check Only One): ** See http://epd.georgia.gov/georgia-305b303d-list-documents for EPD's Impaired Waters List.

◯ Yes Name of Impaired Stream Segment(s): _____

◯ No

F. Does the facility/construction site discharge storm water into an Impaired Stream Segment where a Total Maximum Daily Load (TMDL) Implementation Plan for "sediment" was finalized at least six (6) months prior to the submittal of the Initial NOI? (Check Only One): ** See **http://epd.georgia.gov/total-maximum-daily-loadings** for the list of waters with TMDL Implementation Plans.

◯ Yes Name of Impaired Stream Segment(s): _____

◯ No

IV. ATTACHMENTS *(Applicable Only to Initial Notifications for New Facilities/Construction Sites)*

Indicate if the items listed below are attached to this Notice of Intent:

☐ Location map identifying the receiving water(s), outfall(s) or combination thereof to be monitored. Include a written description and location map identifying the Impaired Stream Segment(s) when applicable.

☐ Erosion, Sedimentation and Pollution Control Plan (if the project is greater than 50 acres regardless of the existence of a certified Local Issuing Authority in the jurisdiction *OR* if the project is in a jurisdiction where there is no certified Local Issuing Authority regulating that project regardless of acreage). May be submitted via DVD/CD.

☐ Written authorization from the appropriate EPD District Office if the Plan disturbs more than 50 acres at any one time for each individual permittee (i.e., primary, secondary or tertiary permittees), or more than 50 contiguous acres total at any one time (applicable only to General NPDES Permits No. GAR100001 and No. GAR100003).

ATTACHMENTS *(Applicable Only to Change of Information Notifications for Existing Facilities/Construction Sites)*

Indicate if the items listed below are attached to this Notice of Intent:

☐ Copy of NOI previously submitted for coverage under the 2013 re-issuance of the NPDES General Permits to Discharge Storm Water Associated With Construction Activity.

☐ Copy of the amended Plan as per Part IV.A.4.c. of the Permit for projects where the construction activity as indicated on the Notice of Intent has changed.

V. CERTIFICATIONS (Owner or Operator or Both to Sign as Applicable)

A. By signing below, I certify that to the best of my knowledge and belief, that the Erosion, Sedimentation and Pollution Control Plan (Plan) was prepared by a design professional, as defined by this permit, that has completed the appropriate certification course approved by the Georgia Soil and Water Conservation Commission in accordance with the provisions of O.C.G.A. 12-7-19 and that I will adhere to the Plan and comply with all applicable requirements of this permit.

AND

B. By signing below, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Owner's Printed Name: _____ Title: _____

Signature: _____ Date: _____

and/or

Operator's Printed Name: _____ Title: _____

Signature: _____ Date: _____

IMPORTANT!!!

This NOI is not Valid if:

1. Form is incomplete or fields are missing information.
2. Signatures by owner and/or operator are missing in Section V Certifications.
3. Signed copies are not received at EPD District Address. See Pages 9-10 for addresses.
4. Check/money order not received at EPD P.O. Box address listed below.

DO NOT MAIL CASH.

HOW TO SUBMIT THIS NOTIFICATION

1. Complete this form electronically and then print and sign. You cannot save data typed into this form and you cannot submit this form electronically. Please retain a copy of the completed and signed form for your records.
2. Mail the signed copy with the applicable attachments to the appropriate EPD District Office (mailing addresses listed on Pages 9 - 10). Do not send checks/money orders to the EPD District Offices.
3. If fees are required, print and sign a second copy of this completed form. ***DO NOT MAIL CASH.*** Make check/money order payable to: **Department of Natural Resources - EPD**.
4. Mail the check/money order with the second copy of the completed and signed form to:

EPD - Construction Land Disturbance Fees
P.O. Box 932858
Atlanta, GA 31193-2858

INSTRUCTIONS

NOTICE OF INTENT - PRIMARY PERMITTEE

For Coverage Under the 2013 Re-Issuance of the NPDES General Permits To Discharge Storm Water Associated With Construction Activity

THESE PERMITS EXPIRE JULY 31, 2018

Please print or type the Notice of Intent (NOI) form. Any NOI that contains illegible or incomplete information will not be accepted, will be returned and the construction site will not be granted Permit coverage. All information requested on the NOI must be submitted in order for the NOI to be valid. Any information requested on the NOI that is not applicable to the primary permittee or to the construction site must be marked "N/A." Please do not leave any sections blank in the NOI.

Who must file a Notice of Intent Form - The Owner and/or Operator of a facility/construction site that has a discharge of storm water where construction activities occur must apply for a National Pollutant Discharge Elimination System (NPDES) Permit. The Georgia Environmental Protection Division (EPD) re-issued the General NPDES Permits for Storm Water Discharges Associated with Construction Activity on September 24, 2013. The Permits are available for review at the EPD District Offices and on the EPD website at ***epd.georgia.gov***. It is highly recommended that the permittees read and understand the terms and conditions of the Permits prior to submitting a NOI. Please contact the appropriate EPD District Office listed on the following pages for assistance in completing the NOI.

Where to file a Notice of Intent Form - The NOI and the attachments, as applicable, must be submitted to the appropriate EPD District Office as listed on the following pages. Please submit only the first five pages of this document with the applicable attachments.

Section I - Site/Owner/Operator Information

The construction site name and location information (i.e., GPS location of construction exit, street address, city, county) must be sufficient to accurately locate the construction site. If the construction site does not have a street address, please provide sufficient information to accurately locate the construction site. If additional space is needed, attach the location information to the NOI.

A duly authorized representative may be either a named individual or any individual occupying a named position that the primary permittee has authorized to sign certification statements, inspection reports, sampling reports or other reports requested by EPD.

The facility/construction site contact is the person who the primary permittee has assigned the responsibility for the daily on-site operational control.

Please do not leave any blanks in this section. Any information requested on the NOI that is not applicable to the primary permittee or to the construction site must be mark "N/A."

Section II – Construction Site Activity Information and Fee Calculations

The Primary Permittee is solely responsible for the payment of fees for all **planned** land disturbing activities, including all land disturbing activities within a common development planned by the Secondary Permittees and/or Tertiary Pemittees. Estimated disturbed acreage is the total number of acres, to nearest tenth (1/10th) acre. Only the Primary Permittee is responsible for paying the NPDES General Permit fees.

If the Primary Permittee has already paid the applicable fees, the Primary Permittee does not pay any additional NPDES General Permit fees, unless the scope of work covered under the NPDES General Permit so paid for is increased.

For land disturbing activities submitting an *Initial* Notice of Intent *in an area with no certified Local Issuing Authority* **OR** *for land disturbing activities not regulated by a certified Local Issuing Authority*, the Primary Permittee shall pay a fee of ***$80 per acres disturbed*** to EPD (to the nearest tenth (1/10th) acre).

Land disturbing activities not regulated by a certified Local Issuing Authority include, but are not limited to:

- Construction of public water system reservoirs.
- Land disturbing activities conducted by any electric membership corporation or municipal electrical system or any public under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in O.C.G.A. §36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution power, except when the project is located within a common development as described in the NPDES General Permits.
- Construction of agricultural buildings (e.g., barns, poultry houses).
- Construction or maintenance projects undertaken or financed by the Department of Transportation, the Georgia Highway Authority, the State Road and Tollway Authority, or any county or municipality, except when the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority is a Secondary Permittee within a common development.
- Projects carried out under the technical supervision of the Natural Resources Conservation Service of the United States Department of Agricultural.

For land disturbing activities submitting an *Initial* Notice of Intent *regulated by a certified Local Issuing Authority*, the Primary Permittee shall pay a fee of ***$40 per acres disturbed*** to EPD **AND** a fee of ***$40 per acres disturbed*** to the Local Issuing Authority (to the nearest tenth (1/10th) acre). Payments to the Local Issuing Authority should be made in the manner specified by the Local Issuing Authority and should not be submitted to EPD. The NPDES General Permit fees are ***in addition*** to any local land disturbing activity fees that are required by the Local Issuing Authority.

Please do not leave any blanks in this section. Any information requested on the NOI that is not applicable to the primary permittee or to the construction site must be mark "N/A."

Make checks/money orders payable to: Department of Natural Resources - EPD

Section III - Receiving Water Information

"Trout Streams" are waters of the State classified as either primary trout waters or secondary trout waters, as designated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at epd.georgia.gov. "Waters Supporting Warm Water Fisheries" are all waters of the State that sustain, or have the potential to sustain, aquatic life but exclude "Trout Streams."

If the facility/construction site discharges storm water directly or indirectly to the receiving water(s), and not through a municipal separate storm sewer system (MS4), enter the name of the receiving water(s) and indicate whether the water(s) is a trout stream or a warm water fisheries stream. Attach a written description and location map identifying the receiving water(s).

If the facility/construction site discharges storm water to a municipal separate storm sewer system (MS4), enter the name of the owner/operator of the MS4 (e.g., city name or county name) and the name of the receiving water(s) at the point of discharge from the MS4. A MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) that is owned and/or operated by a city or county which is designed or used for collecting or conveying storm water. It may be necessary to contact the city or county that owns and/or operates the MS4 to determine the name of the receiving water(s). Indicate whether the receiving water(s) is a trout stream or a warm water fisheries stream. Attach a written description and location map identifying the receiving water(s).

Any permittee who intends to obtain coverage under the Permits for storm water discharges associated with construction activity into an Impaired Stream Segment, or within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s), as shown on Georgia's most current "305(b)/303(d) List Documents (Final)" at the time of NOI submittal, must satisfy the requirements of Part III.C. of the Permits if the Impaired Stream Segment has been listed for criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff). Those discharges that are located within one (1) linear mile of an Impaired Stream Segment, but are not located within the watershed of any portion of that stream segment, are excluded from this requirement. Georgia's 2012 and subsequent "305(b)/303(d) List Documents (Final)" can be viewed on the EPD website at https://epd.georgia.gov/georgia-305b303d-list-documents. Attach a written description and location map identifying the Impaired Stream Segment(s).

If a Total Maximum Daily Load (TMDL) Implementation Plan for sediment has been finalized at least six (6) months prior to the permittee's submittal of the Initial NOI, the Erosion, Sedimentation and Pollution Control Plan (Plan) must address any site-specific conditions or requirements included in the TMDL Implementation Plan that are applicable to the permittee's discharge(s) to the Impaired Stream Segment within the timeframe specified in the TMDL Implementation Plan. If the TMDL Implementation Plan establishes a specific numeric wasteload allocation that applies to the permittee's discharge(s) to the Impaired Stream Segment, then the permittee must incorporate that allocation into the Erosion, Sedimentation and Pollution Control Plan and implement all necessary measures to meet that allocation. A list of TMDL Implementation Plans can be viewed on the EPD website at epd.georgia.gov.

Please do not leave any blanks in this section. Any information requested on the NOI that is not applicable to the primary permittee or to the construction site must be mark "N/A."

Section V – Certifications

The owner and/or operator (or both) must sign the Notice of Intent certification statements on the lines provided. Federal and State statutes provide specific requirements as to who is authorized to sign the Notice of Intent forms. A Notice of Intent form signed by an unauthorized person will not be valid. Please be aware that Federal and State statutes provide for severe penalties for submitting false information on this Notice of Intent form. Federal and State regulations require that the Notice of Intent form be signed as follows:

For a corporation, by a responsible corporate officer;
For a partnership or sole proprietorship, by a general partner or the proprietor; and
For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

GEORGIA EPD DISTRICT OFFICES

All required correspondence, including but not limited to Notices of Intent, Notices of Termination, Erosion, Sedimentation and Pollution Control Plans, sampling reports and any other reports shall be sent to the following EPD District Offices:

A. For facilities/construction sites located in the following counties: Bibb, Bleckley, Chattahoochee, Crawford, Dooly, Harris, Houston, Jones, Lamar, Macon, Marion, Meriwether, Monroe, Muscogee, Peach, Pike, Pulaski, Schley, Talbot, Taylor, Troup, Twiggs, Upson

Information shall be submitted to:

West Central District Office
Georgia Environmental Protection Division
2640 Shurling Drive
Macon, GA 31211-3576
(478) 751-6612

B. For facilities/construction sites located in the following counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Johnson, Laurens, McDuffie, Montgomery, Richmond, Screven, Treutlen, Warren, Washington, Wheeler, Wilkinson

Information shall be submitted to:

East Central District Office
Georgia Environmental Protection Division
3525 Walton Way Extension
Augusta, GA 30909-1821
(706) 667-4343

C. For facilities/construction sites located in the following counties: Baldwin, Banks, Barrow, Butts, Clarke, Elbert, Franklin, Greene, Hall, Hancock, Hart, Jackson, Jasper, Lincoln, Madison, Morgan, Newton, Oconee, Oglethorpe, Putnam, Stephens, Taliaferro, Walton, Wilkes

Information shall be submitted to:

Northeast District Office
Georgia Environmental Protection Division
745 Gaines School Road
Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:

Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:

Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:

Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8251
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(229) 430-4144

Insert Yellow Sheet

Back of Yellow Sheet

Revised September 2013

For Official Use Only

NOTICE OF INTENT

VERSION 2013

State of Georgia
Department of Natural Resources
Environmental Protection Division

For Coverage Under the 2013 Re-Issuance of the NPDES General Permits No. GAR100003 To Discharge Storm Water Associated With Construction Activity for Common Developments

THIS PERMIT EXPIRES JULY 31, 2018

SECONDARY PERMITTEE
GAR100003 - Common Development

NOTICE OF INTENT (Check Only One):

☐ Initial Notification (New Facility/Construction Site)

☐ Re-Issuance Notification (Existing Facility/Construction Site and Postmarked Before December 24, 2013)

☐ Change of Information (Existing Facility/Construction Site, if the NOI was submitted after September 24, 2013)

I. SITE/SECONDARY PERMITTEE INFORMATION

Project Construction Site Name: _____

Construction Site Location *(information must be sufficient to accurately locate the construction site)*:

_____

_____

Subdivision Name *(if applicable)*: _____

Lot Number(s) *(if applicable)*: _____

Common Development Name: _____

Construction Site Location *(e.g., street address)*: _____

City: _____
(applicable if the site is located within the jurisdictional boundaries of the municipality)

County: _____

Secondary Permittee's Name: _____Phone:_____

Email Address: _____

Address: _____City:_____State: _____Zip Code: _____

Duly Authorized Representative(s) *(optional)*: _____Phone:_____

Email Address: _____

Facility/Construction Site Contact: _____Phone: _____

Email Address:_____

Primary Permittee's Name: _____Phone: _____

Email Address: _____

Address: _____City: _____State: _____Zip Code: _____

II. CONSTRUCTION SITE ACTIVITY INFORMATION

Start Date *(month/date/year)*: _____ / _____ / _____ Completion Date *(month/date/year)*: _____ / _____ / _____

Estimated Disturbed Acreage *(acres, to the nearest tenth (1/10th) acre)*: _____

Will the Secondary Permittee disturb more than 50 acres at any one time ? (Check Only One)

☐ YES - _____ / _____ / _____ Date of EPD Written Authorization *(month/date/year)*

☐ NO

☐ N/A – if the Initial NOI was submitted prior to August 1, 2008 for the General NPDES Permit No. GAR100003 for Common Development construction activities.

Construction Activity Type:

☐ Commercial ☐ Industrial ☐ Municipal/ Institutional ☐ Mixed Use ☐ Water Quality/Aquatic Habitat Restoration

☐ Linear ☐ Utility ☐ Residential ☐ Agricultural Buildings ☐ Other _____

III. RECEIVING WATER INFORMATION

A. Name of Initial Receiving Water(s):_____

☐ Trout Stream ☐ Water Supporting Warm Water Fisheries

B. Name of MS4 Owner/Operator *(if applicable)*: _____

Name of Receiving Water(s): _____

☐ Trout Stream ☐ Water Supporting Warm Water Fisheries

C. Does the facility/construction site discharge storm water into an Impaired Stream Segment, or within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s), as shown on Georgia's most current "305(b)/303(d) List Documents (Final)" listed for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff) ? (Check Only One):

☐ YES, Name of Impaired Stream Segment(s): _____

☐ NO

☐ N/A – if the Initial NOI was submitted prior to October 31, 2008 for the General NPDES Permit No. GAR100003 for Common Development construction activities.

☐ N/A – if the secondary permittees are utility companies and utility contractors and implementing the applicable best management practices detailed in the primary permittee's Plan.

D. Does the facility/construction site discharge storm water into an Impaired Stream Segment where a Total Maximum Daily Load (TMDL) Implementation Plan for "sediment" was finalized at least six (6) months prior to the submittal of the Initial NOI ? (Check Only One):

☐ YES, Name of Impaired Stream Segment(s): _____

☐ NO

☐ N/A – if the Initial NOI was submitted prior to October 31, 2008 for the General NPDES Permit No. GAR100003 for Common Development construction activities.

☐ N/A – if the secondary permittees are utility companies and utility contractors, and implementing the applicable best management practices detailed in the primary permittee's Plan.

IV. ATTACHMENTS *(Applicable Only to Initial Notifications for New Facilities/Construction Sites)*

Indicate if the items listed below are attached to this Notice of Intent:

_____ Copies of the Primary Permittee's most current Notice of Intent.

_____ Written description and location map identifying the Impaired Stream Segment(s) when applicable.

_____Written authorization from the appropriate EPD District Office if the Secondary Permittee plans to disturb more than 50 acres at any one time.

ATTACHMENTS *(Applicable Only to Re-Issuance Notifications for Existing Facilities/Construction Sites)*

Indicate if the item listed below is attached to this Notice of Intent:

_____ Copy of NOI previously submitted for coverage under the 2008 re-issuance of the NPDES General Permits to Discharge Storm Water Associated With Construction Activity.

ATTACHMENTS *(Applicable Only to Change of Information Notifications for Existing Facilities/Construction Sites)*

Indicate if the items listed below are attached to this Notice of Intent:

_____ Copy of NOI previously submitted for coverage under the 2013 re-issuance of the NPDES General Permits to Discharge Storm Water Associated With Construction Activity.

_____ Copy of the amended Plan as per Part IV.A.4.c. of the Permit for projects where the construction activity as indicated on the Notice of Intent has changed.

V. Does this project require another type of permit from EPD?

☐ YES – if yes, indicate what type of permit _____

☐ NO

VI. CERTIFICATIONS (Secondary Permittee)

_____I certify that I will adhere to the Primary Permittee's Erosion, Sedimentation and Pollution Control Plan (Plan) or the portion of the Plan applicable to my construction activities and comply with all applicable requirements of this permit.

_____I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Owner's Printed Name: _____ Title: _____

Signature: _____ Date: _____

Operator's Printed Name: _____ Title: _____

Signature: _____ Date: _____

INSTRUCTIONS

NOTICE OF INTENT - SECONDARY PERMITTEE

For Coverage Under the 2013 Re-Issuance of the NPDES General Permits No. GAR100003 To Discharge Storm Water Associated With Construction Activity for Common Developments

THIS PERMIT EXPIRES JULY 31, 2018

Please print or type the Notice of Intent (NOI) form. Any NOI that contains illegible or incomplete information will not be accepted, will be returned and the construction site will not be granted Permit coverage. All information requested on the NOI must be submitted in order for the NOI to be valid. Any information requested on the NOI that is not applicable to the secondary permittee or to the construction site must be marked "N/A." Please do not leave any sections blank in the NOI.

Who must file a Notice of Intent Form - The owner of a facility/construction site within a common development that has a discharge of storm water where construction activities occur must apply for a National Pollutant Discharge Elimination System (NPDES) Permit. The Georgia Environmental Protection Division (EPD) re-issued the General NPDES Permits for Storm Water Discharges Associated with Construction Activity for Common Developments on September 24, 2013. The NPDES General Permit No. GAR100003 is available for review at the EPD District Offices and on the EPD website, www.gaepd.org. It is highly recommended that the permittees read and understand the terms and conditions of this Permit prior to submitting a NOI. Please contact the appropriate EPD District Office as listed on the following pages for assistance in completing the NOI.

Where to file a Notice of Intent Form - The NOI and the attachments, as applicable, must be submitted to the appropriate EPD District Office as listed on the following pages. Please submit only the first four pages of this document with the applicable attachments.

Section I - Site/Secondary Permittee Information

The construction site name and location information (i.e., GPS location of construction exit, subdivision name, lot number(s), common development name, street address, city, county) must be sufficient to accurately locate the construction site. If the construction site does not have a street address, please provide sufficient information to accurately locate the construction site. If additional space is needed, attach the location information to the NOI.

A duly authorized representative may be either a named individual or any individual occupying a named position that the secondary permittee has authorized to sign certification statements, inspection reports, sampling reports or other reports requested by EPD.

The facility/construction site contact is the person who the secondary permittee has assigned the responsibility for the daily on-site operational control.

Please do not leave any blanks in this section. Any information requested on the NOI that is not applicable to the secondary permittee or to the construction site must be mark "N/A."

Section II – Construction Site Activity Information

For construction activities that began prior to the effective date of the Permits, the start date *(month/date/year)* must be the actual start date of construction activities.

Estimated disturbed acreage is the total number of acres, *to the nearest tenth (1/10th) acre*, that will be disturbed by the secondary permittee.

Please do not leave any blanks in this section. Any information requested on the NOI that is not applicable to the secondary permittee or to the construction site must be mark "N/A."

Section III - Receiving Water Information

"Trout Streams" are waters of the State classified as either primary trout waters or secondary trout waters, as designated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org. "Waters Supporting Warm Water Fisheries" are all waters of the State that sustain, or have the potential to sustain, aquatic life but exclude "Trout Streams."

If the facility/construction site discharges storm water directly or indirectly to the receiving water(s), and not through a municipal separate storm sewer system (MS4), enter the name of the receiving water(s) and indicate whether the water(s) is a trout stream or a warm water fisheries stream. Attach a written description and location map identifying the receiving water(s).

If the facility/construction site discharges storm water to a municipal separate storm sewer system (MS4), enter the name of the owner/operator of the MS4 (e.g., city name or county name) and the name of the receiving water(s) at the point of discharge from the MS4. A MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) that is owned and/or operated by a city or county which is designed or used for collecting or conveying storm water. It may be necessary to contact the city or county that owns and/or operates the MS4 to determine the name of the receiving water(s). Indicate whether the receiving water(s) is a trout stream or a warm water fisheries stream. Attach a written description and location map identifying the receiving water(s).

Any permittee who intends to obtain coverage under the Permits for storm water discharges associated with construction activity into an Impaired Stream Segment, or within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s), as shown on Georgia's most current "305(b)/303(d) List Documents (Final)" at the time of NOI submittal, must satisfy the requirements of Part III.C. of the Permits if the Impaired Stream Segment has been listed for criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff). Those discharges that are located within one (1) linear mile of an Impaired Stream Segment, but are not located within the watershed of any portion of that stream segment, are excluded from this requirement. Georgia's 2008 and subsequent 305(b)/303(d) List Documents (Final)" can be viewed on the EPD website, www.gaepd.org/Documents/305b.html. Attach a written description and location map identifying the Impaired Stream Segment(s).

If a Total Maximum Daily Load (TMDL) Implementation Plan for sediment has been finalized at least six (6) months prior to the permittee's submittal of the NOI, the Erosion, Sedimentation and Pollution Control Plan (Plan) must address any site-specific conditions or requirements included in the TMDL Implementation Plan that are applicable to the permittee's discharge(s) to the Impaired Stream Segment within the timeframe specified in the TMDL Implementation Plan. If the TMDL Implementation Plan establishes a specific numeric wasteload allocation that applies to an permittee's discharge(s) to the Impaired Stream Segment, then the permittee must incorporate that allocation into the Erosion, Sedimentation and Pollution Control Plan and implement all necessary measures to meet that allocation. A list of TMDL Implementation Plans can be viewed on the EPD website, www.gaepd.org.

Please do not leave any blanks in this section. Any information requested on the NOI that is not applicable to the secondary permittee or to the construction site must be mark "N/A."

Section V – Certifications

The secondary permittee must sign the Notice of Intent and initial the certification statements on the lines provided. Federal and State statutes provide specific requirements as to who is authorized to sign the Notice of Intent forms. A Notice of Intent form signed by an unauthorized person will not be valid. Please be aware that Federal and State statutes provide for severe penalties for submitting false information on this Notice of Intent form. Federal and State regulations require that the Notice of Intent form be signed as follows:

- For a corporation, by a responsible corporate officer;
- For a partnership or sole proprietorship, by a general partner or the proprietor; and
- For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

GEORGIA EPD DISTRICT OFFICES

All required correspondence, including but not limited to Notices of Intent, Notices of Termination, Erosion, Sedimentation and Pollution Control Plans, sampling reports and any other reports shall be sent to the following EPD District Offices:

A. For facilities/construction sites located in the following counties: Bibb, Bleckley, Chattahoochee, Crawford, Dooly, Harris, Houston, Jones, Lamar, Macon, Marion, Meriwether, Monroe, Muscogee, Peach, Pike, Pulaski, Schley, Talbot, Taylor, Troup, Twiggs, Upson

Information shall be submitted to:

West Central District Office
Georgia Environmental Protection Division
2640 Shurling Drive
Macon, GA 31211-3576
(478) 751-6612

B. For facilities/construction sites located in the following counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Johnson, Laurens, McDuffie, Montgomery, Richmond, Screven, Treutlen, Warren, Washington, Wheeler, Wilkinson

Information shall be submitted to:

East Central District Office
Georgia Environmental Protection Division
3525 Walton Way Extension
Augusta, GA 30909-1821
(706) 667-4343

C. For facilities/construction sites located in the following counties: Baldwin, Banks, Barrow, Butts, Clarke, Elbert, Franklin, Greene, Hall, Hancock, Hart, Jackson, Jasper, Lincoln, Madison, Morgan, Newton, Oconee, Oglethorpe, Putnam, Stephens, Taliaferro, Walton, Wilkes

Information shall be submitted to:

Northeast District Office
Georgia Environmental Protection Division
745 Gaines School Road
Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:

Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:

Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:

Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8251
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(229) 430-4144

Insert Yellow Sheet

Back of Yellow Sheet

For Official Use Only

NOTICE OF INTENT

VERSION 2013

State of Georgia
Department of Natural Resources
Environmental Protection Division

For Coverage Under the 2013 Re-Issuance of the NPDES General Permits No. GAR100003 To Discharge Storm Water Associated With Construction Activity for Common Developments

THIS PERMIT EXPIRES JULY 31, 2018

TERTIARY PERMITTEE
GAR100003 – Common Development

NOTICE OF INTENT (Check Only One):

☐ Initial Notification (New Facility/Construction Site)

☐ Re-Issuance Notification (Existing Facility/Construction Site and Postmarked Before December 24, 2013)

☐ Change of Information (Existing Facility/Construction Site, if the NOI was submitted after September 24, 2013)

I. SITE/OWNER/OPERATOR INFORMATION

Project Construction Site Name: _____

GPS Location of Construction Exit *(decimal degrees)*:

Latitude _____ Longitude_____

Subdivision Name *(if applicable)*: _____

Lot Number(s) *(if applicable)*: _____

Common Development Name: _____

Construction Site Location *(e.g., street address)*: _____

City:_____
(applicable if the site is located within the jurisdictional boundaries of the municipality)

County: _____

Owner's Name: _____ Phone: _____

Email Address: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Duly Authorized Representative *(optional)*: _____ Phone: _____

Email Address: _____

Operator's Name *(optional)*: _____ Phone: _____

Email Address: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Facility/Construction Site Contact: _____ Phone: _____

Email Address: _____

II. CONSTRUCTION SITE ACTIVITY INFORMATION

Start Date *(month/date/year)*: _____ / _____ / _____ Completion Date *(month/date/year)*: _____ / _____ / _____

Estimated Disturbed Acreage *(acres, to the nearest tenth (1/10th) acre)*: _____

Does the Erosion, Sedimentation and Pollution Control Plan (Plan) provide for disturbing more than 50 acres at any one time by the Tertiary Permittee ? (Check Only One):

☐ YES - _____ / _____ / _____ Date of EPD Written Authorization *(month/date/year)*

☐ NO

☐ N/A – if the Initial NOI was submitted prior to August 1, 2008 the General NPDES Permit No. GAR100003 for the Tertiary Permittee's construction activities.

Construction Activity Type:

☐ Commercial ☐ Industrial ☐ Municipal/ Institutional ☐ Mixed Use ☐ Water Quality/Aquatic Habitat Restoration

☐ Linear ☐ Utility ☐ Residential ☐ Agricultural Buildings ☐ Other _____

Primary Permittee's Name *(if available)*: _____ Phone: _____

Email Address: _____

Address: _____ City: _____ State: _____ Zip Code: _____

III. RECEIVING WATER INFORMATION

A. Name of Initial Receiving Water(s): _____

☐ Trout Stream ☐ Water Supporting Warm Water Fisheries

B. Name of (MS4) Owner/Operator *(if applicable)*: _____

Name of Receiving Water(s): _____

☐ Trout Stream ☐ Water Supporting Warm Water Fisheries

C. Sampling of Receiving Stream(s), applicable only if the total planned disturbance is equal to or greater than five (5) acres:

☐ Trout Stream Δ 10 NTU ☐ Warm Water Fisheries Stream Δ 25 NTU ☐ N/A

D. Sampling of Outfall(s), applicable only if the total planned disturbance is equal to or greater than five (5) acres:

☐ Trout Stream ☐ Warm Water Fisheries Stream ☐ N/A

A summary chart (if applicable) delineating the following information for each outfall must be attached:

Number of Sampling Outfalls: _____ Construction Site Size (acres): _____

Appendix B NTU Value: _____ Surface Water Drainage Area (square miles): _____

E. Does the facility/construction site discharge storm water into an Impaired Stream Segment, or within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s), as shown on Georgia's most current "305(b)/303(d) List Documents (Final)" listed for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff) ? (Check Only One):

☐ YES, Name of Impaired Stream Segment(s): _____

☐ NO

☐ N/A - if the Initial NOI was submitted prior to October 31, 2008 for the General NPDES Permit No. GAR100003 for the Tertiary Permittee's construction activities.

F. Does the facility/construction site discharge storm water into an Impaired Stream Segment where a Total Maximum Daily Load (TMDL) Implementation Plan for "sediment" was finalized at least six (6) months prior to the submittal of the Initial NOI ? (Check Only One):

☐ YES, Name of Impaired Stream Segment(s): _____

☐ NO

☐ N/A - if the Initial NOI was submitted prior to October 31, 2008 for the General NPDES Permit No. GAR100003 for the Tertiary Permittee's construction activities.

IV. ATTACHMENTS *(Applicable Only to Initial Notifications for New Facilities/Construction Sites)*

Indicate if the items listed below are attached to this Notice of Intent:

_____ Location map identifying the receiving stream(s), outfall(s) or combination thereof to be monitored (applicable if the total planned disturbance is equal to or greater than five (5) acres).

_____ Written description and location map identifying the Impaired Stream Segment(s) when applicable.

_____ Erosion, Sedimentation and Pollution Control Plan (if the project is greater than 50 acres regardless of the existence of a certified Local Issuing Authority in the jurisdiction *OR* if the project is in a jurisdiction where there is no certified Local Issuing Authority regulating that project regardless of acreage).

_____ Written authorization from the appropriate EPD District Office if the Plan disturbs more than 50 acres at any one time.

_____ Schedule for the timing of the major construction activities.

ATTACHMENTS (*Applicable Only to Re-Issuance Notifications for Existing Facilities/Construction Sites)*

Indicate if the item listed below is attached to this Notice of Intent:

_____ Copy of NOI previously submitted for coverage under the 2008 re-issuance of the NPDES General Permits to Discharge Storm Water Associated With Construction Activity.

ATTACHMENTS (*Applicable Only to Change of Information Notifications for Existing Facilities/Construction Sites)*

Indicate if the items listed below are attached to this Notice of Intent:

_____ Copy of NOI previously submitted for coverage under the 2013 re-issuance of the NPDES General Permits to Discharge Storm Water Associated With Construction Activity.

_____ Copy of the amended Plan as per Part IV.A.4.c. of the Permit for projects where the construction activity as indicated on the Notice of Intent has changed.

V. Does this project require another type of permit from EPD?

☐ YES – if yes, indicate what type of permit _____

☐ NO

VI. CERTIFICATIONS (Owner or Operator or Both to Initial as Applicable)

_____I certify that to the best of my knowledge and belief, that the Erosion, Sedimentation and Pollution Control Plan (Plan) was prepared by a design professional, as defined by this permit, that has completed the appropriate certification course approved by the Georgia Soil and Water Conservation Commission in accordance with the provisions of O.C.G.A. 12-7-19 and that I will adhere to the Plan and comply with all applicable requirements of this permit.

_____I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Owner's Printed Name: _____ Title: _____

Signature: _____ Date: _____

Operator's Printed Name: _____ Title: _____

Signature: _____ Date: _____

INSTRUCTIONS

NOTICE OF INTENT - TERTIARY PERMITTEE

For Coverage Under the 2013 Re-Issuance of the NPDES General Permits No. GAR100003 To Discharge Storm Water Associated With Construction Activity for Common Developments

THIS PERMIT EXPIRES JULY 31, 2018

Please print or type the Notice of Intent (NOI) form. Any NOI that contains illegible or incomplete information will not be accepted, will be returned and the construction site will not be granted Permit coverage. All information requested on the NOI must be submitted in order for the NOI to be valid. Any information requested on the NOI that is not applicable to the tertiary permittee or to the construction site must be marked "N/A." Please do not leave any sections blank in the NOI.

Who must file a Notice of Intent Form - The Owner and/or Operator of a facility/construction site that has a discharge of storm water where construction activities occur must apply for a National Pollutant Discharge Elimination System (NPDES) Permit. The Georgia Environmental Protection Division (EPD) re-issued the General NPDES Permits for Storm Water Discharges Associated with Construction Activity for Common Developments on September 24, 2013. The NPDES General Permit No. GAR100003 is available for review at the EPD District Offices and on the EPD website, www.gaepd.org.

After filing a Notice of Termination, the primary permittee of a common development is required to notify by written correspondence with return receipt certified mail (or similar service) to the subsequent legal title holder of each remaining lot(s) that these lot Owners and/or Operators will become tertiary permittees for purposes of this permit and these tertiary permittees will be responsible for off-site best management practices, as applicable.

It is highly recommended that the permittees read and understand the terms and conditions of this Permit prior to submitting a NOI. Please contact the appropriate EPD District Office as listed on the following pages for assistance in completing the NOI.

Where to file a Notice of Intent Form - The NOI and the attachments, as applicable, must be submitted to the appropriate EPD District Office as listed on the following pages. Please submit only the first four pages of this document with the applicable attachments.

Section I - Site/Owner/Operator Information

The construction site name and location information (i.e., GPS location of construction exit, subdivision name, lot number(s), street address, city, county) must be sufficient to accurately locate the construction site. If the construction site does not have a street address, please provide sufficient information to accurately locate the construction site. If additional space is needed, attach the location information to the NOI.

A duly authorized representative may be either a named individual or any individual occupying a named position that the tertiary permittee has authorized to sign certification statements, inspection reports, sampling reports or other reports requested by EPD.

The facility/construction site contact is the person who the tertiary permittee has assigned the responsibility for the daily on-site operational control.

Please do not leave any blanks in this section. Any information requested on the NOI that is not applicable to the tertiary permittee or to the construction site must be mark "N/A."

Section II – Construction Site Activity Information

For construction activities that began prior to the effective date of the Permits, the start date *(month/date/year)* must be the actual start date of construction activities.

Estimated disturbed acreage is the total number of acres, *to the nearest tenth (1/10th) acre*, that will be disturbed by the tertiary permittee.

Please do not leave any blanks in this section. Any information requested on the NOI that is not applicable to the tertiary permittee or to the construction site must be mark "N/A."

Section III - Receiving Water Information

"Trout Streams" are waters of the State classified as either primary trout waters or secondary trout waters, as designated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org. "Waters Supporting Warm Water Fisheries" are all waters of the State that sustain, or have the potential to sustain, aquatic life but exclude "Trout Streams."

If the facility/construction site discharges storm water directly or indirectly to the receiving water(s), and not through a municipal separate storm sewer system (MS4), enter the name of the receiving water(s) and indicate whether the water(s) is a trout stream or a warm water fisheries stream. Attach a written description and location map identifying the receiving water(s).

If the facility/construction site discharges storm water to a municipal separate storm sewer system (MS4), enter the name of the owner/operator of the MS4 (e.g., city name or county name) and the name of the receiving water(s) at the point of discharge from the MS4. A MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) that is owned and/or operated by a city or county which is designed or used for collecting or conveying storm water. It may be necessary to contact the city or county that owns and/or operates the MS4 to determine the name of the receiving water(s). Indicate whether the receiving water(s) is a trout stream or a warm water fisheries stream. Attach a written description and location map identifying the receiving water(s).

Any permittee who intends to obtain coverage under the Permits for storm water discharges associated with construction activity into an Impaired Stream Segment, or within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s), as shown on Georgia's most current "305(b)/303(d) List Documents (Final)" at the time of NOI submittal, must satisfy the requirements of Part III.C. of the Permits if the Impaired Stream Segment has been listed for criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff). Those discharges that are located within one (1) linear mile of an Impaired Stream Segment, but are not located within the watershed of any portion of that stream segment, are excluded from this requirement. Georgia's 2008 and subsequent 305(b)/303(d) List Documents (Final)" can be viewed on the EPD website, www.gaepd.org/Documents/305b.html. Attach a written description and location map identifying the Impaired Stream Segment(s).

If a Total Maximum Daily Load (TMDL) Implementation Plan for sediment has been finalized at least six (6) months prior to the permittee's submittal of the NOI, the Erosion, Sedimentation and Pollution Control Plan (Plan) must address any site-specific conditions or requirements included in the TMDL Implementation Plan that are applicable to the permittee's discharge(s) to the Impaired Stream Segment within the timeframe specified in the TMDL Implementation Plan. If the TMDL Implementation Plan establishes a specific numeric wasteload allocation that applies to an permittee's discharge(s) to the Impaired Stream Segment, then the permittee must incorporate that allocation into the Erosion, Sedimentation and Pollution Control Plan and implement all necessary measures to meet that allocation. A list of TMDL Implementation Plans can be viewed on the EPD website, www.gaepd.org.

Please do not leave any blanks in this section. Any information requested on the NOI that is not applicable to the tertiary permittee or to the construction site must be mark "N/A."

Section V – Certifications

The owner and/or operator must sign the Notice of Intent and initial the certification statements on the lines provided. Federal and State statutes provide specific requirements as to who is authorized to sign the Notice of Intent forms. A Notice of Intent form signed by an unauthorized person will not be valid. Please be aware that Federal and State statutes provide for severe penalties for submitting false information on this Notice of Intent form. Federal and State regulations require that the Notice of Intent form be signed as follows:

- For a corporation, by a responsible corporate officer;
- For a partnership or sole proprietorship, by a general partner or the proprietor; and
- For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

GEORGIA EPD DISTRICT OFFICES

All required correspondence, including but not limited to Notices of Intent, Notices of Termination, Erosion, Sedimentation and Pollution Control Plans, sampling reports and any other reports shall be sent to the following EPD District Offices:

A. For facilities/construction sites located in the following counties: Bibb, Bleckley, Chattahoochee, Crawford, Dooly, Harris, Houston, Jones, Lamar, Macon, Marion, Meriwether, Monroe, Muscogee, Peach, Pike, Pulaski, Schley, Talbot, Taylor, Troup, Twiggs, Upson

Information shall be submitted to:
West Central District Office
Georgia Environmental Protection Division
2640 Shurling Drive
Macon, GA 31211-3576
(478) 751-6612

B. For facilities/construction sites located in the following counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Johnson, Laurens, McDuffie, Montgomery, Richmond, Screven, Treutlen, Warren, Washington, Wheeler, Wilkinson

Information shall be submitted to:
East Central District Office
Georgia Environmental Protection Division
3525 Walton Way Extension
Augusta, GA 30909-1821
(706) 667-4343

C. For facilities/construction sites located in the following counties: Baldwin, Banks, Barrow, Butts, Clarke, Elbert, Franklin, Greene, Hall, Hancock, Hart, Jackson, Jasper, Lincoln, Madison, Morgan, Newton, Oconee, Oglethorpe, Putnam, Stephens, Taliaferro, Walton, Wilkes

Information shall be submitted to:
Northeast District Office
Georgia Environmental Protection Division
745 Gaines School Road
Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:
Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:
Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:
Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8251
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(229) 430-4144

Insert Yellow Sheet

Back of Yellow Sheet

Revised September 2013

For Official Use Only

NOTICE OF INTENT

VERSION 2013

State of Georgia
Department of Natural Resources
Environmental Protection Division

For Coverage Under the 2013 Re-Issuance of the NPDES General Permits No. GAR100003 To Discharge Storm Water Associated With Construction Activity for Common Developments

THIS PERMIT EXPIRES JULY 31, 2018

BLANKET SECONDARY PERMITTEE
GAR100003 - Common Development

NOTICE OF INTENT (Check Only One):

☐ Annual Notification (New Facility/Construction Site)

☐ Re-Issuance Notification (Existing Facility/Construction Site and Postmarked Before December 24, 2013)

☐ Change of Information (Existing Facility/Construction Site)

I. BLANKET SECONDARY PERMITTEE INFORMATION

Blanket Secondary Permittee's Name:_____ Phone:_____

Email Address: _____

Address:_____City:_____State:_____Zip Code: _____

Duly Authorized Representative(s) *(optional)*: _____Phone: _____

Email Address:_____

Facility/Construction Site Contact:_____ Phone:_____

Email Address: _____

Utility Sub-Contractor's Name *(optional)*: _____Phone: _____

Email Address: _____

Address: _____City: _____State: _____Zip Code:_____

II. CONSTRUCTION SITE ACTIVITY INFORMATION

Construction Activity Type:

☐ Commercial ☐ Industrial ☐ Municipal/ Institutional ☐ Mixed Use ☐ Water Quality/Aquatic Habitat Restoration

☐ Linear ☐ Utility ☐ Residential ☐ Agricultural Buildings ☐ Other _____

III. CERTIFICATIONS (Blanket Secondary Permittee)

_____I certify that I will adhere to the Primary Permittee's Erosion, Sedimentation and Pollution Control Plan (Plan) or the portion of the Plan applicable to my construction activities and comply with all applicable requirements of this permit.

_____I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Blanket Secondary Permittee's Printed Name: _____ Title:_____

Signature: _____ Date:_____

INSTRUCTIONS

NOTICE OF INTENT - BLANKET SECONDARY PERMITTEE

For Coverage Under the 2013 Re-Issuance of the NPDES General Permits No. GAR100003 To Discharge Storm Water Associated With Construction Activity for Common Developments

THIS PERMIT EXPIRES JULY 31, 2018

Please print or type the Notice of Intent (NOI) form. Any NOI that contains illegible or incomplete information will not be accepted, will be returned and the construction site will not be granted Permit coverage. All information requested on the NOI must be submitted in order for the NOI to be valid. Any information requested on the NOI that is not applicable to the secondary permittee or to the construction site must be marked "N/A." Please do not leave any sections blank in the NOI.

Who must file a Notice of Intent Form – A utility company may submit an annual Blanket Notice of Intent covering all construction activities statewide within common developments on or before January 15 of the year in which coverage is desired, except for calendar year 2013 in which case the Blanket NOI shall be submitted ninety (90) days of the permit effective date. A copy of the Blanket NOI or equivalent written contact information must be provided to the primary permittee not more than seven (7) days prior to the commencement of construction activities by the blanket secondary permittee at each facility/construction site.

The Georgia Environmental Protection Division (EPD) re-issued the General NPDES Permits for Storm Water Discharges Associated with Construction Activity for Common Developments on September 24, 2013. The NPDES General Permit No. GAR100003 is available for review at the EPD District Offices and on the EPD website, www.gaepd.org. It is highly recommended that the permittees read and understand the terms and conditions of this Permit prior to submitting a NOI. Please contact the appropriate EPD District Office as listed on the following pages for assistance in completing the NOI.

Where to file a Notice of Intent Form - The NOI must be submitted to the appropriate EPD District Office as listed on the following pages. Please submit only the first two pages of this document with the applicable attachments.

Section I – Blanket Secondary Permittee Information

A duly authorized representative may be either a named individual or any individual occupying a named position that the secondary permittee has authorized to sign certification statements, inspection reports, sampling reports or other reports requested by EPD.

The facility/construction site contact is the person who the blanket secondary permittee has assigned the responsibility for the daily on-site operational control.

Section III – Certifications

The blanket secondary permittee must sign the Notice of Intent and initial the certification statements on the lines provided. Federal and State statutes provide specific requirements as to who is authorized to sign the Notice of Intent forms. A Notice of Intent form signed by an unauthorized person will not be valid. Please be aware that Federal and State statutes provide for severe penalties for submitting false information on this Notice of Intent form. Federal and State regulations require that the Notice of Intent form be signed as follows:

- For a corporation, by a responsible corporate officer;
- For a partnership or sole proprietorship, by a general partner or the proprietor; and
- For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

GEORGIA EPD DISTRICT OFFICES

All required correspondence, including but not limited to Notices of Intent, Notices of Termination, Erosion, Sedimentation and Pollution Control Plans, sampling reports and any other reports shall be sent to the following EPD District Offices:

A. For facilities/construction sites located in the following counties: Bibb, Bleckley, Chattahoochee, Crawford, Dooly, Harris, Houston, Jones, Lamar, Macon, Marion, Meriwether, Monroe, Muscogee, Peach, Pike, Pulaski, Schley, Talbot, Taylor, Troup, Twiggs, Upson

Information shall be submitted to:

West Central District Office
Georgia Environmental Protection Division
2640 Shurling Drive
Macon, GA 31211-3576
(478) 751-6612

B. For facilities/construction sites located in the following counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Johnson, Laurens, McDuffie, Montgomery, Richmond, Screven, Treutlen, Warren, Washington, Wheeler, Wilkinson

Information shall be submitted to:

East Central District Office
Georgia Environmental Protection Division
3525 Walton Way Extension
Augusta, GA 30909-1821
(706) 667-4343

C. For facilities/construction sites located in the following counties: Baldwin, Banks, Barrow, Butts, Clarke, Elbert, Franklin, Greene, Hall, Hancock, Hart, Jackson, Jasper, Lincoln, Madison, Morgan, Newton, Oconee, Oglethorpe, Putnam, Stephens, Taliaferro, Walton, Wilkes

Information shall be submitted to:

Northeast District Office
Georgia Environmental Protection Division
745 Gaines School Road
Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:

Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:

Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:

Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8251
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(229) 430-4144

Insert Yellow Sheet

Back of Yellow Sheet

Revised September 2013

For Official Use Only

NOTICE OF TERMINATION

VERSION 2013

State of Georgia
Department of Natural Resources
Environmental Protection Division

To Cease Coverage Under the NPDES General Permits
To Discharge Storm Water Associated With Construction Activity

THESE PERMITS EXPIRE JULY 31, 2018

I.

PERMIT TYPE *(Check Only One)*:

☐ GAR100001 - *Stand Alone*
☐ GAR100002 – *Infrastructure*
☐ GAR100003 - *Common Development*

PERMITTEE TYPE *(Check Only One and Complete)*:

☐ ***Primary Permittee***

Number of Secondary Permittees *(applicable only to General NPDES Permit No. GAR100003)*: _____

☐ ***Secondary Permittee*** *(applicable only to General NPDES Permit No. GAR100003)*

Primary Permittee's Name:_____Phone:_____

Email Address:_____

Address: _____City:_____State:___Zip Code:_____

☐ ***Tertiary Permittee*** *(applicable only to General NPDES Permit No. GAR100003)*

Primary Permittee's Name *(if available)*:_____Phone:_____

Email Address:_____

Address: _____City:_____State:___Zip Code:_____

II. SITE / OWNER / OPERATOR INFORMATION

Project Construction Site Name: _____

GPS Location of Construction Exit of Stand Alone or Common Development Project *(decimal degrees)*:

Latitude _____ Longitude _____

GPS Locations of Beginning and End of Infrastructure Project or Phase of Infrastructure Project *(decimal degrees)*:

Latitude _____ Longitude_____

Latitude _____ Longitude _____

Construction Site Location *(e.g., street address)*: _____

_____

City *(applicable if the site is located within the jurisdictional boundaries of the municipality)*: _____

County or Counties:_____

Common Development Name *(applicable only to General NPDES Permit No. GAR100003)*: _____

Subdivision Name (if applicable): _____

Lot Number(s) (if applicable): _____

Owner's Name: _____ Phone: _____

Email Address: _____

Address: _____City:_____State:_____Zip Code: _____

Duly Authorized Representative(s) *(optional)*: _____ Phone: _____

Email Address: _____

Operator's Name *(optional)*: _____ Phone: _____

Email Address: _____

Address : _____City: _____State: _____Zip Code: _____

Facility/Construction Site Contact: _____Phone: _____

Email Address:_____

III. SITE ACTIVITY INFORMATION

Start Date *(month/date/year)*: _____ / _____ / _____ Completion Date *(month/date/year)*: _____ / _____ / _____

Disturbed Acreage of Project or Phase of Infrastructure Project *(acres, to the nearest tenth (1/10th) acre)*: _____

Construction Activity Type:

☐ Commercial ☐ Industrial ☐ Municipal/ Institutional ☐ Mixed Use ☐ Water Quality/Aquatic Habitat Restoration

☐ Linear ☐ Utility ☐ Residential ☐ Agricultural Buildings ☐ Other _____

Name of Initial Receiving Water(s): _____

☐ Trout Stream ☐ Water Supporting Warm Water Fisheries

Name of MS4 Owner/Operator *(if applicable)*: _____

Name of Receiving Water(s): _____

☐ Trout Stream ☐ Water Supporting Warm Water Fisheries

IV. NOTICE OF TERMINATION ELIGIBILITY *(Check Only One and Complete)*:

☐ ***Construction Activities Ceased and Final Stabilization Completed***

_____ *Attached to this Notice of Termination – if Primary Permittee, listing of the legal name, email address, address and telephone number for each Secondary Permittee at this site for which this NOT is submitted (applicable only to NPDES General Permit No. GAR100003).*

_____ *Attached to this Notice of Termination – if Primary Permittee, listing of the legal name, email address, address and telephone number for the legal title holders for each remaining undeveloped lot(s) at this site for which this NOT is submitted (applicable only to NPDES General Permit No. GAR100003).*

☐ ***No Longer Owner and/or Operator of Facility/Construction Site***

New Owner's Name: _____ *Phone:* _____

Email Address: _____

Address: _____*City:*_____*State:*_____*Zip Code:* _____

New Operator's Name (if available): _____ *Phone:* _____

Email Address: _____

Address: _____*City:*_____*State:*_____*Zip Code:* _____

☐ ***Primary Permittee of a Common Development Construction Project No Longer Exists (applicable only to Secondary Permittees under NPDES General Permit No. GAR100003)***

Primary Permittee's Name: _____ *Phone:* _____

Email Address: _____

Address: _____*City:*_____*State:*_____*Zip Code:* _____

☐ ***Coverage under the 2013 NPDES General Permit No. GAR100002 is not required for the Primary Permittee of an existing Infrastructure Construction Project.***

V. Did this project require another type of permit from EPD?

☐ YES – if yes, indicate what type of permit _____

☐ NO

VI. ATTACHMENTS

Indicate if the items listed below are attached to this Notice of Termination:

_____ Copy of most recent NOI previously submitted for coverage under the 2013 NPDES General Permits to Discharge Storm Water Associated With Construction Activity.

_____ Copies of sampling reports and/or written justifications why sampling was not conducted (when sampling is required by the permit). Copies of all sampling reports may be submitted as a PDF file on CD-ROM or other storage device.

_____ Listing of the legal name, email address, address and telephone number for each Secondary Permittee at this site for which this NOT is submitted (*applicable only to Primary Permittees under General NPDES Permit No. GAR100003).*

_____ Listing of the legal name, email address, address and telephone number for the legal title holders for each remaining undeveloped lot(s) at this site for which this NOT is submitted *(applicable only to Primary Permitees under General NPDES Permit No. GAR100003).*

_____ GPS locations (decimal degrees) of the beginning and end of each phase of an infrastructure construction project, and if applicable, a map identifying significant landmarks *(applicable only to General NPDES Permit No. GAR100002).*

_____ Documentation that the existing infrastructure construction project will not result in contiguous land disturbances equal or greater than one (1) acre on or before, and continuing after the effective date of the permit *(applicable only to General NPDES Permit No. GAR100002).*

_____ Documentation that the existing infrastructure construction project consists solely of routine maintenance for the original purpose of the facility performed to maintain the original line and grade and/or the hydraulic capacity *(applicable only to General NPDES Permit No. GAR100002).*

VII. CERTIFICATIONS (Owner or Operator or Both to Initial as Applicable)

_____ ***(Applicable only to NPDES General Permit No. GAR100001)*** "I certify under penalty of law that either: (a) all storm water discharges associated with construction activity authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed or (b) I am no longer an Owner or Operator at the construction site and a new Owner or Operator has assumed operational control of the permitted construction site where I previously had ownership or operational control; and that discharging pollutants in storm water associated with construction activity to waters of Georgia is unlawful under the Georgia Water Quality Control Act and the Clean Water Act where the discharge is not authorized by a NPDES permit."

_____ ***(Applicable only to NPDES General Permit No. GAR100002)*** "I certify under penalty of law that either: (a) all storm water discharges associated with construction activity authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed or (b) I am no longer an Owner or Operator at the construction site and a new Owner or Operator has assumed operational control of the permitted construction site where I previously had ownership or operational control or (c) coverage under the permit for an existing infrastructure construction project is not required under Part I.C.1. of NPDES General Permit No. GAR100002; and that discharging pollutants in storm water associated with construction activity to waters of Georgia is unlawful under the Georgia Water Quality Control Act and the Clean Water Act where the discharge is not authorized by a NPDES permit."

_____ ***(Applicable only to NPDES General Permit No. GAR100003)*** "I certify under penalty of law that either: (a) all storm water discharges associated with construction activity authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed or (b) I am no longer an Owner or Operator at the construction site and a new Owner or Operator has assumed operational control of the permitted construction site where I previously had ownership or operational control or (c) If I am secondary permittee, the primary permittee of the common development no longer exists. If I am a primary permittee filing this Notice of Termination under Part VI.A.2. of NPDES General Permit NO, GAR100003, I will notify by written correspondence to the subsequent legal title holder of any remaining lots that these lot Owners or Operators will become tertiary permittees for purposes of NPDES General Permit NO, GAR100003 and I will provide these tertiary permittees with the primary permittee's Erosion, Sedimentation and Pollution Control Plan and Notice of Termination. I understand that by submitting this Notice of Termination, that I am no longer authorized to discharge storm water associated with construction activity by the general permit, and that discharging pollutants in storm water associated with construction activity to waters of Georgia is unlawful under the Georgia Water Quality Control Act and the Clean Water Act where the discharge is not authorized by a NPDES permit."

_____ I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Owner's Printed Name: _____Title:_____

Signature: _____Date:_____

Operator's Printed Name:_____Title: _____

Signature: _____Date:_____

INSTRUCTIONS

NOTICE OF TERMINATION

NPDES General Permits for Storm Water Discharges Associated With Construction Activity

These Permits Expire July 31, 2018

Please print or type the Notice of Termination (NOT) form. Any NOT that contains illegible or incomplete information will not be accepted and will be returned. All information requested on the NOT must be submitted in order for the NOT to be valid. Any information requested on the NOT that is not applicable to the owner and/or operator or the construction site must be marked "N/A." Please do not leave any sections blank in the NOT.

Who must file a Notice of Termination (NOT) Form – The permittee of the facility/construction site must submit a Notice of Termination when (1) the facility/construction site has undergone final stabilization and all storm water discharges from construction activities that are authorized by the NPDES General Permits have ceased, (2) when the Owner and/or Operator of the site changes, (3) Primary Permittee of a Common Development construction project no longer exist, or (4) coverage under the 2013 NPDES General Permit No. GAR100002 is not required.

Final Stabilization means that all soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by 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 in 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).

Where to file NOT Forms - The NOT and attachments, as applicable, must be submitted to the appropriate EPD District Office as listed on the following pages. Please submit only the first five pages of this document with the applicable attachments.

Section I - Permit and Permittee Type

Indicate the NPDES General Permit number (i.e., No. GAR100001, No. GAR100002, or No. GAR100003) and permittee (i.e., primary, secondary or tertiary permittee) for which this NOT is being submitted.

Section II - Site / Permittee Information

The construction site name and location information (i.e., GPS location of construction exit, street address, city, county) must be sufficient to accurately locate the construction site. If the construction site does not have a street address, please provide sufficient information to accurately locate the construction site. If additional space is needed, attach the location information to the NOT.

A duly authorized representative may be either a named individual or any individual occupying a named position that the permittee has authorized to sign all reports, certification statements, or other information requested by EPD.

The facility/construction site contact is the person who the permittee has assigned the responsibility for the daily on-site operational control.

Please do not leave any blanks in this section. Any information requested on the NOT that is not applicable to the permittee or to the construction site must be marked "N/A."

Section III - Site Activity Information

Mark the appropriate boxes to indicate the types of construction activities that were conducted at the facility/construction site.

Please do not leave any blanks in this section. Any information requested on the NOT that is not applicable to the permittee or to the construction site must be marked "N/A."

Section IV – Notice of Termination Eligibility

Indicate by marking the appropriate box why this NOT has been submitted: (1) the facility/construction site has undergone final stabilization and all storm water discharges from construction activities that are authorized by the NPDES General Permits have ceased, (2) when the Owner and/or Operator of the site changes, (3) Primary Permittee of a Common Development construction project no longer exist, or (4) coverage under the 2013 NPDES General Permit No. GAR100002 is not required.

For Stand Alone construction projects, the primary permittee may submit a NOT where the entire stand alone development has undergone final stabilization, all storm water discharges associated with construction activity that are authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed. For construction activities where the primary permittee has elected to submit NOIs for separate phases of the stand alone development, the phase or phases of the stand alone development on the NOT shall correspond to the phase or phases on the NOI.

For Infrastructure construction projects, the primary permittee may submit a NOT where the entire project has undergone final stabilization, all storm water discharges associated with construction activity that are authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed. The permittee may also submit a Notice of Termination for each phase of the infrastructure project, not to exceed four (4) phases, that have undergone final stabilization and all storm water discharges associated with construction activity for that phase authorized by this permit have ceased. Except for the final phase, the disturbed acreage for each phase must be equal to or greater than 25% of the total estimated disturbed acreage for the infrastructure project. For the final phase, the disturbed acreage for the final phase must be equal to or greater than 10% of the total estimated disturbed acreage for the infrastructure project. The Notice of Termination for each phase of the infrastructure project must include the GPS locations (decimal degrees) of the beginning and end of each phase and if applicable, a map identifying significant landmarks.

In addition, the primary permittee of an existing Infrastructure construction project may submit a NOT when the existing infrastructure construction project will not result in "contiguous" land disturbances equal or greater than one (1) acre on or before, and continuing after the effective date of the permit or when the existing infrastructure construction project consists solely of "routine maintenance" for the original purpose of the facility performed to maintain the original line and grade and/or the hydraulic capacity. As defined in the 2013 NPDES General Permit No. GAR100002 (Part IC.1.a.), "contiguous" means areas of land disturbances that are in actual contact to create a connected, uninterrupted area of land disturbance. However, for purposes of this permit, contiguous areas of land disturbances include those areas of land disturbances solely separated by drilling and boring activities, waters of the State and adjacent State-mandated buffers, roadways and/or railways. In addition, contiguous areas of land disturbances include all areas of land disturbances at a sole roadway intersection and/or junction. In order to be eligible for the "routine maintenance" exemption the project must comply with the following conditions: (1) no mass grading shall occur on the project, (2) the project shall be stabilized by the end of each day with temporary or permanent stabilization measures, (3) the project shall have a duration of less than 120 calendar days, and (4) final stabilization must be implemented at the end of the maintenance project;

For Common Development construction projects, the primary permittee may submit a NOT where the entire common development has undergone final stabilization, all storm water discharges associated with construction activity that are authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed. For construction activities where the primary permittee has elected to submit NOIs for separate phases of the common development, the phase or phases of the common development on the NOT shall correspond to the phase or phases on the NOI.

In addition, if the primary permittee of a Common Development decides not to proceed with all permitted construction activities, the primary permittee may submit a Notice of Termination, if and only if, (a) all construction activities have ceased for a minimum of 90 days; (b) final stabilization has been implemented by the primary permittee and by all secondary permittee(s); (c) all secondary permittees have submitted a NOT signed in accordance with Part V.G.1. of this permit (excluding utility companies and/or utility contractors working under a Blanket NOI); (d) the site is in compliance with this permit; and (e) all temporary BMPs have been removed .

Secondary permittees should submit a Notice of Termination when the primary permittee of the Common Development no longer exist.

Tertiary permittees may submit a Notice of Termination when their sites within a Common Development have undergone final stabilization, all storm water discharges from their construction activities have ceased, their construction sites are in compliance with this permit and all temporary BMPs have been removed. If the total land disturbance within the tertiary permittee's construction site is less than five (5) acres, tertiary permittees may also submit a NOT for each individual lot resulting in land disturbance of less than one (1) acre with a Plan for a typical individual lot within the tertiary permittee's construction site.

Permitees may submit a NOT when the Owner or Operator of the site changes. Where storm water discharges will continue after the identity of the Owner or Operator changes, the permittee must, prior to filing the Notice of Termination, notify any subsequent Owner or Operator of the permitted site as to the requirements of this permit.

Section VII - Certifications

The owner and/or operator must sign the Notice of Termination and initial the certification statements on the lines provided. Federal and State statutes provide specific requirements as to who is authorized to sign the Notice of Termination forms. A Notice of Termination form signed by an unauthorized person will not be valid. Please be aware that Federal and State statutes provide for severe penalties for submitting false information on this Notice of Termination form. Federal and State regulations require that the Notice of Termination form be signed as follows:

- For a corporation, by a responsible corporate officer;
- For a partnership or sole proprietorship, by a general partner or the proprietor; and
- For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

GEORGIA EPD DISTRICT OFFICES

All required correspondence, including but not limited to Notices of Intent, Notices of Termination, Erosion, Sedimentation and Pollution Control Plans, sampling reports and any other reports shall be sent to the following EPD District Offices:

A. For facilities/construction sites located in the following counties: Bibb, Bleckley, Chattahoochee, Crawford, Dooly, Harris, Houston, Jones, Lamar, Macon, Marion, Meriwether, Monroe, Muscogee, Peach, Pike, Pulaski, Schley, Talbot, Taylor, Troup, Twiggs, Upson

Information shall be submitted to: West Central District Office
Georgia Environmental Protection Division
2640 Shurling Drive
Macon, GA 31211-3576
(478) 751-6612

B. For facilities/construction sites located in the following counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Johnson, Laurens, McDuffie, Montgomery, Richmond, Screven, Treutlen, Warren, Washington, Wheeler, Wilkinson

Information shall be submitted to:
East Central District Office
Georgia Environmental Protection Division
3525 Walton Way Extension
Augusta, GA 30909-1821
(706) 667-4343

C. For facilities/construction sites located in the following counties: Baldwin, Banks, Barrow, Butts, Clarke, Elbert, Franklin, Greene, Hall, Hancock, Hart, Jackson, Jasper, Lincoln, Madison, Morgan, Newton, Oconee, Oglethorpe, Putnam, Stephens, Taliaferro, Walton, Wilkes

Information shall be submitted to:
Northeast District Office
Georgia Environmental Protection Division
745 Gaines School Road
Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:
Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:
Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:
Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8251
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:
Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(229) 430-4144

Insert Yellow Sheet

Back of Yellow Sheet

Revised September 2013

For Official Use Only

NOTICE OF TERMINATION

VERSION 2013

State of Georgia
Department of Natural Resources
Environmental Protection Division

To Cease Coverage Under the NPDES General Permit No. GAR100003
To Discharge Storm Water Associated
With Construction Activity for Common Developments

THESE PERMITS EXPIRE JULY 31, 2018

BLANKET SECONDARY PERMITEE
GAR100003 – COMMON DEVELOPMENT

I. SITE / PERMITTEE INFORMATION

Blanket Secondary Permittee's Name: _____ Phone: _____

Email Address: _____

Address: _____City:_____State:_____Zip Code: _____

Duly Authorized Representative(s) *(optional)*: _____ Phone: _____

Email Address: _____

Utility Sub-Contractor Name *(optional)*: _____ Phone: _____

Email Address: _____

Address : _____City: _____State: _____Zip Code: _____

Facility/Construction Site Contact: _____Phone: _____

Email Address:_____

_____ ***Attach to this Notice of Termination – Listing of the facilities/construction sites with coverage under the annual Notice of Intent submitted by the Blanket Secondary Permittee including the following information for each facility/construction site:***

Project Construction Site Name: _____

Construction Site Location *(e.g., street address)*: _____

_____

Common Development Name: _____

Subdivision Name (if applicable): _____

Lot Number(s) (if applicable): _____

City *(applicable if the site is located within the jurisdictional boundaries of the municipality)*: _____

County or Counties:_____

Primary Permittee's Name: _____ Phone: _____

Email Address: _____

Address: _____City:_____State:_____Zip Code: _____

II. SITE ACTIVITY INFORMATION

Start Date *(month/date/year)*: _____ / _____ / _____ Completion Date *(month/date/year)*: _____ / _____ / _____

Disturbed Acreage *(acres, to the nearest tenth (1/10th) acre)*: _____

Construction Activity Type:

☐ Commercial ☐ Industrial ☐ Municipal/ Institutional ☐ Mixed Use ☐ Water Quality/Aquatic Habitat Restoration

☐ Linear ☐ Utility ☐ Residential ☐ Agricultural Buildings ☐ Other _____

NOTICE OF TERMINATION ELIGIBILITY *(Check Only One and Complete)*:

☐ ***Construction Activities Ceased and Final Stabilization Completed***

☐ ***No Longer Owner and/or Operator of Facility/Construction Site***

New Blanket Secondary Permittee's Name: _____ *Phone:* _____

Email Address: _____

Address: _____*City:*_____*State:*_____*Zip Code:* _____

New Utility Sub-Contractor's Name (if available): _____ *Phone:* _____

Email Address: _____

Address: _____*City:*_____*State:*_____*Zip Code:* _____

☐ ***Annual Notice of Termination (postmarked no later than January 15th of the subsequent year in which the NOI for the Blanket Secondary was filed)***

III. Did this project require another type of permit from EPD?

☐ YES – if yes, indicate what type of permit _____

☐ NO

IV. CERTIFICATIONS (Blanket Secondary Permittee)

_____ I certify under penalty of law that either: (a) all storm water discharges associated with construction activities from the portions of the common developments where I was blanket secondary have ceased or have been eliminated; (b) I am no longer a blanket secondary permittee at the construction sites and a new blanket secondary permittee has assumed operational control for those portions of the construction sites where I previously had operational control; and/or (c) I am a blanket secondary permittee filing an annual Notice of Termination under Part VI.A.5. of General NPDES Permit No. GAR100003. I understand that by submitting this Notice of Termination, that I am no longer authorized to discharge storm water associated with construction activity by the general permit, and that discharging pollutants in storm water associated with construction activity to waters of Georgia is unlawful under the Georgia Water Quality Control Act and the Clean Water Act where the discharge is not authorized by a NPDES permit

_____ I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Blanket Secondary Permittee's Name:_____Title:_____
(please print or type)

Signature: _____Date:_____

INSTRUCTIONS

NOTICE OF TERMINATION – BLANKET SECONDARY PERMITTEE

NPDES General Permits for Storm Water Discharges Associated With Construction Activity for Common Developments

These Permits Expire July 31, 2018

Please print or type the Notice of Termination (NOT) form. Any NOT that contains illegible or incomplete information will not be accepted and will be returned. All information requested on the NOT must be submitted in order for the NOT to be a valid. Any information requested on the NOT that is not applicable to the blanket secondary permittee or the construction site(s) must be marked "N/A." Please do not leave any sections blank in the NOT.

Who must file a Notice of Termination (NOT) Form - When all construction sites have undergone final stabilization and all storm water discharges associated with construction activities that are authorized by the secondary blanket permittee's Notice of Intent (NOI) have ceased or when the blanket secondary permittee of the site(s) changes, the blanket secondary permittee of the construction sites must submit a Notice of Termination.

A blanket secondary permittee must submit an annual Notice of Termination no later than January 15 of the subsequent year in which the annual NOI was filed by a blanket secondary permittee. A utility company may submit an annual Blanket Notice of Intent covering all construction activities statewide within common developments on or of before January 15 of the year in which coverage is desired.

Final Stabilization means that all soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by 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 in 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).

Where to file NOT Forms - The NOT and attachments, as applicable, must be submitted to the appropriate EPD District Office as listed on the following pages. Please submit only the first three pages of this document with the applicable attachments.

Section I - Site / Permittee Information

A duly authorized representative may be either a named individual or any individual occupying a named position that the permittee has authorized to sign all reports, certification statements, or other information requested by EPD.

The facility/construction site contact is the person who the permittee has assigned the responsibility for the daily on-site operational control.

The construction site name and location information must be sufficient to accurately locate the construction sites with coverage under the annual Notice of Intent submitted by the blanket secondary permittees. If the construction site does not have a street address, please provide sufficient information to accurately locate the construction site.

Please do not leave any blanks in this section. Any information requested on the NOT that is not applicable to the blanket secondary permittee or to the construction sites must be marked "N/A."

Section II - Site Activity Information

Indicate by marking the appropriate box why this NOT has been submitted: (1) all construction sites have undergone final stabilization and all storm water discharges associated with construction activities that are authorized by the secondary blanket permittee's Notice of Intent have ceased, (2) the blanket secondary permittee of the site(s) has changed, or (3) the blanket secondary permittee has submitted an annual Notice of Termination under Part VI.A.5. of General NPDES Permit No. GAR100003.

Mark the appropriate boxes to indicate the types of construction activities that were conducted at the facility/construction site.

Please do not leave any blanks in this section. Any information requested on the NOT that is not applicable to the blanket secondary permittee or to the construction sites must be marked "N/A."

Section IV - Certifications

The blanket secondary permittee must sign the Notice of Termination and initial the certification statements on the lines provided. Federal and State statutes provide specific requirements as to who is authorized to sign the Notice of Termination forms. A Notice of Termination form signed by an unauthorized person will not be valid. Please be aware that Federal and State statutes provide for severe penalties for submitting false information on this Notice of Termination form. Federal and State regulations require that the Notice of Termination form be signed as follows:

- For a corporation, by a responsible corporate officer;
- For a partnership or sole proprietorship, by a general partner or the proprietor; and
- For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

GEORGIA EPD DISTRICT OFFICES

All required correspondence, including but not limited to Notices of Intent, Notices of Termination, Erosion, Sedimentation and Pollution Control Plans, sampling reports and any other reports shall be sent to the following EPD District Offices:

A. For facilities/construction sites located in the following counties: Bibb, Bleckley, Chattahoochee, Crawford, Dooly, Harris, Houston, Jones, Lamar, Macon, Marion, Meriwether, Monroe, Muscogee, Peach, Pike, Pulaski, Schley, Talbot, Taylor, Troup, Twiggs, Upson

Information shall be submitted to:

West Central District Office
Georgia Environmental Protection Division
2640 Shurling Drive
Macon, GA 31211-3576
(478) 751-6612

B. For facilities/construction sites located in the following counties: Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Johnson, Laurens, McDuffie, Montgomery, Richmond, Screven, Treutlen, Warren, Washington, Wheeler, Wilkinson

Information shall be submitted to:

East Central District Office
Georgia Environmental Protection Division
3525 Walton Way Extension
Augusta, GA 30909-1821
(706) 667-4343

C. For facilities/construction sites located in the following counties: Baldwin, Banks, Barrow, Butts, Clarke, Elbert, Franklin, Greene, Hall, Hancock, Hart, Jackson, Jasper, Lincoln, Madison, Morgan, Newton, Oconee, Oglethorpe, Putnam, Stephens, Taliaferro, Walton, Wilkes

Information shall be submitted to:

Northeast District Office
Georgia Environmental Protection Division
745 Gaines School Road
Athens, GA 30605-3129
(706) 369-6376

D. For facilities/construction sites located in the following counties: Carroll, Clayton, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Rockdale, Spalding

Information shall be submitted to:

Mountain District - Atlanta Satellite
Georgia Environmental Protection Division
4244 International Parkway, Suite 114
Atlanta, GA 30354-3906
(404) 362-2671

E. For facilities/construction sites located in the following counties: Bartow, Catoosa, Chattooga, Cherokee, Cobb, Dade, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Habersham, Haralson, Lumpkin, Murray, Paulding, Pickens, Polk, Rabun, Towns, Union, Walker, White, Whitfield

Information shall be submitted to:

Mountain District - Cartersville Office
Georgia Environmental Protection Division
P.O. Box 3250
Cartersville, GA 30120-1705
(770) 387-4900

F. For facilities/construction sites located in the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Bulloch, Camden, Candler, Charlton, Chatham, Clinch, Coffee, Effingham, Evans, Glynn, Jeff Davis, Liberty, Long, McIntosh, Pierce, Tattnall, Toombs, Ware, Wayne

Information shall be submitted to:

Coastal District - Brunswick Office
Georgia Environmental Protection Division
400 Commerce Center Drive
Brunswick, GA 31523-8251
(912) 264-7284

G. For facilities/construction sites located in the following counties: Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Crisp, Decatur, Dodge, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Quitman, Randolph, Seminole, Stewart, Sumter, Telfair, Terrell, Thomas, Tift, Turner, Webster, Wilcox, Worth

Information shall be submitted to:

Southwest District Office
Georgia Environmental Protection Division
2024 Newton Road
Albany, GA 31701-3576
(229) 430-4144

Insert Tab 5

Checklist Procedures

Back of Tab

COMMON DEVELOPMENT GAR100003

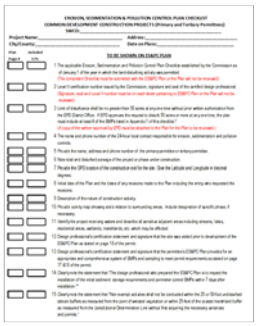
2016 CHECKLIST PROCEDURES

GSWCC

Level II: Introduction to Design July 2016

1.

- The applicable Erosion, Sedimentation, and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.
- The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed.



2.

- Level II certification number issued by the Commission, signature, and seal of the certified design professional.
- Signature, seal, and Level II number must be on each sheet pertaining to ES&PC plan or the plan will not be reviewed. The Level II certification must be issued to the Design Professional whose signature and seal are on the plan.

3.

- Limit of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist.
- A copy of the written approval by EPD must be attached to the plan for the plan to be reviewed.

4.

- The name and phone number of the 24-hour local contact responsible for erosion, sedimentation, and pollution controls.
- May be shown on ES&PC Plan sheets and/or ES&PC notes.

24 Hour Contact:
John Doe
555-555-5555

5.

- Provide the name, address, and phone number of primary permittee or tertiary permittee.
- May be shown on cover sheet, ES&PC Plan, or under ES&PC notes.

Primary Permittee/Tertiary Permittee:

(Company/Person)
(Address)
(Contact)
(Phone)

6.

- Note total and disturbed acreage of the project or phase under construction.
- Must be shown on ES&PC Plan or under ES&PC notes.

OVERALL SITE AREA: 43.8 ACRES
TOTAL DISTURBED AREA: 9.7 ACRES

7.

- Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.
- GPS location of the construction exit must be shown on **cover sheet** and may also be shown on ES&PC Plan sheets and ES&PC notes. It must match the NOI.

Co CONSTRUCTION EXIT/ENTRANCE
33.1682° N
84.8602° W

8.

- Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
- The initial Plan date should be shown on all pages. With each resubmittal the revision date and the entity requesting revisions should be shown on cover sheet and each sheet that has been revised.

ISSUE DATE 14 MAR 2014

REVISIONS:	
3/10/16	LIA COMMENTS
3/27/16	LIA COMMENTS

9.

- Description of the nature of construction activity.
- Provide a description of the existing site and a description of the proposed project. These must be shown on ES&PC Plan or under ES&PC notes.

The site is currently developed and has one structure on the property. The proposed construction consists of an access drive and grading for a future expansion. The proposed construction will also include landscaping, and a storm conveyance system.

10.

- Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
- Site location must be delineated showing surrounding area roads and highways. If the project is being done in phases, each individual phase must be delineated and labeled. This information is important for plan reviewers if a site visit is needed, or if the site needs to be located on another map.

11.

- Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, etc. which may be affected.
- The name of the initial receiving water(s) or if unnamed the first named blue line stream indicated on the appropriate USGS topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of the whether the receiving water(s) supports warm water fisheries or is a trout stream. Describe any neighboring area which could be affected by the post-developed runoff from the site.

12.

- Design professional's **certification statement** and **signature** that the site was visited prior to development of the ES&PC plan as stated on page 18 of the permit.
- The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes:
  - *"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 supervision."*

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 pages 17 & 18 of the permit.
- The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes:
  - *"I certify that the permittee's Erosion, Sedimentation, and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR 100003."*

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."**
- The Plan must include a statement indicating that the primary permittee must retain the design professional who prepared the Plan, except when the primary 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 primary permittee within seven (7) days and the permittee must correct all deficiencies with 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.

DESIGN PROFFESIONAL 7-DAY VISIT CERTIFICATION

DATE OF INSPECTION _____

I CERTIFY THE SITE WAS IN COMPLIANCE WITH THE ES&PC PLAN ON THE DATE ON INSPECTION.

_____ CERTIFICATION #
DSWCC LEVEL II DESIGN PROFESSIONAL

INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN.

_____

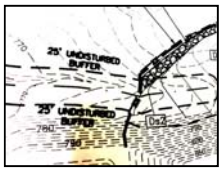
_____

_____

THE DEFICIENCIES MUST BE ADDRESSED AND AN RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFFESIONAL CERTIFICATION IS OBTAINED.

15.

- Clearly note the statement that **"Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer without first acquiring the necessary variances and permits."**
- See Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN (I) and (II) on pages 15, 16, 17 & 18 of the permit and show under ES&PC notes.



16.

- Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
- When the project requires an approved buffer variance from the GA EPD, an indication shall be shown on the ES&PC Plan. A description of the encroachment activity must be shown on the ES&PC Plan or under ES&PC notes.

17.

- Clearly note the statement that **"Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."**
- See Part IV. C. on page 21 & 22 of the permit. This can be clarified in a narrative and shown under ES&PC notes. Revisions or amendments should be submitted to the Local Issuing Authority for review.

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."**
- The Plan must include a description of how waste materials, including waster building materials, construction, and demolition debris, concrete washout, excavated sediment, etc., will be properly disposed of. Any disposal of solid waste to waters of the State is prohibited unless authorized by a Section 404 permit.

WASTE MATERIALS

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF ONCE PER WEEK OR MORE OFTEN IF NECESSARY AND TRASH WILL BE HAULED AS REQUIRED BY LOCAL REGULATIONS. NO CONSTRUCTION WASTE WILL BE BURIED ON SITE.

ALL PERSONNEL WILL BE INSTRUCTED ON PROPER PROCEDURES FOR WASTE DISPOSAL. A NOTICE STATING THESE PRACTICES WILL BE POSTED AT THE JOBSITE AND THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

19.

- Clearly note the 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."**
- Must be shown on ES&PC Plan or under ES&PC notes.

20.

- Clearly note the 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."**
- Must be shown on ES&PC Plan or under ES&PC notes.

21.

- Clearly note the statement that **"Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."**
- Must be shown on ES&PC Plan or under ES&PC notes.

22.

- Indication that the applicable portion of the primary permittees ES&PC Plan is to be provided to each secondary permittee prior to the secondary conducting any construction activity and that each secondary shall sign the Plan or portion of the Plan applicable to their site. List the names and addresses of all secondary permittees.

- The Plan must contain a list and contact information for all secondary permittees and a statement that the primary permittee shall provide a copy of the Plan (and any subsequent revisions to the Plan) to each secondary permittee. The Plan must include a section for each secondary to sign indicating that they have made a written acknowledgement of receipt of the Plan and a copy of the acknowledgement must be kept in the primary's records.

23.

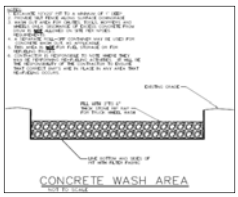
- Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix 1 listing all the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

If any storm water associated with construction activities discharges into an Impaired Stream Segment that has been listed for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff), the ES&PC Plan must include at least four (4) of the BMPs listed in Part III.C.2. (a)-(t) of the Permit. The Impaired Stream Segment(s) should be delineated on the ES&PC Plan. Georgia's most current and subsequent "305(b)/303(d) List Documents (Final) can be viewed on the GAEPD website.

24.

- 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.
- List of TMDL Implementation Plans can be viewed on the GAEPD website, www.gaepd.org
- The TMDL Implementation Plan for sediment should be delineated on the ES&PC Plan.

25.



- BMPs for concrete wash-down of tools, concrete mixer chutes, hoppers, and the rear of the vehicles. **Washout of the drum at the construction site is prohibited.**
- When the project allows for the concrete wash-down of tools, concrete mixer chutes, hoppers, and the rear of the vehicles on the project site delineate the location of the area provided for washing and provide detail of BMPs that will be used. If the project does not allow for the concrete wash-down on the project site, note that on the plan.

26.

- Provide BMPs for the remediation of all petroleum spills and leaks.
- The Plan must provide BMPs and guidance for the prevention of spills and leaks of petroleum products from any areas where such products are stored or used as well as guidance for the proper remediation of any spills and leaks that do occur. This information can be in the form of a separate Spill Prevention/Spill Response document so long as that information accompanies the Plan.

Spill Cleanup and Control Practices

- Local, State and manufacturer's recommended methods for spill cleanup will be clearly posted and procedures will be made available to site personnel.
- Material and equipment necessary for spill cleanup will be kept in the material storage areas. Typical materials and equipment includes, but is not limited to, brooms, dustpans, mops, rags, gloves, goggles, cat litter, sand, sawdust and properly labeled plastic and metal waste containers.
- Spill prevention practices and procedures will be reviewed after a spill and adjusted as necessary to prevent future spills.
- All spills will be cleaned up immediately upon discovery. All spills will be reported as required by local, State, and Federal regulations.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1 – 800 – 424 – 8802.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1 – 800 – 424 – 2675.
- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE GEORGIA E.P.D. WILL BE CONTACTED WITHIN 24 HOURS.
- FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

The contractor shall notify the licensed professional who prepared this Plan if more than 1320 gallons of petroleum is stored onsite (this includes capacities of equipment) or if any one piece of equipment has a capacity greater than 660 gallons. The contractor will need a Spill Prevention Containment and Countermeasures Plan prepared by that licensed professional.

27.

- 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.
- The Plan must contain a 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. These may include storm water detention and retention structures, use of vegetated swales and natural depressions for flow attenuation or a combination of these practices (sequential systems). The Plan must also include a technical explanation of the basis used to select these practices where flows will exceed pre-development levels. The Plan must indicate that velocity dissipation devices will be placed at discharge locations and along the length of any outflow channel in order to provide a non-erosive flow so that the natural physical and biological characteristics and functions of the water course are maintained and protected. The installation of these devices may be subject to Section 404 of the Federal Clean Water Act.
- Note: The permittee is only responsible for the installation and maintenance of storm water management devices prior to final stabilization of the site and not the operation and maintenance of such structures after construction activities have been completed.

28.

- Description of the practices that will be used to reduce the pollutants in storm water discharges.
- The Plan must identify all potential sources of storm water pollution expected to be present on the site and provide a narrative explaining how the pollutants will be minimized in the storm water discharges.

Product Specific Practices

Petroleum Based Products – Containers for products such as fuels, lubricants, and tars will be inspected daily for leaks and spills. This includes onsite vehicles and machinery daily inspections and regular preventative maintenance of such equipment. Equipment maintenance areas will be located away from State Waters, natural drains, and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/minimize site contamination. Discharge of oils, fuels, and lubricants is prohibited. Proper disposal methods will include collection in a suitable container and disposal as required by local and State regulations.

Paints/Paint thinners/Solvents – All products will be stored in tightly sealed original containers when not in use. Excess product will not be discharged to the storm water collection system. Excess product, materials used with these products, and product containers will be disposed of according to manufacturer's specifications and recommendations.

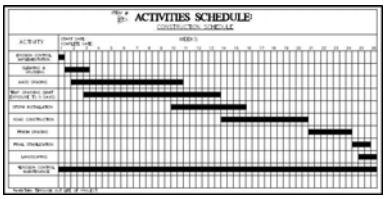
Concrete Truck Washing – NO concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water onsite.

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.

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.

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).
- Activity schedule must be site specific. The narrative description and timeline for each phase of construction may be shown on ES&PC Plan sheet or under ES&PC notes.



30.

- Provide complete requirements of inspections and record keeping by the primary permittee or tertiary permittee.
- The Plan must include all of the inspections and record keeping requirements of the primary permittee as stated in Part IV.D.4.a. on page 25 of the Permit. The complete inspection and record keeping requirements shall be shown on the Plan under ES&PC notes.

4. Inspections.

a. 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 rainfall once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday until a Notice of Termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials 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 non-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): (a) disturbed areas of the primary permittee's construction site ; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation ; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.(4). These inspections must be conducted until a Notice of Termination is submitted.

(4). Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is received by EPD) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).

(5). Based on the results of each inspection, the site description control measures identified in the Erosion, Sedimentation and shall be revised as appropriate not later than seven (7) calenda implementation of such changes shall be made as soon as pr 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 project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit.

31.

- Provide complete requirements of sampling frequency and reporting of sampling results.
- See page 31 Sampling Frequency and page 32 section E. Reporting in the permit. Complete sampling frequency and reporting requirements are to be shown on the Plan under ES&PC notes.

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 storm water discharge to a monitored receiving water and/or from a monitored outfall location within in forty-five (45) minutes or as soon as possible.

(2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge.

(3). Sampling by the permittee shall occur for the following qualifying events:

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the sampling location;

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the sampling location, whichever comes first;

(c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there was no discharge), the permittee, in accordance with Part IV.D.4.a.(6), must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations under (a), (b) or (c) above; and

(e). Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

*Note that the permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

32.

- Provide complete details for retention of records as per Part IV.F. of the permit.
- See page 33 section F. Retention of Records in the permit. Complete details of retention of records are to be shown on the Plan under ES&PC notes.

F. Retention of Records.

1. The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

   a. A copy of all Notices of Intent submitted to EPD;
   b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
   c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;
   d. A copy of all sampling information, results, and reports required by this permit;
   e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of this permit;
   f. A copy of all violation summaries and violation summary reports generated in accordance with Part IV.D.2. of this permit; and
   g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2). of this permit.

2. Copies of all Notices of Intent, Notices of Termination, inspection reports, sampling reports (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) or other reports requested by the EPD, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the NOT is submitted in accordance with Part VI. of this permit. These records must be maintained at the permittee's primary place of business or at a designated alternative location once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

33.

- Description of analytical methods to be used to collect and analyze the samples from each location.
- This narrative must is to be shown on the Plan under ES&PC notes and shall include quality control/assurance procedures and precise sampling methodology for each sampling location.

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 STORM WATER 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.

34.

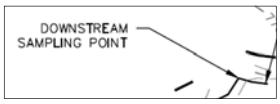
- Appendix B rationale for NTU values at all outfall sampling points where applicable.
- When the permittee has determined that some or all outfalls will be monitored, a rationale must be shown on the Plan under ES&PC notes which includes the NTU limit(s) selected from Appendix B. This rationale must 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).

Waters Supporting Warm Water Fisheries

Site Size, acres	Surface Water Drainage Area, square miles							
	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	75	150	200	400	750	750	750	750
10.01-25	50	100	100	200	300	500	750	750
25.01-50	50	50	100	100	200	300	750	750
50.01-100	50	50	50	100	100	150	300	600
100.01+	50	50	50	50	50	100	200	100

35.

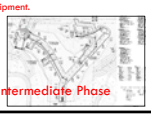
- Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged.
- The Plan shall include a USGS topographic map, a topographic map or a drawing (referred to as a topographic map) that is a scale equal to or more detailed than a 1:24000 map showing the locations of the site or the common development. The map must include (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 the mandatory field verification, into which the storm water is discharged and (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 storm water(s) enters the receiving water(s) to the point where the receiving water(s) combines with the first blue line stream shown on the USS topographic map.



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.
- The Plan must be shown in a minimum of three phases with each phase shown on a separate sheet. Initial phase of the Plan must include the required 67 cy per acre sediment storage, construction exit, tree-save fence if applicable and any other BMPs necessary to prevent sediment from leaving the site such as silt fence, inlet protection on existing storm drain structures, diversions, check dams, temporary ground cover, etc. Limits of disturbance for the initial phase are to be only the areas needed to install initial BMPs. The intermediate phase should show rough grading and utility construction. BMPs should include initial protection, additional silt fence as needed, any revised sediment storage needed as drainage basins are altered, outlet protection, retrofit if applicable, matting with temporary or permanent vegetation as needed, temporary down drains, filter rings, etc. Final phase of Plan should show finished grade, curbing and paving if applicable, building construction if applicable, etc. BMPs should include permanent vegetation, appropriate inlet protection, etc. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and the final BMPs are the same, the Plan may combine all of the BMPs into a single phase Plan. The Plan will include appropriate staging and access requirements for construction equipment.

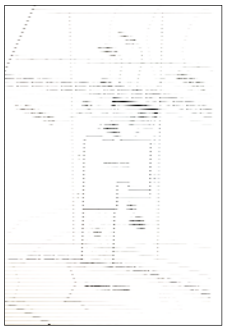
Initial Phase


Intermediate Phase

Final Phase

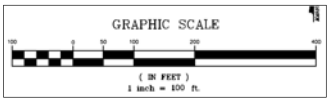
37.

- Plan addresses BMPs for all phases of common development including individual building lots and out-parcels, etc. regardless of who owns or operates the individual sites. Include a typical and any situational lots applicable.
- The Erosion, Sedimentation, & Pollution Control plans for a common development is designed for the life of the project and must include practices to be implemented by all secondary permittees involved, whether the primary permittee relinquishes ownership of the land rights or not. This includes providing an ES&PC Plan for typical and situational lots for each secondary permittee (builder) who purchases a lot from the primary permittee (developer). Situational lots may include, but are not limited to, lots adjacent to state waters buffers (in which a double row of Type S sediment barriers must be shown adjacent to wetlands, lots with an extreme grade, etc.



38.

- Graphic Scale & North Arrow
- The graphic scale and north arrow must be clearly shown on all phases of the ES&PC Plan sheets.



39.

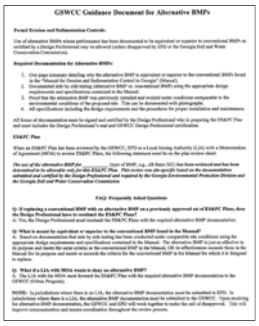
- Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or	Flat 0 - 2%	0.5 or 1
larger scale	Rolling 2 - 8%	1 or 2
	Steep 8% +	2,5 or 10

- The initial, intermediate, and final phase sheets of the Plan must show the proposed grade in bold contour lines with the above intervals overlaying the original contour lines. Elevations of both the existing and proposed contour lines must be shown.

40.

- Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the GSWCC).
- Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org



GSWCC Guidance Document for Alternative BMPs

Permit Erosion and Sedimentation Controls:

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

Required Documentation for Alternative BMPs:

1. One-page summary detailing why the alternative BMP is equivalent or superior to the conventional BMPs listed in the "Manual for Erosion and Sedimentation Control in Georgia" (Manual).
2. Documented side by side testing (alternative BMP vs. conventional BMP) using the appropriate design requirements and specifications contained in the Manual.
3. Proof that the alternative BMP was previously installed and tested under conditions comparable to the site conditions and conditions of the proposed site. This can be documented with photographs.
4. All specifications including the design requirements and the procedures for proper installation and maintenance.

All forms of documentation must be signed and certified by the Design Professional who is preparing the ESAPC Plan and must includes the Design Professional's seal and GSWCC Design Professional certification.

ESAPC Plan

When an ESAPC Plan has been reviewed by the GSWCC, EPD or a Local Issuing Authority (LIA) with a Memorandum of Agreement (MOA) to review ESAPC Plans, the following statement must be on the plan review sheet:

The use of the alternative BMP for _____ (type of BMP, e.g., silt fence 50) has been reviewed and has been determined to be allowable only for this ESAPC Plan. This review was site-specific based on the documentation submitted and certified by the Design Professional and required by the Georgia Environmental Protection Division and the Georgia Soil and Water Conservation Commission.

FAQ: Frequently Asked Questions

Q: If replacing a conventional BMP with an alternative BMP on a previously approved set of ESAPC Plans, does the Design Professional have to resubmit the ESAPC Plan?
A: Yes, the Design Professional must resubmit the ESAPC Plans with the required alternative BMP documentation.

Q: What is meant by equivalent or superior to the conventional BMP found in the Manual?
A: Based on documentation that side by side testing has been conducted under comparable site conditions using the appropriate design requirements and specifications contained in the Manual, the alternative BMP is at least just as effective in its purpose and meets the same criteria as the conventional BMP in the Manual, OR its effectiveness exceeds those in the Manual for its purpose and meets or exceeds the criteria for the conventional BMP in the Manual for which it is designed to replace.

Q: What if a LIA with MOA wants to deny an alternative BMP?
A: The LIA with the MOA must forward the ESAPC Plan with the required alternative BMP documentation to the GSWCC (Urban Program).

NOTE: In jurisdictions where there is no LIA, the alternative BMP documentation must be submitted to EPD. In jurisdictions where there is a LIA, the alternative BMP documentation must be submitted to the GSWCC. Upon receiving the alternative BMP documentation, the GSWCC and EPD will work together to make the call if disapproved. This will improve communication and ensure coordination throughout the review process.

41.

- Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.
- Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.

GSWCC

Equivalent BMP Application

Pre-notice

1. Provide a copy of the required checklist with a copy of the Notice of intent form for each site on the disk or thumb drive.

2. Provide a copy of the plans by disk or thumb drive to the GSWCC/ Urban Program when each NOI is filed with the EPD.

Date submitted _____ Signature of preparer: _____

Please label the disk or thumb drive with the date submitted and project name. Project name shall never be the same. Pre-notice form should be sent return receipt mail to the following address:

GSWCC/Urban Program

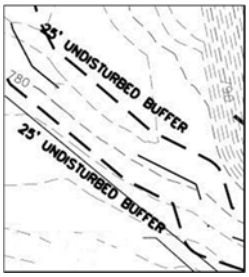
P.O. Box 8024

Athens, GA 30603

If you have any questions contact the GSWCC/Urban program at 1-706-552-4474.

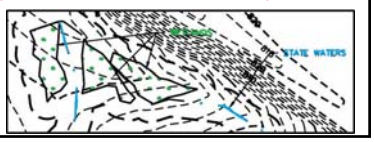
42.

- Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate areas of impact.
- The State Law of Georgia mandates these minimum undisturbed buffers, but the Local Issuing Authority are allowed to require more stringent buffers of state waters. The minimum undisturbed buffers required by the state and all other buffers of state waters required by the issuing authority must be delineated. Any undisturbed buffer area that is impacted by the project site must be noted on the Plan.



43.

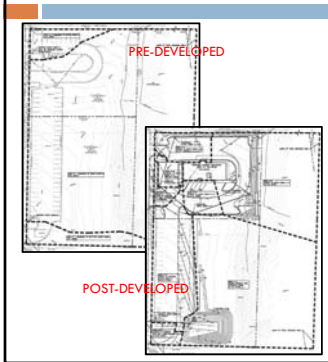
- Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.
- ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE MUST BE DELINEATED ON ALL PHASES OF THE PLAN.
- When a project is located in a jurisdiction with a certified Local Issuing Authority and the LIA must make a determination of State waters that are not delineated on the plan, the Plan review could be delayed for beyond the full forty-five day review time allowed to the LIA, or the full thirty-five day review time allowed to the District if the District is reviewing the plan. For all projects in a jurisdiction where there is no certified Local Issuing Authority regulating that project, EPD is responsible for State waters determinations and there is no time limits for reviewing the Plan.
- ALL WETLANDS LOCATED WITHIN THE PROJECT SITE ONLY MUST BE DELINEATED.
- If the Local Issuing Authority requires an undisturbed buffer of wetlands, delineate required buffer.



44.

- Delineation and acreage of contributing drainage basins on the project site.
- All existing drainage basins on the project site and their acreage must be delineated on the existing conditions and/or on the initial phase of the plan. As the basins are altered or new ones created during intermediate and final phases, the new basins and their acreage must be delineated throughout each phase of the Plan.

45.



- Provide hydrology study and maps of drainage basins for both pre and post developed conditions.
- Hydrology study and drainage maps should be separate from the Plan. Maps should include each individual basin draining to, through and from the project site, with each one delineated, labeled and showing its total acreage.

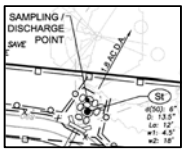
46.

- An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
- The Plan must provide both pre and post construction estimates of the runoff coefficient or peak discharge flow for the site. This can be in the form of a hydrologic study so long as that study is made a part of the Plan and accompanies the Plan. A complete hydrologic study is not required element of the Plan, only the pre and post construction estimates of the run-off coefficient or peak discharge flow for the site.

PRE-DEVELOPED COMPOSITE CN: 57
POST-DEVELOPED COMPOSITE CN: 83

47.

- Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.
- The storm-drain pipe and weir velocities must show the flow characteristics of the pipe at full flow including pipe diameter, flow rate (cfs), velocity (fps), and tailwater conditions. This information should be shown in a chart on the storm-drain profile sheet, ES&PC intermediate phase sheet or on the ES&PC detail sheet that shows outlet protection. The dimensions of the apron must include length (La), width at the headwall (W1), down-stream width (W2), average stone diameter (d50), and stone depth (D) designed in accordance with Figures 6-24.1 and 6-24.2 in the Manual. These should be shown in a chart on ES&PC intermediate and/or final phase sheet or ES&PC detail sheet with outlet protection. Velocity dissipation devices shall be placed at all 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 so that the natural physical and biological functions and characteristics are maintained and protected.



Pipe Chart

Element ID	From (inlet) Node	To (Outlet) Node	Drainage Area (ac)	Rational Coeff.	Length (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow into node (cfs)	Peak Flow (cfs)	Peak Flow Velocity (ft/sec)
PIPE 1.1	P.DCS.1B	P.HW.1A			26.76	1.0000	18.000	0.0190		3.12	3.28
PIPE 2.1	P.HW.2B	P.HW.2A			18.49	1.0000	18.000	0.0190		6.80	9.11
PIPE 2.2	P.DWCB.2C	P.HW.2B	0.42	0.9000	20.50	10.0000	18.000	0.0190	2.28	6.80	3.72
PIPE 2.3	P.BWCB.2D	P.DWCB.2C	0.61	0.9000	80.77	2.0000	18.000	0.0190	3.11	2.98	2.12
PIPE 3.1	P.JB.3A	P.WQ.3B	0.00		67.58	0.7500	10.000	0.0120	0.00	1.20	3.10
PIPE 3.2	P.JB.3B	P.JB.3A	0.11	0.9500	38.69	1.0000	10.000	0.0120	0.63	1.20	3.10
PIPE 3.3	P.JB.3C	P.JB.3B	0.11	0.9500	67.58	0.7500	10.000	0.0120	0.63	0.61	1.61

48.

- Soil series for the project site and their delineation.
- Soil series delineations are required for the Plan review and can be found on the NRCS website. The highest level of soil survey required for the project site, such as a level three or level four survey for projects that will be using septic systems, must be delineated on the Plan. The soil series delineation should be shown on the existing site Plan or the initial phase Plan. A chart listing the soils located on the project should be shown on the sheet with their delineation.

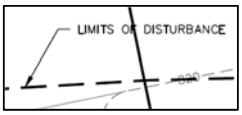
SOIL TYPES

SYMBOL	SOIL NAME	DEPTH (inches)	ERODIBILITY	PERMEABILITY (inches/hour)	TEXTURE	DRAINAGE	SLOPE	STRUCTURE	EROSION FACTORS K	T
LeC3	Lloyd Clay Loam	0-7	Severe	0.57-1.98	Clay Loam	Well Drained	6-10%	GRANULAR	---	---
LeD3	Lloyd Clay Loam	0-7	Severe	0.57-1.98	Clay Loam	Well Drained	10-15%	GRANULAR	---	---
LeD4	Severely Eroded Clay Loam	0-7	Severe	0.57-1.98	Clay Loam	Well Drained	10-15%	GRANULAR	---	---
LdB2	Lloyd Sandy Loam	0-7	Slight	0.57-1.98	Sandy Loam	Well Drained	2-6%	GRANULAR	---	---
LdC2	Lloyd Sandy Loam	0-7	Severe	0.57-1.98	Sandy Loam	Well Drained	6-10%	GRANULAR	---	---
LdD2	Lloyd Sandy Loam	0-7	Severe	0.57-1.98	Sandy Loam, Clay Loam	Well Drained	10-15%	GRANULAR	---	---
Ap	Alluvial Land	0-60	---	---	Sandy Loam	Somewhat Poorly	0-2%	---	---	---

NOTE:
SOIL INFORMATION WAS TAKEN THE MONMOUTH COUNTY NRCS SOIL SURVEY.

49.

- The limits of disturbance for each phase of construction.
- The limits of disturbance for the initial phase should delineate only the area required to be disturbed for the installation of perimeter control and initial sediment storage. The intermediate phase should delineate the entire area to be disturbed for that phase, such as grading, drainage, utilities installed, etc. The final phase should delineate any additional areas to be disturbed such as individual lots, etc.



50.

- Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the plan.

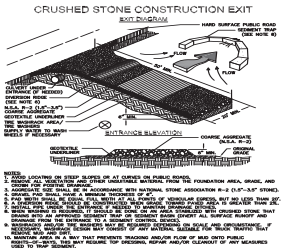
50. (Cont.)

- For each common drainage location, a temporary (or permanent) sediment basin (Sd3, Sd4, Rt, or excavated Sd2) providing at least 67 cubic yards of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site. The 67 cubic yards of storage per acre does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area the sediment basin. Sediment basins may not be appropriate for some common drainage locations and a written justification explaining the decision not to use sediment basins must be included in the Plan. Worksheets from the Manual must be completed and shown on the Plan or attached to the Plan for each temporary sediment basin designed for the project. All cross sections and details required per the Manual for Sd3's must be shown on the ES&PC detail section of the Plan. Completed worksheets from the Manual must be shown on the Plan for each retrofit and excavated inlet sediment trap. When the design professional chooses to use equivalent controls the calculations used to obtain the required 67 cubic yards per acre drained must be included in the Plan. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan.

51.

- Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
- BMPs for all phases of the Plan must be consistent with and no less stringent than the Manual and shown using uniform coding symbols from the Manual. The uniform coding symbols legend from the Manual must be included and may be shown on detail sheet or any of the ES&PC Plan sheets.

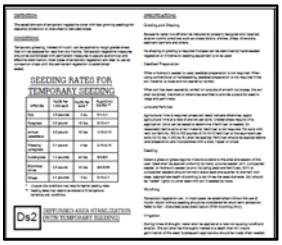
52.



- Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
- The erosion and sediment control detail sheet must show a detailed drawing for each structural BMP shown on the Plan. All BMPs and details shown must, at a minimum, meet the guidelines given in the Manual. Note that a worksheet is provided in the Manual for most structural BMPs that must be included on the ES&PC Plan or detail sheet.

53.

- Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates, and seeding, fertilizer, lime, and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.
- Must be shown on ES&PC Plan, on the ES&PC detail sheet or under ES&PC notes.



Questions?

GSWCC
Urban Program
P.O. Box 8024
Athens, GA 30603
(706) 552-4474

Insert Yellow Sheet

Back of Yellow Sheet

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
STAND ALONE CONSTRUCTION PROJECTS

SWCD:_____

Project Name:_____ **Address:**_____
City/County:_____ **Date on Plans:**_____

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
		1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
		2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed) The Level II certification must be issued to the Design Professional whose signature and seal are on the Plan.
		3 Limits of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist.* (A copy of the written approval by EPD must be attached to the plan for the plan to be reviewed.)
		4 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls. May be shown on ES&PC Plan sheets and/or ES&PC notes.
		5 Provide the name, address and phone number of primary permittee. May be shown on cover sheet, ES&PC Plan or under ES&PC notes.
		6 Note total and disturbed acreage of the project or phase under construction. Must be shown on ES&PC Plan or under ES&PC notes.
		7 Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees. GPS location of the construction exit must be shown on cover sheet and may also be shown on ES&PC Plan sheets and ES&PC notes. It must match the NOI.
		8 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions. The initial Plan date should be shown on all pages. With each resubmittal, the revision date and entity requesting revisions should be shown on cover sheet and each sheet that has been revised.
		9 Description of the nature of construction activity. Provide a description of the existing site and a description of the proposed project. These must be shown on ES&PC Plan or under ES&PC notes.
		10 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary. Site location must be delineated showing surrounding area roads and highways. If the project is being done in phases, each individual phase must be delineated and labeled. This information is important for Plan Reviewers if a site visit is . needed, or if the site needs to be located on another map.
		11 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected. The name of the initial receiving water(s) or if unnamed, the first named blue line stream indicated on the appropriate USGS Topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of whether the receiving water(s) supports warm water fisheries or is a trout stream. Describe any neighboring area which could be affected by the

post-developed runoff from the site.

12 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 15 of the permit.
The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes. "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 supervision."

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 page 15 of the permit.*
The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes. "I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of Best Management Practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of Best Management Practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR 100001."

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."*
The Plan must include a statement indicating that the primary permittee must retain the design professional who prepared the Plan, except when the primary 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 primary 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.

15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
See Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN (I) and (II) on pages 15,16,17 & 18 of the permit and show under ES&PC notes.

16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
When the project requires an approved buffer variance from the GA EPD, an indication shall be shown on the ES&PC Plan. A description of the encroachment activity must be shown on the ES&PC Plan or under ES&PC notes.

17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."*
See part IV. C. on page 19 of the permit. This can be clarified in a narrative and shown under ES&PC notes. Revisions or amendments should be submitted to the Local Issuing Authority for review.

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."*
The Plan must include a description of how waste materials, including waste building materials, construction and demolition debris, concrete washout, excavated sediment, etc., will be properly disposed of. Any disposal of solid waste to waters of the State is prohibited unless authorized by a Section 404 permit.

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."
Must be shown on ES&PC Plan or under ES&PC notes.

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."
Must be shown on ES&PC Plan or under ES&PC notes.

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."
Must be shown on ES&PC Plan or under ES&PC notes.

22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment.*
If any storm water associated with construction activities discharges into an Impaired Stream Segment that has been listed for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff), the ES&PC Plan must include at least four (4) of the BMPs listed in Part III.C.2. (a) - (t) of the Permit. The Impaired Stream Segment(s) should be delineated on the ES&PC Plan. Georgia's most current and subsequent "305(b)/303(d) List Documents (Final)' can be veiwed on the GAEPD website. www.gaepd.org/Documents/305b.html

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.*
List of TMDL Implementation Plans can be viewed on the GAEPD website, www.gaepd.org. The TMDL Implementation Plan for sediment should be delineated on the ES&PC Plan.

24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited.*
When the project allows the concrete washdown of tools, concrete mixer chutes, hoppers and rear of the vehicles on the project site delineate the location of the area provided for washing and provide detail of BMPs that will be used. If the project does not allow the concrete washdown on the project site, note that on the Plan.

25 Provide BMPs for the remediation of all petroleum spills and leaks.
The Plan must provide BMPs and guidance for the prevention of spills and leaks of petroleum products from any areas where such products are stored or used as well as guidance for the proper remediation of any spills and leaks that do occur. This information can be in the form of a separate Spill Prevention/Spill Response document so long as that information accompanies the Plan.

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.*
The Plan must contain a 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. These may include storm water detention and retention structures, use of vegetated swales and natural depressions for flow attenuation or a combination of these practices (sequential systems). The Plan must also include a technical explanation of the basis used to select these practices where flows will exceed pre-development levels. The Plan must indicate that velocity dissipation devices will be placed at discharge locations and along the length of any outflow channel in order to provide a non-erosive flow so that the natural physical and biological characteristics and functions of the water course are maintained and protected. The installation of these devices may be subject to Section 404 of the Federal Clean Water Act.

Note: The permittee is only responsible for the installation and maintenance of storm water management devices prior to final stabilization of the site and not the operation and maintenance of such structures after construction activities have been completed.

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

The Plan must identify all potential sources of storm water pollution expected to be present on the site and provide a narrative explaining how the pollutants will be minimized in the storm water discharges.

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

Activity schedule must be site specific. The narrative description and timeline for each phase of construction may be shown on ES&PC Plan sheet or under ES&PC notes.

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

The Plan must include all of the inspections and record keeping requirements of the primary permittee as stated in Part IV.D.4.a. on page 23 of the Permit. The complete inspection and record keeping requirements shall be shown on the Plan under ES&PS notes.

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

See page 26 Sampling Frequency and page 25 section E. Reporting in the permit. Complete sampling frequency and reporting requirements are to be shown on the Plan under ES&PC notes.

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

See page 28 section F. Retention of Records in the permit. Complete details of retention of records are to be shown on the Plan under ES&PC notes.

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

This narrative must is to be shown on the Plan under ES&PC notes and shall include quality control/assurance procedures and precise sampling methodology for each sampling location.

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

When the permittee has determined that some or all outfalls will be monitored, a rationale must be shown on the Plan under ES&PC notes which includes 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).

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

The Plan shall include 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 locations of the site or the common development. The map must include (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 the mandatory field verification, into which the storm water is discharged and (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 storm water(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.

35 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.*

The Plan must be shown in a minimum of three phases with each phase shown on a separate sheet. Initial phase of the Plan must include the required 67 cy per acre sediment storage, construction exit, tree-save fence if applicable and any other BMPs necessary to prevent sediment from leaving the site such as silt fence, inlet protection on existing storm drain structures, diversions, check dams, temporary ground cover, etc. Limits of disturbance for the initial phase are to be only the areas needed to install initial BMPs. The intermediate phase should show rough grading and utility construction. BMPs should include initial inlet protection, additional silt fence as needed, any revised sediment storage needed as drainage basins are altered, outlet protection, retrofit if applicable, matting with temporary or permanent vegetation as needed, temporary down drains, filter rings, etc. Final phase of Plan should show finished grade, curbing and paving if applicable, building construction if applicable, etc. BMPs should include permanent vegetation, appropriate inlet protection, etc.
For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and the final BMPs are the same, the Plan may combine all of the BMPs into a single phase Plan. The Plan will include appropriate staging and access requirements for construction equipment.

36 Graphic scale and North arrow.
The graphic scale and North arrow must be clearly shown on all phases of the ES&PC Plan sheets.

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

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or larger scale	Flat 0 - 2%	0.5 or 1
	Rolling 2 - 8%	1 or 2
	Steep 8% +	2,5 or 10

The initial, intermediate, and final phase sheets of the Plan must show the proposed grade in bold contour lines with the above intervals overlaying the original contour lines. Elevations of both the existing and proposed contour lines must be shown.

38 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.
Please refer to the Alternative BMP Guidance Document found at www.gaswcc.georgia.gov

39 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.*
Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.

40 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
The State Law of Georgia mandates these minimum undisturbed buffers, but the Local Issuing Authorities are allowed to require more stringent buffers of State waters. The minimum undisturbed buffers required by the State and all other buffers of State waters required by the issuing authority must be delineated. Any undisturbed buffer area that is impacted by the project site must be noted on the Plan.

41 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.
ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE MUST BE DELINEATED ON ALL PHASES OF THE PLAN. When a project is located in a jurisdiction with a certified Local Issuing Authority and the LIA must make a determination of State waters that are not delineated on the plan, the Plan review could be delayed for beyond the full forty-five day review time allowed to the LIA, or the full thirty-five day review time allowed to the District if the District is reviewing the plan. For all projects in a jurisdiction where there is no certified Local Issuing Authority regulating that project, EPD is responsible for State waters determinations and there are no time limits for reviewing the Plan.
ALL WETLANDS LOCATED WITHIN THE PROJECT SITE ONLY MUST BE DELINEATED.
If the Local Issuing Authority requires an undisturbed buffer of wetlands, delineate required buffer.

42 Delineation and acreage of contributing drainage basins on the project site.

All exsisting drainage basins on the project site and their acreage must be delineated on the exisitng conditions and/or on the initial phase of the Plan. As the basins are altered or new ones created during intermediate and fnal phases, the new basins and their acreage must be delineated throughout each phase of the Plan.

43 Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions.*

Hydrology study and drainage maps should be separate from the Plan. Maps should include each individual basin draining to, through, and from, the project site, with each one delineated, labeled and showing its total acreage.

44 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.

The Plan must provide both pre- and post-construction estimates of the runoff coefficient or peak discharge flow for the site. This can be in the form of a hydrologic study so long as that study is made a part of the Plan and accompanies the Plan. A complete hydrologic study is not a required element of the Plan, only the pre and post-construction estimates of the run-off coefficient or peak discharge flow for the site.

45 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.

The storm-drain pipe and weir velocities must show the flow characteristics of the pipe at full flow including pipe diameter, flow rate (cfs), velocity (fps), and tailwater conditions. This information should be shown in a chart on the storm-drain profile sheet, ES&PC intermediate phase sheet, or on the ES&PC detail sheet that shows outlet protection.

The dimensions of the apron must include length (La), width at the headwall (W1), down-stream width (W2), average stone diameter (d50), and stone depth (D) designed in accordance with Figures 6-24.1 and 6-24.2 in the Manual. These should be shown in a chart on ES&PC intermediate and/or final phase sheet or ES&PC detail sheet with outlet protection.

velocity dissipation devices shall be placed at all 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 so that the natural physical and biological functions and characteristics are maintained and protected.

46 Soil series for the project site and their delineation.

Soil series delineations are required for the Plan review and can be found on the NRCS web site. The highest level of soil survey required for the project site, such as a level three or level four survey for projects that will be using septic systems, must be delineated on the Plan. The soil series delineation should be shown on the existing site Plan or the initial phase Plan. A chart listing the soils located on the project should be shown on the sheet with their delineation.

47 The limits of disturbance for each phase of construction.

The limits of disturbance for the initial phase should delineate only the area required to be disturbed for the installation of perimeter control and initial sediment storage. The intermediate phase should delineate the entire area to be disturbed for that phase, such as grading, drainage, utilities installed, etc. The final phase should delineate any additional areas to be disturbed such as individual lots, etc.

48 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justfication explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasable, a written justification explaining this decision must be included in the Plan.

For each common drainage location, a temporary (or Permanent) sediment basin (Sd3, Sd4, Rt, or excavated Sd2) providing

at least 67 cubic yards of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site. The 67cubic yards of storage per acre does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. Sediment basins may not be appropriate for some common drainage locations and a written justification explaining the decision not to use sediment basins must be included in the Plan. Worksheets from the Manual must be completed and shown on the Plan or attached to the Plan for each temporary sediment basin designed for the project. All cross sections and details required per the Manual for Sd3's must be shown on the ES&PC detail section of the Plan. Completed worksheets from the Manual must be shown on the Plan for each retrofit and excavated inlet sediment trap. When the design professional chooses to use equivalent controls the calculations used to obtain the required 67 cubic yards per acre drained must be included on the Plan. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan.

49 Location of Best Management Practices that are consistent with, and no less stringent than, the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
BMPs for all phases of the Plan must be consistent with and no less stringent than the Manual and shown using uniform coding symbols from the Manual. The uniform coding symbols legend from the Manual must be included and may be shown on detail sheet or any of the ES&PC Plan sheets.

50 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
The erosion and sediment control detail sheet must show a detailed drawing for each structural BMP shown on the Plan. All BMPs and details shown must, at a minimum, meet the guidelines given in the Manual. Note that a worksheet is provided in the Manual for most structural BMPs that must be included on the ES&PC Plan or detail sheet.

51 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.
Must be shown on ES&PC Plan, on the ES&PC detail sheet or under ES&PC notes.

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

Insert Yellow Sheet

Back of Yellow Sheet

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
INFRASTRUCTURE CONSTRUCTION PROJECTS

SWCD:_____

Project Name:_____ **Address:**_____

City/County:_____ **Date on Plans:**_____

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
		1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
		2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed) The Level II certification must be issued to the Design Professional whose signature and seal are on the Plan.
		3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls. May be shown on ES&PC Plan sheets and/or ES&PC notes.
		4 Provide the name, address and phone number of primary permittee. May be shown on cover sheet, ES&PC Plan or under ES&PC notes.
		5 Note total and disturbed acreage of the project or phase under construction. Must be shown on ES&PC Plan or under ES&PC notes.
		6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in decimal degrees. GPS locations of the begining and end of the infrastructure project must be shown on cover sheet and may also be shown on ES&PC Plan sheets and ES&PC notes. It must match the NOI.
		7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions. The initial Plan date should be shown on all pages. With each resubmittal, the revision date, and the entity requesting revisions should be shown on cover sheet and each sheet that has been revised.
		8 Description of the nature of construction activity. Provide a description of the existing site and a description of the proposed project. These must be shown on ES&PC Plan or under ES&PC notes.
		9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary. Site location must be delineated showing surrounding area roads and highways. If the project is being done in phases, each individual phase must be delineated and labeled. This information is important for Plan Reviewers if a site visit is . needed, or if the site needs to be located on another map.
		10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected. The name of the initial receiving water(s) or if unnamed the first named blue line stream indicated on the appropriate USGS Topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of whether the receiving water(s) supports warm water fisheries or is a trout stream. Describe any neighboring area which could be affected by the post-developed runoff from the site.
		11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 15 of the permit.

The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes. "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 supervision."

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

The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes. "I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of Best Management Practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of Best Management Practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR 100002."

13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative sampling as stated on page 26 of permit as applicable.*

The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes."I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of: (a) all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent steams and other water bodies, or (b) where any such specific identified perennial or intermittent stream and other water body is not proposed to be sampled, I have determined in my professional judgment, utilizing the factors required in the General NPDES Permit No. GAR 100002, that the increase in the turbidity of each specific identified sampled receiving water will be representative of the increase in the turbidity of a specific identified un-sampled receiving water."

14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements,perimeter control BMPs and sediment basins in accordance with part IV.A.5. within 7 days after installation."*

The Plan must include a statement indicating that the primary permittee must retain the design professional who prepared the Plan, or an alternative professional approved by EPD in writing, to inspect the installation of the intial sediment storage requirements and perimeter control BMPs within (7) days after installation. Alternatively, for linear infrastructure projects, the primary permittee must retain the design professional who prepared the Plan, or alternative design professional approved by EPD in writing to inspect (a) the installation of sediment storage requirements and perimeter control BMPs for the "initial segment" of the linear infrastructure project and (b) all sediment basins within the entire linear infrastructure project within (7) days after the installation. For the purposes of the specific requirements in Part IV.A.5., the disturbed acerage of the "initial segment" of a linear infrastructure project must be equal to or greater than 10% of the total estimated disturbed acreage for the linear infrastructure project but not less than one(1) acre. 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 primary permittee within (7) days and the permittee must correct all deficiencies within (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.

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

See Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN (I) and (II) on pages 15,16 & 17 of the permit and show under ES&PC notes.

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

When the project requires an approved buffer variance from the GA EPD, an indication shall be shown on the ES&PC

Plan. A description of the encroachment activity must be shown on the ES&PC Plan or under ES&PC notes.

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

See part IV. C. on page 19 of the permit. This can be clarified in a narrative and shown under ES&PC notes. Revisions or amendments should be submitted to the Local Issuing Authority for review.

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."*

The Plan must include a description of how waste materials, including waste building materials, construction and demolition debris, concrete washout, excavated sediment, etc., will be properly disposed of. Any disposal of solid waste to waters of the State is prohibited unless authorized by a Section 404 permit.

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."

Must be shown on ES&PC Plan or under ES&PC notes.

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."

Must be shown on ES&PC Plan or under ES&PC notes.

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."

Must be shown on ES&PC Plan or under ES&PC notes.

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

If any storm water associated with construction activities discharges into an Impaired Stream Segment that has been listed for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff), the ES&PC Plan must include at least four (4) of the BMPs listed in Part III.C.2. (a) - (t) of the Permit. The Impaired Stream Segment(s) should be delineated on the ES&PC Plan. Georgia's most current and subsequent "305(b)/303(d) List Documents (Final)' can be veiwed on the GAEPD website. www.gaepd.org/Documents/305b.html

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.*

List of TMDL Implementation Plans can be viewed on the GAEPD website, www.gaepd.org. The TMDL Implementation Plan for sediment should be delineated on the ES&PC Plan.

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

When the project allows the concrete washdown of tools, concrete mixer chutes, hoppers and rear of the vehicles on the project site, delineate the location of the area provided for washing and provide detail of BMPs that will be used. If the project does not allow the concrete washdown on the project site, note that on the Plan.

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

The Plan must provide BMPs and guidance for the prevention of spills and leaks of petroleum products from any areas where such products are stored or used as well as guidance for the proper remediation of any spills and leaks that do occur. This information can be in the form of a separate Spill Prevention/Spill Response document so long as that

information accompanies the Plan.

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.*

The Plan must contain a 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. These may include storm water detention and retention structures, use of vegetated swales and natural depressions for flow attenuation or a combination of these practices (sequential systems). The Plan must also include a technical explanation of the basis used to select these practices where flows will exceed pre-development levels. The Plan must indicate that velocity dissipation devices will be placed at discharge locations and along the length of any outflow channel in order to provide a non-erosive flow so that the natural physical and biological characteristics and functions of the water course are maintained and protected. The installation of these devices may be subject to Section 404 of the Federal Clean Water Act.

Note: The permittee is only responsible for the installation and maintenance of storm water management devices prior to final stabilization of the site and not the operation and maintenance of such structures after construction activities have been completed.

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

The Plan must identify all potential sources of storm water pollution expected to be present on the site and provide a narrative explaining how the pollutants will be minimized in the storm water discharges.

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

Activity schedule must be site specific. The narrative description and timeline for each phase of construction may be shown on ES&PC Plan sheet or under ES&PC notes.

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

The Plan must include all of the inspections and record keeping requirements of the primary permittee as stated in Part IV.D.4.a. on page 23 of the Permit. The complete inspection and record keeping requirements shall be shown on the Plan under ES&PS notes.

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

See page 26 Sampling Frequency and page 25 section E. Reporting in the permit. Complete sampling frequency and reporting requirements are to be shown on the Plan under ES&PC notes.

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

See page 28 section F. Retention of Records in the permit. Complete details of retention of records are to be shown on the Plan under ES&PC notes.

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

This narrative must be shown on the Plan under ES&PC notes and shall include quality control/assurance procedures and precise sampling methodology for each sampling location.

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

When the permittee has determined that some or all outfalls will be monitored, a rationale must be shown on the Plan under ES&PC notes which includes 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).

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

The Plan shall include 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 locations of the site or the common development. The

map must include (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 the mandatory field verification, into which the storm water is discharged and (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 storm water(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.

35 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.*

The Plan must be shown in a minimum of three phases with each phase shown on a separate sheet. Initial phase of the Plan must include the required 67 cy per acre sediment storage, construction exit, tree-save fence if applicable and any other BMPs necessary to prevent sediment from leaving the site such as silt fence, inlet protection on existing storm drain structures, diversions, check dams, temporary ground cover, etc. Limits of disturbance for the initial phase are to be only the areas needed to install initial BMPs. The intermediate phase should show rough grading and utility construction. BMPs should include initial inlet protection, additional silt fence as needed, any revised sediment storage needed as drainage basins are altered, outlet protection, retrofit if applicable, matting with temporary or permanent vegetation as needed, temporary down drains, filter rings, etc. Final phase of Plan should show finished grade, curbing and paving if applicable, building construction if applicable, etc. BMPs should include permanent vegetation, appropriate inlet protection, etc.
For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and the final BMPs are the same, the Plan may combine all of the BMPs into a single phase Plan. The Plan will include appropriate staging and access requirements for construction equipment.

36 Graphic scale and North arrow.

The graphic scale and North arrow must be clearly shown on all phases of the ES&PC Plan sheets.

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

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

The initial, intermediate, and final phase sheets of the Plan must show the proposed grade in bold contour lines with the above intervals overlaying the original contour lines. Elevations of both the existing and proposed contour lines must be shown.

38 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.

Please refer to the Alternative BMP Guidance Document found at www.gaswcc.georgia.gov

39 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.*

Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.

40 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.

The State Law of Georgia mandates these minimum undisturbed buffers, but the Local Issuing Authorities are allowed to require more stringent buffers of State waters. The minimum undisturbed buffers required by the State and all other buffers of State waters required by the issuing authority must be delineated. Any undisturbed buffer area that is impacted by the project site must be noted on the Plan.

41 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.

ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE MUST BE DELINEATED ON ALL PHASES OF THE PLAN. When a project is located in a jurisdiction with a certified Local Issuing Authority and the LIA must make a determination of State waters that are not delineated on the plan, the Plan review could be delayed for beyond the full forty-five day review time allowed to the LIA, or the full thirty-five day review time allowed to the District if the District is reviewing the plan. For all projects in a jurisdiction where there is no certified Local Issuing Authority regulating that project, EPD is responsible for State waters determinations and there is no time limits for reviewing the Plan.

ALL WETLANDS LOCATED WITHIN THE PROJECT SITE ONLY MUST BE DELINEATED.

If the Local Issuing Authority requires an undisturbed buffer of wetlands, delineate required buffer.

42 Delineation and acreage of contributing drainage basins on the project site.

All exsisting drainage basins on the project site and their acreage must be delineated on the exisitng conditions and/or on the initial phase of the plan. As the basins are altered or new ones created during intermediate and fnal phases, the new basins and their acreage must be delineated throughout each phase of the Plan.

43 Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.

Hydrology study and drainage maps should be separate from the Plan. Maps should include each individual basin draining to, through and from the project site, with each one delineated, labeled and showing its total acreage.

44 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.

The Plan must provide both pre- and post-construction estimates of the runoff coefficient or peak discharge flow for the site. This can be in the form of a hydrologic study so long as that study is made a part of the Plan and accompanies the Plan. A complete hydrologic study is not a required element of the Plan, only the pre and post-construction estimates of the run-off coefficient or peak discharge flow for the site.

45 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.

The storm-drain pipe and weir velocities must show the flow characteristics of the pipe at full flow, including pipe diameter, flow rate (cfs), velocity (fps), and tailwater conditions. This information should be shown in a chart shown on storm-drain profile sheet, ES&PC intermediate phase sheet or on the ES&PC detail sheet that shows outlet protection.

The dimensions of the apron must include length (La), width at the headwall (W1), down-stream width (W2), average stone diameter (d50), and stone depth (D) designed in accordance with Figures 6-24.1 and 6-24.2 in the Manual. These should be shown in a chart on ES&PC intermediate and/or final phase sheet or ES&PC detail sheet with outlet protection.

velocity dissipation devices shall be placed at all 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 so that the natural physical and biological functions and characteristics are maintained and protected.

46 Soil series for the project site and their delineation.

Soil series delineations are required for the Plan review and can be found on the NRCS web site. The highest level of soil survey required for the project site, such as a level three or level four survey for projects that will be using septic systems, must be delineated on the Plan. The soil series delineation should be shown on the existing site Plan or the initial phase Plan. A chart listing the soils located on the project should be shown on the sheet with their delineation.

47 The limits of disturbance for each phase of construction.

The limits of disturbance for the initial phase should delineate only the area required to be disturbed for the installation of perimeter control and initial sediment storage. The intermediate phase should delineate the entire area to be disturbed for that phase, such as grading, drainage, utilities installed, etc. The fina phase should delineate any additional areas to be disturbed such as individual lots, etc.

48 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin,

retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justfication explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasable, a written justification explaining this decision must be included in the plan.

For each common drainage location, a temporary (or permanent) sediment basin (Sd3, Sd4, Rt, or excavated Sd2) providing at least 67 cubic yards of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site. The 67cubic yards of storage per acre does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. Sediment basins may not be appropriate for some common drainage locations and a written justification explaining the decision not to use sediment basins must be included in the Plan. Worksheets from the Manual must be completed and shown on the Plan or attached to the Plan for each temporary sediment basin designed for the project. All cross sections and details required per the Manual for Sd3's must be shown on the ES&PC detail section of the Plan. Completed worksheets from the Manual must be shown on the Plan for each retrofit and excavated inlet sediment trap. When the design professional chooses to use equivalent controls the calculations used to obtain the required 67 cubic yards per acre drained must be included on the Plan. If outlet structures that withdraw water from the surface are not feasible , a written justification explaining this decision must be included in the Plan.

49 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.

BMPs for all phases of the Plan must be consistent with and no less stringent than the Manual and shown using uniform coding symbols from the Manual. The uniform coding symbols legend from the Manual must be included and may be shown on detail sheet or any of the ES&PC Plan sheets.

50 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.

The erosion and sediment control detail sheet must show a detailed drawing for each structural BMP shown on the Plan. All BMPs and details shown must, at a minimum, meet the guidelines given in the Manual. Note that a worksheet is provided in the Manual for most structural BMPs that must be included on the ES&PC Plan or detail sheet.

51 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.

Must be shown on ES&PC Plan, on the ES&PC detail sheet or under ES&PC notes.

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

Insert Yellow Sheet

Back of Yellow Sheet

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
COMMON DEVELOPMENT CONSTRUCTION PROJECTS (Primary and Tertiary Permittees)

SWCD:_____

Project Name:_____ **Address:**_____

City/County:_____ **Date on Plans:**_____

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
		1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
		2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed) The Level II certification must be issued to the Design Professional whose signature and seal are on the Plan.
		3 Limit of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist.* (A copy of the written approval by EPD must be attached to the Plan for the Plan to be reviewed.)
		4 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls. May be shown on ES&PC Plan sheets and/or ES&PC notes.
		5 Provide the name, address and phone number of the primary permittee or tertiary permittee. May be shown on cover sheet, ES&PC Plan or under ES&PC notes.
		6 Note total and disturbed acreage of the project or phase under construction. Must be shown on ES&PC Plan or under ES&PC notes.
		7 Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees. GPS location of the construction exit must be shown on cover sheet and may also be shown on ES&PC Plan sheets and ES&PC notes. It must match the NOI.
		8 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions. The initial Plan date should be shown on all pages. With each resubmittal the revision date and entity requesting revisions should be shown on cover sheet and each sheet that has been revised.
		9 Description of the nature of construction activity. Provide a description of the existing site and a description of the proposed project. These must be shown on ES&PC Plan or under ES&PC notes.
		10 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary. Site location must be delineated showing surrounding area roads and highways. If the project is being done in phases, each individual phase must be delineated and labeled. This information is important for Plan reviewers if a site visit is . needed, or if the site needs to be located on another map.
		11 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected. The name of the initial receiving water(s) or if unnamed the first named blue line stream indicated on the appropriate USGS Topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of whether the receiving water(s) supports warm water fisheries or is a trout stream. Describe any neighboring area which could be affected by the post-developed runoff from the site.

12 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 18 of the permit.
The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes. "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 supervision."

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 pages 17 & 18 of the permit.
The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes. "I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of Best Management Practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR 100003."

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."*
The Plan must include a statement indicating that the primary permittee must retain the design professional who prepared the Plan, except when the primary 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 primary 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.

15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
See Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN (I) and (II) on pages 15,16,17 & 18 of the permit and show under ES&PC notes.

16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
When the project requires an approved buffer variance from the GA EPD, an indication shall be shown on the ES&PC Plan. A description of the encroachment activity must be shown on the ES&PC Plan or under ES&PC notes.

17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."
See part IV. C. on page 21 & 22 of the permit. This can be clarified in a narrative and shown under ES&PC notes. Revisions or amendments should be submitted to the Local Issuing Authority for review.

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."
The Plan must include a description of how waste materials, including waste building materials, construction and demolition debris, concrete washout, excavated sediment, etc., will be properly disposed of. Any disposal of solid waste to waters of the State is prohibited unless authorized by a Section 404 permit.

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."
Must be shown on ES&PC Plan or under ES&PC notes.

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."

Must be shown on ES&PC Plan or under ES&PC notes.

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."

Must be shown on ES&PC Plan or under ES&PC notes.

22 Indication that the applicable portion of the primary permittees ES&PC Plan is to be provided to each secondary permittee prior to the secondary conducting any construction activity and that each secondary shall sign the Plan or portion of the Plan applicable to their site. List the names and addresses of all secondary permittees.*

The Plan must contain a list of and contact information for all secondary permittees and a statement that the primary permittee shall provide a copy of the Plan (and any subsequent revisions to the Plan) to each secondary permittee. The Plan must include a section for each secondary to sign indicating that they have made a written acknowledgement of receipt of the Plan and a copy of the acknowledgement must be kept in the primary's records.

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

If any storm water associated with construction activities discharges into an Impaired Stream Segment that has been listed for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff), the ES&PC Plan must include at least four (4) of the BMPs listed in Part III.C.2. (a) - (t) of the Permit. The Impaired Stream Segment(s) should be delineated on the ES&PC Plan. Georgia's most current and subsequent "305(b)/303(d) List Documents (Final)' can be veiwed on the GAEPD website. www.gaepd.org/Documents/305b.html

24 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 23 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.*

List of TMDL Implementation Plans can be viewed on the GAEPD website, www.gaepd.org. The TMDL Implementation Plan for sediment should be delineated on the ES&PC Plan.

25 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.

When the project allows the concrete washdown of tools, concrete mixer chutes, hoppers and rear of the vehicles on the project site delineate the location of the area provided for washing and provide detail of BMPs that will be used. If the project does not allow the concrete washdown on the project site, note that on the Plan.

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

The Plan must provide BMPs and guidance for the prevention of spills and leaks of petroleum products from any areas where such products are stored or used as well as guidance for the proper remediation of any spills and leaks that do occur. This information can be in the form of a separate Spill Prevention/Spill Response document so long as that information accompanies the Plan.

27 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.

The Plan must contain a 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. These may include storm water detention and retention structures, use of vegetated swales and natural depressions for flow attenuation or a combination of these practices (sequential systems). The Plan must also include a technical explanation of the basis used to select these practices where flows will exceed pre-development levels. The Plan must indicate that velocity dissipation devices will be

placed at discharge locations and along the length of any outflow channel in order to provide a non-erosive flow so that the natural physical and biological characteristics and functions of the water course are maintained and protected. The installation of these devices may be subject to Section 404 of the Federal Clean Water Act.

Note: The permittee is only responsible for the installation and maintenance of storm water management devices prior to final stabilization of the site and not the operation and maintenance of such structures after construction activities have been completed.

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

The Plan must identify all potential sources of storm water pollution expected to be present on the site and provide a narrative explaining how the pollutants will be minimized in the storm water discharges.

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).

Activity schedule must be site specific. The narrative description and timeline for each phase of construction may be shown on ES&PC Plan sheet or under ES&PC notes.

30 Provide complete requirements of inspections and record keeping by the primary permittee or tertiary permittee.

The Plan must include all of the inspections and record keeping requirements of the primary permittee or tertiary permittee as stated in Part IV.D.4.a. on page 25 of the Permit. The complete inspection and record keeping requirements shall be shown on the Plan under ES&PS notes.

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

See page 31 Sampling Frequency and page 32 section E. Reporting in the permit. Complete sampling frequency and reporting requirements are to be shown on the Plan under ES&PC notes.

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

See page 33 section F. Retention of Records in the permit. Complete details of retention of records are to be shown on the Plan under ES&PC notes.

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

This narrative must is to be shown on the Plan under ES&PC notes and shall include quality control/assurance procedures and precise sampling methodology for each sampling location.

34 Appendix B rationale for NTU values at all outfall sampling points where applicable.*

When the permittee has determined that some or all outfalls will be monitored, a rationale must be shown on the Plan under ES&PC notes which includes 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).

35 Delineate all sampling locations if applicable, perennial and intermittent streams and other water bodies into which storm water is discharged. *

The Plan shall include 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 locations of the site or the common development. The map must include (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 the mandatory field verification, into which the storm water is discharged and (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 storm water(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.

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.

The Plan must be shown in a minimum of three phases with each phase shown on a separate sheet. Initial phase of the Plan must include the required 67 cy per acre sediment storage, construction exit, tree-save fence if applicable and any other BMPs necessary to prevent sediment from leaving the site such as silt fence, inlet protection on existing storm drain structures, diversions, check dams, temporary ground cover, etc. Limits of disturbance for the initial phase are to be only the areas needed to install initial BMPs. The intermediate phase should show rough grading and utility construction. BMPs should include initial inlet protection, additional silt fence as needed, any revised sediment storage needed as drainage basins are altered, outlet protection, retrofit if applicable, matting with temporary or permanent vegetation as needed, temporary down drains, filter rings, etc. Final phase of Plan should show finished grade, curbing and paving if applicable, building construction if applicable, etc. BMPs should include permanent vegetation, appropriate inlet protection, etc.

For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and the final BMPs are the same, the Plan may combine all of the BMPs into a single phase Plan. The Plan will include appropriate staging and access requirements for construction equipment.

37 Plan addresses BMPs for all phases of common development including individual building lots and out-parcels, etc regardless of who owns or operates the individual sites. Include a typical and any situational lots applicable.

The Erosion, Sedimentation & Pollution Control plans for a common development is designed for the life of the project and must include practices to be implemented by all secondary permittees involved, whether the primary permittee relinquishes ownership of the land rights or not. This includes providing an ES&PC Plan for typical and situational lots for each secondary permittee (builder) who purchases a lot from the primary permittee (developer). Situational lots may include, but are not limited to, lots adjacent to State waters buffers (in which a double row of Type S sediment barriers must be shown adjacent to wetlands, lots with an extreme grade, etc.

38 Graphic scale and North arrow.

The graphic scale and North arrow must be clearly shown on all phases of the ES&PC Plan sheets.

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

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or larger scale	Flat 0 - 2%	0.5 or 1
	Rolling 2 - 8%	1 or 2
	Steep 8% +	2,5 or 10

The initial, intermediate and final phase sheets of the Plan must show the proposed grade in bold contour lines with the above intervals overlaying the original contour lines. Elevations of both the existing and proposed contour lines must be shown.

40 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.

Please refer to the Alternative BMP Guidance Document found at www.gaswcc.georgia.gov

41 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.

Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.

42 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.

The State Law of Georgia mandates these minimum undisturbed buffers, but the Local Issuing Authorities are allowed to require more stringent buffers of State waters. The minimum undisturbed buffers required by the State and all other buffers

of State waters required by the issuing authority must be delineated. Any undisturbed buffer area that is impacted by the project site must be noted on the Plan.

43 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.

ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE MUST BE DELINEATED ON ALL PHASES OF THE PLAN. When a project is located in a jurisdiction with a certified Local Issuing Authority and the LIA must make a determination of State waters that are not delineated on the plan, the Plan review could be delayed for beyond the full forty-five day review time allowed to the LIA, or the full thirty-five day review time allowed to the District if the District is reviewing the plan. For all projects in a jurisdiction where there is no certified Local Issuing Authority regulating that project, EPD is responsible for State waters determinations and there is no time limits for reviewing the Plan.

ALL WETLANDS LOCATED WITHIN THE PROJECT SITE ONLY MUST BE DELINEATED.

If the Local Issuing Authority requires an undisturbed buffer of wetlands, delineate required buffer.

44 Delineation and acreage of contributing drainage basins on the project site.

All exsisting drainage basins on the project site and their acreage must be delineated on the exisitng conditions and/or on the initial phase of the Plan. As the basins are altered or new ones created during intermediate and fnal phases, the new basins and their acreage must be delineated throughout each phase of the Plan.

45 Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions.*

Hydrology study and drainage maps should be separate from the Plan. Maps should include each individual basin draining to, through and from the project site, with each one delineated, labeled and showing its total acreage.

46 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed. *

The Plan must provide both pre- and post-construction estimates of the runoff coefficient or peak discharge flow for the site. This can be in the form of a hydrologic study so long as that study is made a part of the Plan and accompanies the Plan. A complete hydrologic study is not a required element of the Plan, only the pre and post-construction estimates of the run-off coefficient or peak discharge flow for the site.

47 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.

The storm-drain pipe and weir velocities must show the flow characteristics of the pipe at full flow including pipe diameter, flow rate (cfs), velocity (fps), and tailwater conditions. This information should be shown in a chart shown on storm-drain profile sheet, ES&PC intermediate phase sheet or on the ES&PC detail sheet that shows outlet protection.

The dimensions of the apron must include length (La), width at the headwall (W1), down-stream width (W2), average stone diameter (d50), and stone depth (D) designed in accordance with Figures 6-24.1 and 6-24.2 in the Manual. These should be shown in a chart on ES&PC intermediate and/or final phase sheet or ES&PC detail sheet with outlet protection.

velocity dissipation devices shall be placed at all 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 so that the natural physical and biological functions and characteristics are maintained and protected.

48 Soil series for the project site and their delineation.

Soil series delineations are required for the Plan review and can be found on the NRCS web site. The highest level of soil survey required for the project site, such as a level three or level four survey for projects that will be using septic systems, must be delineated on the Plan. The soil series delineation should be shown on the existing site Plan or the initial phase Plan. A chart listing the soils located on the project should be shown on the sheet with their delineation.

49 The limits of disturbance for each phase of construction.

The limits of disturbance for the initial phase should delineate only the area required to be disturbed for the installation of perimeter control and initial sediment storage. The intermediate phase should delineate the entire area to be disturbed for that phase, such as grading, drainage, utilities installed, etc. The final phase should delineate any additional areas to be

disturbed such as individual lots, etc.

50 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justfication explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasable, a written justification explaining this decision must be included in the plan.
For each common drainage location, a temporary (or Permanent) sediment basin (Sd3, Sd4, Rt, or excavated Sd2) providing at least 67 cubic yards of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site. The 67cubic yards of storage per acre does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. Sediment basins may not be appropriate for some common drainage locations and a written justification explaining the decision not to use sediment basins must be included in the Plan. Worksheets from the Manual must be completed and shown on the Plan or attached to the Plan for each temporary sediment basin designed for the project. All cross sections and details required per the Manual for Sd3's must be shown on the ES&PC detail section of the Plan. Completed worksheets from the Manual must be shown on the Plan for each retrofit and excavated inlet sediment trap. When the design professional chooses to use equivalent controls the calculations used to obtain the required 67 cubic yards per acre drained must be included on the Plan. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the plan.

51 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
BMPs for all phases of the Plan must be consistent with and no less stringent than the Manual and shown using uniform coding symbols from the Manual. The uniform coding symbols legend from the Manual must be included and may be shown on detail sheet or any of the ES&PC Plan sheets.

52 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
The erosion and sediment control detail sheet must show a detailed drawing for each structural BMP shown on the Plan. All BMPs and details shown must, at a minimum, meet the guidelines given in the Manual. Note that a worksheet is provided in the Manual for most structural BMPs that must be included on the ES&PC Plan or detail sheet.

53 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.
Must be shown on ES&PC Plan, on the ES&PC detail sheet or under ES&PC notes.

*This requirement of the Common Development permit is not applicable to Tertiary Permittees with a Plan(s) for a typical individual lot(s), if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each individual lot is less than one (1) acre. If applicable, the * checklist item would be N/A.

Insert Yellow Sheet

Back of Yellow Sheet

APPENDIX 1

THE ES&PC PLAN MUST INCLUDE AT LEAST FOUR (4) OF THE FOLLOWING BMPS FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO A IMPAIRED STREAM SEGMENT AND FOR SITES WHICH EPD HAS APPROVED IN WRITING A REQUEST TO DISTURB 5O ACRES OR MORE AT ANY ONE TIME.

The four items chosen must be appropriate for the site conditions.

Plan Page #	Included Y/N	
		a. During construction activities, double the width of the 25 foot undisturbed vegetated buffer along all State waters requiring a buffer and the 50 foot undisturbed vegetated buffer along all State waters classified as "trout streams" requiring a buffer. During construction activities, EPD will not grant variances to any such buffers that are increased in width.
		b. Increase all temporary sediment basins and retrofitted storm water management basins to provide sediment storage of at least 3600 cubic feet (134 cubic yards) per acre drained.
		c. Use baffles in all temporary sediment basins and retrofitted storm water management basins to at least double the conventional flow path length to the outlet structure.
		d. A large sign (minimum 4 feet x 8 feet) must be on the site on the actual start date of construction visible from a public roadway identifying the construction site, the permittee(s), and the contact person(s) and telephone number(s) until a NOT has been submitted.
		e. Use anionic polyacrylamide (PAM) and/or mulch to stabilize areas left disturbed for more than seven (7) calendar days in accordance with Part III. D.1. of the NPDES Permit.
		f. Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24 hour period, recognizing the exceptions specified in Part IV.D.6.d. of the NPDES Permits.
		g. Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as provided for in O.C.G.A. 12-7-6 (a)(1).
		h. Reduce the total planned site disturbance to less than 50% impervious surfaces (excluding any State-mandated buffer areas from such calculations). All calculations must be included on the plan.
		i. Limit the amount of disturbed area at any one time to no greater than 25 acres or 50% of the total planned is less. All calculations must be included on the plan.
		j. Use “Dirt II” techniques available on the EPD website, www.gaepd.org (e.g., seep berms, sand filters, anionic PAM) to model and manage construction storm water runoff (including sheet flow). All calculations must be included on the Plan.
		k. Add appropriate organic soil amendments (e.g., compost) and conduct pre- and post-construction soil sampling to a depth of six (6) inches to document improved levels of soil carbon after final stabilization of the construction site.
		l. Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever construction storm water (including sheet flow) may be discharged. Mulch filter berms cannot be placed in waterways or areas of concentrated flow.
		m. Apply the appropriate Georgia Department of Transportation approved erosion control matting or blankets or bonded fiber matrix to all slopes steeper than 3:1. All graphical illustrations must be included on the Plan.
		n. Use appropriate erosion control matting or blankets instead of concrete in all construction storm water ditches and storm drainages designed for a 25 year, 24 hour rainfall event.
		o. Use anionic PAM under a passive dosing method (e.g., flocculant blocks) within construction storm water ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.

p. 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.

q. Conduct soil tests to identify and to implement site-specific fertilizer needs.

r. Certified personnel for primary permittees shall conduct inspections at least twice every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with 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) .

s. 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.

t. Use alternative BMPs whose performance has been documented to be superior to conventional BMPs as certified by aDesign Professional (unless disapproved by EPD or the State Soil and Water Conservation Commission). (If using this item please refer to the Alternative BMP guidance document found at www.gaswcc.georgia.gov)

u. 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.

Effective January 1, 2016

Insert Yellow Sheet

Back of Yellow Sheet

GSWCC Guidance Document for Alternative BMPs

Permit Erosion and Sedimentation Controls:

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

Required Documentation for Alternative BMPs:

1. One page summary detailing why the alternative BMP is equivalent or superior to the conventional BMPs found in the "Manual for Erosion and Sedimentation Control in Georgia" (Manual).
2. Documented side by side testing (alternative BMP vs. conventional BMP) using the appropriate design requirements and specifications contained in the Manual.
3. Proof that the alternative BMP was previously installed and worked under conditions comparable to the environmental conditions of the proposed site. This can be documented with photographs.
4. All specifications including the design requirements and the procedures for proper installation and maintenance.

All forms of documentation must be signed and certified by the Design Professional who is preparing the ES&PC Plan and must includes the Design Professional's seal and GSWCC Design Professional certification.

ES&PC Plan

When an ES&PC Plan has been reviewed by the GSWCC, EPD or a Local Issuing Authority (LIA) with a Memorandum of Agreement (MOA) to review ES&PC Plans, the following statement must be on the plan review sheet:

The use of the alternative BMP for _____ (type of BMP, e.g., silt fence Sd1) ***has been reviewed and has been determined to be allowable only for this ES&PC Plan. This review was site-specific based on the documentation submitted and certified by the Design Professional and required by the Georgia Environmental Protection Division and the Georgia Soil and Water Conservation Commission.***

FAQ: Frequently Asked Questions

Q: If replacing a conventional BMP with an alternative BMP on a previously approved set of ES&PC Plans, does the Design Professional have to resubmit the ES&PC Plans?
A: Yes, the Design Professional must resubmit the ES&PC Plans with the required alternative BMP documentation.

Q: What is meant by equivalent or superior to the conventional BMP found in the Manual?
A: Based on documentation that side by side testing has been conducted under comparable site conditions using the appropriate design requirements and specifications contained in the Manual: The alternative BMP is just as effective in its purpose and meets the same criteria as the conventional BMP in the Manual, OR its effectiveness exceeds those in the Manual for its purpose and meets or exceeds the criteria for the conventional BMP in the Manual for which it is designed to replace.

Q: What if a LIA with MOA wants to deny an alternative BMP?
A: The LIA with the MOA must forward the ES&PC Plan with the required alternative BMP documentation to the GSWCC (Urban Program).

NOTE: In jurisdictions where there is no LIA, the alternative BMP documentation must be submitted to EPD. In jurisdictions where there is a LIA, the alternative BMP documentation must be submitted to the GSWCC. Upon receiving the alternative BMP documentation, the GSWCC and EPD will work together to make the call of disapproval. This will improve communication and ensure coordination throughout the review process.

APPENDIX A-2
Joining the Equivalent BMP List: Application and Removal Process

BACKGROUND AND PURPOSE

Pursuant to the Clean Water Act, EPA established requirements for storm water discharges under the National Pollutant Discharge Elimination System (NPDES) permitting program. Georgia's Environmental Protection Division (EPD) administers three NDPES General Permits that authorize the discharge of storm water from sites where construction activities occur. Each of these permits requires BMPs to be implemented in accordance with the design specifications contained in the Manual for Erosion and Sediment Control (Manual) published by the Georgia Soil and Water Conservation Commission (GSWCC).

The allowance of the efficient addition of proven BMPs that are at least as stringent as the Manual for Erosion and Sediment Control recognizes the dynamic growth and technological advancements in the area of BMP development. Each of the NPDES General Permits authorizing the discharge of storm water also allows for Alternative BMPs – BMPs not listed in the Manual – to be used if they meet the following requirement:

The use of alternative BMPs whose performance has been documented to be equivalent or superior to conventional BMPs as certified by a Design Professional may be allowed (unless disapproved by EPD or the State Soil and Water Conservation Commission).

GSWCC and EPD have previously developed a guidance document for the use of Alternative BMPs. Specifically, the Design Professional preparing the Erosion, Sedimentation and Pollution Control Plan (ES&PC Plan) for a permittee must sign and certify the following documentation:

1. One page summary detailing why the alternative BMP is equivalent or superior to the conventional BMPs found in the Manual.
2. Documented side by side testing (alternative BMP vs. conventional BMP) using the appropriate design requirements and specifications contained in the Manual.
3. Proof that the alternative BMP was previously installed and worked under conditions comparable to the environmental conditions of the proposed site. This can be documented with photographs.
4. All specifications including the design requirements and the procedures for proper installation and maintenance.

In the year 2015, BMPs not in the Manual may be approved as part of the Alternative BMP process described above. Allowing a new mechanism for Alternative BMPs repeatedly used and approved under GSWCC Guidance to be placed on an Equivalent BMP List would increase efficiency for all the agencies involved and the development community. This would be similar to the 5th edition of the Manual's recognition of materials approved by the Georgia Department of Transportation (GDOT), which appear on GDOT's Qualified Products List (QPL). As of January 1, 2016, any product that seeks to be on the GDOT QPL List must first go through the Equivalent BMP process. GSWCC's approval of a BMP however does not ensure GDOT's adoption of that item into their QPL, design policies or procedures.

Therefore, the purpose of this document is to provide a process by which BMPs having demonstrated success in the field at least three times under the Alternative BMP process and having been bench tested may be placed on an Equivalent BMP List. The procedure also includes a mechanism for removing BMPs from the Equivalent BMP list. In addition, the GSWCC has the discretion to remove a BMP from the Equivalent BMP List at any time.

PROCEDURE FOR APPLYING FOR THE EQUIVALENT BMP LIST

For a BMP to be considered for inclusion on the Equivalent BMP List, a Design Professional must have successfully completed the current process for Alternative BMPs as outlined by GSWCC Guidance on at least three completed projects where EPD's Notice of Termination Form has been filed. Geographic dispersion of the

project sites is encouraged. The following steps are required:

1. Provide pre-notice to EPD and GSWCC of the intent to apply for an Alternative BMP to be included on the Equivalent BMP List as follows:

A. Specify on the required checklist that accompanies the Notice of Intent Form that the project includes an Alternative BMP that will be included on an Application for the Equivalent BMP List.

B. Inform GSWCC of the intent to apply by sending a digital copy of the approved ES&PC plan and a copy of the above to GSWCC when each NOI is filed with EPD.

2. Once the project involving the Alternative BMP has been completed and a Notice of Termination Form for the project has been filed, submit to GSWCC the following:

A. An Application to be on the Equivalent BMP List and a sample of the BMP.

B. Three sets -- one for each time the Alternative BMP was used in three separate projects -- of the required documentation to use the Alternative BMP, based on the current approval process as outlined by GSWCC Guidance. Evidence of repeatable bench and field testing must be included as part of this documentation. Only approved ASTM standards or Overview Council-approved standards will be accepted for repeatable bench testing; working test methods will not be accepted.

C. Three sets -- one for each time the Alternative BMP was used in three separate projects -- of the Notice of Termination Form for each project involving the Alternative BMP.

D. A Certification Form signed by two individuals -- a Level II certified Design Professional and a Level 1A or Level 1B Certified Personnel -- who evaluated the BMPs performance in the field stating that the Alternative BMP performed as expected throughout the life of each of the three projects.

E. Three sets of installation photos -- one for each time the Alternative BMP was used -- of the Alternative BMP utilized in the three projects.

F. Three sets of after-storm event photos -- one for each time the Alternative BMP was used -- of the Alternative BMP utilized in the three projects.

G. Any post-storm event inspection records as well as inspection and enforcement records made by any federal, state, or local regulatory agency related to this specific BMP on this project.

The above materials should be submitted to GSWCC both electronically and with hard copies to P.O. Box 8024, Athens, Georgia 30603. GSWCC will provide copies of the materials submitted to EPD and GDOT upon receipt. GSWCC will receive and review the information submitted above. GSWCC has the discretion to approve the application, deny the application, request a resubmittal, or request additional information, with consultation from EPD and GDOT. Applicants will be informed of GSWCC's determination in writing. Applicants receiving approval for inclusion on the Equivalent BMP List will be notified within 90 days. Applicants with BMPs denied from inclusion on the Equivalent BMP List may seek review of the GSWCC's determination from the GSWCC State Board.

PROCEDURE FOR REMOVING A BMP FROM THE EQUIVALENT BMP LIST

Any individual, local government, or agency may submit to GSWCC a request that the BMP be removed from the Equivalent BMP List. The request should include a certified statement that the Alternative BMP failed to perform as expected and thus should be removed from the Equivalent BMP List, along with supporting documentation (picture, inspection forms, etc.). The request for removal is encouraged to focus on complaints independent of issues of ordinary installation and maintenance of the BMP. The request should be submitted to GSWCC both electronically and with hard copies to P.O. Box 8024, Athens, Georgia 30603.

GSWCC will provide copies of the request for removal to EPD and GDOT upon receipt. GSW-

CC will also provide a copy of the request to the individual who initially applied for the Alternative BMP to be included on the Equivalent BMP List. GSWCC has the discretion to approve the request, deny the request, request a resubmittal, or request additional information with consultation from EPD and GDOT.

An applicant with a BMP removed from the Equivalent BMP List may seek review of the GSWCC's determination from the GSWCC State Board.

An Alternative BMP removed from the Equivalent BMP List may be returned to the list if an applicant successfully completes the Procedure for Applying for the Equivalent BMP List again.

TRANSITION PERIOD

The Manual for Erosion and Sediment Control in Georgia has been revised and revisions will become effective January 1, 2016. The Equivalent BMP List will first be made available January 1, 2016. BMPs included in the 5th Edition of the Manual and GDOT's QPL list will be recognized by GSWCC and included on the Equivalent BMP List. Applications for BMPs to be included on the Equivalent BMP list will be based on NOI'S submitted on or after January 1, 2016. GSWCC's approval of a BMP however does not ensure GDOT's adoption of that item into their QPL, design policies or procedures. The first update to the Equivalent BMP list will occur on or after March 31, 2016.

ENDNOTES

[1] *See* NPDES General Permit No. GAR 10001, Authorization To Discharge Under the National Pollutant Discharge Elimination System Storm Water Discharges Associated with Construction Activity For Stand Alone Construction Projects; NPDES General Permit No. GAR 10002, Authorization To Discharge Under the National Pollutant Discharge Elimination System Storm Water Discharges Associated with Construction Activity for Infrastructure Construction Projects; NPDES General Permit No. GAR 10003, Authorization To Discharge Under the National Pollutant Discharge Elimination System Storm Water Discharges Associated with Construction Activity for Common Developments.

[2] *See* Id. at Permit No. GAR100003 (page 24), Permit No. GAR 100002 (page 21), and Permit No. GAR 10001 (page 21).

[3] GSWCC Guidance Document for Alternative BMPs, *available at* https://epd.georgia.gov/sites/epd.georgia.gov/ files/GSWCC_Alternative_BMP_Guidance_Document_Oct_2008.pdf.

[4] Ga. Code Ann., § 12-7-3 (10.2) provides:

> "Manual for Erosion and Sediment Control in Georgia" or "manual" means the published guidance of the commission governing the design and practices to be utilized in the protection of this state's natural resources from erosion and sedimentation which shall be based foremost upon sound engineering principles and repeatable bench and field testing of structural and vegetative best management practices and which shall have the annual approval of the Erosion and Sediment Control Overview Council established pursuant to Code Section 12-7-7.1.

[5] *See* Notice of Termination, available at https://gaswcc.georgia.gov/notice-termination-forms.

[6] State law requires that the design and practices utilized for erosion and sedimentation control must be based on "sound engineering principles and repeatable bench and field testing of structural and vegetative best management practices…." *See supra* note 5.

[7] Ga. Code Ann., § 12-7-19, Education and training certification requirements, provides that:

> (a)(1) Persons involved in land development design, review, permitting, construction, monitoring, or inspection or any land-disturbing activity shall meet the education and training certification requirements, dependent on his or her level of involvement with the process, as developed by the commission in accordance with this Code section and in consultation with the division and the Stakeholder Advisory Board created pursuant to Code Section 12-7-20.

(2) On or after May 14, 2007, for each site on which land-disturbing activity occurs, each entity or person acting as either a primary, secondary, or tertiary permittee, as defined in the state general permit, shall have as a minimum one person who is in responsible charge of erosion and sedimentation control activities on behalf of said entity or person and meets the applicable education or training certification requirements developed by the commission present on site whenever land- disturbing activities are conducted on that site…..

[8] The State Soil and Water Conservation Commission is established pursuant to Ga. Code Ann. § 2-6-23, and the Governor appoints one at-large member from each of the five soil and water conservation district regions to serve on the commission.

Insert Tab 6

Stormwater Management

Back of Tab

1

STORMWATER MANAGEMENT

GREEN INFRASTRUCTURE

GSWCC | Level II: Introduction to Design | July 2016

2

Stormwater Management

- Purpose
- History
- Impact
- Pollutants
- Blue Book
- Green Infrastructure

Stormwater Management

3

- Stormwater is ….
  - Water that does not soak into the ground
  - Runoff that can carry pollutants

Stormwater Management

4

- Why manage stormwater?
  - To mimic natural hydrology
  - To reduce physical, chemical and biological degradation of streams.
  - To meet local, state and federal requirements.
  - To allow for future growth & development

Stormwater Management

5

- Why is stormwater management so important?
  - From "River of Fire" to Clean Water Act
  - Cuyahoga River 1949-1969

Stormwater Management

6

- Stormwater is a leading cause of water quality impairment
  - Growth in Georgia
    - 2000 -2010 GA gained 1.5 million new residents
  - Georgia State Water Plan
    - In all water planning regions, assessments identified water bodies that currently have poor water quality, often due to the pollutants carried by stormwater.
    - Actions are needed to protect or restore the water quality in these streams, rivers, lakes, and estuaries.

Highlights of Regional Water Planning 2009-2011

Stormwater Management

7

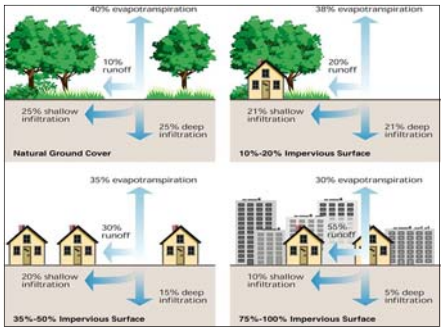
- What happens with increased impervious surfaces?
  - Increased volume of runoff
  - Increased peak discharge
  - Increased velocities
  - Shorter time to peak flow
  - More frequent bankfull events
  - Increased flooding
  - Lower stream baseflow
  - Less ground water recharge

Atlanta, Georgia

Courtesy: NCSU

Impervious Cover

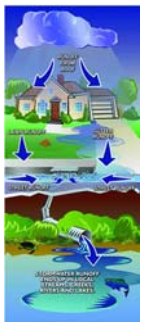
8



Impacts of Development

9

- Tree canopy and topsoil removal
- Compacted soils
- Impervious surfaces prevent infiltration
- Concentrated runoff
- Flash flooding



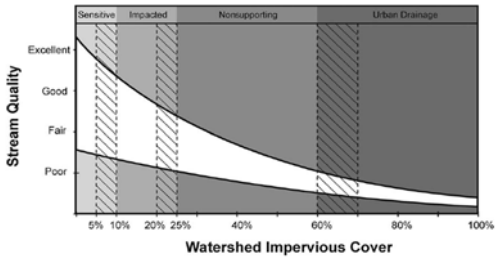
Impacts to the Environment

10

- Stream channel enlargement (down-cutting & widening - entrenchment)
- Reduced base flow in streams
- Loss of riparian vegetation (filtration, treatment, flood abatement)
- Floodplain degradation
- Degradation of habitat
- Degradation of water quality
- Decline in wildlife diversity & abundance

Reformulated Impervious Cover Model

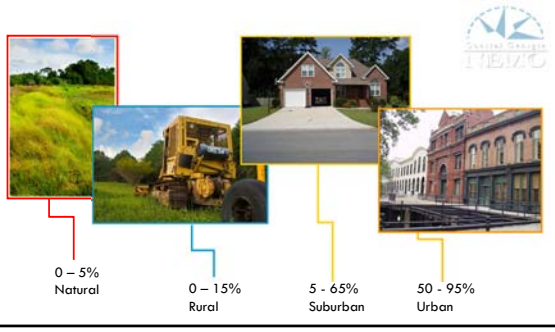
11



Schueler, T. R., L. Fraley-McNeal, et al. (2009).

Urban Growth & Impervious Surfaces

12



Stormwater Management

13

- Channel protection is very important due to impervious surfaces and uncontrolled runoff

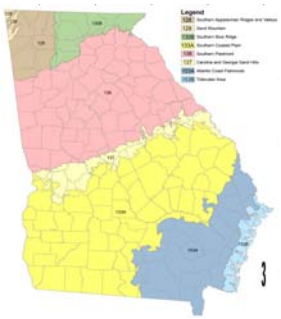
Protect the integrity of streams, wetlands and other natural drainage features

Pollutants

14

- Major Pollutant Categories
  - Nutrients
  - Pathogens
  - Sediment
  - Toxic Contaminants
  - Debris
  - Thermal Stress

These majors pollutants can be found in all major land use areas.



Pollutants

15

Pollutants

16

- Nutrients
  - -N & P have "escalated dramatically" in past 50 years
  - -50% of U.S. streams have medium to high N & P
  - -78% of assessed coastal waters exhibit eutrophication
  - -Nitrate violations in drinking water have increased
  - -USGS reported elevated N & P in shallow ground water
  - -Algal blooms increasing (associated toxins)
  - -N & P pollution expected to increase

March 16, 2011 EPA Memorandum
Nancy Stoner, Acting Assistant Administrator

Pollutants

17

The Pollutants in Polluted Runoff

Sediment

- Toxic Contaminants
- Debris
- Thermal Stress
- Nutrients Pathogens

Sediment is eroded soil or sand which smothers aquatic habitat, carries pollutants, and reduces water clarity.

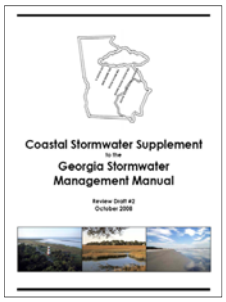
Sources: road sand, construction sites, agricultural fields, disturbed areas

Photo courtesy of Weeks Bay Watershed Project

GA Stormwater Manuals

18

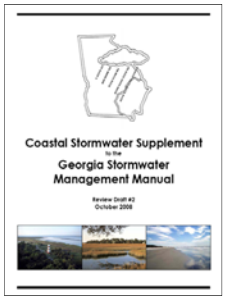
Guidance



GA Stormwater Manuals

19

- Coastal Supplement
  - Adaptations for coastal constraints
  - Additional content to promote natural resource protection
  - Includes stormwater runoff volume reduction (Green Infrastructure)
  - Provides better protection of water quality and aquatic and terrestrial resources



GA Stormwater Manuals

20

- Georgia Stormwater Manual (Blue Book)
  - New Recommended WQ Performance Standards
    - Given that an 80% TSS removal rate for the 1.2 inch rainfall event is the standard for addressing water quality, 100% TSS removal through volume reduction of the 1.0 inch rainfall event will address the same requirement. In another method of describing total TSS removal, 80% of 1.2 inches (0.96) approximately equates to 100% of 1.0 inches.

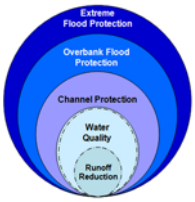


Figure 2.2.3-1 Representation of the Unified Stormwater Sizing Criteria

GA Stormwater Manuals

21

- New Recommended WQ Performance Standards

- Runoff Reduction (RRv) – i.e. Green Infrastructure
  - Runoff reduction practices should be sized and designed to retain the first 1.0 inch of rainfall on the site to the maximum extent practicable.
- Water Quality (WQv) – i.e. Stormwater Management Pond
  - Stormwater management systems should be designed to retain or treat the runoff from 85% of the storms that occur in an average year [1.2 inches], and reduce average annual post-development total suspended solids loadings by 80%.

GA Stormwater Manuals

22

- Runoff Reduction (RRv) Method
  - Reduces volume of runoff AND removes pollutants
  - Promotes 'Green Infrastructure' Techniques
  - Promotes infiltration rather than detention
  - Every land surface can act as stormwater control
  - Reduces amount of detention volume required
  - Limitations: highly compacted clay soils & contaminated sites

Green Infrastructure

23

- Many different terms
  - Low Impact Development, Green Infrastructure, & Runoff Reduction
- The U.S. EPA uses the term to mean an approach to managing stormwater
  - Utilizing natural systems or engineered systems that mimic natural landscapes to capture, cleanse and reduce stormwater runoff through plant, soil and microbial processes
  - Infiltration, evapotranspiration & reuse
  - Manages wet weather flow by managing rain water on the site where it falls

Green Infrastructure

24

Slow, Infiltrate, and Clean Stormwater

Green Infrastructure

25

Credit: City of Atlanta

Smarter Stormwater Management

26

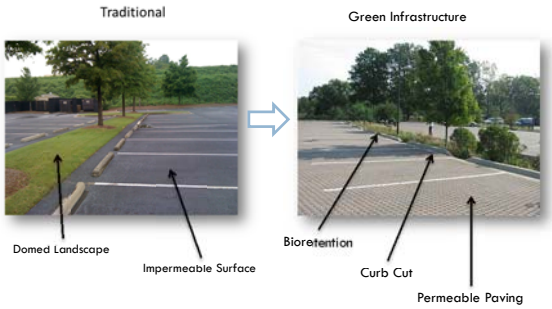
- Traditional approach
  - Convey stormwater quickly from site to waterbody or detention ponds
  - Manage peak flows for flood control, drainage and large scale downstream erosion.

- Green Infrastructure Approach
  - Encourage integration of green infrastructure in the design of the project
  - View stormwater as a resource
  - Slow down the flow, allow to infiltrate
  - Reduces pollutant loads to waterbodies
  - Obtain multiple community benefits

Credit: USEPA

Traditional vs. Green Infrastucture

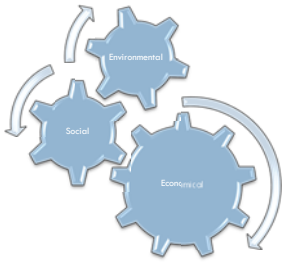
27



Green Infrastructure

28

- Triple Bottom Line
  - Economic benefits
  - Social benefits
  - Environmental benefits
- Leads to Sustainable Development



Examples of RR/Green Infrastructure

29

- Soil Restoration
- Site Reforestation
- Green Roofs
- Permeable Pavements
- Undisturbed Pervious Areas (greenspace)
- Vegetated Filter Strips
- Downspout Disconnection
- Rain Gardens
- Stormwater Planters
- Dry wells
- Rainwater Harvesting
- Bioretention
- Infiltration Practices
- Dry Swales
- Grass Channels

Bioretention

30

Source: Breedlove Land Planning

Bioretention

31

Source: Breedlove Land Planning

Bioretention

32

Source: City of Atlanta

Bioswale

33

Source: City of Atlanta

Permeable Pavement (Pavers)

34

Source: City of Atlanta

Permeable Pavement (Porous Concrete)

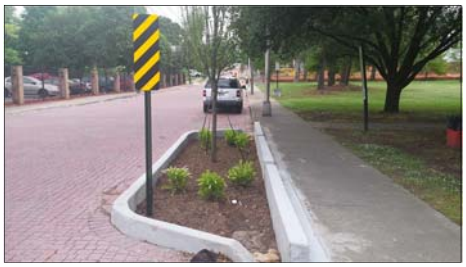
35

Source: City of Atlanta

"Green" Street

36

- Stormwater Planter and Permeable Pavers



Source: City of Atlanta

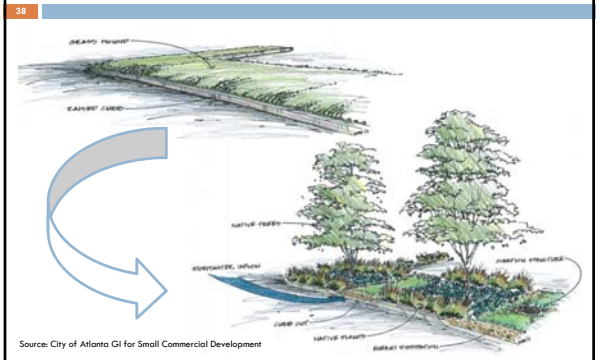
Green Roof

37

Source: City of Atlanta

Retrofit examples: Landscape Islands

38



Source: City of Atlanta GI for Small Commercial Development

Green infrastructure can compete for space

39

- Creativity with site layout
  - Upfront coordination between Civil, Landscape Architect, and Architect
- Dual purpose practices:
  - permeable pavement ⇒ parking lots
  - bioretention ⇒ landscape islands
  - green roof ⇒ typical roof
- Able to meet tree planting and runoff reduction requirements with one practice

Source: Kimley-Horn & Associates

Infiltration Practices

40

- Soils analysis should be conducted prior to design
  - Infiltration rates, high water table, bedrock, contaminated soils
- Piedmont soils (silt and clay) and compaction
  - Loosening compacted soils on redevelopment sites
  - Prevent compaction during construction
  - Innovative designs (upturned underdrain) to encourage surface drainage and promote infiltration in clay soils
- Erosion control
  - Phasing installation to prevent sedimentation issues
  - Installation of appropriate BMPs
  - Routing runoff around green infrastructure until final stabilization

Construction Practices

41

- Installation should occur after the contributing drainage areas to the infiltration practice area have been stabilized.
- If this is not feasible, stormwater flow should be diverted around the infiltration practice area.
- During excavation, heavy machinery shall not drive over exposed underlying soils.
- Excavate in dry conditions as much as practicable.
- Excavate final 9" to 12" with teeth of bucket (do not smear).

Construction Practices

42

- Loosen subgrade soils that have been compacted or smeared by raking, disking or tilling to a minimum depth of 6".
- Subsoils should be scarified (not compacted) prior to placement of clean, washed drainage stone.
- To prevent compaction within the limits of the basins, only hand laborers, light equipment with turf ties, or wide-track loaders should be used.
- Soil surfaces should be scarified to aerate and reduce soil compaction.

Erosion Control and Phasing

43

- After installation, no BMPs (Sd2s) were installed in front of curb cuts.

Erosion Control and Phasing

44

- Sediment removed and bioretention cell restored

Erosion Control and Phasing

45

- Small area of disturbed soil and concentrated flow can lead to major clogging

Erosion Control and Phasing

46

- Green Infrastructure should be installed once all surrounding areas are stabilized

Summary

47

- Development activities impact the volume and quality of stormwater runoff
- Stormwater management plays an important role in the overall health of our surface waters
- When properly designed, installed, and maintained, stormwater management practices, including green infrastructure, can mitigate the negative impacts of development
- Uncontrolled sedimentation can impact stormwater management practices both during and after construction

48

Questions?

GSWCC
Urban Program
P.O. Box 8024
Athens, GA 30603
(706) 552-4474

GSWCC

Insert Tab 7

Vegetative Measures

Back of Tab

1

BEST MANAGEMENT PRACTICES

VEGETATIVE MEASURES

GSWCC

Level II: Introduction to Design July 2016

The Manual for Erosion & Sediment Control in Georgia

2

- Also known as the "Manual" or "Green Book"
- Chapter 6, Section 2 contains standards for vegetative practices and provides instructions for the preparation of erosion and sediment control plans for land-disturbing activities.
- The current edition of the Manual can be found at: www.gaswcc.georgia.gov

Equivalent Product List

3

- The products and practices presented in this presentation show the standard installation methods for each conventional BMP. New products and practices may not necessarily meet the requirements for each conventional BMP. Please see the Equivalent Best Management Practice List for specific manufacturer guidelines and specifications.
- The current Equivalent BMP List can be found @ http://gaswcc.georgia.gov/ under "Documents List"

Shall/Will, Should, and May

4

- Shall or Will – A mandatory condition. When certain requirements are described with the "shall" or "will" stipulations, it is mandatory that the requirements be met.
- Should – An advisory condition. Considered to be recommended but not mandatory
- May – A permissive condition. No requirement is intended.

Benefits of Vegetation in ES&PC

5

- Intercepts raindrops
  - Reduces detachment of soil particles
  - Results in less soil erosion
- Slows & Cleans runoff
  - Increases water infiltration
  - Increased soil moisture aids plant growth
- Protects structures, rivers, streams, and ponds
- Reduces maintenance of structural measures
  - Reduced deposition in sediment basins
- Improves aesthetics, soil quality, and wildlife habitat

Benefits of Vegetation in ES&PC

6

It's cheaper to prevent erosion

Than to deal with sedimentation

Construction Sites Inhibit Plant Growth

7

- Factors
  - Topsoil is removed
  - Steep slopes
  - Low soil moisture
  - Low soil fertility
  - Acidic soils
  - Concentrated flow
  - Compacted soils

8 Vegetative BMPs

Bf – Slide 9
Cs – Slide 14
Ds1 – Slide 17
Ds2 – Slide 20
Ds3 – Slide 28
Ds4 – Slide 55
Du – Slide 58
Fl-Co – Slide 60
Sb – Slide 64
Ss – Slide 67
Tac – Slide 71

Buffer Zone

Bf

9

- Definition
  - A strip of undisturbed, original vegetation, enhanced or restored vegetation or the re-establishment of vegetation surrounding an area of disturbance or bordering streams, ponds, wetlands, lakes and coastal waters

Buffer Zone

Bf

10

- Purpose
  - Reduce storm water runoff
  - Act as a screen for "visual pollution"
  - Reduce construction noise
  - Improve aesthetics
  - Filtering and infiltrating runoff
  - Providing shade, food, and cover for wildlife and aquatic organisms
  - Flood protection
  - Protect channel banks from scour and erosion

Buffer Zone

Bf

11

- Types
  - General Buffer – A strip of undisturbed, original land surrounding the disturbed site
  - Vegetated Stream Buffer – A strip of undisturbed, original land bordering a stream
- Design Specifications
  - Important factors such as slope, hydrology, width, and structure, and maintenance shall be considered
  - The GA EPD enforces a minimum stream buffer requirement for warm water (25 ft.) and cold water (50 ft.) fisheries

Specific Buffer Objectives

Bf

12

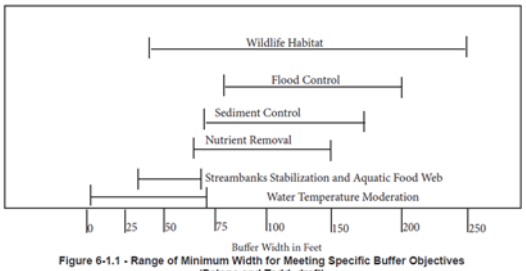


Figure 6-1.1 - Range of Minimum Width for Meeting Specific Buffer Objectives (Palone and Todd, draft)

Buffer Zone

Bf

13

Coastal Dune Stabilization

Cs

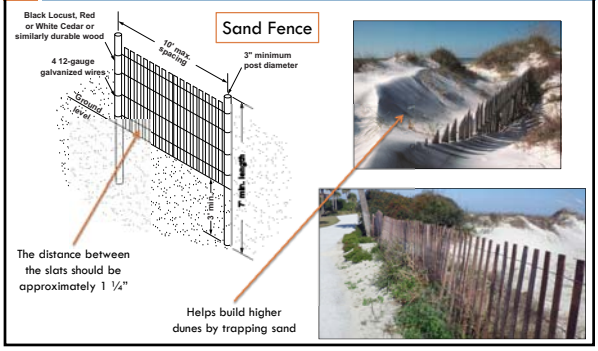
14

- Definition
  - The planting of vegetation on dunes that are denuded, artificially constructed, or re-nourished
- Purpose
  - Allow the development of dunes in areas where they have been damaged or destroyed
  - Stabilize soil on dunes allowing them to become more resistant to wind and waves
- Permits must be requested and granted by all appropriate jurisdictions, including all Federal, State, and local agencies, before work is performed

Coastal Dune Stabilization

Cs

15



Coastal Dune Stabilization

Cs

16

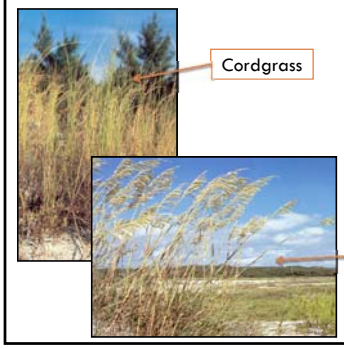


Table 1. Planting Requirements for Native Plants

Species	Stock	Date	Depth
Marshay Cordgrass (Spartina patens)	Plants	Spring	4"-5"
Bitter Panicum (Panicum amarum)	Rhizomes	Spring	~4"
Coastal Panigrass (Panicum amarum v. amaralum	Seeds or Plants	Spring	1"-3"

Disturbed Area Stabilization (With Mulching Only)

Ds1

17

- Definition
  - The application of plant residue or other suitable material, produced on site if possible, to the soil surface
- Purpose
  - Reduce runoff
  - Conserve moisture
  - Prevent surface compaction or crusting
  - Control undesirable vegetation
  - Modify soil temperature
  - Increase biological activity

Disturbed Area Stabilization (With Mulching Only)

Ds1

18

Table 1. Mulching Application Requirements

Material	Rate	Depth
Straw or hay	-	2" to 4"
Wood waste, chips, sawdust, bark	-	2" to 3"
Polyethylene film	Secure with soil, anchors, weights	-
Geotextiles, jute matting, netting, etc.	See manufac-turer's recom-mentations	-

- Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance
- Apply at the appropriate depth
- Maintain at least 90% cover
- Must be anchored
- Can be used alone for up to 6 months

Disturbed Area Stabilization (With Temporary Seeding)

Ds2

20

- Definition
  - The establishment of temporary vegetative cover with fast growing species for seasonal protection on disturbed or denuded areas
- Purpose
  - Reduce runoff and sediment damage of downstream resources
  - Protect the soil surface from erosion
  - Improve wildlife habitat
  - Improve aesthetics
  - Improve tilth, infiltration, aeration, and organic matter

Disturbed Area Stabilization (With Temporary Seeding)

Ds2

21

- Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance
- If an area is expected to be undisturbed for longer than 6 months, permanent perennial vegetation shall be used
- Can be applied to:
  - Rough graded areas
  - Temporary Diversions
  - Temporary Sediment Basins
  - Topsoil stockpile
  - Temporary Dams

Disturbed Area Stabilization (With Temporary Seeding)

Ds2

22

- Components
  - Grading & Shaping
  - Seedbed Preparation
  - Lime & Fertilizer
  - Seeding
  - Mulching
  - Irrigation
  - Seed Quality & Selection
  - Planting Techniques
- Plant Selection
  - Select a grass or grass-legume mixture suitable to the area and season of the year
  - It should provide adequate cover (90%) and germinate quickly
  - Some species are not appropriate for companion plantings because of their potential to out-compete the desired species

Disturbed Area Stabilization (With Temporary Seeding)

Ds2

23

Annuals

Common Species Used for Temporary Cover

24

- Warm Season Annuals
  - Browntop Millet
  - Pearl Millet
  - Sudan Grass
- Warm Season Perennials
  - Common Bermuda
  - Weeping Lovegrass
- Cool Season Annuals
  - Rye
  - Ryegrass
  - Wheat
- Cool Season Perennials
  - Tall Fescue
  - Crown Vetch
  - Clover

Example Temporary Species Chart

25

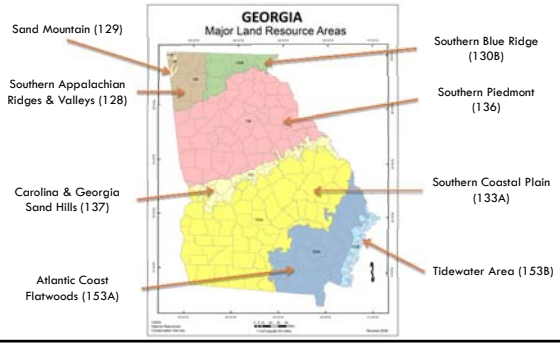
Table 1. Some Temporary Plant Species, Seeding Rates and Planting Dates

Species	Rates Per 1,000 sq. ft.	Rates per Acre	Planting Dates by Region		
			M-L	P	C
Barley Alone Barley in Mixtures	3.3 lbs. .6 lbs.	3 bu. .5 bu.	9/1-10/31	9/15-11/15	10/1-12/31
Lespedeza, Annual Lespedeza in Mixtures	0.9 lbs. 0.2 lbs.	40 lbs. 10 lbs.	3/1-3/31	3/1-3/31	2/1-2/28
Lovegrass, Weeping Lovegrass in Mixtures	0.1 lbs. .05 lbs.	4lbs. 2 lbs.	4/1-5/31	4/1-5/31	3/1-5/31
Millet, Browntop Millet in Mixtures	.9 lbs. .2 lbs.	40 lbs. 10 lbs.	4/15-6/15	4/15-6/30	4/15- 6/30
Millet, Pearl	1.1 lbs.	50 lbs.	5/15-7/15	5/1-7/31	4/15-8/15
Oats Alone Oats in Mixtures	2.99 lbs. .7 lbs.	4 bu. 1 bu.	9/15 -11/15	9/15-11/15	9/15-11/15

A complete listing off all temporary species can be found in the "Resource Information" section

Major Land Resource Areas

26

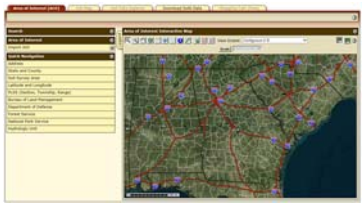


Soils Matter

http://websoilsurvey.sc.egov.usda.gov/

27

- Web Soil Survey - NRCS
  - Provides soil data and information produced by the National Cooperative Soil Survey
  - Has soil maps for more than 95% of the nation's counties



Disturbed Area Stabilization (With Permanent Vegetation)

Ds3

28

- Definition
  - The planting of perennial vegetation such as trees, shrubs, vines, grasses, or legumes on exposed areas for final permanent stabilization
- Purpose
  - Protect the soil surface from erosion
  - Reduce damage to downstream areas
  - Improve wildlife habitat and visual resources
  - Improve aesthetics

Disturbed Area Stabilization (With Permanent Vegetation)

Ds3

29

- This practice shall be applied immediately to rough graded areas that will be undisturbed for **longer than 6 months**
- Final Stabilization – All of the soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures, **100%** of the soil surface is uniformly covered in permanent vegetation with a density of **70%** or greater, or landscaped according to the ES&PC plan (uniformly covered with landscaping materials in planned landscaped areas)

Disturbed Area Stabilization (With Permanent Vegetation)

Ds3

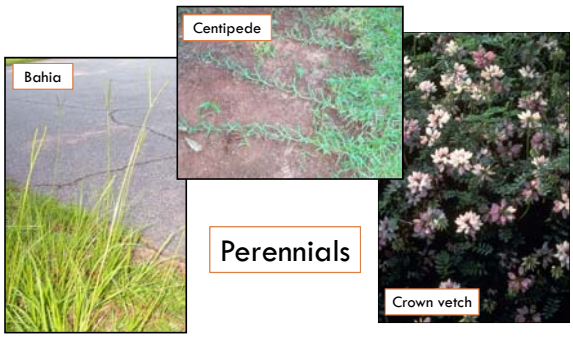
30

Perennials

Disturbed Area Stabilization (With Permanent Vegetation)

Ds3

31



Example Permanent Species Chart

32

Table 1. Some Permanent Plant Species, Seeding Rates, and Planting Dates (continued)

Species	Rates per Acre	Rates per 1,000 sq. ft	Planting Dates by Region			Remarks
			M- L	P	C	
Bermuda Springs Common lawn and forage hybrids	40 cu. ft.	0.9 cu.ft.	4/15-6/15	4/1-6/15	4/1-5/31	1 cu. ft. = 650 sprigs 1 bu. = 1.25 cu. ft. or 800 sprigs
	Sod plugs 3' x3'					
Centipede	Bicok Sod Only	Block Sod Only	---	11/1-5/31	11/1-5/31	Drought tolerant. Full sun or partial shade.
Crown Vetch With winter annuals or cool season grasses	15 lbs.	0.3 lb.	9/1-10/15	9/1-10/15	--	Mix with 30 lbs. Tall Fescue or 15 lbs. Rye; inoculate seed; plant only North of Atlanta
Fescue, Tall Alone With other perennials	50 lbs. 30 lbs.	1.1 lbs. 0.7 lb.	3/1-4/15 or 8/15-10/15	9/1-10/15	---	Can be mixed with perennial Lespedezas or Crown Vetch; not for droughty soils or heavy use areas

A complete listing off all permanent species can be found in the "Resource Information" section

Planned Components

Ds3

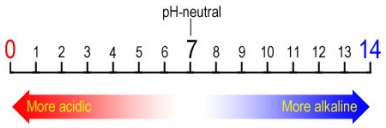
33

- Grading & Shaping
- Lime & Fertilizer
  - Rates & Application
- Inoculants
- Plant Selection
- Seed Quality
- Seedbed Preparation
- Planting Method
- Applying Mulch
- Anchoring Mulch
- Irrigation
- Maintenance
- Planned Use
- Management

Lime & Fertilizer

34

- Soil Acidity (pH)
  - Can affect plant growth
  - Almost all soils in Georgia are acidic
  - Most plants used in erosion control need a soil pH of 6.0-6.5



Lime

35

- Agricultural Lime
  - Required at the rate of 1-2 tons/acre unless soil tests indicate otherwise
  - If lime is applied within 6 months of planting permanent perennial vegetation, additional lime is not required
  - Conventional Planting – apply before seedbed preparation
  - Hydraulic Seeding – apply in a slurry mixed with seed, inoculant, and/or wood pulp fiber mulch

Lime

36

- Can be lost in runoff
- Does not move rapidly through the soil
- Encourages a healthier and thicker stand
- Fast-acting Lime
  - Starts working immediately
  - Raises Soil pH quicker

Fertilizer Rates

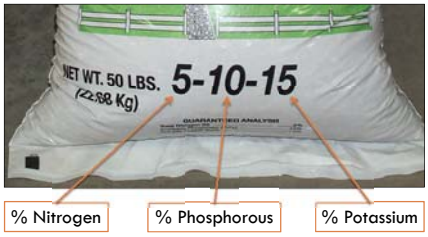
37

Table 6-5.1. Fertilizer Requirements

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 1/2/ — 30
2. Cool season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	0-50 lbs./ac. 1/ — —
3. Ground covers	First Second Maintenance	10-10-10 10-10-10 10-10-10	1300 lbs./ac. 3/ 1300 lbs./ac. 3/ 1100 lbs./ac.	— — —
4. Pine seedlings	First	20-10-5	one 21-gram pellet per seedling placed in the closing hole	—
5. Shrub Lespedeza	First Maintenance	0-10-10 0-10-10	700 lbs./ac. 700 lbs./ac. 4/	—
6. Temporary cover crops seeded alone	First	10-10-10	500 lbs./ac.	30 lbs./ac. 5/
7. Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 2/6/ 50-100 lbs./ac. 2/ 30 lbs./ac.
8. Warm season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50 lbs./ac./6/

Fertilizer

38



% Nitrogen | % Phosphorous | % Potassium

This 50 LB bag contains 30% plant food (15 LB) and 70% filler.

Fertilizer

39

Grass	
Schedule	**Analysis**
Initial	N-P-K
Topdressing	N
2nd Year	N-P-K
*Maintenance	N-P-K

Legume/Grass Mixture	
Schedule	**Analysis**
Initial	N-P-K
Topdressing	N
2nd Year	*-P-K
*Maintenance	*-P-K

*The desired species are legumes which produce their own nitrogen after establishment
*Legumes get ample N from bacteria if the seed are inoculated properly
*Maintenance fertilizers should be applied on a yearly basis

Fertilizer

40

Initial Fertilizer | Topdressing | Legumes

Plant Selection

41

- Plant Selection
  - Species characteristics (Consider native grasses)
  - Site conditions
    - Location, topography, concentrated flow areas
  - Soil conditions
    - Composition, fertility, pH
  - Planned land use
  - Time of year
  - Planting method

Native Grasses

42

Reed Canary

Big Bluestem

Native Grasses

43

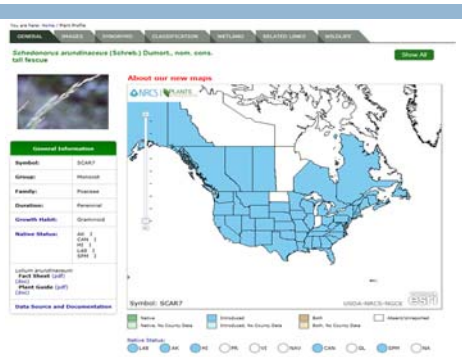
Indiangrass

Switchgrass

USDA Plant Database

http://plants.usda.gov/java/

44



Companion Plants

45

- Some perennial species, such as Common Bermuda, Tall Fescue and Weeping Lovegrass, are easily established and can be planted alone
- Other perennials, such as Bahiagrass and Sericea Lespedeza, are slow to become established and should be planted with another perennial species
- Common seeding combinations
  1) Weeping Lovegrass with Sericea Lespedeza (scarified)
  2) Tall Fescue with Sericea Lespedeza (un-scarified)
  3) Browntop Millet (annual) with Common Bermuda

Companion Plants

46

Ryegrass outcompeting the desired species

Sericea Lespedeza with Weeping Lovegrass

Seed Quality

47

- Pure Live Seed (PLS) – expressed as a percentage of the seeds that are pure and will germinate
  - % purity & germination can be found on seed tags

PLS Example

Tall Fescue

85% germination & 95% purity

PLS = 0.85 germination x 0.95 purity

PLS = 80.75%

$$\frac{\text{Seeding rate}}{\text{PLS}} = \frac{50 \text{ lbs. PLS/acre}}{80.75\% \text{ PLS}} = \boxed{61.92 \text{ lbs/acre}}$$

Hulled vs. Un-hulled

48

- Some seed coats prevent water absorption in order to expand the germination period
  - This is nature's way to ensure species survival
- A "hulled" seed's outer coat is removed mechanically
  - Allows water to enter the seed quicker for faster germination

Example: Common Bermuda

Use hulled seed for spring/summer plantings

Use un-hulled seed for fall/winter plantings

Scarification

49

- "Hard" seeds are nearly impervious to water and remain dormant for a long time
- Scarification overcomes the seed coat dormancy period by scratching, splitting, or puncturing the seed coat
  - Enables the seed to absorb water and sprout more quickly

Example: Sericea Lespedeza

Use scarified seed for spring/summer plantings

Use un-scarified seed for fall/winter plantings

Optimum Planting Dates

50

- Warm Season Plants (i.e. Common Bermuda & Weeping Lovegrass)
  - April 1st – May 15th
- Cool Season Plants (i.e. Rye, Ryegrass & Tall Fescue)
  - September 1st – October 15th
- Seeding rates are very important!!!
  - Under-seeding reduces the stand
  - Over-seeding creates excess demand for moisture and nutrients

Seedbed Preparation

51

- Provides a suitable growing medium for roots
- Not required where hydraulic seeding and fertilizer equipment is to be used, but strongly recommended when possible
- Tillage shall adequately
  - Loosen soil to a depth of 4"-6"
  - Alleviate compaction
  - Incorporate lime & fertilizer
  - Smooth and firm the soil
  - Allow for the proper placement of seed
  - Allow for the anchoring of straw or hay if a disk is to be used

Applying & Anchoring Mulch

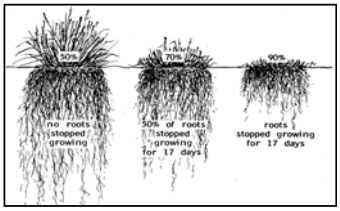
53

- Dry straw
  - 2 tons/acre
- Dry hay
  - 2 ½ tons/acre
- Wood pulp fiber or cellulose mulch
  - 500 lbs/acre with hydraulic seeding
- Pine straw/pine bark
  - Thickness of 3"
- Hay & Straw shall be pressed into the soil with a packer disk or harrow
- Synthetic tackifiers, binders, hydraulic mulch shall be applied in conjunction with or immediately after mulch is spread
- Plastic mesh or netting may be required on unstable soils and concentrated flow areas

Management

54

- Irrigation – Apply at a rate that will not cause runoff
- Maintain at least 6" of top growth under any use and management



Disturbed Area Stabilization (With Sodding)

Ds4

55

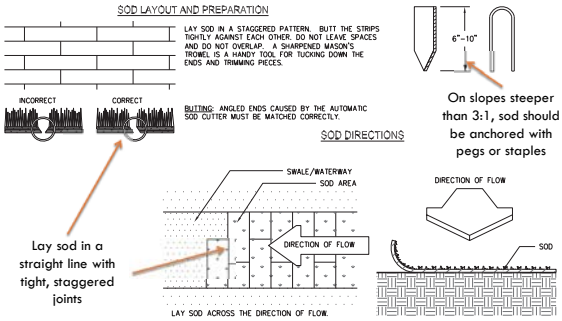
- Definition
  - A permanent vegetative cover using sod on highly erodible or critically eroded lands

- Purpose
  - Immediate ground cover
  - Reduce runoff and erosion
  - Improve aesthetics
  - Reduce dust
  - Stabilize waterways
  - Filter sediment
  - Reduce downstream complaints
  - Reduce likelihood of stop work order

Disturbed Area Stabilization (With Sodding)

Ds4

56



On slopes steeper than 3:1, sod should be anchored with pegs or staples

Lay sod in a straight line with tight, staggered joints

Disturbed Area Stabilization (With Sodding)

Ds4

57

Table 6-6.2 Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tiflawn	M-L,P,C P,C P,C P,C	warm weather
Bahiagrass	Pensacola	P,C	warm weather
Centipede	–	P,C	warm weather
St. Augustine	Common Bitterblue Raleigh	C	warm weather
Zoysia	Emerald Myer	P,C	warm weather
Tall Fescue	Kentucky	M-L,P	cool weather

The sod type should be shown on the plans

Fertilize in accordance with soil tests or Table 6-6.3

Table 6-6.3 Fertilizer Requirements for Sod

Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Top Dressing Rate (lbs./acre)
cool season grasses	first second maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100 - 30
warm season grasses	first second maintenance	6-12-12 6-12-12 10-10-10	1500 800 400	50-100 50-100 30

Dust Control

Du

58

- Definition
  - The control of surface and air movement of dust on construction, roads, and demolition sites
- Purpose
  - Prevent movement of dust from exposed surfaces
  - Reduce the presence of airborne substances that may be harmful

Dust Control

Du

59

- Temporary Methods
  - Mulches
  - Vegetative Cover
  - Spray-on Adhesives
  - Tillage
  - Irrigation
  - Barriers
  - Calcium Chloride
- Permanent Methods
  - Permanent Vegetation
  - Topsoiling
  - Stone

Flocculants & Coagulants

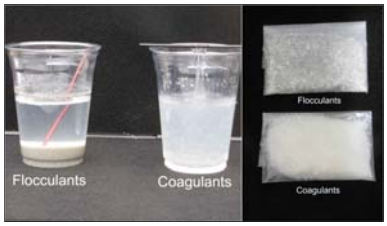
Fl-Co

60

- Definition
  - Formulated to assist in the solids/liquids separation of suspended particles in solution. Only anionic forms shall be used

This practice is not intended for application to surface waters of the state

It is intended for application within constructed storm water ditches that feed into constructed ponds or basins



Flocculants & Coagulants

FI-Co

61

Coagulant	Flocculants
Neutralizes the repulsive electrical charge surrounding a particle allowing it to stick together with other particles to form a clump or floc	Facilitate the agglomeration or aggregation of the coagulated particles to form larger floccules that slowly drop out of suspension

Flocculants

FI-Co

62

[redacted]

Coagulants

FI-Co

63

[redacted]

Streambank Stabilization

Sb

64

- Definition
  - The use of readily available native plant materials to maintain and enhance streambanks
- Purpose
  - Prevent small streambank erosion problems
  - Form a root mat to stabilize and reinforce the soil on the streambank
  - Enhance the appearance of the stream
  - Enhance water quality and wildlife habitat

Streambank Stabilization

Sb

65

- Preferred Practices
  - Live Staking
  - Live Fascines
  - Branchpacking
  - Vegetated Geo-grid
  - Brushmattress
  - Coconut Fiber Roll
  - Dormant Post Plantings
- Acceptable Practices
  - Joint Planting
  - Live Cribwall
  - Vegetated Gabion Baskets
  - Tree Revetments
  - Log, Rootwad & Boulder Revetments

Streambank Stabilization

Sb

66

Stabilization structures and vegetative measures should be planned and designed by a design professional with experience in the field

Please refer to the GSWCC's guidance document, *Streambank & Shoreline Stabilization*

Slope Stabilization

Ss

67

- Definition
  - A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels
- Purpose
  - Provide a cover layer that stabilizes the soil and act as a rain drop dissipater
  - Provide a microclimate that protects young vegetation and promote its establishment

Rolled Erosion Control Products

Ss

68

- A natural fiber blanket with single or double photodegradable or biodegradable nets
- Blankets shall be nontoxic to vegetation, seed, or wildlife
- Installation and stapling shall conform to manufacturer's guidelines for application
- Short-term (~12 months) RECPs shall be used:
  - In concentrated flow areas less than 5 ft/sec
  - On slopes 3:1 or greater with a height of 10 ft. or greater

Hydraulic Erosion Control Products

Ss

69

- HECP utilize straw, cotton, wood, or other natural based fibers held together by a soil binding agent
- Materials shall be prepackaged from the manufacturer. Field mixing of performance enhancing additives will not be allowed
- All fibrous components should be natural or biodegradable and nontoxic to vegetation, seed or wildlife
- Applications rates shall conform to the manufacturer's guidelines

Slope Stabilization

Ss

70

Each roll should be placed in a staggered sequence behind the first roll starting at the top of the slope

Tackifiers

Tac

71

- Definition
  - A tie-down for soil, compost, seed, straw, hay or mulch
  - Hydrate in water and readily blend with other slurry materials to form a homogenous slurry
- Only anionic forms of PAM shall be used
- Purpose
  - Increase infiltration
  - Increase soil fertility
  - Enhance seed germination
  - Increase soil cohesion
  - Enhanced soil stabilization
  - Reduce stormwater runoff turbidity
  - Reduce loss of topsoil

Tackifiers

Tac

72

There are 5 types of tackifiers:

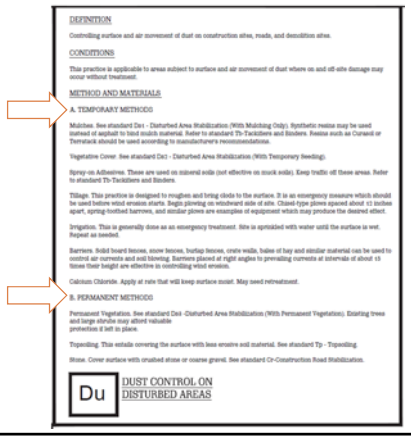
- Tac-1 Synthetic Polymers
- Tac-2 Organic Polymers
- Tac-3 Synthetic/Organic Blends
- Tac-4 Organic Polymers w/ Synthetic Fibers
- Tac-5 Synthetic/Organic Blends w/ Synthetic Fibers

Guar is an annual legume and the source of guar gum

73

Example Vegetative Plan

From Chapter 3 of the "Manual"



DEFINITION

Controlling surface and air movement of dust on construction sites, roads, and demolition sites.

CONDITIONS

This practice is applicable to areas subject to surface and air movement of dust where on and off-site damage may occur without treatment.

METHOD AND MATERIALS

A. TEMPORARY METHODS

Mulches. See standard Ds1 - Disturbed Area Stabilization (With Mulching Only). Synthetic resins may be used instead of asphalt to bind mulch material. Refer to standard Th-Tackifiers and Binders. Resins such as Curasol or Terrotack should be used according to manufacturer's recommendations.

Vegetative Cover. See standard Ds1 - Disturbed Area Stabilization (With Temporary Seeding).

Spray-on Adhesives. These are used on mineral soils (not effective on muck soils). Keep traffic off these areas. Refer to standard Th-Tackifiers and Binders.

Tillage. This practice is designed to roughen and bring clods to the surface. It is an emergency measure which should be used before wind erosion starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.

Irrigation. This is generally done as an emergency treatment. Site is sprinkled with water until the surface is wet. Repeat as needed.

Barriers. Solid board fences, snow fences, burlap fences, crate walls, bales of hay and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 15 times their height are effective in controlling wind erosion.

Calcium Chloride. Apply at rate that will keep surface moist. May need retreatment.

B. PERMANENT METHODS

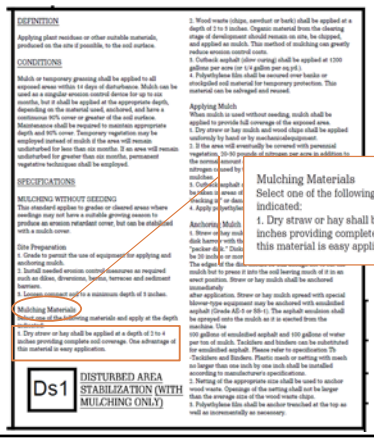
Permanent Vegetation. See standard Ds1 -Disturbed Area Stabilization (With Permanent Vegetation). Existing trees and large shrubs may afford valuable protection if left in place.

Topsoiling. This entails covering the surface with less erosive soil material. See standard Tp - Topsoiling.

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

Du DUST CONTROL ON DISTURBED AREAS

74



DEFINITION

Applying plant residues or other suitable materials, produced on the site if possible, to the soil surface.

CONDITIONS

Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Mulch can be used as a singular erosion control device for up to six months, but it shall be applied at the appropriate depth, depending on the material used, anchored, and have a continuous 90% cover or greater of the soil surface. Maintenance shall be required to maintain appropriate depth and 90% cover. Temporary vegetation may be employed instead of mulch if the area will remain undisturbed for less than six months. If an area will remain undisturbed for greater than six months, permanent vegetative techniques shall be employed.

SPECIFICATIONS

MULCHING WITHOUT SEEDING
This standard applies to grades or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

Site Preparation
1. Grade to permit the use of equipment for applying and anchoring mulch.
2. Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.
3. Loosen compact soil to a minimum depth of 3 inches.

Mulching Materials
Select one of the following materials and apply at the depth indicated:
1. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application.

Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

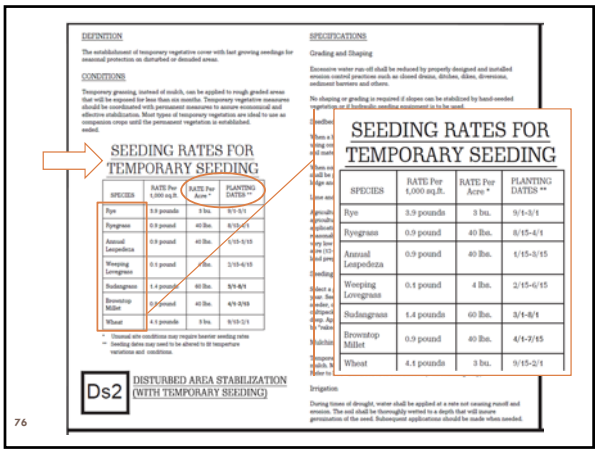
2. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.
3. Cutback asphalt (slow curing) shall be applied at 1200 gallons per acre (or 1.4 gallon per sq.yd.).
4. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and reused.

Applying Mulch
When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area.
1. Dry straw or hay mulch and wood chips shall be applied uniformly by hand or by mechanicalequipment.
2. If the area will eventually be covered with perennial vegetation, 50-90 pounds of nitrogen per acre in addition to the normal amount
nitrogen caused by
mulches.
3. Cutback asphalt
be added in areas of
cracking or dam
4. Apply polyethyle

Anchoring Mulch
1. Straw or hay mul
disk harrow with th
"packer disk." Disks
be 30 inches or mor
The edges of the disk
mulch but to press it into the soil leaving much of it in an
erect position. Straw or hay mulch shall be anchored
immediately
after application. Straw or hay mulch spread with special
blower-type equipment may be anchored with emulsified
asphalt (Grade AE-1 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 can be substituted
for emulsified asphalt. Please refer to specification Th
-Tackifiers and Binders. Plastic mesh or netting with mesh
no larger than one inch by one inch shall be installed
according to manufacturer's specifications.
2. Netting of the appropriate size shall be used to anchor
wood waste. Openings of the netting shall not be larger
than the average size of the wood waste chips.
3. Polyethylene film shall be anchor trenched at the top as
well as incrementally as necessary.

Mulching Materials
Select one of the following materials and apply at the depth indicated:
1. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application.

75



DEFINITION

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

CONDITIONS

Temporary grassing, instead of mulch, can be applied to rough graded areas that will be exposed for less than six months. Temporary vegetative measures should be coordinated with permanent measures to assure economical and effective stabilization. Most types of temporary vegetation are ideal to use as companion crops until the permanent vegetation is established.

SEEDING RATES FOR TEMPORARY SEEDING

SPECIES	RATE Per 1,000 sq.ft.	RATE Per Acre *	PLANTING DATES **
Rye	3.9 pounds	3 bu.	9/1-3/1
Ryegrass	0.9 pound	40 lbs.	8/15-4/1
Annual Lespedeza	0.9 pound	40 lbs.	4/15-3/15
Weeping Lovegrass	0.1 pound	4 lbs.	2/15-6/15
Sudangrass	1.4 pounds	60 lbs.	3/1-8/1
Brownton Millet	0.9 pound	40 lbs.	4/1-3/15
Wheat	4.1 pounds	3 bu.	9/15-2/1

* Unusual site conditions may require heavier seeding rates
** Seeding dates may need to be altered to fit temperature variations and conditions.

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

SPECIFICATIONS

Grading and Shaping

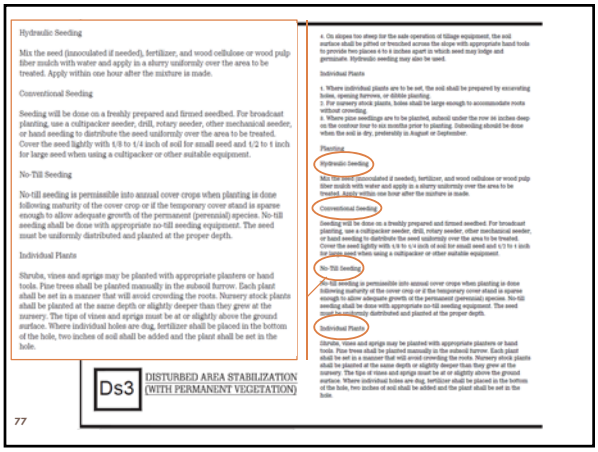
Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others.

No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.

Irrigation

During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.

76



Hydraulic Seeding

Mix the seed (innoculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.

Conventional Seeding

Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a cultipacker seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other suitable equipment.

No-Till Seeding

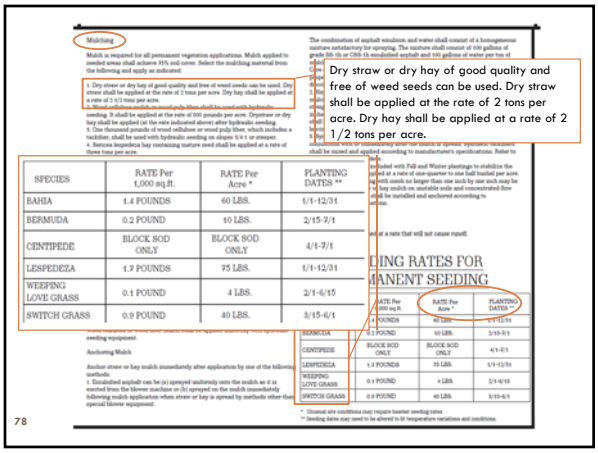
No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment. The seed must be uniformly distributed and planted at the proper depth.

Individual Plants

Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. Pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots. Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at the nursery. The tips of vines and sprigs must be at or slightly above the ground surface. Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the plant shall be set in the hole.

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

77



Mulching

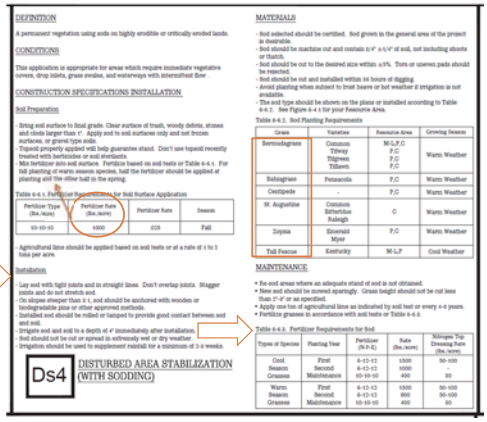
Mulch is required for all permanent vegetation applications. Mulch applied to seeded areas shall achieve 95% soil cover. Select the mulching material from the following and apply as indicated:

1. Dry straw or dry hay of good quality and free of weed seeds can be used. Dry straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.
2. Wood cellulose mulch or wood pulp fiber shall be used with hydraulic seeding. It shall be applied at the rate of 500 pounds per acre. Drystraw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.
3. One thousand pounds of wood cellulose or wood pulp fiber, which includes a tackifier, shall be used with hydraulic seeding on slopes 3/4:1 or steeper.
4. Sericea lespedeza hay containing mature seed shall be applied at a rate of three tons per acre.

Dry straw or dry hay of good quality and free of weed seeds can be used. Dry straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.

SPECIES	RATE Per 1,000 sq.ft.	RATE Per Acre *	PLANTING DATES **
BAHIA	1.4 POUNDS	60 LBS.	1/1-12/31
BERMUDA	0.2 POUND	10 LBS.	2/15-7/1
CENTIPEDE	BLOCK SOD ONLY	BLOCK SOD ONLY	4/1-7/1
LESPEDEZA	1.7 POUNDS	75 LBS.	1/1-12/31
WEEPING LOVE GRASS	0.1 POUND	4 LBS.	2/1-6/15
SWITCH GRASS	0.9 POUND	40 LBS.	3/15-6/1

78



DEFINITION

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

CONDITIONS

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

CONSTRUCTION SPECIFICATIONS INSTALLATION

Soil Preparation

- Bring soil surface to final grade. Clear surface of trash, woody debris, stones and clods larger than 4". Apply sod to soil surfaces only and not frozen surfaces, or gravel type soils.
- Topsoil properly applied will help guarantee stand. Don't use topsoil recently treated with herbicides or soil sterilants.
- Mix fertilizer into soil surface. Fertilize based on soil tests or Table 6-6.1. For fall planting of warm season species, half the fertilizer should be applied at planting and the other half in the spring.

Table 6-6.1. Fertilizer Requirements for Soil Surface Application

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

- Agricultural lime should be applied based on soil tests or at a rate of 1 to 2 tons per acre.

Installation

- Lay sod with tight joints and in straight lines. Don't overlap joints. Stagger joints and do not stretch sod.
- On slopes steeper than 3:1, sod should be anchored with wooden or biodegradable pins or other approved methods.
- Installed sod should be rolled or tamped to provide good contact between sod and soil.
- Irrigate sod and soil to a depth of 4" immediately after installation.
- Sod should not be cut or spread in extremely wet or dry weather.
- Irrigation should be used to supplement rainfall for a minimum of 3-4 weeks.

Ds4 DISTURBED AREA STABILIZATION (WITH SODDING)

MATERIALS

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

Table 6-6.2. Sod Planting Requirements

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

MAINTENANCE

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

Table 6-6.3. Fertilizer Requirements for Sod

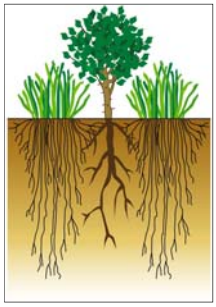
Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Top Dressing Rate (lbs./acre)
Cool Season Grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100 - 50
Warm Season Grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 800 400	50-100 50-100 50

79

Summary

80

- Vegetation is the 1st step in reducing erosion
- A site-specific plan is required to achieve maximum impact
- The vegetative plan and maintenance requirements should encompass the entire year



81

Questions?

GSWCC
Urban Program
P.O. Box 8024
Athens, GA 30603
(706) 552-4474

GSWCC

Insert Yellow Sheet

Back of Yellow Sheet

VEGETATIVE BEST MANAGEMENT PRACTICES

Bf	Buffer Zone
Cs	Coastal Dune Stabilization
Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Ds4	Disturbed Area Stabilization (With Sodding)
Du	Dust Control on Disturbed Area
Fl-Co	Flocculants and Coagulants
Sb	Streambank Stabilization (With Permanent Vegetation)
Ss	Slope Stabilization
Tac	Tackifiers

The products and practices presented in this Field Manual show the standard installation methods for each conventional BMP. New products and practices may not necessarily meet the requirements for each conventional BMP. Please see the Equivalent Best Management Practice List for specific manufacturer guidelines and specifications.

Bf

BUFFER ZONE

DEFINITION

A strip of undisturbed, original vegetation, enhanced or restored existing vegetation or the re-establishment of vegetation surrounding an area of disturbance or bordering streams, ponds, wetlands, lakes, and coastal waters

PURPOSE

- Reduce storm runoff velocities
- Act as screen for “visual pollution”
- Reduce construction noise
- Improve aesthetics
- Filtering and infiltrating runoff
- Cooling rivers and streams by creating shade
- Provide food and cover for wildlife and aquatic organisms
- Flood protection
- Protect channel banks from erosion

INSTALLATION

- Important factors, such as slope, hydrology, width, and structure shall be considered.
- The GA EPD enforces a 25 ft minimum undisturbed stream buffer requirement for warm water fisheries and a 50 ft minimum undisturbed stream buffer requirement for cold water fisheries.

- If any land-disturbing activity, exempt or non-exempt, occurs within a mandated stream buffer, all cut and fills shall be stabilized with appropriate slope stabilization.

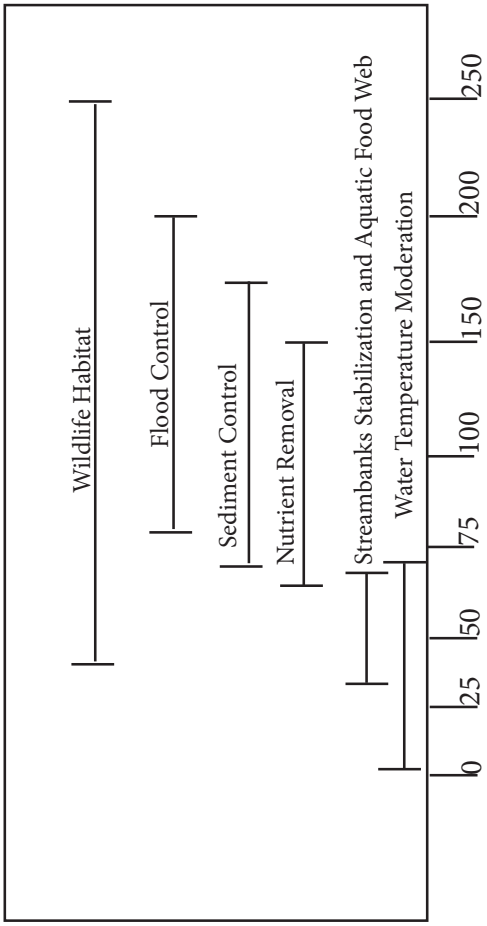


Figure 1. Range of Minimum Width (ft.) for Meeting Specific Buffer Objectives (Palone & Todd, draft)

Types of Buffers

General Buffer

- A strip of undisturbed, original land surrounding the disturbed site.
- A width should be selected to permit the zone to serve the purpose(s) listed above.

Vegetated Stream Buffer

- A vegetated stream buffer of 50 ft or greater can protect waters from excess sedimentation.

- The size of the stream and topography of the area must be considered to determine the appropriate width.
- The buffer should be increased 2 ft in width for every 1% slope.

Planting Techniques

- Plantings for buffer re-establishment and enhancement can consist of bare root seedlings, container-grown seedlings, container-grown plants, and balled and burlapped plants.
- Standard erosion control grasses and legumes may be used in denuded areas for quick stabilization.
- Refer to Tables 6-1.1 & 6-1.2 in the Manual for Erosion & Sediment Control in Georgia for complete listing of all Native Plants & Unrooted Hardwood Cuttings.
- Streambank stabilization techniques may be required if steep slopes and hydrologic patterns deem it necessary.
- Soil preparation and maintenance are essential for the establishment of planted vegetation.

Table 1. Effectiveness of Vegetative Buffer Strips

Purpose	Grass	Shrub	Tree
Filter Sediment	High	Low	Low
Filter Chemicals	Medium	Low	Low
Stabilize Stream Banks	Low	High	High
Improve Aesthetics	Low	Medium	High
Improve Habitat	Low	Medium	High
Reduce Noise	Low	Medium	High

Bf

MAINTENANCE

- Areas closet to the stream should be maintained with minimal impact.
- During periods of drought, water as necessary in all buffer areas planted for enhancement.
- Remove weeds by hand or with careful spraying.
- Monitor to determine if plant material needs to be replaced.
- Fertilizer is unnecessary if the appropriate vegetation is chosen.

REFERENCES

Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Sb	Streambank Stabilization (With Permanent Vegetation)

Cs

COASTAL DUNE STABILIZATION (WITH VEGETATION)

DEFINITION

Planting vegetation on dunes that are denuded, artificially constructed, or renourished.

PURPOSE

- Stabilize soil on dunes allowing them to become more resistant to wind and waves.
- Allow development of dunes in areas where they have been damaged or destroyed.

INSTALLATION

- Install in accordance with the approved plan.
- Install in accordance with all Federal, State and local regulations.
- Protect dunes from vehicular and human traffic.
- Provide crosswalks or crossover structures to allow for beach access.
- Irrigate during the first growing season in order to obtain good survival.
- Native plants commercially available that may be planted are included in Table 1.

Cs

Table 1. Planting Requirements for Native Plants

Species	Stock	Date	Depth
Marshay Cordgrass (Spartina patens)	Plants	Spring	4”-5”
Bitter Panicum (Panicum amarum)	Rhizomes	Spring	~4”
Coastal Panigrass (Panicum amarum v. amaralum	Seeds or Plants	Spring	1”-3”

Figure 1. Sand Fence and Native Plants

Sand Fence

- Install according to approved plan.
- Use posts made of Black Locust, Red or White Cedar, or similarly durable wood.
- Use posts with minimum length of 7 ft and minimum diameter of 3”.
- Space posts at a maximum of 10 ft.
- Entrench posts a minimum of 3 ft.
- Fasten fence to posts with four 12-gauge galvanized wires.
- Vegetation must be established immediately following development of the dunes.
- Use standard commercial 4-ft high snow fence that consists of wooden slats wired together with 1-1/4” spaces between the slats (See Figure 2)

Cs

Barrier Dune Construction

- Install sand fence a minimum of 100 ft from the mean high tide line.
- Space 2 or more parallel fences 30-40 ft apart.
- Locate fences as close to perpendicular with the prevailing winds, but as near parallel to the water line as possible
- When the winds are generally parallel to the water line, construct a single line of fence at least 140 ft from the mean high tide line with a shorter 30 ft section perpendicular to the original fence.
- Place these fences opposite the water side and space these fences about 40 ft apart.

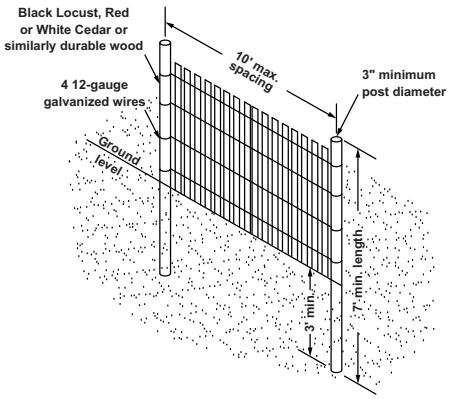


Figure 2. Sand Fence Installation Requirements

MAINTENANCE

- Repair any blowouts, wash pits, or other natural or man-made damage quickly.
- Maintain fences and erect additional fences if needed until the eroding area is replenished.
- Replant lost or destroyed vegetation.
- Apply 50 lbs of nitrogen/acre/year.
- Protect dunes from traffic by using elevated walks, semi-permanent paved paths, and portable roll-up walkways .

Cs

(This page left blank intentionally.)

Ds1

DISTURBED AREA STABILIZATION
(WITH MULCHING ONLY)

DEFINITION

A temporary cover of plant residues or other suitable materials, produced on site if possible, applied to the soil surface.

PURPOSE

- Reduce runoff and erosion
- Modify soil temperature
- Conserve moisture
- Prevent surface compaction and crusting
- Control undesirable vegetation
- Increase biological activity in the soil

INSTALLATION

- Apply mulch or temporary grassing to all exposed areas within 14 days of disturbance.
- Applicable to graded or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant cover.
- Mulch can be used as a singular erosion control device for up to 6 months.
- Apply at the appropriate depth. Refer to Table 1 for specific materials.

Site Preparation

- Grade to permit the use of equipment for applying and anchoring mulch

- Install needed erosion control measures such as dikes, berms, and sediment barriers.
- Loosen compacted soil to a minimum depth of 3”.

Applying Mulch

- Apply dry straw or hay and wood chips uniformly by hand or by mechanical equipment.
- Apply 20-30 lbs of nitrogen/acre if the area will eventually be covered with perennial vegetation.
- Apply polyethylene film on exposed areas.

Anchoring Mulch

- Press straw or hay into the soil with a disk harrow immediately after application. Tackifiers may be used when spreading mulch with blower-type equipment.
- Anchor wood waste using the appropriate size netting
- Trench polyethylene at the top as well as incrementally as necessary.

Table 1. Mulching Application Requirements

Material	Rate	Depth
Straw or hay	-	2” to 4”
Wood waste, chips, sawdust, bark	-	2” to 3”
Polyethylene film	Secure with soil, anchors, weights	-
Geotextiles, jute matting, netting, etc.	See manufac-turer’s recom-mentations	-

MAINTENANCE

- The appropriate depth and 90% cover shall be maintained at all times.

REFERENCES

Tac Tackifiers

DISTURBED AREA STABILIZATION

(WITH TEMPORARY SEEDING)

DEFINITION

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

PURPOSE

- Reduce runoff and sediment damage of down stream resources
- Protect the soil surface from erosion
- Improve wildlife habitat
- Improve aesthetics
- Improve tilth, infiltration, and aeration as well as organic matter for permanent plantings

INSTALLATION

- Apply mulch or temporary grassing to all exposed areas within 14 days of disturbance.
- Applicable to rough graded areas that will be exposed for less than 6 months.
- Coordinate with permanent measures to ensure economical and effective stabilization.
- Take note of which species are not appropriate for companion crop plantings.
- When the soil has been sealed by rainfall or consists of smooth cut slopes, scarify the soil in order to provide a place for the seed to lodge and germinate.

- Apply agricultural lime at the rate determined by soil test pH.
- Apply lime before land preparation and incorporate with a disk, ripper, or chisel.
- On steep slopes, apply fertilizer hydraulically.
- Select grass or grass-legume mixtures based on the area and season of the year.
- Apply seed uniformly by hand, cyclone seeder, drill, culti-packer-seeder, or hydraulic seeder.
- The appropriate depth of planting is 10x the seed diameter.
- Apply irrigation at a rate that will not cause runoff and erosion. Thoroughly wet the soil to insure germination of the seed.

MAINTENANCE

- Re-seed areas where an adequate stand of temporary vegetation fails to emerge.
- If optimum conditions for temporary vegetation is lacking, mulch can be used a singular erosion control device.

REFERENCES

Ds1	Disturbed Area Stabilization (With Mulching Only)
Tac	Tackifiers

Figure 2. Browntop Millet

Figure 3. Ryegrass

Figure 3. Rye

Table 1. Some Temporary Plant Species, Seeding Rates and Planting Dates

Species	Rates Per 1,000 sq. ft.	Rates per Acre	Planting Dates by Region		
			M-L	P	C
Barley Alone Barley in Mixtures	3.3 lbs. .6 lbs.	3 bu. .5 bu.	9/1-10/31	9/15-11/15	10/1-12/31
Lespedeza, Annual Lespedeza in Mixtures	0.9 lbs. 0.2 lbs.	40 lbs. 10 lbs.	3/1-3/31	3/1-3/31	2/1-2/28
Lovegrass, Weeping Lovegrass in Mixtures	0.1 lbs. .05 lbs.	4lbs. 2 lbs.	4/1-5/31	4/1-5/31	3/1-5/31
Millet, Browntop Millet in Mixtures	.9 lbs. .2 lbs.	40 lbs. 10 lbs.	4/15-6/15	4/15-6/30	4/15- 6/30
Millet, Pearl	1.1 lbs.	50 lbs.	5/15-7/15	5/1-7/31	4/15-8/15
Oats Alone Oats in Mixtures	2.99 lbs. .7 lbs.	4 bu. 1 bu.	9/15 -11/15	9/15-11/15	9/15-11/15

Ds2

Table 1. Some Temporary Plant Species, Seeding Rates and Planting Dates (continued)

Ds2

Species	Rates Per 1,000 sq. ft.	Rates per Acre	Planting Dates by Region		
			M-L	P	C
Rye (Grain) Alone Rye in Mixtures	3.9 lbs. .6 lbs.	3 bu. .5 bu.	8/15-10/31	9/15/-11/30	10/1-12/31
Ryegrass	0.9 lbs.	40 lbs.	8/15-11/15	9/1-12/15	9/15-12/31
Sudangrass	1.4 lbs.	60 lbs.	5/1-7/31	5/1-7/31	4/1-7/31
Triticale Alone Triticale in Mixtures	3.3 lbs. .6 lbs	3 bu. .5 bu.	NA	NA	10/15-11/30
Wheat Alone Wheat in Mixtures	4.1 lbs. .7 lbs.	3 bu. .5 bu.	9/15 -11/30	10/1-12/15	10/15-12/31

1. Unusual site conditions may require heavier seeding rates.
2. Seeding dates may need to be altered to fit temperature variations and local conditions.
3. For Major Land Resource Areas (MLRAs), see page 60.
4. Seeding rates are based on pure live seed (PLS).

Table 2. Fertilizer Requirements for Temporary Vegetation

Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	N Top Dressing Rate (lbs./acre)
Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100 --- 30
Cool seasn grasses & legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 1000 400	0-50 --- ---
Temporary cover crops seeded alone	First	10-10-10	500	30
Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 800 400	50-100 50-100 30

Ds3

DISTURBED AREA STABILIZATION

(WITH PERMANENT SEEDING)

DEFINITION

The planting of perennial vegetation such as trees, shrubs, vines, grasses, or legumes on exposed areas for final permanent stabilization.

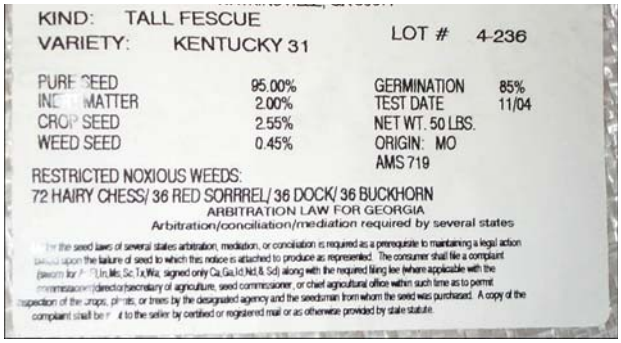
PURPOSE

- Protect the soil surface from erosion
- Reduce damage from sediment and runoff to down-stream areas
- Improve wildlife habitat and visual resources
- Improve aesthetics

INSTALLATION

- Use conventional planting methods where possible.
- Final Stabilization means that 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 landscaping materials in planned lanscaped areas), or equivalent permanent stabilization measures.
- Select plants species based on site and soil conditions, planned use and maintenance of the area, time of year, method of planting, and the needs of the land user. (Refer to Table 1)

- Apply agricultural lime at a rate of 1-2 tons/acre unless soil tests indicate otherwise. Please refer to Table 2 for initial fertilization, nitrogen, topdressing, and maintenance fertilizer requirements for each species.
- Apply seed hydraulically. If using conventional methods, use a culti-packer seeder, drill, rotary seeder, or by hand.
- Cover the seed lightly with 1/8”-1/4” of soil for small seed and 1/2”-1” of soil for large seed when using a cultipacker.
- Check seed tags for % germination & % purity in order to calculate Pure Live Seed (PLS), which is the percentage of the seeds that are pure and will germinate.
- Mulch is required for all permanent vegetation applications. Please refer to **Ds1** for application rates and anchoring methods for different materials.
- Irrigate when the soil is dry and at a rate that will not cause runoff.



KIND: TALL FESCUE
VARIETY: KENTUCKY 31
LOT # 4-236

PURE SEED	95.00%	GERMINATION	85%
INERT MATTER	2.00%	TEST DATE	11/04
CROP SEED	2.55%	NET WT. 50 LBS.	
WEED SEED	0.45%	ORIGIN: MO	
		AMS 719	

RESTRICTED NOXIOUS WEEDS:
72 HAIRY CHESS/ 36 RED SORRREL/ 36 DOCK/ 36 BUCKHORN
ARBITRATION LAW FOR GEORGIA
Arbitration/conciliation/mediation required by several states

Figure 1. Typical Tag on a Bag of Seed

PLS Example

Tall Fescue

85% germination & 95% purity

PLS = 0.85 germination x 0.95 purity

PLS = 80.75%

$$\frac{\text{Seeding rate}}{\text{PLS}} = \frac{\text{50 lbs. PLS/acre}}{\text{80.75\% PLS}} = \text{61.92 lbs/acre}$$

Table 1. Some Permanent Plant Species, Seeding Rates, and Planting Dates

Species	Rates per Acre	Rates per 1,000 sq. ft	Planting Dates by Region			Remarks
			M- L	P	C	
Bahia, Pensacola Alone or with temporary cover With other perennials	60 lbs. 30 lbs.	1.4 lbs. 0.7 lb.	---	4/1 -5/31	3/1-5/31	Low growing; sod producing; will spread into Bermuda lawns.
Bahia, Wilmington Alone or with temporary cover With other perennials	60 lbs. 30 lbs.	1.4 lbs. 0.7 lb.	3/15-5/31	3/1-5/31	__	Same as above
Bermuda, Common (Hulled seed) Alone With other perenials	10 lbs. 6 lbs.	0.2 lb. 0.1 lb.	---	4/1-5/31	3/15-5/31	Quick cover; low growing; sod forming; needs full sun.
Bermuda, Common (Unhulled seed) With temporary cover With other perennials	10 lbs. 6 lbs.	0.2 lb. 0.1 lb	---	10/1-2/28	11/1-1/31	Plant with Winter annuals. Plant with Tall Fescue

Table 1. Some Permanent Plant Species, Seeding Rates, and Planting Dates (continued)

Species	Rates per Acre	Rates per 1,000 sq. ft	Planting Dates by Region			Remarks
			M- L	P	C	
Bermuda Springs Common lawn and forage hybrids	40 cu. ft.	0.9 cu.ft.	4/15-6/15	4/1-6/15	4/1-5/31	1 cu. ft. = 650 sprigs 1 bu. = 1.25 cu. ft. or 800 sprigs
	Sod plugs 3' x3'					
Centipede	Blcok Sod Only	Block Sod Only	---	11/1-5/31	11/1-5/31	Drought tolerant. Full sun or partial shade.
Crown Vetch With winter annuals or cool season grasses	15 lbs.	0.3 lb.	9/1-10/15	9/1-10/15	--	Mix with 30 lbs. Tall Fescue or 15 lbs. Rye; inoculate seed; plant only North of Atlanta.
Fescue, Tall Alone With other perennials	50 lbs. 30 lbs.	1.1 lbs. 0.7 lb.	3/1-4/15 or 8/15-10/15	9/1-10/15	---	Can be mixed with perennial Lespedezas or Crown Vetch; not for droughty soils or heavy use areas

Table 1. Some Permanent Plant Species, Seeding Rates, and Planting Dates (continued)

Species	Rates per Acre	Rates per 1,000 sq. ft	Planting Dates by Region			Remarks
			M- L	P	C	
Lespedeza, Sericea						Widely adapted and low maintenance; takes 2-3 years to establish; inoculate seed with EL inoculant; mix with Weeping lovegrass, Common Bermuda, Bahia or Tall Fescue.
Scarified	60 lbs.	1.4 lbs.	4/1-5/31	3/15-5/31	3/1-5/15	
Unscarified	75 lbs.	1.7 lbs.	9/1-2/28	9/1-2/28	9/1-2/28	Mix with Tall Fescue or winter annuals.
Seed-bearing hay	3 tons	138 lbs.	10/1-2/28	10/1-1/31	10/15-1/15	Cut when seed is mature but before it shatters. Add Tall Fescue or winter annuals.

Table 1. Some Permanent Plant Species, Seeding Rates, and Planting Dates (continued)

Species	Rates per Acre	Rates per 1,000 sq. ft	Planting Dates by Region			Remarks
			M- L	P	C	
Lespedeza Ambro Virgata or Appalow						Spreading growth with height of 18”-24”; good in urban areas; slow to develop good stands; mix with Weeping Lovegrass, Common Bermuda, Bahia Tall Fescue or winter annuals; do not mix with Sericea Lespededeza; inoculate seed with EL inoculant.
Scarified	60 lbs.	1.4 lbs.	4/1-5/31	3/15-5/31	3/1-5/15	
Unscarified	75 lbs.	1.7 lbs.	9/1-2/28	9/1-2/28	9/1-2/28	
Lespedeza, Shrub (Lespedeza Bicolor or Lespedeza Thumbergii) Plants	3’ x 3’ spacing		10/1-3/31	11/1-3/15	11/15-2/28	Plant in small clumps for wildlife food and cover.

Ds3

Table 1. Some Permanent Plant Species, Seeding Rates, and Planting Dates (continued)

Species	Rates per Acre	Rates per 1,000 sq. ft	Planting Dates by Region			Remarks
			M- L	P	C	
Lovegrass, weeping Alone With other perennials	4 lbs. 2 lbs.	0.1 lb. 0.05 lb.	4/1-5/31	3/15-5/31	3/1-5/31	Quick cover; drought tolerant; grows well with Sericea Lespedeza on road-banks and other steep slopes; short lived.
Maidencane sprigs	2' x 3' spacing		2/1-3/31	2/1-3/31	2/1-3/31	For very wet sites such as river banks and shorelines. Dig sprigs locally.
Panicgrass, Altantic Coastal	20 lbs.	0.5 lb.	---	3/1-4/30	3/1-4/30	Grows well on coastal sand dunes; mix with Sericea Lespedeza but not on sand dune.
Red Canary Grass With other perennials	50 lbs. 30 lbs.	1.1 lbs. 0.7 lb.	8/15-10/15	9/1-10/15	——	Grows similar to Tall Fescue; for wet sites

Table 1. Some Permanent Plant Species, Seeding Rates, and Planting Dates (continued)

Species	Rates per Acre	Rates per 1,000 sq. ft	Planting Dates by Region			Remarks
			M- L	P	C	
Sunflower, Aztec Maximillian	10 lbs.	0.2 lb.	4/15-5/31	4/15-5/31	4/1-5/31	Mix with Weeping Lovegrass or other low growing grasses or legumes.

1. Rates are for broadcasted seed. If a seed drill is used, reduce the rates by one-half.
2. PLS is an abbreviation for Pure Live Seed. Refer to Glossary for an explanation of this term.
3. The resource areas are defined in the Glossary. See page 60 for Resource Area.
4. Seeding rates are based on pure live seeds (PLS).

Table 2. Fertilizer Requirements for Permanent Vegetation

Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./ acre)	N Top Dressing Rate (lbs./acre)
Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100 --- 30
Cool grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 1000 400	0-50 --- ---
Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 800 400	50-100 50-100 30
Warm season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 1000 400	50 --- ---

(This page left blank intentionally.)

Figure 2. Weeping Lovegrass

Figure 3. Sericea Lespedeza

Figure 4. Common Bermuda

MAINTENANCE

- Re-seed areas where an adequate stand of vegetation fails to emerge or where a poor stand exists.
- Maintain at least 6” of top growth under any use and management.
- Exclude traffic until the plants are well established.
- Please refer to Table 2 for second year and maintenance fertilizer rates.
- Apply one ton of agricultural lime every 4-6 years or as indicated by soil tests.
- Mow Bermudagrass, Bahiagrass, and Tall Fescue as desired.
- Mow Sericea Lespedeza only after frost to ensure that the seeds are mature.

REFERENCES

Ds1 Disturbed Area Stabilization (With Mulching Only)

Ds2 Disturbed Area Stabilization (With Temporary Seeding)

Ss Slope Stabilization

Ds4

DISTURBED AREA STABILIZATION
(WITH SODDING)

DEFINITION

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

PURPOSE

- Establish immediate ground cover
- Reduce runoff and erosion
- Improve aesthetics and land value
- Reduce dust and sediments
- Stabilize waterways and critical areas
- Filter sediments, nutrients and bugs
- Reduce downstream complaints
- Reduce likelihood of legal action
- Reduce likelihood of work stoppage due to legal action
- Increase “good neighbor” benefits

INSTALLATION

- Bring soil surface to final grade. Clear surface of trash, woody debris, stones and clods larger than 1”. Apply sod to soil surfaces only and not frozen surfaces, or gravel type soils.

- Topsoil properly applied will help guarantee a stand. Don’t use topsoil recently treated with herbicides or soil sterilants.
- Mix fertilizer into soil surface. Fertilize based on soil tests or Table 1. For fall planting of warm season species, half the fertilizer should be applied at planting and the other half in the spring.
- Agricultural lime should be applied based on soil tests or at a rate of 1-2 tons/acre.
- Lay sod with tight joints and in straight lines. Don’t overlap joints. Stagger joints and do not stretch sod.

Table 1. Fertilizer Requirements for Soil Surface Application

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

- On slopes steeper than 3:1, sod should be anchored with pins or other approved methods.
- Installed sod should be rolled or tamped to provide good contact between sod and soil.
- Irrigate sod and soil to a depth of 4” immediately after installation.
- Sod should not be cut or spread in extremely wet or dry weather.
- Irrigation should be used to supplement rainfall for a minimum of 2-3 weeks.

MATERIALS

- Sod selected should be certified. Sod grown in the general area of the project is desirable.
- Sod should be machine cut and contain 3/4” (+ or - 1/4”) of soil, not including shoots or thatch.

- Sod should be cut to the desired size within ±5%. Torn or uneven pads should be rejected.
- Sod should be cut and installed within 36 hours of digging.
- Avoid planting when subject to frost heave or hot weather, if irrigation is not available.
- The sod type should be shown on the plans or installed according to Table 2. See page 60 for your Resource Area.

Table 2. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tiflawn	M-L, P,C P,C P,C P,C	Warm weather
Bahiagrass	Pensacola	P,C	Warm weather
Centipede	___	P,C	Warm weather
St. Augustine	Common Bitterblue Raleigh	C	Warm weather
Zoysia	Emerald Myer	P,C	Warm weather
Tall Fescue	Kentucky 31	M-L, P	Cool weather

MAINTENANCE

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

- Fertilize grasses in accordance with soil tests or Table 3.

Table 3. Fertilizer Requirements for Sod

Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Top Dressing Rate (lbs./acre)
Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100 --- 30
Warm season grassed	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 800 400	50-100 50-100 30

REFERENCES

Ds1 Disturbed Area Stabilization (With Mulching Only)

Ds2 Disturbed Area Stabilization (With Temporary Seeding)

Ds3 Disturbed Area Stabilization (With Permanent Vegetation)

Ss Slope Stabilization

Du

DUST CONTROL ON DISTURBED AREAS

DEFINITION

Controlling surface and air movement of dust on construction sites, roads, and demolition sites.

PURPOSE

- Prevent surface and air movement of dust from exposed soil surfaces.
- Reduce the presence of airborne substances that may be harmful or injurious to human health, welfare, or safety, or to animals or plant life.

MATERIALS

Temporary Methods

- Mulches - See **Ds1 - Disturbed Area Stabilization** (with Mulching only). Refer to specification **Tac - Tackifiers** for the use of synthetic resin to bind mulch material.
- Vegetative Cover - See **Ds2 - Disturbed Area Stabilization** (with Temporary Seeding).
- Spray-on Adhesives - For use on mineral soils, not muck soils. Refer to specification **Tac - Tackifiers**.

- Tillage - Designed to roughen and bring clods to the soil surface. Begin plowing on windward side of site. Use chisel-type plows, spring-toothed harrows, or similar plows to achieve desired effect. This is an emergency measure to be used before wind erosion starts.
- Irrigation - Sprinkle the site with water until the surface is wet. Repeat as needed.
- Barriers - Use solid board fence, snow fence, burlap fence, crate walls, bales of hay, or similar material to control air currents and soil blowing. Place barriers at right angles at intervals of 15x their height to control wind erosion.
- Calcium Chloride - Apply at a rate to keep the surface moist.

Permanent Methods

- Permanent Vegetation - See **Ds3 - Disturbed Area Stabilization** (with Permanent seeding). Existing trees and large shrubs may afford valuable protection if left in place.
- Topsoiling - See specification **Tp - Topsoiling**.
- Stone - Cover surface with crushed stone or coarse gravel. See specification **Cr - Construction Road Stabilization**.

MAINTENANCE

- Prohibit traffic on surface after spraying.
- Supplement surface covering as needed.

REFERENCES

Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Ds4	Disturbed Area Stabilization (With Sodding)
Tac	Tackifiers
Cr	Construction Road Stabilization
Tp	Topsoiling

(This page left blank intentionally.)

Fl-Co

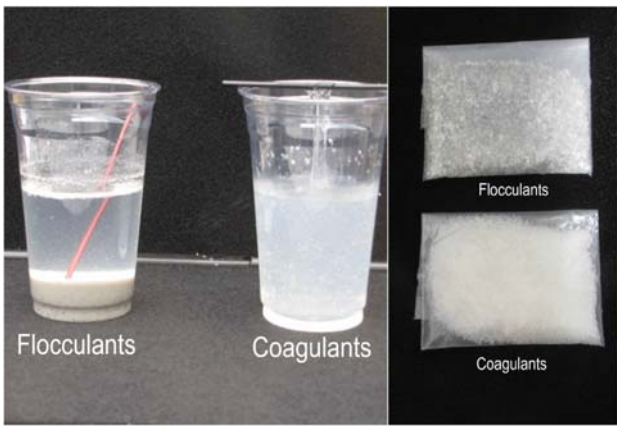
FLOCCULANTS & COAGULANTS

DEFINITION

Formulated to assist in the solids/liquid separation of suspended particles in solution.

Coagulant - Required to help give body to the water. A coagulant neutralizes the repulsive electrical charges surrounding particles allowing them to “stick together” creating clumps or flocs that form a small to mid-size particle.

Flocculent - Facilitate the agglomeration or aggreation of the coagulated particles to form larger floccules and act as a net where it gathers up the smaller coagulated particles making a larger particle. This larger particle will slowly drop out of suspension.



PURPOSE

- Settle suspended sediment, heavy metals and hydrocarbons (TSS) in runoff water from construction sites for water clarification.

INSTALLATION

- Application shall conform to manufacturer’s instructions and guidelines. Fl-Co applications shall comply with all federal and local laws.
- Only anionic forms of Fl-Co shall be used.

- This practice is not intended for application to surface waters of the state. It is intended for application within construction storm water ditches and storm drainage systems that feed into pre-constructed ponds or basins.

MAINTENANCE

- Maintenance shall consist of reapplying Fl-Co via the measures above when turbidity levels are no longer met or the Fl-Co is used up. Bricks, blocks, socks,logs and bags shall be maintained when sediment accumulates on the products.

Sb

STREAMBANK STABILIZATION

(USING PERMANENT VEGETATION)

DEFINITION

The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.

PURPOSE

- Lessen the impact of rain directly on the soil.
- Trap sediment from adjacent land.
- Form a root mat to stabilize and reinforce the soil on the streambank.
- Provide wildlife habitat.
- Enhance the appearance of the stream.
- Lower summertime water temperatures for a healthy aquatic population.

NOTE: Careful thought, planning and execution is required to assure that the streambank stabilization project is done efficiently and correctly. Please refer to GSWCC's Guidelines for Streambank Restoration for more detailed information.

SELECTED PRACTICES

- Revegetation includes seeding and sodding of grasses, seeding in combination with erosion control fabrics, and the planting of woody vegetation (shrubs and trees).
- Use jute mesh and other geotextiles to aid in soil stabilization and revegetation.

Live Stake

- Fresh, alive woody plant cuttings tamped into the ground as stakes, intended to root and grow into mature shrubs that will stabilize soils and restore the riparian zone habitats.
- Willow species work best.
- Provides no immediate streambank stabilization.

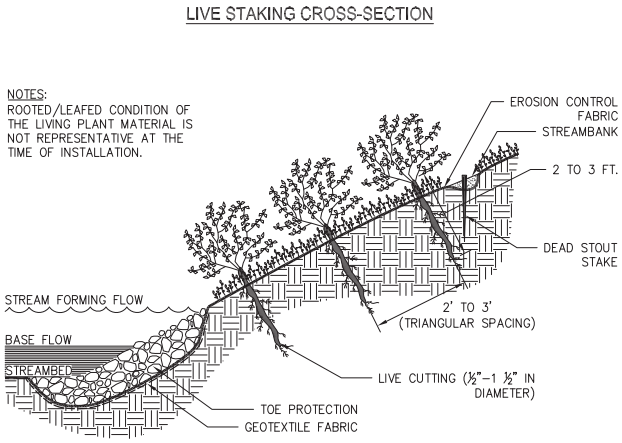


Figure 1. Illustration of a Live Stake

Joint Planting

- Installation of live willow stakes between rock previously placed along the streambank.
- Rock needs to be loosely dumped or hand placed and no thicker than 2 ft.
- Enables a bank previously installed with conventional rip-rap to become naturalized.

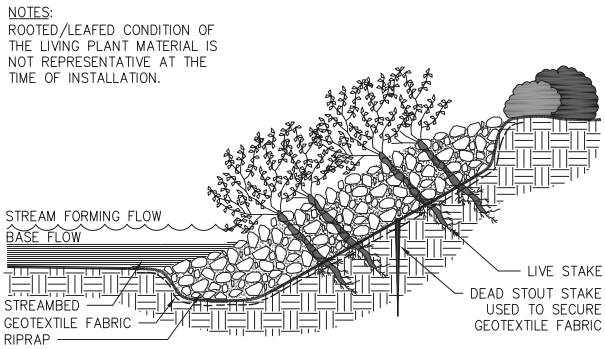


Figure 2. Illustration of Joint Planting

Live Fascine

- Sausage-like bundles of live cut branches placed into trenches along the streambank.
- Willow species work best.
- Provides immediate protection from erosion when properly used and installed.
- Creates very little site disturbance as compared to other systems.
- Works especially well when combined with surface covers such as jute mesh or coir fabrics.

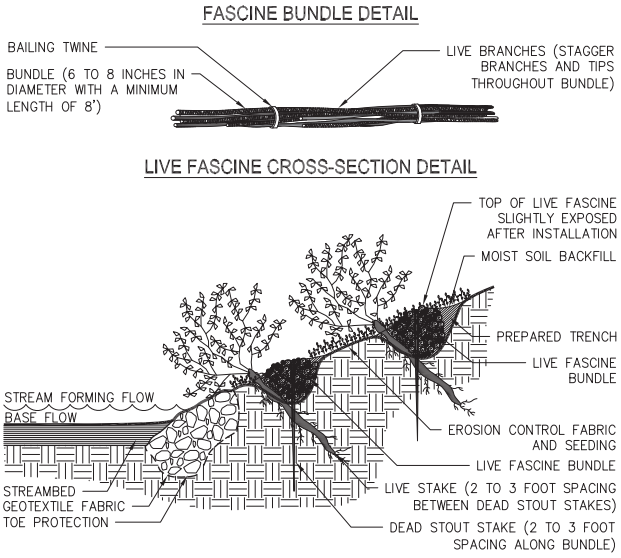


Figure 3. Illustration of a Live Fascine

Brushmattress

- Combination of living units that form an immediate protective surface cover over the streambank.
- Living units used include live stakes, live fascines, and a mattress branch cover (long, flexible branches placed against the bank surface).
- Requires a great deal of live material.
- Complicated and expensive to evaluate, design, and install.
- Captures sediment during flood conditions.
- Produces habitat rapidly, and quickly develops a healthy riparian zone.

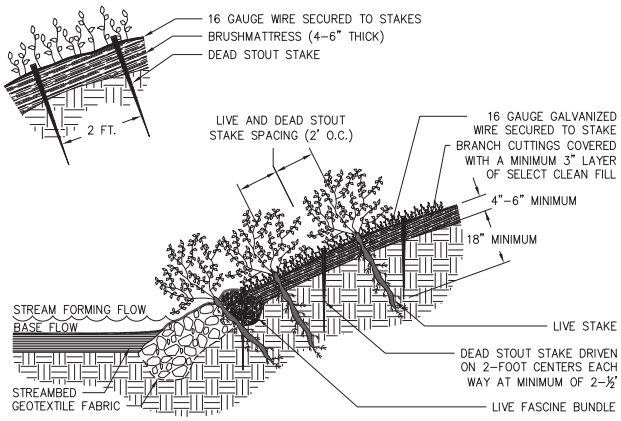


Figure 4. Illustration of a Brushmattress

Live Cribwall

- A rectangular framework of logs or timbers, rock, and woody cuttings.
- Requires a great deal of assessment and understanding of stream behavior.
- Can be complicated and expensive if a supply of wood and some volunteer help is not available.
- Develops a natural streambank or upland slope appearance after it has begun to grow.

- Provides excellent habitat for a variety of fish, birds, and animals.
- Very useful where space is limited on small, narrow stream corridors.

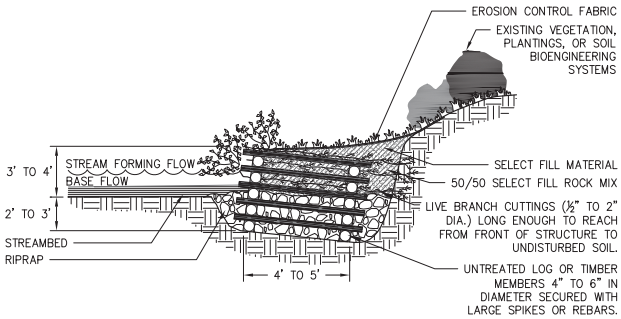


Figure 5. Illustration of a Live Cribwall

Branchpacking

- Process of alternating layers of live branches and soil, incorporated into a hole, gully, or slumped-out area in a slope or streambank.
- Moderate to complex level of difficulty for construction.
- Produces an immediate filter barrier, reducing scouring conditions, repairing gully erosion, and providing habitat cover and bank reinforcement.

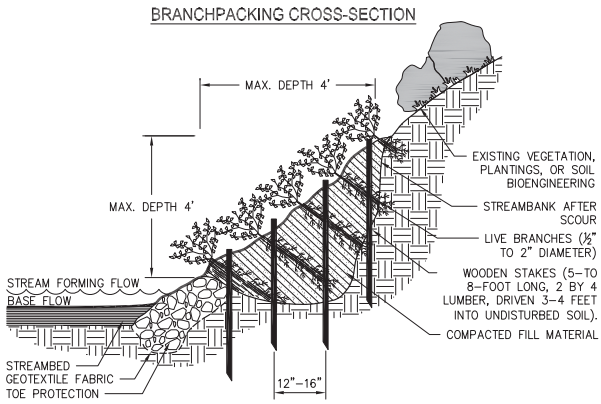


Figure 6. Illustration of Branchpacking

- One of the most effective and inexpensive methods for repairing holes in earthen embankments along small stream sites.

Table 1. Streambank Erosion Protection Measures Relative Costs Complexity		
Measure	Relative Cost	Relative Complexity
Live stake	Low	Simple
Joint planting	Low*	Simple*
Live fascine	Moderate	Moderate
Brushmattress	Moderate	Moderate to Complex
Live cribwall	High	Complex
Branchpacking	Moderate	Moderate to Complex
Conventional vegetation	Low to Moderate	Simple to Moderate
Conventional bank armoring (riprap)	Moderate to High	Moderate to Complex

*Assumes rock is in place

MAINTENANCE

- Check banks after every high-water event, fixing gaps in the vegetative cover at once with structural materials or new plants, and mulching if necessary.
- Fresh cuttings from other plants may be used for repairs.
- When fertilizer is applied on the surface, it is best to apply about one-half at planting, one-fourth when new growth is about 2” tall, and one-fourth about six weeks later.

REFERENCES

Ds1 Disturbed Area Stabilization (With Mulching Only)

Ds2 Disturbed Area Stabilization (With Temporary Seeding)

Ds3 Disturbed Area Stabilization (With Permanent Vegetation)

Ds4 Disturbed Area Stabilization (With Sodding)

Ss Slope Stabilization

Guidelines for Streambank Restoration, Georgia Soil and Water Conservation Commission

(This page left blank intentionally.)

Ss

SLOPE STABILIZATION

DEFINITION

A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.

Rolled Erosion Control Products (RECP)

- A natural fiber blanket with single or double photodegradable or biodegradable nets.

Hydraulic Erosion Control Products (HECP)

- HECP shall utilize straw, cotton, wood or other natural based fibers held together by a soil binding agent which works to stabilize soil particles. Paper mulch should not be used for erosion control.

PURPOSE

- Provide a cover layer that stabilizes the soil and acts as a rain drop impact dissipater while providing a microclimate which protects young vegetation and promotes its establishment.

INSTALLATION

- Installation and stapling of RECPs and application rates for the HECPs shall conform to manufacturer's guidelines for application.
- Hydraulic erosion control products shall be prepackaged from the manufacturer. Field mixing of performance enhancing additives will not be allowed. Fibrous components should be all natural or biodegradable.

Figure 1. Hydroseeding on disturbed areas

MAINTENANCE

- Inspect all erosion control blankets and matting periodically after installation. Inspect immediately after rainstorms to check for erosion and undermining.
- Repair all dislocations and failures immediately.
- Re-install all materials after washouts or breakage occurs. Repair damage to the slope or ditch first.
- Monitor all areas until they are permanently stabilized.

Figure 2. Installation of Jute Matting

Ss

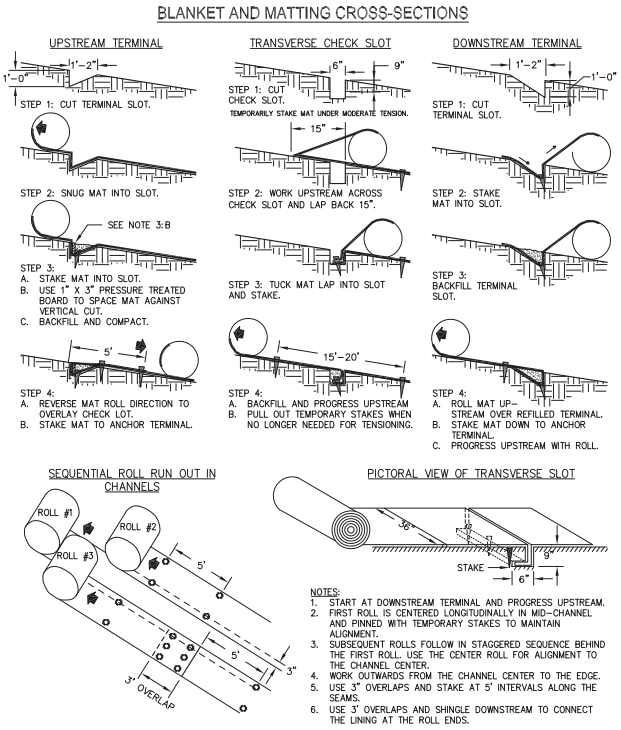


Figure 2. Typical Installation Guidelines for RECP

(This page left blank intentionally.)

Tac

TACKIFIERS

DEFINITION

A substance used as tie-down for soil, compost, seed, straw, hay or mulch. They hydrate in water and readily blend with other slurry materials to form a homogenous slurry.

PURPOSE

The purpose of tackifiers are to reduce soil erosion from wind and water on construction sites. It also increases the performance of the mulching material, so that it can:

- Increase infiltration.
- Increase soil fertility
- Control undesirable vegetation.
- Reduce runoff stormwater turbidity and loss of topsoil.
- Modify soil temperature.
- Increase soil cohesion and stabilization.
- Enhance seed germination

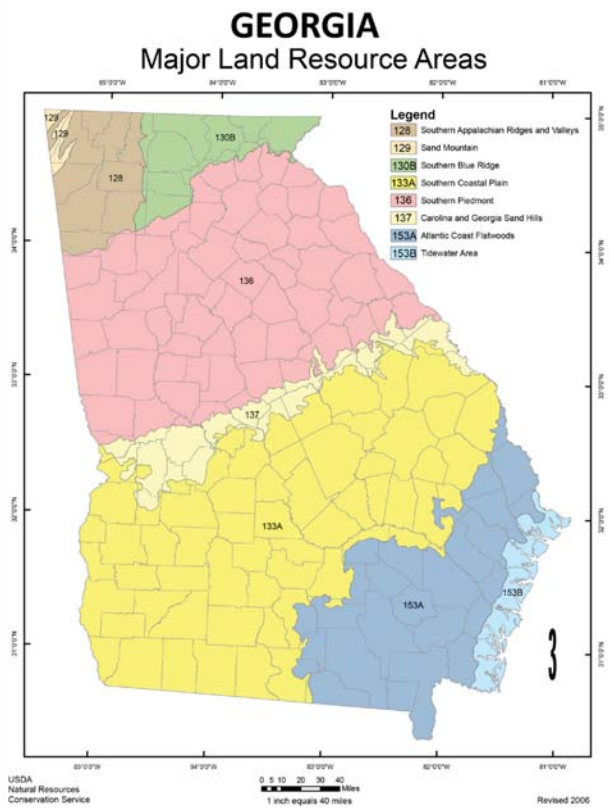
CONDITIONS

This practice is intended for direct soil surface application to sites where the timely establishment of vegetation may not be feasible or where vegetative cover is absent or inadequate.

Tac

CRITERIA

- All organic mulching materials shall be anchored by tackifiers/binders or matting/netting. Tackifiers and binders are used to anchor wood cellulose, wood pulp fiber, and other mulch materials applied with hydroseeding equipment.
- Only anionic forms of PAM shall be used. Not harmful to plants, animals, and aquatic life.
- Application rates shall conform to manufacturer's guidelines for application.
- Shall not reduce infiltration rates.
- All organic tackifiers must be derived from natural plant sources.
- Contain no growth or germination inhibiting materials.
- Synthetic fibers shall be of nylon or polyester blends.
- There are 5 types of tackifiers:
  - **Tac-1** Synthetic Polymers
  - **Tac-2** Organic Polymers
  - **Tac-3** Synthetic/Organic Blends
  - **Tac-4** Organic Polymers w/ Synthetic Fibers
  - **Tac-5** Synthetic/Organic Blends w/ Synthetic Fibers



(This page left blank intentionally.)

Insert Tab 8

Structural Measures

Back of Tab

1

BEST MANAGEMENT PRACTICES

STRUCTURAL MEASURES

GSWCC

Level II: Introduction to Design July 2016

The Manual for Erosion & Sediment Control in Georgia

2

- Also known as the "Manual" or "Green Book"
- Chapter 6, Section 3 contains standards for structural practices and provides instructions for the preparation of erosion and sediment control plans for land-disturbing activities.
- The current edition of the Manual can be found at: www.gaswcc.georgia.gov

Equivalent Product List

3

- The products and practices presented in this presentation show the standard installation methods for each conventional BMP. New products and practices may not necessarily meet the requirements for each conventional BMP. Please see the Equivalent Best Management Practice List for specific manufacturer guidelines and specifications.
- The current Equivalent BMP List can be found @ http://gaswcc.georgia.gov/ under "Documents List"

Shall/Will, Should, and May

4

- Shall or Will – A mandatory condition. When certain requirements are described with the "shall" or "will" stipulations, it is mandatory that the requirements be met.
- Should – An advisory condition. Considered to be recommended but not mandatory
- May – A permissive condition. No requirement is intended.

5

Structural BMPs

Cd – Slide 6
Ch – Slide 13
Co – Slide 17
Cr – Slide 20
Dc – Slide 23
Di – Slide 26
Dn1 – Slide 31
Dn2 – Slide 35
Fr – Slide 38
Ga – Slide 42
Gr – Slide 44
Lv – Slide 49
Rd – Slide 53
Re – Slide 56
Rt – Slide 58
Sd1 – Slide 65
Sd2 – Slide 76
Sd3 – Slide 87
Sd4 – Slide 94
Sk – Slide 102
SpB – Slide 106
Sr – Slide 112
St – Slide 118
Su – Slide 121
Tc – Slide 126
Tp – Slide 129
Tr – Slide 132
Wt – Slide 134

Check Dam

Cd

6

- Definition
  - A temporary grade control structure, or dam constructed across a swale, drainage ditch, or area of concentrated flow.
- Purpose
  - Reduce velocity of storm water
  - Filter sediment
  - Stabilize the grade
- <u>Not to be used in a live stream</u>

Check Dam

Cd

7

- Design Criteria
  - Side slopes shall be 2:1 or flatter
  - Drainage Area
    - (2) acres for Stone Check Dams
    - (1) acre for Straw-Bale & Compost Filter Sock Check Dams

TO BE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN

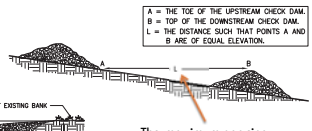
1. cfs in the channel/ditch that the check dam is being used in:_____
2. Above 2.0 cfs: Yes_____ No_____
3. If Yes, list BMP being used in conjunction with check dams:_____

Stone Check Dams

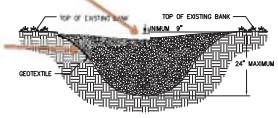
Cd-S

8

The center of the check dam shall be at least 9" lower than the outer edges.



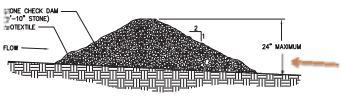
Geotextile should be used as a separator



PROFILE VIEW

The maximum spacing between dams should be such that the toe of upstream dam is at the same elevation as the top of the downstream dam.

Stone Size (2"-10")

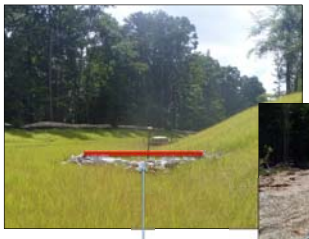


Dam height (24") should be measured to the center of the check dam

Stone Check Dams

Cd-S

9

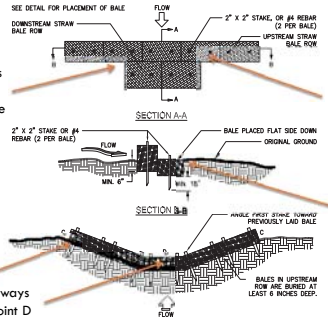


The center of the check dam is lower than the outer edges.

Straw-Bale Check Dams

Cd-Hb

10



The bales should be placed in rows with bale ends tightly abutting the adjacent bales

Bales should be bound with wire or nylon string

A trenched in bale level with the ground acts as a splash pad

Point C should always be higher than Point D

Straw-Bale Check Dams

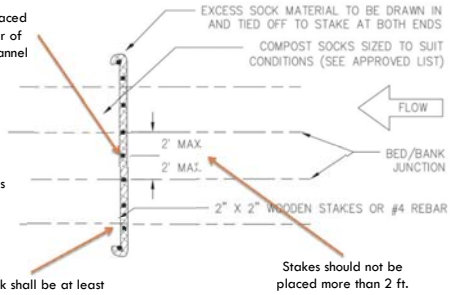
Cd-Hb

11

Compost Filter Sock

Cd-Fs

12



1 stake is placed at the center of the ditch/channel

Maximum staking depth is 18"

The sock shall be at least 18" in diameter

Stakes should not be placed more than 2 ft. apart

Channel Stabilization

Ch

13

- Definition
  - Improving, constructing or stabilizing an open channel for water conveyance.
- Purpose
  - Prevent erosion and sediment deposition
  - Provide adequate capacity for flood water, drainage, or other water management practices
- This standard only applies to channels conveying intermittent flow, not a continuous, live stream.

Channel Stabilization

Ch

14

- Design Criteria
  - Category 1 (< 5 ft/sec)
    - Vegetated Lining – temporary erosion control blankets or sod shall be used to aid in the establishment of the vegetated lining.

Channel Stabilization

Ch

15

- Design Criteria
  - Category 2 (≥ 5 ft/sec but < 10 ft/sec)
    - Turf Reinforcement Matting (TRM) – a permanent geo-synthetic matting that is used to stabilize the soil while permanent vegetation is taking root.
    - Rock Riprap Lining

Channel Stabilization

Ch

16

- Design Criteria
  - Category 3 (≥ 10 ft/sec)
    - Concrete Lining
    - Grade Stabilization Structure – These structures are used where excessive grades are present or water is to be lowered structurally from one elevation or another.

Construction Exit

Co

17

- Definition
  - A stone stabilized pad located at any point where traffic will be leaving a construction site to a public right-of-way, street, alley, sidewalk or parking area.
- Purpose
  - Reduce or eliminate the transport of mud from the construction area onto public rights-of-way by motor vehicles of by runoff.
- Required at all points of construction access

Construction Exit

Co

18

Ridge is required if grade is > 2% toward paved area

Aggregate Size (1.5"-3.5")

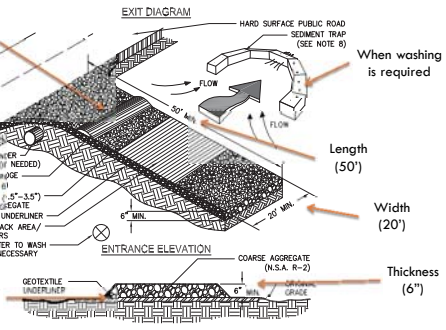
When washing is required

Length (50')

Width (20')

Geotextile is placed between the aggregate and the soil base

Thickness (6")



Construction Exit

Co

19

Construction Road Stabilization

Cr

20

- Definition
  - A travel-way constructed as part of a construction plan including access roads, subdivision roads, parking areas, and other on-site vehicle transportation routes.
- Purpose
  - Provide a fixed travel route for construction traffic and reduce erosion for the subsequent regrading of permanent roadbeds between time of initial grading and final stabilization.

Construction Road Stabilization

Cr

21

- Design Criteria
  - The grades for a temporary road should not exceed 10% for lengths less than 200 ft.
  - Geotextile should be applied to the roadbed for additional stability
  - A 6" layer of coarse aggregate shall be applied immediately after grading
  - Road Widths
    - One-way traffic – 14 ft.
    - Two-way traffic – 20 ft.
    - Two-way trailer traffic – 24 ft.

Construction Road Stabilization

Cr

22

Stream Diversion Channel

Dc

23

- Definition
  - A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed in the stream channel.
- Purpose
  - To protect the streambed from erosion and to allow work "in the dry".
- Shall only be used on flowing streams with a drainage area less than 1 square mile (640 acres)
- Stream buffer variance from the GA EPD may be required. All other appropriate agencies, including the Army Corps of Engineers, shall be contacted to ensure compliance

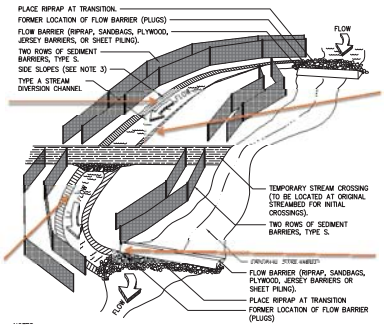
Stream Diversion Channel

Dc

24

Side slopes shall be no steeper than 2:1

The bottom width shall be a minimum of 6 feet or equal to the existing streambed



The channel surface shall be smooth to prevent tearing

The downstream plug is removed first after liner installation is complete

Stream Diversion Channel

Dc

25

Stream Diversion Channel Linings		
Lining Material	Symbol	Acceptable Velocity (fps)
Geotextile, polyethylene film, or sod	Dc-A	0-2.5
Geotextile alone	Dc-B	2.5-9.0
Class I Riprap and Geotextile	Dc-C	9.0-13.0

Diversion

Di

26

- Definition
  - A ridge of compacted soil, constructed above, across, or below a slope.
- Purpose
  - Reduce the erosion of steep, or otherwise highly erodible areas by reducing slope lengths and intercepting storm runoff.
- Applicable when runoff from higher areas is or has the potential for damaging property, causing erosion, contributing to pollution, flooding, or interfering with the establishment of vegetation.

Diversion

Di

27

- Design Criteria
  - Location is determined by outlet conditions, topography, land use, soil type, length of slope, seep planes, and the development layout.
  - Ridge Design – shall be compacted and designed to have stable side slopes that are no steeper than 2:1. The ridge shall be a minimum width of 4 ft. at the design water elevation after settlement and allow for 10% for settlement.
  - Channel Design – Generally, on steeper slopes, narrow and deep channels may be required. On gentle slopes, broad and shallow channels are usually applicable.
  - Outlet – Every diversion should have an adequate outlet.

Diversion

Di

28

- The required storm frequency is based on the purpose of the diversion
  - Temporary – 10 yr, 24-hr storm
  - Permanent – 25 or 50 yr, 24-hr storm

Diversion Type	Land or Improvement Protected	Storm Frequency	Freeboard (ft)	Minimum Top Width (ft)
Temporary	Construction areas Building sites	10 year	0.3	4
Permanent	Landscaped, recreation, or similar areas	25 year	0.3	4
	Dwellings, schools, commercial buildings, and similar installations	50 year	0.5	4

Diversion

Di

29

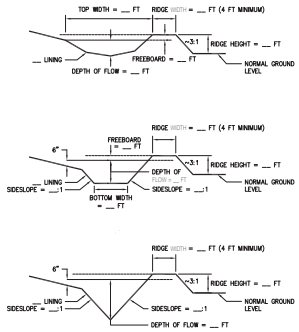
Parabolic

Recommended

Trapezoidal

Not Recommended

Triangular



Diversion

30

Temporary Downdrain Structure

Dn1

31

- Definition
  - A temporary structure used to convey concentrated storm water runoff down the face of cut or fill slopes.
- Purpose
  - Safely convey storm water runoff from one elevation to another without causing slope erosion in order to allow the establishment of vegetation on the slope.
- Removed once the permanent storm water disposal system is in installed.

Temporary Downdrain Structure

Dn1

32

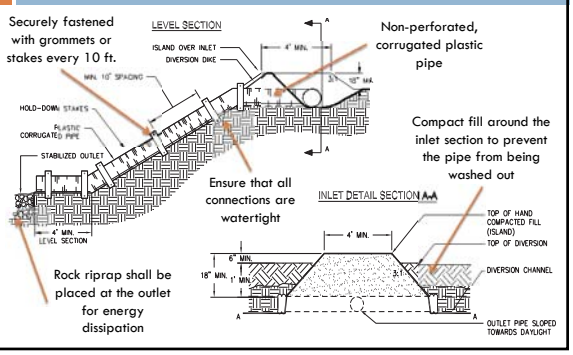
- Design Criteria
  - Placement – Shall be located on undisturbed soil or well-compacted fill
  - Diameter – Shall provide sufficient capacity required to convey the maximum expected runoff expected during the life of the drain

Maximum Drainage Area (acre)	Pipe Diameter (inches)
0.3	10
0.5	12
1.0	18

Temporary Downdrain Structure

Dn1

33



Temporary Downdrain Structure

Dn1

34

- For steep slopes, down drains should be placed diagonally across the slope, extending the drain beyond the toe of the slope.

Permanent Downdrain Structure

Dn2

35

- Definition
  - A permanent structure used to safely convey surface runoff from the top of a slope to the bottom of the slope.
- Purpose
  - Minimize erosion due to concentrated storm water runoff on cut or fill slopes .
- All structures shall satisfy the standards and specifications set forth by the Georgia DOT.

Permanent Downdrain Structure

Dn2

36

- Design Criteria
  - The following types may be used
    - Paved Flume
    - Pipe
    - Sectional
  - These structures should be designed by professionals familiar with these structures.
  - Flumes shall be adequately designed to safely convey the 25-year, 24-hour storm
  - Outlets must be stabilized in accordance with **St – Storm Drain Outlet Protection**

Permanent Downdrain Structure

Dn2

37

Filter Ring

Fr

38

- Definition
  - A temporary stone barrier constructed at storm drain inlets and pond outlets.
- Purpose
  - Reduce flow velocities
  - Prevent failure of other sediment control devices
  - Prevent sediment from leaving the site or enter drainage systems
- Shall be used in conjunction with other sediment control measures.

Filter Ring

Fr

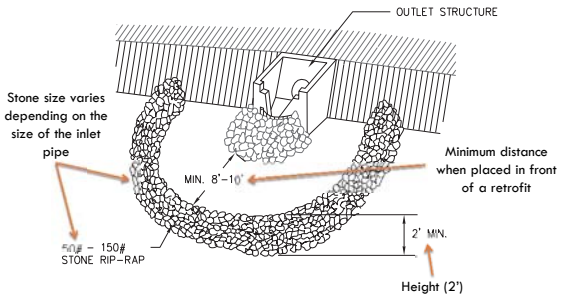
39

- Design Criteria
  - Location
    - Shall surround all sides of the structure receiving runoff from the disturbed area and be placed no less than 4 ft. from the structure. When placed in front of a retrofit, it should be no less than 8-10 ft. from the retrofit.
  - Stone size
    - 3-5 inch stone for inlets with diameters <12 in
    - 10-15 inch stone Inlets with diameters >12 in
  - Height
    - No less than 2 ft. from grade

Filter Ring

Fr

40



Filter Ring

Fr

41

Gabion

Ga

42

- Definition
  - Large, multi-celled, welded wire or rectangular wire mesh boxes
- Purpose
  - Used in the construction of erosion control structures, retaining walls, abutments, check dams, and channel revetments to stabilize highly erosive slopes
- Should be prepared by a design professional familiar with the use of gabions.

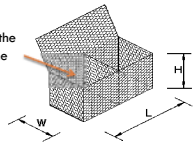
Gabion

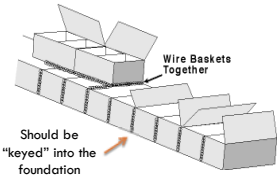
Ga

43

Gabions are durable because they support plant growth that develops a living coating for the wire mesh and stone

Hand packing allows the complete filling of the basket





Grade Stabilization Structure

Gr

44

- Definition
  - A structure used to stabilize the grade in a natural or artificial channel
- Purpose
  - Prevent the formation of gullies
  - Reduce erosion and sediment pollution
- Does not apply to sites where water is to be impounded
- Shall be placed on compacted earth-fill

Grade Stabilization Structure

Gr

45

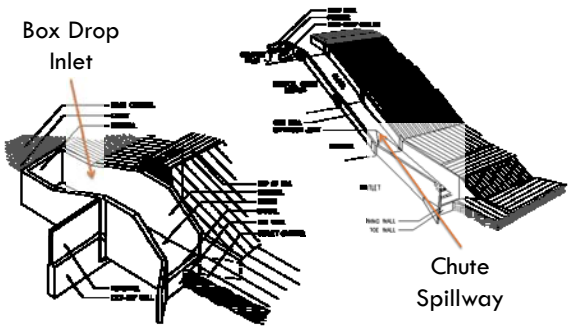
- Design Criteria
  - Structures that consist of concrete, rock, masonry, steel, aluminum, treated wood, or soil engineering methods shall be designed with sound engineering practices
  - Conditions of adjacent areas should be considered when determining the storm frequency used to design the grade stabilization structure

Adjacent Area	Storm Frequency
Residences, commercial buildings, recreational buildings, etc.	100-year, 24-hour
Recreation and landscaped areas	25-year, 24-hour
Agricultural Land	25-year, 24-hour

Grade Stabilization Structure

Gr

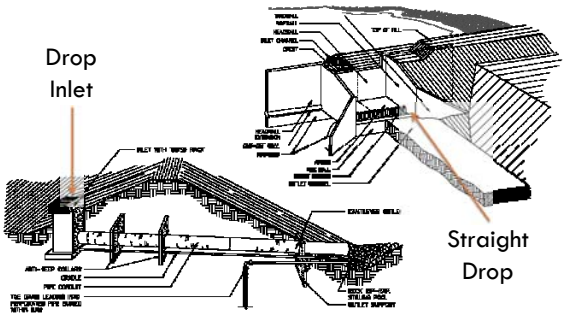
46



Grade Stabilization Structure

Gr

47



Grade Stabilization Structure

Gr

48

Level Spreader

Lv

49

- Definition
  - A storm flow outlet device constructed at zero grade across the slope
- Purpose
  - Dissipate storm flow energy by converting concentrated storm runoff into sheet flow
  - Discharge at a non-erosive velocity onto undisturbed areas stabilized by existing vegetation
- Must be constructed on undisturbed soil (not fill)

Level Spreader

Lv

50

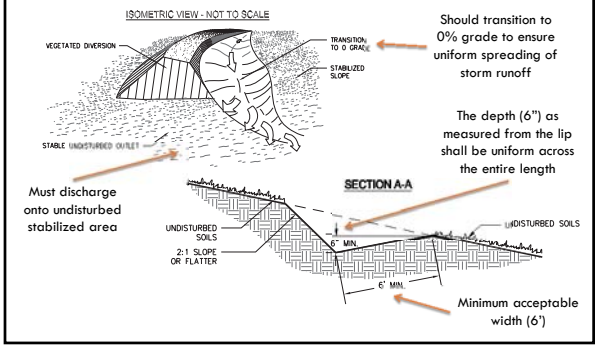
- Design Criteria
  - Length – Determined by estimating the peak flow from the 10-year, 24-hour storm

Peak Q (cfs)	Minimum Length (ft)
≤10	10
11-20	20
21-30	30
31-40	40
41-50	50

Level Spreader

Lv

51



Should transition to 0% grade to ensure uniform spreading of storm runoff

The depth (6") as measured from the lip shall be uniform across the entire length

Must discharge onto undisturbed stabilized area

Minimum acceptable width (6')

Level Spreader

Lv

52

Rock Filter Dam

Rd

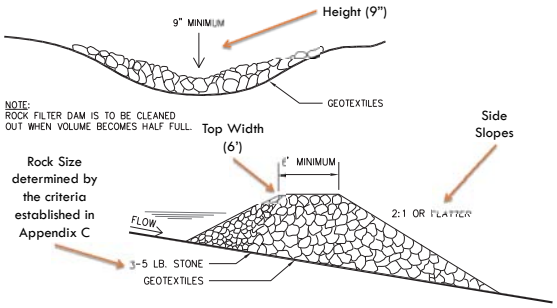
53

- Definition
  - A temporary stone filter dam installed across a drainage way or in conjunction with a temporary sediment trap
- Purpose
  - Serve as a sediment filtering device
  - Reduce the velocity of storm water in a channel
- For use in small channels that drain 50 acres or less
- Should be located as close to the source of sediment as possible

Rock Filter Dam

Rd

54



Rock Filter Dam

Rd

55

Retaining Wall

Re

56

- Definition
  - A wall constructed of one or more of the following: concrete masonry, reinforced concrete, cribbing, treated timbers, steel pilings, gabions, stone drywall, rock riprap, etc.
- Purpose
  - Assist in the stabilization of cut or fill slopes where a stable slope is not attainable without the use of a wall
- Requires a specific design by a design professional

Retaining Wall

Re

57

Retrofit

Rt

58

- Definition
  - A device or structure placed in front of a permanent storm water detention pond outlet or roadway drainage structure to serve as a temporary filter
- Purpose
  - Allow a permanent storm water detention basin or roadway drainage structure to function as temporary sediment storage for land-disturbing projects
- Not to be used in basins on live streams

Retrofit

Rt

59

TO BE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN

Storage Calculations

1. Required stormwater storage = _____ cy
   (as determined by local ordinance)
2. Required sediment storage = _____ cy
   (67 cy/ac * _____ ac disturbed area)
3. Total required storage = (1) + (2) = (3) cy
4. Available storage = (4) cy
5. Is the available storage (4) greater than the total required storage (3)?
   _____ yes _____ no
6. If "no", the sediment storage capacity of the pond must be increased. Choose the method to be used:
   _____ Raise the invert of the outlet structure _____ inches
   _____ Undercut the pond _____ feet
   _____ Other _____
7. Clean-out elevation =_____ft
   (Elevation corresponding to 22 cy/ac *_____ac disturbed area)
8. Is the length-width ratio 2:1 or greater?
   _____ yes _____ no
9. If "no", the length of flow must be increased. Choose the method to be used:
   _____ Baffles (Type of baffle: _____)
   _____ Other _____

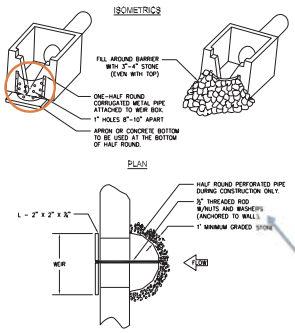
Note the CMP diameter and height if a half-round CMP retrofit is to be used.
Diameter =_____inches Height =_____feet

Sediment storage is calculated per disturbed acre

Perforated Half-Round Pipe

Rt-P

60



- Only in detention ponds with ≤ 30 acre total drainage area
- Never to be used on exposed pipe or winged headwall
- Diameter of half-round pipe should be 1.5x the diameter of the principal pipe outlet or wider than the greatest width of the concrete weir
- Shall be affixed by means (bolts, etc.) to the concrete outlet structure

Perforated Half-Round Pipe

Rt-P

61

Slotted Board Dam

Rt-B

62

- Used in detention ponds with drainage areas up to 100 acres.
- Used in roadway drainage structures with drainage areas ≤30 acres.
- Should be installed with minimum 4”x4” posts
- Boards should have ½”-1” space between them
- Minimum 3”-4” stone filter or approved filter fabric should be installed on the upstream side of the board dam

Slotted Board Dam

63

Silt Control Gate

Rt-Sg

64

- Shall only be used on roadway drainage structures with the following inlets:
  - Winged Headwalls
  - Tapered Headwalls
  - Straight Headwalls
  - Open End Pipes
  - Flared End Sections
- An approved silt fence fabric shall be securely fastened to the front of the structure
- Post shall be 4"x4" treated lumber with no spaces between the boards
- Drainage area shall not exceed 50 acres

Silt Control Gate

Rt-Sg

65

Sediment Barrier

Sd1

66

- Definition
  - A temporary structure made of a porous material typically supported by steel or wood posts
- Types
  - Silt Fence
  - Brush Piles
  - Mulch Berms
  - Compost Filter Sock
- Purpose
  - Minimize and prevent sediment carried by sheet flow from leaving the site and entering the natural drainage way by slowing storm water runoff and causing deposition and/or filtration at the structure

Sediment Barrier

Sd1

67

- Design Criteria
  - Shall not be installed across streams, ditches, waterways, or other concentrated flow areas
  - The type of sediment barrier depends on whether the area is sensitive or non-sensitive
  - A splash pad or other outlet protection device should be provided for any point where flow may overtop the sediment barrier
  - When using multiple types of sediment barriers in a single run, the barriers must overlap 18" or as specified

Sediment Barrier

Sd1

68

Where runoff is to be stored behind the sediment barrier, the maximum continuous slope length behind the sediment barrier shall not exceed those shown in Table 6-27.1

Table 6-27.1 Criteria for Sediment Barrier

Land Slope	Maximum Slope Length Above Fence
Percent	Feet
< 2	100
2 to 5	75
5 to 10	50
10 to 20	25
>20*	15

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

Sediment Barrier

Sd1-NS

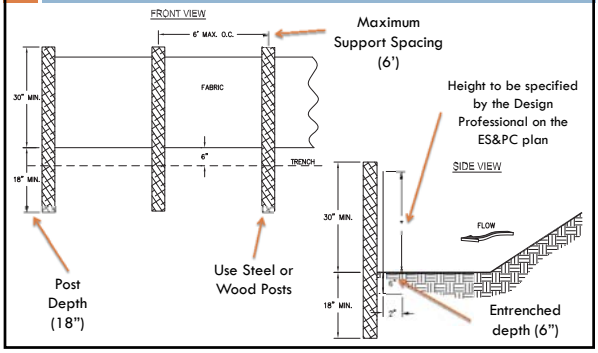
69

- Non-sensitive Areas
  - Should have a support spacing of no greater than 6 ft. on center, with each post being driven into the ground a minimum of 18".
  - Classifications
    - Type A Silt Fence – 36" wide
    - Type B Silt Fence – 22" wide
    - Compost Filter Sock
    - Brush Barrier – Only during Timber Clearing Operations

Type A & B Silt Fence

Sd1-NS

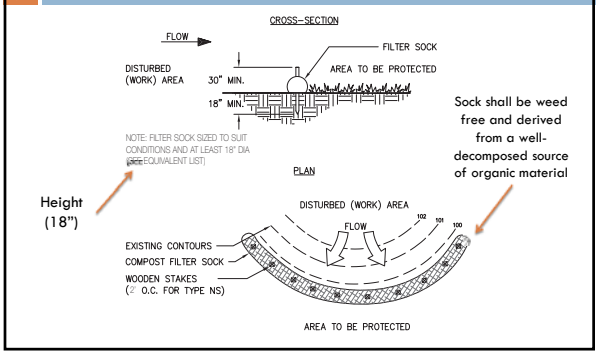
70



Compost Filter Sock

Sd1-NS

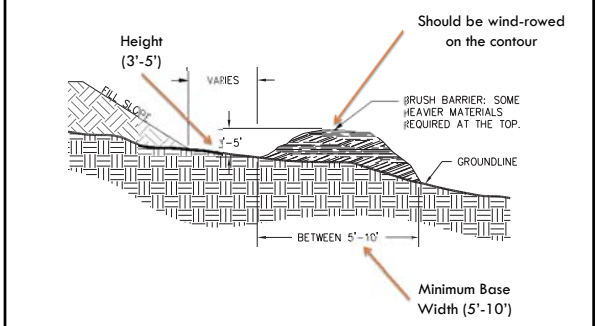
71



Brush Barrier

Sd1-NS

72



Sediment Barrier

Sd1-S

73

- Sensitive Areas
  - Shall have a support spacing of no greater than 4 ft. on center, with each post being driven into the ground a minimum of 18".
  - Classifications
    - Type C Silt Fence
      - 36" wide with wire reinforcement or equivalent backing
      - Almost 3x the flow rate as Type A Silt Fence
      - To be used where runoff velocities are particularly high or where slopes exceed a vertical height of 10 ft.

Type S Sediment Barrier

Sd1-S

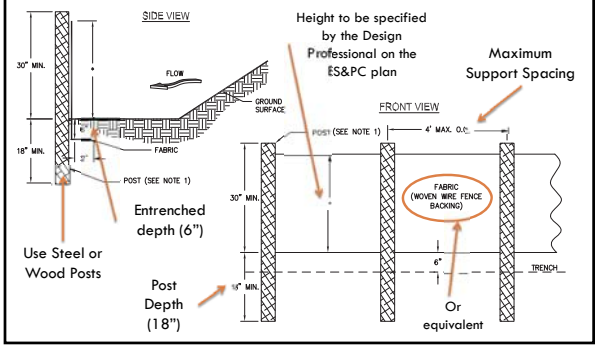
74

- Along all state waters and other sensitive areas, 2 rows of Type S sediment barrier shall be used. The 2 rows of Type S <u>should</u> be placed a minimum of 36" apart.

Type C Silt Fence

Sd1-S

75



Mulch Berms

Sd1

76

Inlet Sediment Trap

Sd2

77

- Definition
  - A temporary protective device formed at or around an inlet to a storm drain to trap sediment
- Purpose
  - Prevent sediment from entering a storm drainage system prior to permanent stabilization
- Should be installed at all storm drain drop inlets that receive runoff from the disturbed area

Inlet Sediment Trap

Sd2

78

- Design Criteria
  - On paved surfaces or where safety is a concern, a high flow trap should be used to negate the potentially negative effects of ponding
  - On unpaved areas, a high retention trap should be taken into account
  - Traps shall be <u>self-draining</u> unless they are otherwise protected in an approved fashion that will not present a safety hazard

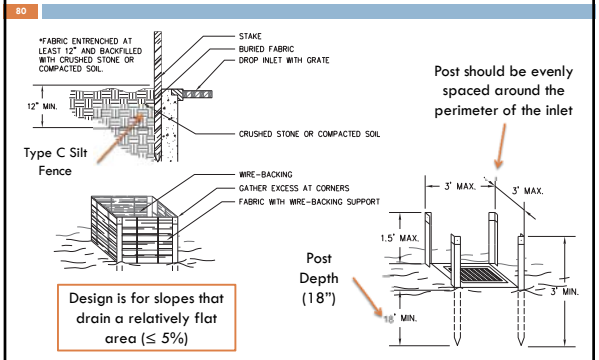
Excavated Inlet Sediment Trap (Sd2)

79

- An excavation may be created around the inlet sediment trap to provide additional sediment storage
- Sediment storage shall be calculated at 67 cy/ac drained
- The drainage area entering the trap shall be <u>no greater than 1 acre</u>
- A minimum depth of 1.5 ft. should be provided and the side slopes should not be steeper than 2:1

Filter Fabric with Supporting Frame (Sd2-F)

80



Design is for slopes that drain a relatively flat area (≤ 5%)

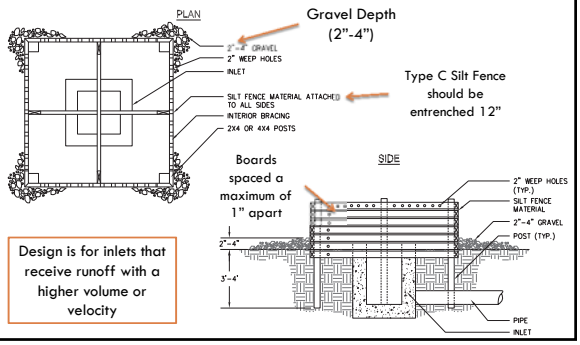
Filter Fabric with Supporting Frame (Sd2-F)

81

Baffle Box

Sd2-B

82



Gravel Depth (2"-4")

Type C Silt Fence should be entrenched 12"

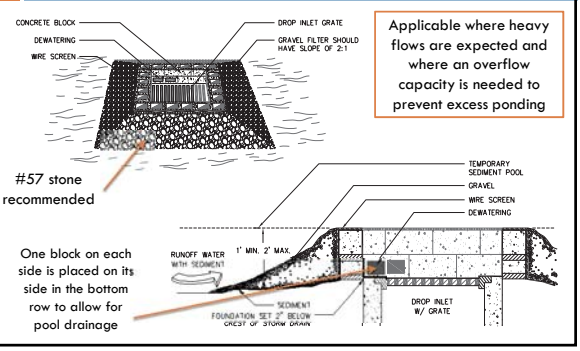
Boards spaced a maximum of 1" apart

Design is for inlets that receive runoff with a higher volume or velocity

Block and Gravel

Sd2-Bg

83



Applicable where heavy flows are expected and where an overflow capacity is needed to prevent excess ponding

#57 stone recommended

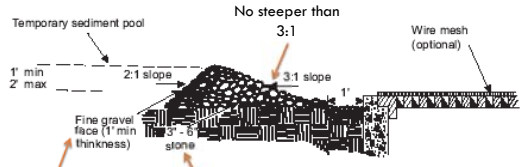
One block on each side is placed on its side in the bottom row to allow for pool drainage

Gravel Drop Inlet

Sd2-G

84

Applicable where heavy concentrated flow are expected



No steeper than 3:1

Stone size for slope away from the inlet (1" min)

Stone size for slope toward the inlet (3"-6")

Sod Inlet

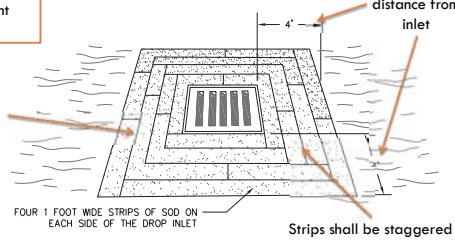
Sd2-S

85

Applicable only at the time of permanent seeding

SOD STRIPS PROTECT INLET AREA FROM EROSION
(SOURCE: VA SWCC)

Minimum distance from inlet



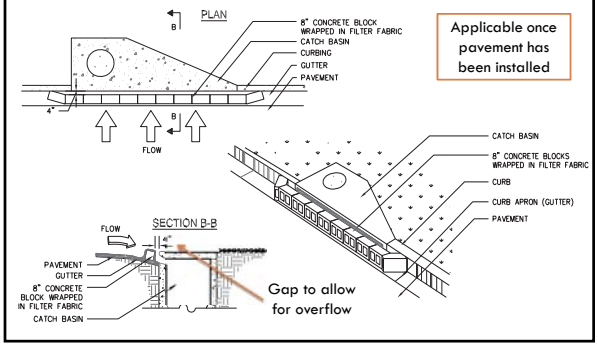
See Ds4 for staking details

Strips shall be staggered so that adjacent strip ends are not aligned

Curb Inlet

Sd2-P

86



Applicable once pavement has been installed

Gap to allow for overflow

Curb Inlet

Sd2-P

87

Temporary Sediment Basin

Sd3

88

- Definition
  - A basin created by the construction of a barrier or dam across a concentrated flow area, or by excavating a basin, or by a combination of both.
- Components
  - Dam
  - Pipe Outlet
  - Emergency Spillway
- Purpose
  - Detain runoff waters and trap sediment from erodible areas
  - Protect properties and drainage ways from excessive sedimentation and debris

Temporary Sediment Basin

Sd3

89

- Design Criteria
  - Location – Shall never be placed in live streams
  - Volume – The sediment storage volume, as measured to the elevation of the crest of the principal spillway, shall be a minimum of 67 cy/ac drained
  - Shape – Length to width ratio, where length is the distance between the inlet and outlet, should be greater than 2:1
  - Spillways – The combined capacities of the principal and emergency spillway shall be sufficient to pass the peak rate of runoff from a 25-year, 24-hour storm

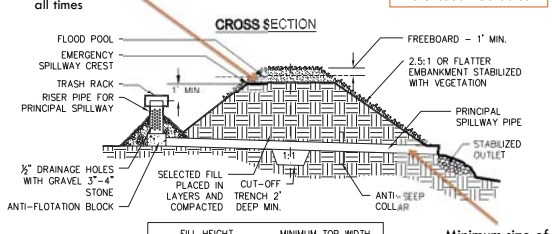
Temporary Sediment Basin

Sd3

90

Emergency spillway shall be present at all times

Maximum drainage not to exceed 150 acres



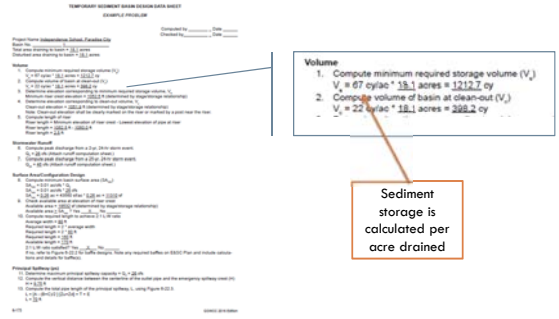
FILL HEIGHT	MINIMUM TOP WIDTH
LESS THAN 10 FEET	8.0 FEET
10 FEET TO 15 FEET	10.0 FEET

Minimum size of the pipe is 8" in diameter

Temporary Sediment Basin

Sd3

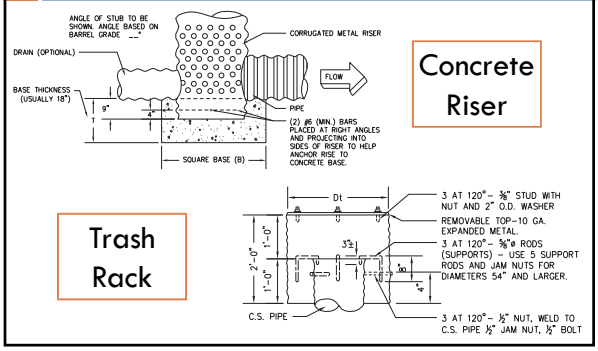
91



Temporary Sediment Basin

Sd3

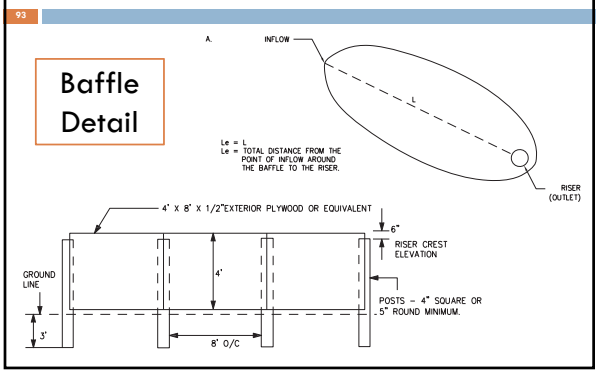
92



Temporary Sediment Basin

Sd3

93



Temporary Sediment Basin

Sd3

94

Temporary Sediment Trap

Sd4

95

- Definition
  - A small temporary pond that drains a disturbed area so that sediment can settle out
- Purpose
  - Collect and store sediment from uphill sites that have been cleared and/or graded during construction
- Effective against coarse sediment, not as effective against silt or clay particles that remain suspended
- Lacks the pipe or riser associated with a Sd3

Temporary Sediment Trap

Sd4

96

- Design Criteria
  - The height of the embankment shall not exceed 5.5 ft.
  - The minimum top width of the embankment is 3 ft.
  - Maximum pond depth is 4 ft. as measured from the bottom to the invert of the emergency spillway
  - The length to width ratio shall be greater than 2:1
  - The minimum volume shall be 67 cy/ac drained
  - 3 Types
    - Overflow, Combination, Rock

Overflow

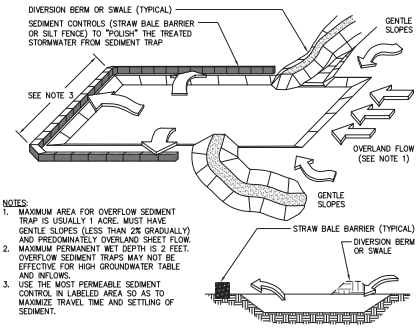
Sd4-A

97

Sediment controls are used to "polish" the water as it leaves the trap

The maximum life span is 6 months

Limited to small areas ≤1 acre

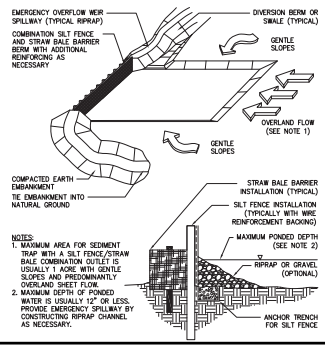


NOTES:
1. MAXIMUM AREA FOR OVERFLOW SEDIMENT TRAP IS USUALLY 1 ACRE. MUST HAVE GENTLE SLOPES (LESS THAN 2% GRADUALLY) AND PREDOMINATELY OVERLAND SHEET FLOW.
2. MAXIMUM PERMANENT WET DEPTH IS 2 FEET. OVERFLOW SEDIMENT TRAPS MAY NOT BE EFFECTIVE FOR HIGH GROUNDWATER TABLE AND INFLOWS.
3. USE THE MOST PERMEABLE SEDIMENT CONTROL IN LABELED AREA SO AS TO MAXIMIZE TRAVEL TIME AND SETTLING OF SEDIMENT.

Combination Outlet

Sd4-B

98



NOTES:
1. MAXIMUM AREA FOR SEDIMENT TRAP WITH A SILT FENCE/STRAW BALE COMBINATION OUTLET IS USUALLY 1 ACRE WITH GENTLE SLOPES AND PREDOMINANTLY OVERLAND SHEET FLOW.
2. MAXIMUM DEPTH OF PONDED WATER IS USUALLY 12" OR LESS. PROVIDE EMERGENCY SPILLWAY BY CONSTRUCTING RIPRAP CHANNEL AS NECESSARY.

Limited to small areas ≤1 acre

Has a life span less than 1 year

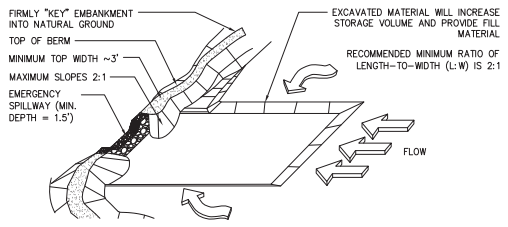
Requires frequent maintenance and adjustments to ensure the released storm water is free of sediment

Proper installation of straw bales and wire backed silt fence are required to resist 1 foot or more of ponded water

Rock Outlet

Sd4-C

99



The sturdiest of the 3 designs and generally requires less maintenance

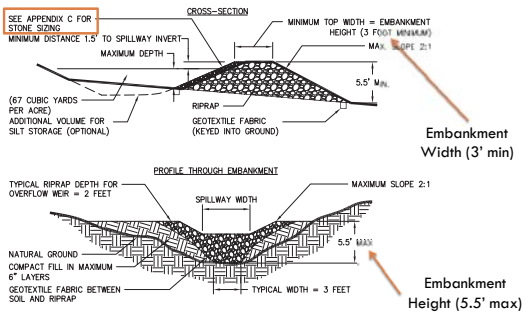
For drainage areas up to 5 acres with a life span of less than 1 year

Relies on filtering through layers of aggregate, rock or riprap material

Rock Outlet

Sd4-C

100



Embankment Width (3' min)

Embankment Height (5.5' max)

Appendix C

101

Table C-1 Graded Rip-Rap Stone

Flow Velocity (ft./sec.)	N.S.A. No.[1]	Size Inches (Sq. Opening) Max.	Avg.[2]	Min.	Filter Stone N.S.A. No.[1]
2.5	R-1	1 1/2	3/4	No. 8	FS-1
4.5	R-2	3	1 1/2	1	FS-1
6.5	R-3	6	3	2	FS-2
9.0	R-4	12	6	3	FS-2
11.5	R-5	18	9	5	FS-2
13.0	R-6	24	12	7	FS-3
14.5	R-7	30	15	12	FS-3

[1] National Stone Association

[2] At least 50% of the individual stone particles must be equal or larger than this listed size

Temporary Sediment Trap

Sd4

102

Floating Surface Skimmer

Sk

103

- Definition
  - A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow
- Purpose
  - Discharge clearer water from the surface at a relatively uniform rate
  - Reduce the retention time associated with meeting a desired water quality standard for discharge

Floating Surface Skimmer

Sk

104

- Design Criteria
  - The skimmer only drains from the crest of the emergency spillway down to the bottom. **It does not replace the emergency overflow spillway**

There is no min/max, shall be specified by design professional

TO BE SHOWN ON THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

When a FLOATING SURFACE SKIMMER is used, show the following information along with each sediment pond, trap or basin being used on the site:

1. Pond, trap or basin size, length* (top and bottom) width* (top and bottom) and depth = _____
2. Time to Drain (hrs) = _____
3. Skimmer Dimensions (orifice and head size)** _____
4. Manufacturer's name _____

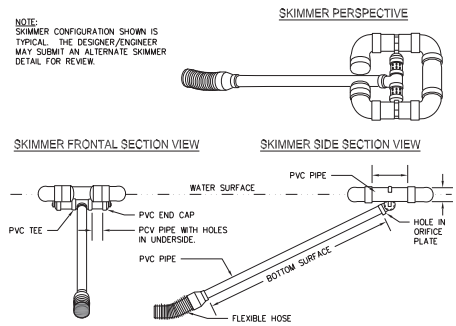
There is not an equivalent list of manufacturers for skimmers. Any person utilizing a home-made skimmer, accepts liability for its use. Their name would be the manufacturer.

*feet, ** inches

Typical Surface Skimmer Design

Sk

105



Floating Surface Skimmer

Sk

106

Seep Berm

SpB

107

- Definition
  - A linear control device constructed as a diversion perpendicular to the direction of runoff to enhance dissipation and infiltration of the runoff, while creating multiple sedimentation chambers with the employment of intermediate dikes
- Purpose
  - Allow the 2-year, 24-hour storm event to seep out while allowing larger flows to be diverted to a sediment storage area

Seep Berm

SpB

108

- Design Criteria
  - The berm shall have a minimum width of 12" across the top and shall not be taller than 4 ft. in height
  - 2 or more intermediate dikes in a series shall be used for drainage areas greater than 1 acre
  - The maximum spacing between the dikes should be such that the toe of the upstream dike is at the same elevation as the top of the downstream dike
  - Proper compaction and stabilization shall be utilized for fill berms

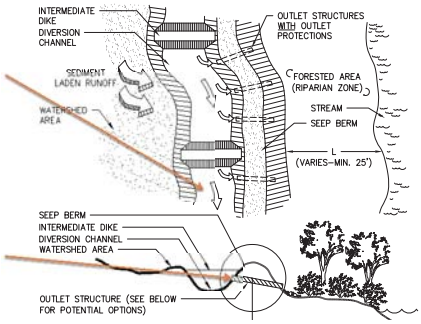
Seep Berm

SpB

109

Not to be used as primary sediment storage. Large flows shall be directed to sediment storage facility

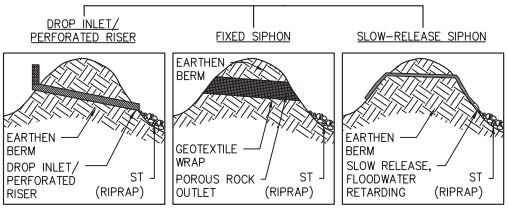
Type of Seep is to be specified on the ES&PC plan



Potential Seep Options

SpB

110



Seep Berm

SpB

111

TO BE SHOWN ON THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

A. Top of Berm Elevation_____ft

B. Bottom of Berm Elevation_____ft

C. Top of Berm Width _____ft

D. Height of the Berm_____ft

E. Seep Hole Diameter_____ft

F. Distance from the the Top of the Seep to be Placed in Accordance with the 2yr-24hr storm _____ft

G. Type of Seep (circle one)

PVC Metal Other(specify)_____

H. Spacing of Seep Along the Berm_____ft

Seep Berm

SpB

112

Can be left in permanently to be utilized as a walking trail, etc.. once construction is complete

Temporary Stream Crossing

Sr

113

- Definition
  - A **temporary** structure installed across a flowing stream or watercourse for use by construction equipment
- Purpose
  - A means for construction equipment and vehicles to cross streams or watercourses without moving sediment into state waters, damaging the streambed, or causing flooding
- Should not be used on streams with a drainage area greater than 1 square mile, unless specifically designed to accommodate the additional drainage by a design professional

Temporary Stream Crossing

Sr

114

- Design Criteria
  - Structures may include bridges, round pipes, or pipe arches
  - The structure shall be large enough to convey the 2-year, 24-hour storm without appreciably altering the flow characteristics
  - The crossing shall be perpendicular to the stream
  - The structure shall be protected from washout during periods of peak discharge by diverting water around the structure
  - Should not be used by the general public

Typical Culvert Crossing

Sr-C

115

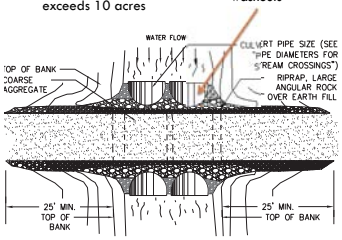
Table 6-33.1. Corrugated Metal Pipe (CMP) Diameters For Temporary Stream Crossings *

Drainage Area	Average Slope of Watershed			
(Acres)	1%	4%	8%	16%
1-25	24	24	30	30
26-50	24	30	36	36
51-100	30	36	42	48
101-150	30	42	48	48
151-200	36	42	48	54
201-250	36	48	54	54
251-300	36	48	54	60
301-350	42	48	60	60
351-400	42	54	60	60
401-450	42	54	60	72
451-500	42	54	60	72
501-550	48	60	60	72
551-600	48	60	60	72
601-640	48	60	72	72

*Assumptions for determining the table: USDA-NRCS Peak Discharge Method; CN = 65; Rainfall depth (average for Georgia) = 3.7" for 2-year frequency. Pipe diameters shown in the table are in inches.

Can be installed in both a wet or dry condition where the drainage area exceeds 10 acres

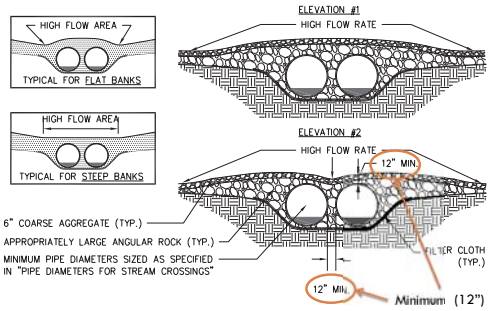
Culverts are subject to blockages and washouts



Typical Culvert Crossing

Sr-C

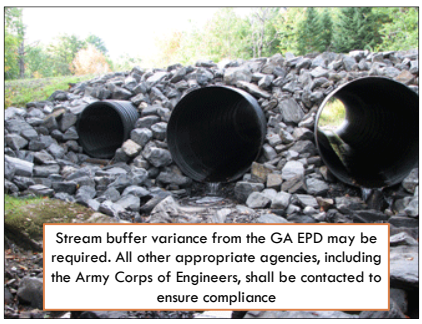
116



Typical Culvert Crossing

Sr-C

117



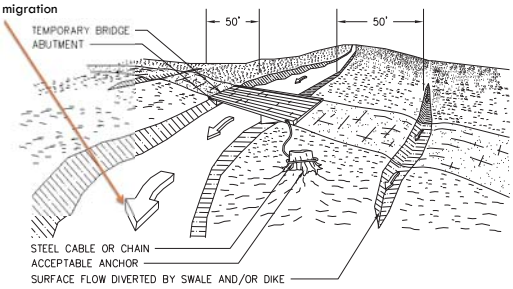
Stream buffer variance from the GA EPD may be required. All other appropriate agencies, including the Army Corps of Engineers, shall be contacted to ensure compliance

Temporary Bridge Crossing

Sr-B

118

Provides the least obstruction to flow and fish migration



Storm Drain Outlet Protection

St

119

- Definition
  - A paved and/or riprap channel section placed below storm drain outlets
- Purpose
  - Reduce the velocity of flow before entering receiving channels below storm drain outlets

TO BE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN

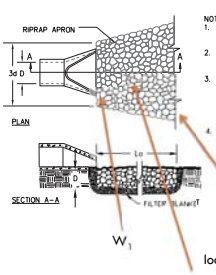
1. The flow characteristics of the pipe at full flow including pipe diameter, flow rate (cfs), velocity (fps), and tail-water condition.
2. The dimensions of the apron including length (La), width at the headwall (W_1), downstream width (W_2), average stone diameter (d50), and stone depth (D) designed in accordance with Figures 6-34.1 and 6-34.2.

Storm Drain Outlet Protection

St

120

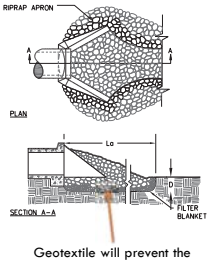
PIPE OUTLET TO FLAT AREA – NO WELL DEFINED CHANNEL



NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESSHAN 6".
3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS T AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

The apron should be located so that there are no bends in the horizontal alignment

PIPE OUTLET TO WELL DEFINED CHANNEL



Geotextile will prevent the migration of soil particles from the subgrade into the graded stone

Storm Drain Outlet Protection

St

121

Surface Roughening

Su

122

- Definition
  - Providing a rough soil surface with horizontal depressions created by operating a tillage or other suitable implement on the contour
- Purpose
  - Aid in the establishment of vegetative cover with seed
  - Reduce runoff velocity and increase infiltration
  - Reduce erosion and provide for sediment trapping
- If a slope is to be stabilized with erosion control blankets, the soil surface should not be roughened

Surface Roughening

Su

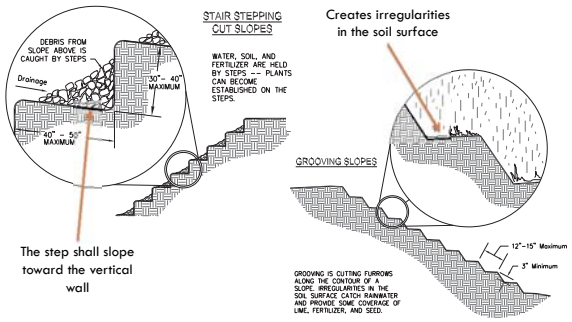
123

- Methods
  - Stair-step grading
  - Grooving
  - Tracking
- The selection of the appropriate method depends upon:
  - Slope steepness
  - Mowing requirements
  - Whether the slope was formed by cutting or filling

Surface Roughening

Su

124



Creates irregularities in the soil surface

The step shall slope toward the vertical wall

Surface Roughening

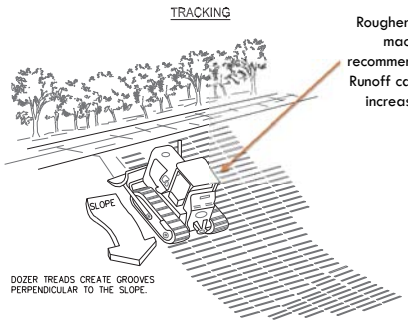
Su

125

Surface Roughening

Su

126



Roughening with tracked machinery is not recommended on clay soils. Runoff can increase due to increased compaction

Turbidity Curtain

Tc

127

- Definition
  - A floating or staked barrier installed within the water
- Purpose
  - Minimize the turbidity and silt migration from work occurring within the water
  - Supplement to perimeter control BMPs at the water's edge
- A turbidity curtain is only allowed as a primary device when required permitting and variances have been obtained

Turbidity Curtain

Tc

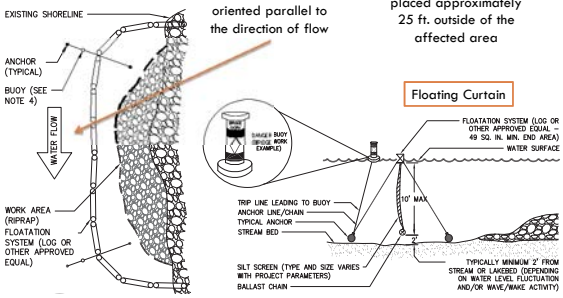
128

Staked Curtain

Curtain should be oriented parallel to the direction of flow

The barrier should be placed approximately 25 ft. outside of the affected area

Floating Curtain



Turbidity Curtain

Tc

129

Topsoiling

Tp

130

- Definition
  - The stripping off of the more fertile top soil, storing it, then spreading it over the disturbed area after completion of construction activities
- Purpose
  - Provide a suitable soil medium for vegetative growth on areas where other measures will not produce or maintain a desirable stand
- A pH range of 5.0 to 7.5 is acceptable

Topsoiling

Tp

131

- Conditions
  - Recommended for sites with 2:1 or flatter slopes where:
    - The texture of the exposed subsoil or parent material is not suitable to produce adequate growth
    - The soil material is so shallow that the rooting zone is not deep enough to support plants with continuing supplies of moisture and food
    - The soil that is to be vegetated contains material that is toxic to plant growth
  - A 4"-6" stripping depth is common
  - Stockpiles shall be contain by sediment barriers and stabilized in accordance with Ds1 and Ds2

Topsoiling

Tp

132

Tree Protection

Tr

133

- Definition
  - Protection for desirable trees from injury during construction activity
- Purpose
  - To ensure the survival of desirable trees where they will be effective for erosion and sediment control, watershed protection, landscape beautification, dust and pollution control, noise reduction, shade and other environmental benefits

Tree Protection

Tr

134

- Tree Protection Zone
  1. Measure the diameter of the tree trunk in inches at 4.5 ft. from the ground. This is called the Diameter Breast Height (DBH)
  2. Multiply this value by 1.5. This result is the radius of the root protection zone in feet (critical rooting distance)

Vegetated Waterway

Wt

135

- Definition
  - A natural or constructed channel that is shaped and graded to the required dimensions and established in suitable vegetation
- Purpose
  - Dispose of storm water runoff without causing damage either by erosion or flooding
- Shall be designed to convey the peak runoff from the 25-year, 24-hour storm event

Grassed Waterways

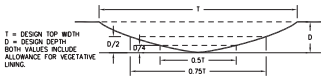
Wt

136

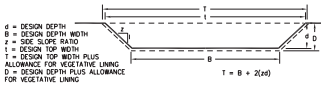
Table 1. Permissible Velocities for Vegetated and Rock-Lined Waterways

Vegetative Cover	Maximum Permissible Velocity (fps)
Bermuda	5
Bahia	4
Tall Fescue	4
Sericea Lespedeza Weeping Lovegrass	3
Stone Center	Design Required

PARABOLIC CROSS SECTION



TRAPEZOIDAL CROSS SECTION

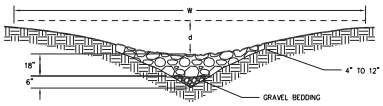


Stone Center Waterway

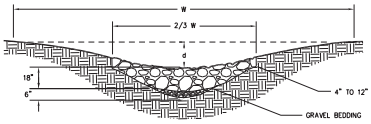
Wt

137

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



WATERWAY WITH STONE CENTER DRAIN AND ROUNDED SECTION SHAPED BY BULLDOZER



d – Design depth
W – Top width

Vegetated Waterway

Wt

138

Clean-out Elevations

139

- One-Half Full (1/2)
  - Silt Fence
  - Check Dam
  - Rock Filter Dam
  - Inlet Sediment Trap
- One-Third Full (1/3)
  - Temporary Sediment Basin
  - Retrofit
  - Temporary Sediment Trap
  - Seep Berm

Summary

140

- Structural BMPs control sedimentation after erosion has happened
- Maintenance requirements are important for each BMP to maintain efficient working measures
- Structural BMPs are typically the last line of defense on site
- BMPs with a hydraulic component must be designed appropriately by a design professional
- Please see the Equivalent BMP List for additional products which may not meet generic specifications in the Manual

141

Questions?

GSWCC
Urban Program
P.O. Box 8024
Athens, GA 30603
(706) 552-4474

GSWCC

Insert Yellow Sheet

Back of Yellow Sheet

STRUCTURAL BEST MANAGEMENT PRACTICES

- **Cd** Check Dam
- **Ch** Channel Stabilization
- **Co** Construction Exit
- **Cr** Construction Road Stabilization
- **Dc** Stream Diversion Channel
- **Di** Diversion
- **Dn1** Temporary Downdrain Structure
- **Dn2** Permanent Downdrain Structure
- **Fr** Filter Ring
- **Ga** Gabion
- **Gr** Grade Stabilization Structure
- **Lv** Level Spreader
- **Rd** Rock Filter Dam
- **Re** Retaining Wall
- **Rt** Retrofit
- **Sd1** Sediment Barrier
- **Sd2** Inlet Sediment Trap
- **Sd3** Temporary Sediment Basin
- **Sd4** Temporary Sediment Trap
- **Sk** Floating Surface Skimmer
- **SpB** Seep Berm
- **Sr** Temporary Stream Crossing

- **St** Storm Drain Outlet Protection
- **Su** Surface Roughening
- **Tc** Turbidity Curtain
- **Tp** Topsoiling
- **Tr** Tree Protection
- **Wt** Vegetated Waterway or Stormwater Conveyance Channel

The products and practices presented in this Field Manual show the standard installation methods for each conventional BMP. New products and practices may not necessarily meet the requirements for each conventional BMP. Please see the Equivalent Best Management Practice List for specific manufacturer guidelines and specifications.

Cd CHECK DAM

DEFINITION

A small temporary barrier constructed across a swale, drainage ditch, or area of concentrated flow.

PURPOSE

- Reduce velocity.
- Filter sediment.
- Stabilize grade.

INSTALLATION

- Install according to the approved plan.
- Place in small, open channels, <u>not in live streams</u>.
- Construct center at least 9” lower than outer edges.
- Extend across entire width of ditch or swale.
- Make side slopes 2:1 or flatter.
- Toe of the upstream dam should be at the same elevation as the top of the downstream dam.
- Seed and mulch area beneath the dam after its removal.
- Check dams may be used in conjunction with other BMPs for any flows exceeding 2.0 cfs.

Stone Check Dams **Cd-S**

- Drainage area not to exceed 2 acres.
- Constructed of graded size 2”-10” stone.
- The center of the check dam should be at least 9” lower than the outer edges.
- The dam height should be a maximum of 2 ft from the center to the rim edge.
- Place a suitable geotextile between the graded stone and the soil base and abutments.

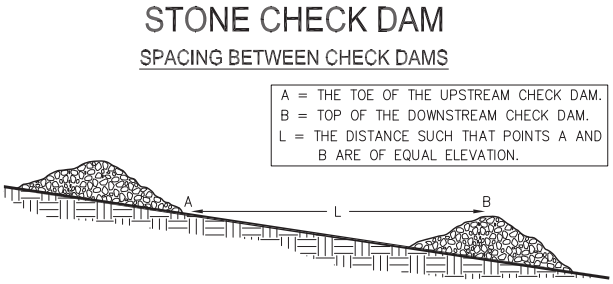
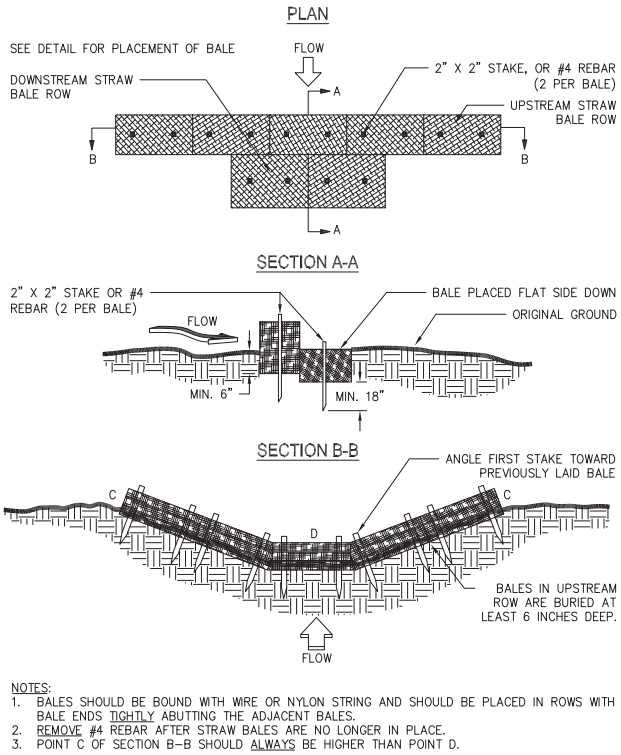


Figure 1. Stone Check Dam Spacing Requirements

Straw Bale Check Dams **Cd-Hb**

- Drainage area not to exceed 1 acre.
- Bales should be bound with wire or nylon string.
- Bales should be placed in rows with bale ends tightly abutting the adjacent bales.
- A trench shall be dug across the channel deep enough that the wide side of the 2nd bale is level with the ground.
- Drive the standard 2x2 stakes or #4 rebar through the bales into the ground 18”-24” for anchorage. The first stake in each bale should be driven toward a previsouly laid bale in order to force bales together.

Cd



NOTES:
1. BALES SHOULD BE BOUND WITH WIRE OR NYLON STRING AND SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. REMOVE #4 REBAR AFTER STRAW BALES ARE NO LONGER IN PLACE.
3. POINT C OF SECTION B-B SHOULD ALWAYS BE HIGHER THAN POINT D.

Figure 1. Straw Bale Check Dam Installation Requirements

Compost Filter Sock **Cd-Fs**

- Drainage area not to exceed 1 acre.
- Place one stake in the filter sock at the center of the ditch/ channel.
- Place stakes at the bed/bank junction and at the end of the device not spaced more than 2 ft apart.
- Compost filter sock to be at least 18" in diameter
- Minimum staking depth is 18".
- Can be seeded at the time of installation.

Cd

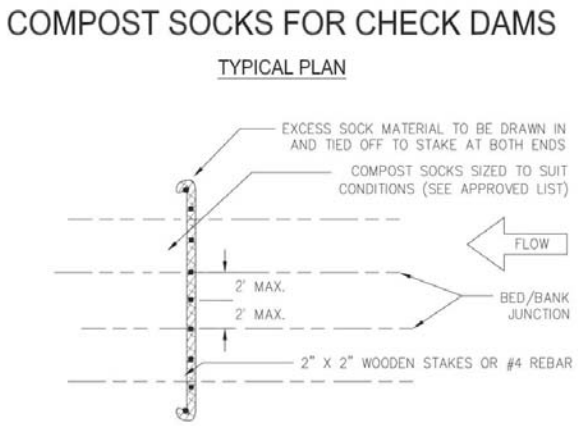


Figure 1. Compost Filter Sock Installation Requirements

MAINTENANCE

- Periodically inspect and maintain all structures.
- Remove sediment when it reaches a depth of one-half the original dam height.
- May remain in place permanently.

REFERENCES

Ds1 Disturbed Area Stabilization (With Mulching Only)

Ds2 Disturbed Area Stabilization (With Temporary Seeding)

Ds3 Disturbed Area Stabilization (With Permanent Vegetation)

Ds4 Disturbed Area Stabilization (With Sodding)

Ch

CHANNEL STABILIZATION

DEFINITION

Improving, constructing, or stabilizing an open channel or waterway.

PURPOSE

- Prevent erosion and sediment deposition.
- Provide adequate capacity for flood water, drainage, or other water management practices.

INSTALLATION

- Install according to the approved plan.
- Drainage area not to exceed one square mile.
- This applies only to channels conveying intermittent flow, not to channels conveying a continuous, live stream.

Category 1 (≤ 5 ft/sec) Ch-1

Vegetative Lining

- Temporary erosion control blankets or sod shall be used to aid in the establishment of the vegetated lining.
- Hydraulic Erosion Control Products are not intended to be applied in channels, swales, or other areas where concentrated flows are anticipated.

Category 2 (≥ 5 ft/sec to < 10 ft/sec) Ch-2

Turf Reinforcement Matting (TRM)

- Permanent geosynthetic erosion control matting that is used in channels to stabilize the soil while permanent vegetation is rooting.

Rock Riprap Lining

- Slopes should be 1.5:1 or less.
- Place a filter blanket, at least 6 inches thick, of sand, gravel, and/or geotextile material between the riprap and the base material.

Category 3 (≥ 10 ft/sec) Ch-3

Concrete Lining

- A separation geotextile should be placed under concrete linings to prevent undermining.
- Provide adequate outlet protection for discharge point.

Grade Stabilization Structure

- Constructed of concrete, rock, masonry, steel, aluminum or treated wood.
- Provide adequate outlet for discharge.
- Do not compromise the environmental integrity of the area.
- Vegetate all disturbed areas immediately.

Figure 1. Concrete Lining

Ch

MAINTENANCE

- Periodically inspect and maintain all structures.

REFERENCES

Gr	Grade Stabilization Structure
St	Storm Drain Outlet Protection
Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Ds4	Disturbed Area Stabilization (With Sodding)

Ch

(This page left blank intentionally.)

Co

CONSTRUCTION EXIT

DEFINITION

A stone-stabilized pad located at any point where traffic will be leaving a construction site to a public right-of-way, street, alley, sidewalk, or parking area.

PURPOSE

- Reduce or eliminate the transport of mud from the construction area onto public right-of-ways.

INSTALLATION

- Install according to the approved plan.
- Use 1.5”-3.5” stone.
- Minimum pad thickness of 6”.
- Minimum pad width of 20 ft.
- Minimum pad length of 50 ft.
- When the construction is less than 50 ft from the paved access, the length shall be from the edge of the existing pavement to the permitted building being constructed.
- When washing is required, conduct on an area stabilized with crushed stone and route runoff to an approved sediment trap or sediment basin.
- Place the geotextile liner the full length and width of the entrance.

Co

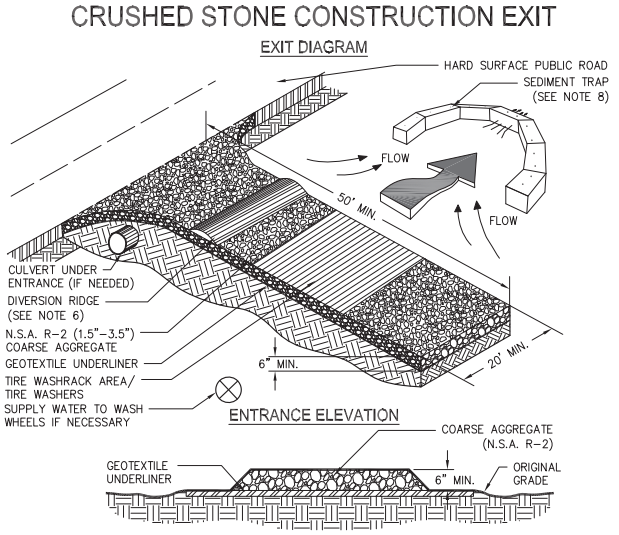


Figure 1. Crushed Stone Construction Exit Installation Requirements

Figure 2. Geotextile Underliner

MAINTENANCE

- Periodically dress with 1.5”-3.5” stone.
- Maintain in a condition that will prevent tracking or flow of mud onto public rights-of way.
- Immediately remove mud and debris tracked or spilled onto roadways.

Cr

CONSTRUCTION ROAD STABILIZATION

DEFINITION

A travel way constructed as part of a construction plan including access roads, subdivision roads, parking areas, and other on-site vehicle transportation routes.

PURPOSE

- Provide a fixed route of travel for construction traffic.
- Reduce erosion and subsequent regrading of permanent roadbeds between time of initial grading and final stabilization.

INSTALLATION

- Install according to the approved plan.
- Temporary roads shall follow the contours of the natural terrain to minimize disturbance of drainage patterns.
- If a temporary road must cross a stream, the crossing must be designed, installed and maintained according to specification **Sr - Temporary Stream Crossing**.
- Grades for temporary roads should not exceed 10% except for short lengths but maximum grades of 20% or more may be used for special uses.

- Temporary roadbeds shall be at least 14 ft wide for one-way traffic, 20 ft wide for two-way traffic. The width for two-way traffic shall be increased approximately 4 ft for trailer traffic.
- Provide a minimum shoulder width of 2 ft on each side.
- All cut and fills shall be 2:1 or flatter. Side slopes shall be no steeper than 3:1 if mowing
- Drainage channels shall be designed to be on stable grades or protected with structures or linings for stability.
- Apply geotextile to the roadbed for additional stability according to the design manual specifications.
- Apply a 6” layer of coarse aggregate immediately after grading. For “heavy-duty” traffic situations, place stone at a depth of 8”-10”.
- Stabilize all roadside ditches, cuts, fills, and other disturbed areas adjacent to parking areas and roads with appropriate temporary or permanent vegetation

MAINTENANCE

- Periodically top dress roads and parking areas with gravel to maintain the gravel depth at 6”.
- Check vegetated areas periodically to ensure a good stand of vegetation is maintained.
- Remove any silt or other debris causing clogging of roadside.

REFERENCES

Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Sr	Temporary Stream Crossing

Dc STREAM DIVERSION CHANNEL

DEFINITION

A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed in the stream channel.

PURPOSE

- Protect the streambed from erosion and allow work “in the dry”.

INSTALLATION

- Install according to the approved plan.
- Drainage area shall not exceed one square mile (640 acres).
- The bottom width of the stream diversion shall be a minimum of six feet or equal to the bottom width of the existing streambed, whichever is greater.
- Side slopes of the stream diversion channel shall be no steeper than 2:1.
- Depth and grade of the channel shall be sufficient to ensure continuous flow of water in the diversion.
- The channel shall be lined to prevent erosion of the channel and sedimentation in the stream.
- The lining is selected based upon the expected velocity of bankfull flow. Please refer to Table 1.

Table 1. Stream Diversion Channel Linings

Lining Materials	Symbol	Acceptable Velocity Range
Geotextile, poly-ethylene film, or sod	Dc-A	0-2.5 fps
Geotextile alone	Dc-B	2.5-9.0 fps
Class I RipRap & Geotextile	Dc-C	9.0-13.0 fps

STREAM DIVERSION CHANNEL

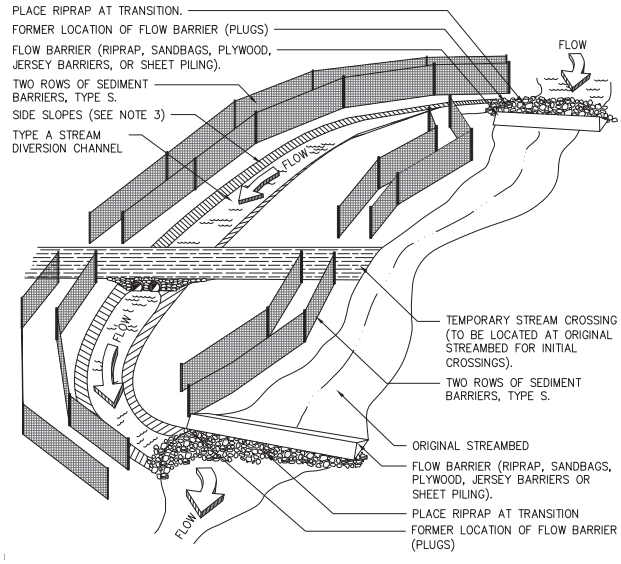


Figure 1. Stream Diversion Channel (Perspective View)

- The channel shall be excavated, constructing plugs at both ends.
- Sediment barriers or berms shall be placed along the sides of the channel to prevent unfiltered runoff from entering the stream.
- The channel surface shall be smooth (to prevent tearing of the liner) and lined with the material specified in the plans.
- The plugs are removed when the liner installation is complete, removing the downstream plug first.
- As soon as construction in the streambed is complete, the diversion shall be replugged and backfilled.
- Upon removal of the lining, the stream shall immediately be restored and properly stabilized.
- A Stream Buffer Variance from the GA EPD may be required and all other appropriate agencies, including the U.S. Army Corps of Engineers, must be contacted to ensure compliance with other laws.

MAINTENANCE

- Inspect the stream diversion channel at the end of each day to make sure that the construction materials are positioned securely.
- Ensure that the work area stays dry and that no construction materials float downstream.
- All repairs shall be made immediately.

REFERENCES

Ss Slope Stabilization

(This page left blank intentionally.)

Di DIVERSION

DEFINITION

A ridge of compacted soil, constructed above, across, or below a slope.

PURPOSE

- Reduce slope lengths.
- Intercept and divert storm runoff to a stable outlet at a non-erosive velocity.

INSTALLATION

- Install according to the approved plan.
- Remove trees, brush, stumps and other objectionable material.
- Compact all fills.
- Channel cross-section should be trapezoidal or parabolic in shape.
- Side slopes should be 2:1 or flatter.
- Excavate narrow, deep channels on steep slopes and broad, shallow channels on gentle slopes.
- Adequate outlet must be present.
- Stabilize channel and outlet with vegetation (mulch required for all seeded or sprigged channels), riprap, or concrete.
- Dispose of and/or stabilize unneeded excavated material.

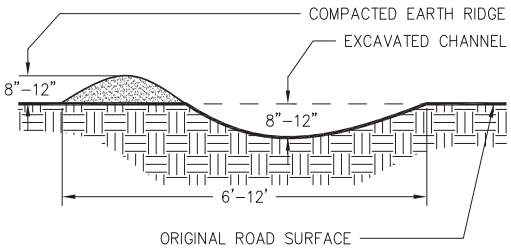


Figure 1. Typical Diversion Across Road

MAINTENANCE

- Inspect frequently and after each rainfall and make necessary repairs.

REFERENCES

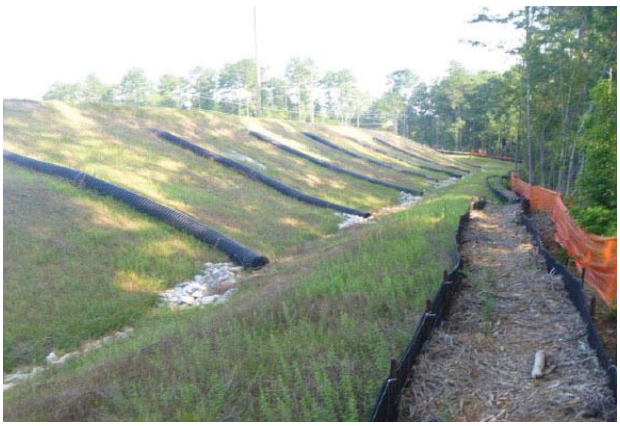
Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Ds4	Disturbed Area Stabilization (With Sodding)
Ch	Channel Stabilization

Dn1

TEMPORARY DOWNDRAIN STRUCTURE

DEFINITION

A temporary structure used to convey storm water down the face of cut or fill slopes.



PURPOSE

- Transport storm runoff from one elevation to another.
- Reduce slope erosion.

INSTALLATION

- Install according to the approved plan.
- Install heavy-duty, flexible materials such as non-perforated, corrugated plastic pipe, or specifically designed flexible tubing.
- Place on undisturbed soil or well-compacted fill.
- Slightly slope the section of pipe under the dike toward its outlet.
- Install Tee, “L” or flared end section inlet at the top of the slope.
- Slope the entrance 1/2” per foot toward outlet.
- Compact a dike ridge no less than 1 ft above the top of the pipe.
- Use reinforced, hold-down grommets or stakes to anchor the pipe at intervals not to exceed 10 ft.

Table 1. Pipe Diameter for Temporary Downdrain

Maximum Drainage Area per Pipe (acres)	Pipe Diameter (inches)
0.3	10
0.5	12
1.0	18

- Ensure that fill over the drain at the top of the slope meets the minimum dimensions.
- Ensure connections are watertight.
- Extend pipe beyond the toe of the slope.
- For steep slopes, drains should be placed diagonally across the slope.
- Curve the outlet uphill.
- Stabilize outlet with rock riprap. A Tee outlet, flared end section, or other suitable device may be used for additional protection.
- Direct all flows into a sediment trap if drains convey sediment-laden runoff.
- Stabilize all disturbed areas immediately.

MAINTENANCE

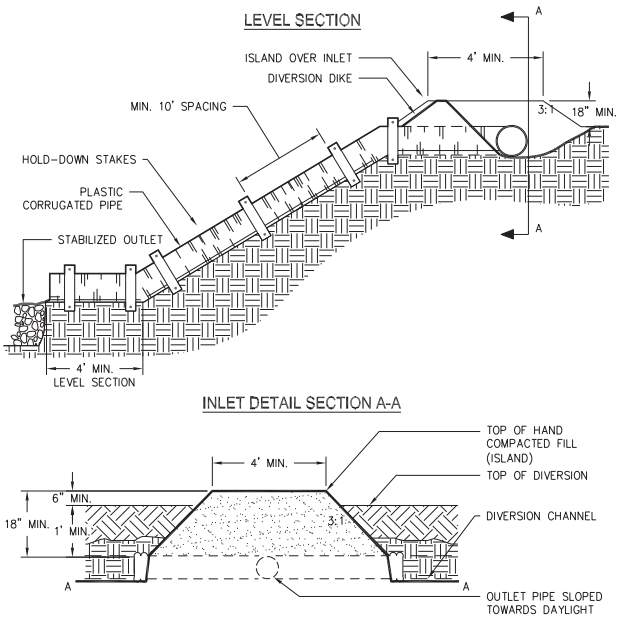
- Inspect drain and diversion after every rainfall and promptly make necessary repairs.
- Remove once the protected area has been stabilized and the permanent water disposal system is fully functional.

REFERENCES

St Storm Drain Outlet Protection

Dn1

DOWNDRAIN PIPE AND INLET DETAIL



MAKE ALL PIPE CONNECTIONS WATERTIGHT AND SECURE SO THAT THE JOINTS WILL NOT SEPARATE IN USE.

Figure 1. Temporary Downdrain and Inlet Detail

Figure 2. Diagonally Placed Downdrain

Dn1

(This page left blank intentionally.)

Dn2

PERMANENT DOWNDRAIN STRUCTURE

DEFINITION

A permanent structure to safely convey surface runoff from the top of a slope to the bottom of the slope.

PURPOSE

- Convey storm runoff safely down cut or fill slopes to minimize erosion.

INSTALLATION

- Install according to the approved plan.
- Slopes must have sufficient grade to prevent sediment deposition.
- Stabilize outlet according to plan.
- Vegetate all disturbed areas immediately.

Types of Structures

- Paved flume - parabolic, rectangular, or trapezoidal cross section.
- Pipe - steel, plastic, etc.
- Sectional - a prefabricated sectional conduit of half-round or third-round pipe.

MAINTENANCE

- Inspect periodically and maintain structure after each rainfall.

REFERENCES

Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Ds4	Disturbed Area Stabilization (With Sodding)
St	Storm Drain Outlet Protection

Fr

FILTER RING

DEFINITION

A temporary stone barrier constructed at storm drain inlets and pond outlets.

PURPOSE

- Reduce flow velocity.
- Prevent the failure of other sediment control devices.
- Prevent sediment from leaving the site or entering drainage systems.

INSTALLATION

- Install according to the approved plan.
- Use in conjunction with other sediment control measures, except where other practices defined in this Manual are not appropriate.
- Surround all sides of the structure receiving runoff from disturbed areas.
- Place the ring a minimum of 4 ft from the structure.
- If the ring is utilized above a retrofit structure, place a minimum of 8-10 ft from the retrofit.
- When utilized at inlets with diameters less than 12”, the filter ring shall be constructed of stone no smaller than 3”-5” (15-30 lbs).

- When utilized at pipes with diameters greater than 12”, the filter ring shall be constructed of stone no smaller than 10”-15” (50-100 lbs).
- Construct the ring at a height no less than 2 ft above grade.
- Mechanically or hand place the stone uniformly around the structure.

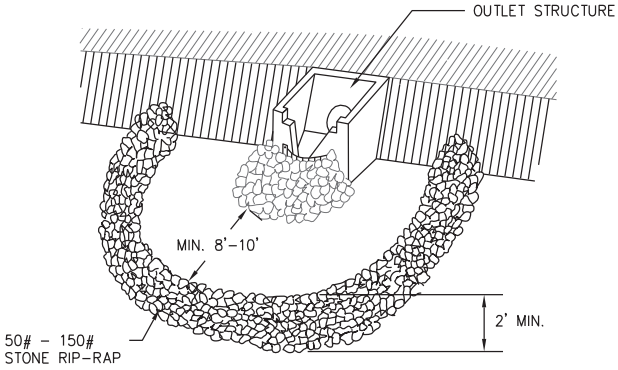


Figure 1. Filter Ring Placement

MAINTENANCE

- Keep clear of trash and debris.
- Continuously monitor and maintain the structure.
- Remove sediment when it reaches <u>one-half</u> full.
- Remove structure when the project has reached final stabilization.

REFERENCES

Rt Retrofit

Sd3 Temporary Sediment Basin

St Storm Drain Outlet Protection

Ga

GABION

DEFINITION

Large, multi-celled, welded wire or rectangular wire mesh boxes, used in channel revetments, retaining walls, abutments, check dams, etc.

PURPOSE

- Construction of erosion control structures.
- Stabilize steep or highly erosive slopes.

INSTALLATION

- Install according to the approved plan.
- Foundations must be smooth and level.
- Use only galvanized or PVC coated wire. For highly corrosive conditions, the PVC coating must be used over the galvanizing.
- Set individual baskets into place, wire them together in courses, and fill with rock to form flexible monolithic building blocks.
- Rock should be durable and adequately sized (typically 4”-8”) to be retained in the baskets.
- Hand-pack the basket in order to completely fill.
- “Key” structure securely into foundations and abutment surfaces.
- Geotextiles should be used behind all gabion structures.

Ga

MAINTENANCE

- Periodically inspect for signs of undercutting or excessive erosion at transition areas.
- Make any necessary repairs immediately.

Gr

GRADE STABILIZATION STRUCTURE

DEFINITION

A structure to stabilize the grade in natural or artificial channels.

PURPOSE

- Stabilize the grade in natural or artificial channels.
- Prevent the formation or advancement of gullies.
- Reduce erosion and sediment pollution.

INSTALLATION

- Install according to the approved plan.
- Construct with concrete, rock, masonry, steel, aluminum, or treated wood or by soil bioengineering methods.
- Dewater excavations prior to filling.
- Construct embankment with a minimum top width of 10 ft and side slopes of 3:1 or flatter.
- Construct materials in 6”-8” horizontal lifts
- Place structure on compacted earth-fill. Compact fill to approximately 95% of standard density.
- Construct keyway 8 or more ft wide and 2 ft deep along centerline of the structure and embankment.
- Provide adequate outlet for discharge.

- Place geotextile, such as revetment mats and riprap, under stabilization structure.
- Apply protective cover immediately after completion of the structure.
- Vegetate all disturbed areas immediately.
- All appropriate agencies, including the GAEPD & U.S. Army Corps of Engineers, must be contacted to ensure compliance with other Laws.

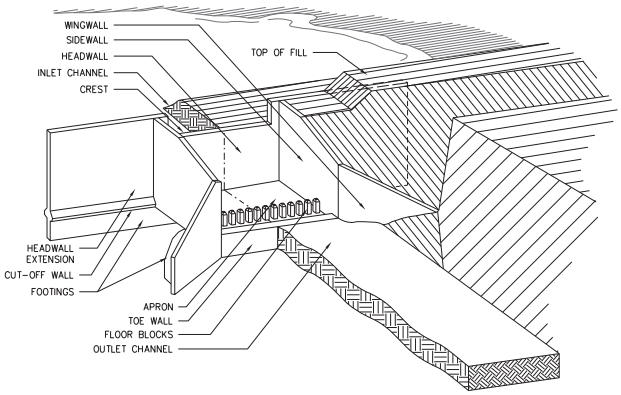


Figure 1. Straight Drop Spillway Structure

MAINTENANCE

- Periodically inspect and maintain all structures.

REFERENCES

St	Storm Drain Outlet Protection
Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Ds4	Disturbed Area Stabilization (With Sodding)

Lv

LEVEL SPREADER

DEFINITION

A storm flow outlet device constructed at zero grade across the slope whereby concentrated runoff may be discharged at non-erosive velocities onto undisturbed areas stabilized by existing vegetation.

PURPOSE

- Dissipate storm flow energy at the outlet.
- Convert storm runoff into sheet flow.
- Discharge storm runoff onto areas stabilized by existing vegetation.

INSTALLATION

- Install according to the approved plan.
- Grade the channel no greater than 1% for the last 15 ft of the dike or diversion.
- Construct on undisturbed soil that is stabilized with vegetation.
- Minimum width of 6 ft.
- The depth of the level spreader from the lip shall be a minimum of 6”.
- The depth shall be uniform across the entire length.

- Construct level lip at 0% grade.
- Discharge converted sheet flow onto undisturbed stabilized areas.
- Provide a smooth outlet.
- Prevent water from concentrating below point of discharge.
- Vegetate all disturbed areas immediately.

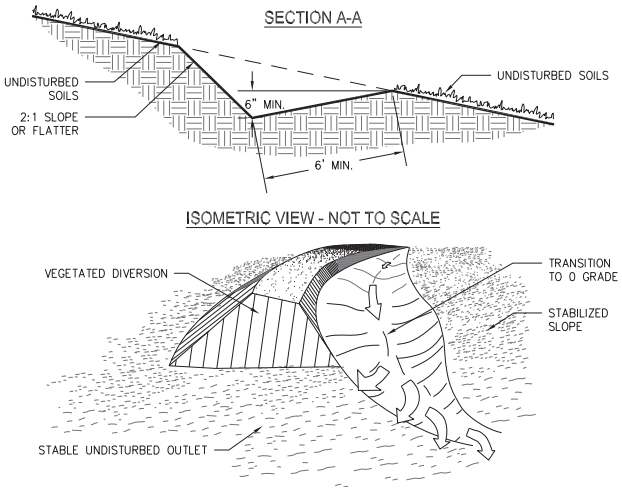


Figure 1. Level Spreader Installation Requirements

MAINTENANCE

- Periodically inspect and maintain all structures.

REFERENCES

Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Ds4	Disturbed Area Stabilization (With Sodding)

Rd

ROCK FILTER DAM

DEFINITION

A temporary stone filter dam installed across drainageways or in conjunction with a temporary sediment trap.

PURPOSE

- Serve as a sediment filtering device.
- Reduce velocity of stormwater flow through a channel.
- Not intended to substantially impound water.

INSTALLATION

- Install according to the approved plan.
- The drainage area shall not exceed 50 acres.
- Must be used in conjunction with other appropriate sediment control measures.
- The dam should be located as close to the source of sediment as possible.
- The dam should not be higher than the channel banks or exceed the elevation of the upstream property line.
- The center of the dam should be at least 9” lower than the outer edges of the dam at the channel banks.

- Side slopes should be 2:1 or flatter.
- The width across the top should be 6 ft. or greater.
- Refer to plan for stone size.
- Geotextiles should be used as a separator between the graded stone, soil base, and abutments.
- Extend completely across the channel and securely tie into both channel banks.
- All other appropriate agencies, including the GAEPD & U.S. Army Corps of Engineers, must be contacted to ensure compliance with other Laws.

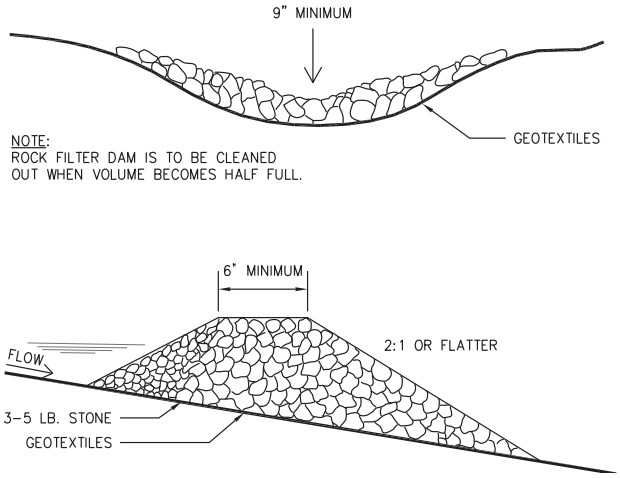


Figure 1. Rock Filter Dam Installation Requirements

MAINTENANCE

- Periodically inspect and maintain all structures.
- Remove sediment when it reaches a depth of <u>one-half</u> of the original height of the dam.
- Remove once disturbed areas have been stabilized.

Re

RETAINING WALL

DEFINITION

A constructed wall of one or more of the following: concrete masonry, reinforced concrete cribbing, treated timbers, steel pilings, gabions, stone drywall, rock riprap, etc.

PURPOSE

- Assist in stabilizing cut or fill slopes where stable slopes are not obtainable without the use of a wall.

INSTALLATION

- Retaining walls require a specific design that is within the capabilities of the design professional.
- Many factors must be taken into account during the design process.
- Close supervision is required to ensure proper installation.
- Depending on the Local Issuing Authority's ordinance, a design professional certificate may be required prior to construction.

Re

(This page left blank intentionally.)

Rt

RETROFIT

DEFINITION

A device or structure placed in front of a permanent stormwater detention pond outlet or roadway drainage structure to serve as a temporary sediment filter.

PURPOSE

- Allows a permanent stormwater detention basin structure to function as a temporary sediment retention basins.
- Allows a roadway drainage structure to be used for temporary sediment storage.

INSTALLATION

- Install according to the approved plan.
- Prohibited in basins on live streams.
- The height of the retrofit should be approximately one-half the height of structure.

Rt-P

Perforated Half-Round Pipe with Stone Filter

- Drainage area shall not exceed 30 acres.
- Never use on exposed pipe end or winged headwall.
- Diameter of half-round pipe should be 1.5x the diameter of the principal pipe outlet or wider than the greatest width of the concrete weir.

Rt

- Shall be affixed by means to the concrete outlet structure.

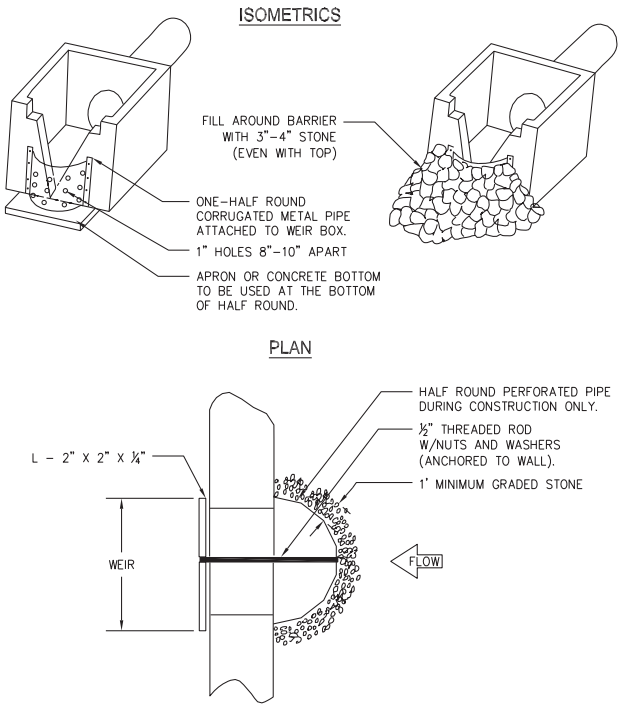


Figure 1. Perforated Half-Round Pipe Retrofit with Stone Filter.

Figure 2. Affixed to Concrete Structure

Figure 3. Slotted Board Dam

Slotted Board Dam with Stone **Rt-B**

- For use in detention ponds with drainage areas up to 100 acres and on roadway drainage structures with a drainage area of 30 acres or less.
- Can be used with open end pipe outlets, winged headwalls, or concrete weir outlets.
- Install with minimum 4x4” posts.
- Install boards with a 0.5”-1.0” space between them.
- Install a minimum of 3”-4” stone or approved filter fabric around the upstream side of the board dam.

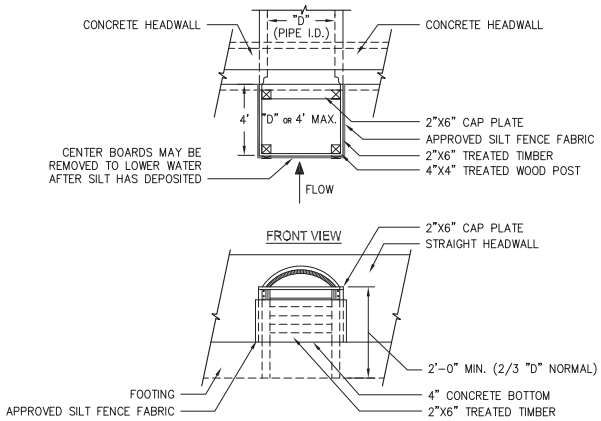


Figure 3. Slotted Board Dam Installation Requirements

Silt Control Gate **Rt-Sg**

- Use only on roadway drainage structures with the following structures: winged headwalls, tapered headwalls, straight headwalls, open end pipes, flared end sections.
- Drainage area shall not exceed 50 acres and the disturbed area of the basin shall not exceed 5 acres.
- Use 4”x4” treated posts & 2”x6” treated face boards with no spacing between the boards.
- Fasten an approved silt fence fabric to the front of the structure with staples or nails.

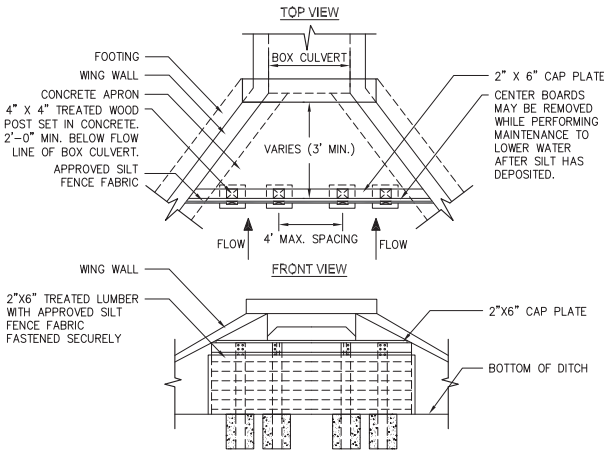


Figure 3. Silt Control Gate Installation Requirements

MAINTENANCE

- Clean-out when <u>one-third</u> sediment storage capacity is lost. Indicate this elevation with a mark on the outlet structure or a post inserted in the pond.
- Remove all trash and debris.
- Remove retrofit and accumulated sediment when the project is completed.
- Stabilize all disturbed areas immediately with permanent vegetation.

Sd1

SEDIMENT BARRIER

DEFINITION

A temporary structure made up of porous material typically supported by steel or wood posts. Types include silt fence, brush piles, mulch berms, compost filter socks or other filtering material.

PURPOSE

- Minimize and prevent sediment carried by sheet flow from leaving the site.
- Retain the sediment on the disturbed area.
- Filter sediment from runoff.

INSTALLATION

- Install according to the approved plan.
- Do not install across streams, ditches, waterways, or other concentrated flow areas.
- The type of sediment barrier depends on whether the area is sensitive or non-sensitive.
- For silt fence, Type C will be classified as sensitive and Type A & B will be classified as non-sensitive.
- Install along the contour.
- Along all state waters and other sensitive areas, 2 rows of Type S shall be used. The 2 rows shall be placed a minimum of 36” apart.

- Overlap barriers 18” when using multiple types of sediment barriers in a single run on a site.
- When storing runoff behind the sediment barrier, the maximum continuous slope length behind the sediment barrier shall not exceed those found in Table 1.
- Provide a riprap spalsh pad or other protection device at any point where flow may overtop the sediment barrier.

Installation Methods

Static Slicing Method

- Using a machine, pull a narrow blade through the ground to create a 12” deep slit, and simultaneously insert the silt fence fabric into the slit behind the blade.
- Roll a tractor wheel along both sides of the slit in the ground 2-4 times to achieve compaction
- Drive posts 18” into ground and attach fabric.

Figure 1. Static Slicing Machine

Trenching Method

- Dig a 2”-6” wide trench with a 6” excavation.
- Drive posts 18” into ground and attach fabric.
- The best trenching method typically requires triple the time and effort to achieve results comparable to the static slicing method.

Sensitive Areas Sd1-S

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

Type C Silt Fence

- 36” wide with wire reinforcement or equivalent backing
- To be used where runoff velocities are particularly high or where slopes exceed a vertical height of 10 ft.

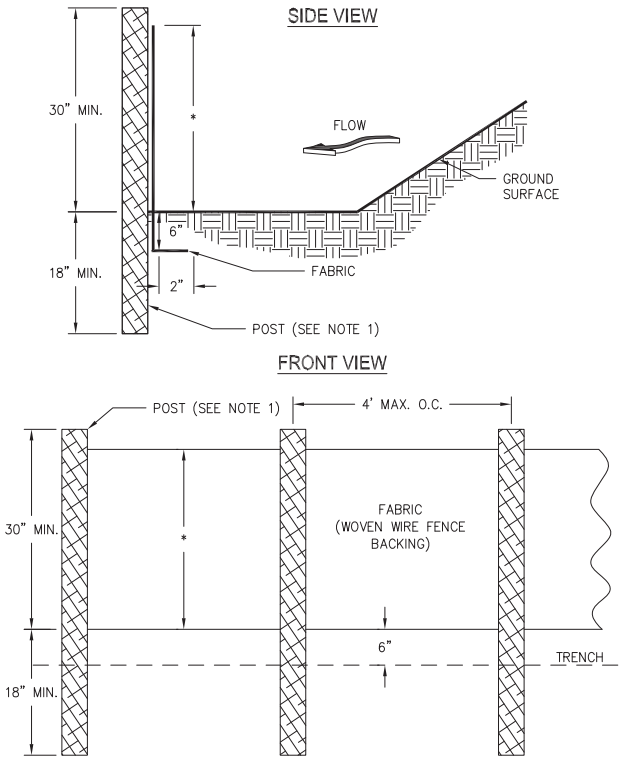


Figure 1. Type “C” Silt Fence

Sd1-NS Non-Sensitive Areas

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

Type A Silt Fence

- 36” wide fabric
- To be used where the life of the project is greater than or equal to 6 months.

Type B Silt Fence

- 22” wide fabric
- Limit to use on minor projects, such as residential home sites or small commercial developments where permanent stabilization will be achieved in less than 6 months.
- Same flow rate as Type A.

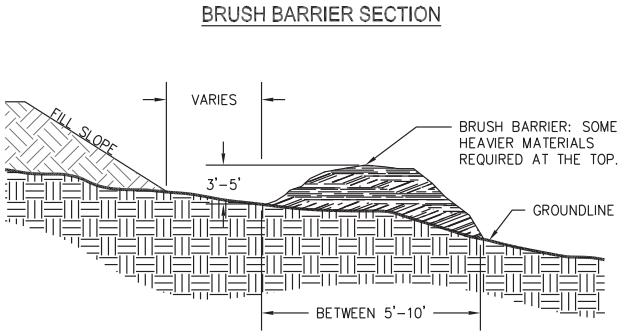


Figure 1. Brush Barrier (Sd1-BB)

Brush Barrier (only during timber clearing)

- Intermingle brush so as not to form a solid dam.
- Should be wind-rowed on the contour as nearly as possible.
- Minimum base width is 5 ft and should be no wider than 10 ft.
- The height should be between 3-5 ft.

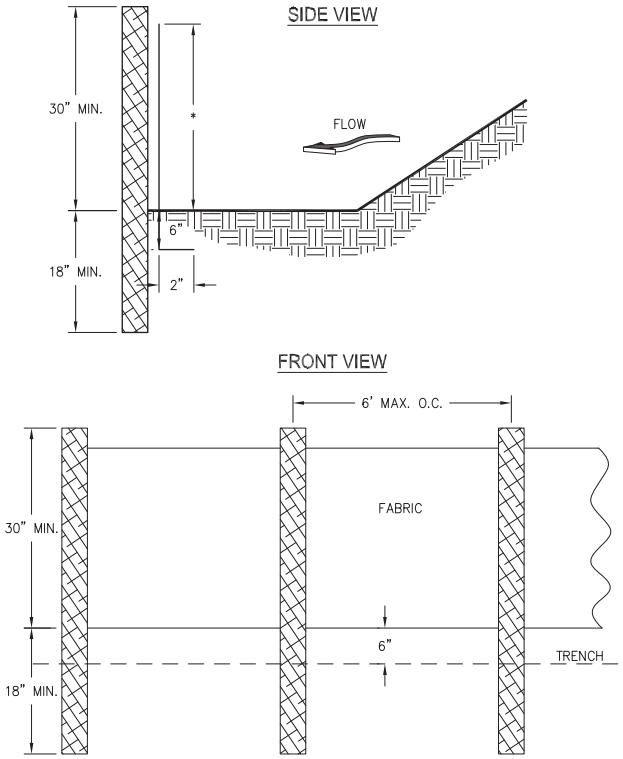


Figure 2. Type “A” & “B” Silt Fence

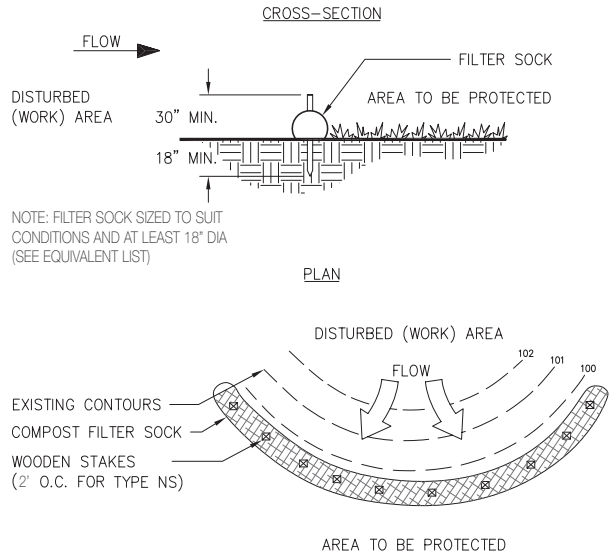


Figure 3. Compost Filter Sock - Type “B”

Table 1. Criteria for Sediment Barrier Placement

Land Slope (%)	Maximum Slope Length Behind Fence (ft)
<2	100
2-5	75
5-10	50
10-20	25
>20	15

MAINTENANCE

- Remove the sediment once it has accumulated to one-half the original height of the barrier.
- Replace barrier whenever it has deteriorated to such an extent that the effectiveness of the product is reduced (~ 6 months) or the height of the product is not maintaining 80% of its properly installed height.
- Remove and dispose of all accumulated sediment at the barrier before it is removed.
- Leave in place until all disturbed areas are permanently stabilized.

Table 2. Post Size

Type	Min. Length	Type of Post	Size of Post
NS	4’	Oak Steel Soft Wood	1.5”x1.5” 1.15lb/ft min 3” or 2”x4”
S	4’	Oak Steel	2”x2” 1.15lb/ft. min

Figure 1. Thomas Carpenter, CPESC, Carpenter Erosion Control.

Sd2

INLET SEDIMENT TRAP

DEFINITION

A temporary protective device formed at or around an inlet to a storm drain to trap sediment.

PURPOSE

- Prevent sediment from entering a storm drainage system prior to permanent stabilization of the disturbed area draining to the inlet.

INSTALLATION

- Install according to the approved plan.
- Do not install on paved surfaces where safety is a concern.
- Sediment traps must be self-draining unless otherwise protected.
- Install at or around all storm drain drop inlets that receive runoff from disturbed areas.
- Construct on natural ground surface, excavated surface, or on machine compacted fill.

Excavated Sediment Traps

- An excavation created around the inlet to provide additional sediment storage.
- Provide a minimum depth of 1.5 ft for sediment storage.
- The side slopes shall not be steeper than 2:1.
- The drainage area entering the trap shall be no greater than 1 acre.

Filter Fabric with Supporting Frame Sd2-F

- Applicable where the inlet drains a relatively flat area (<5% slope).
- Use Type S steel posts.
- Space stakes evenly around perimeter at a maximum of 3 ft apart.
- Drive stakes into the ground ~18” deep.
- The fabric shall be 36” tall and entrenched at least 12” and backfill with crushed stone or compacted soil.
- Securely fasten the fabric and wire to the posts.

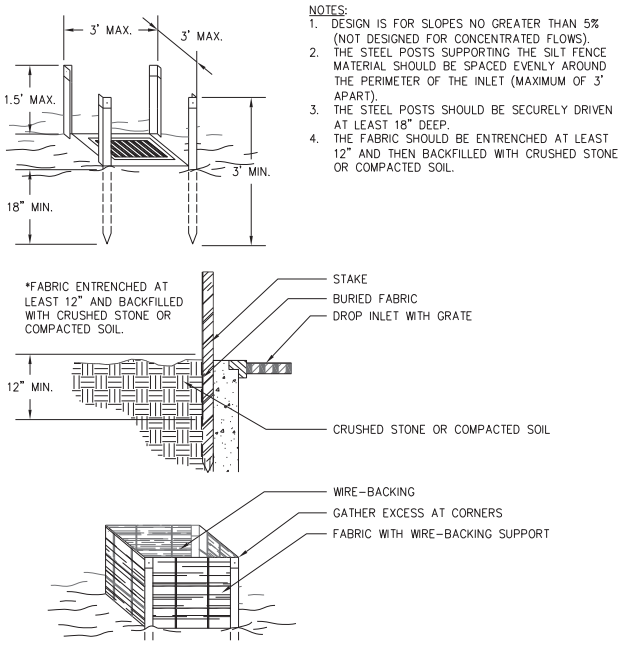


Figure 1. Filter Fabric with Supporting Frame Installation Requirements (Sd2-F)

Block and Gravel Drop Inlet Protection Sd2-Bg

- Applicable where heavy flows are expected and a overflow capacity is necessary to prevent excessive ponding.

- Excavate foundation at least 2” below the crest of the storm drain.
- On each side of the structure, place one block in the bottom row on its side to allow pool drainage.
- Place the bottom row of blocks against the edge of the storm drain.
- Add support by placing 2”x4” wood studs through block openings.
- Fit hardware cloth or wire mesh with 1/2” openings over all block openings to hold gravel in place.
- Place clean gravel 2” below the top of the block on a 2:1 or flatter slope and smooth it to an even grade.
- GADOT #57 stone is recommended.

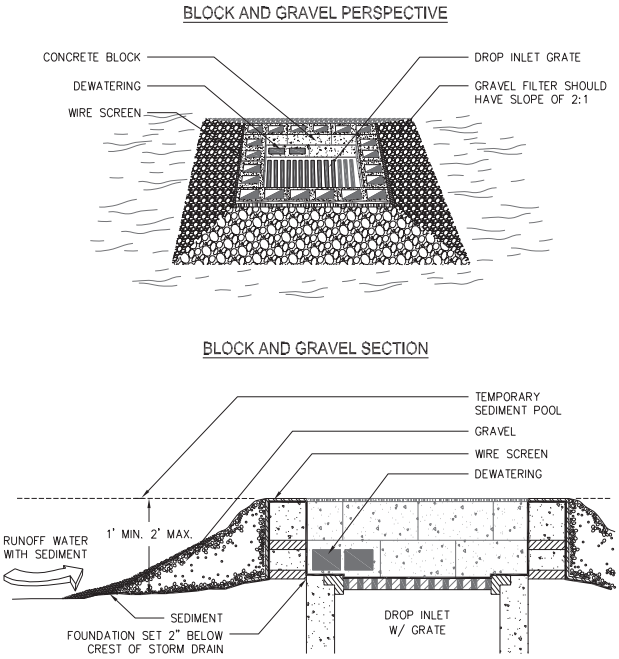


Figure 2. Block and Gravel Drop Inlet Protection Installation Requirements (Sd2-Bg)

Baffle Box **Sd2-B**

- Applicable for inlets receiving a higher volume or velocity.
- Construct 2”x4” boards spaced a maximum of 1” apart OR of plywood with weep holes 2” in diameter.
- Place weep holes ~6” on center vertically or horizontally.
- Place gravel outside of the box and around the inlet at a depth of 2-4”.
- Wrap entire box in Type C filter fabric and entrench at a depth of 12”.

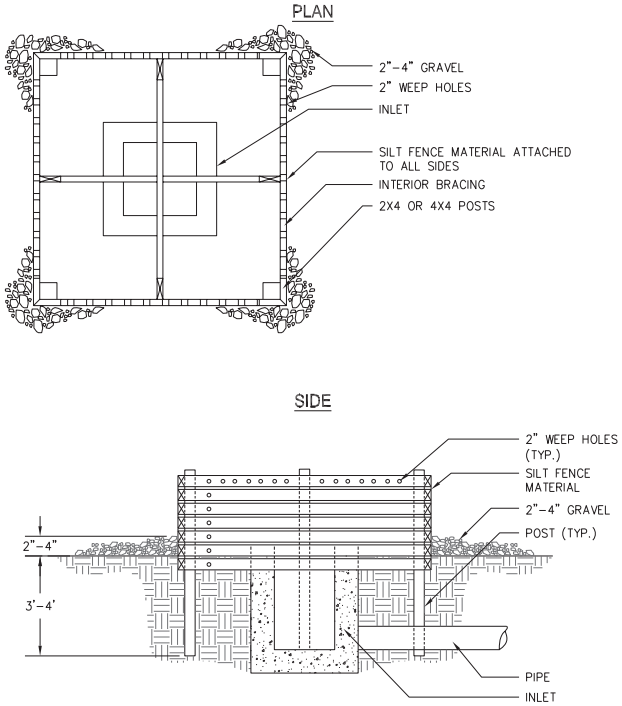


Figure 3. Baffle Box Installation Requirements (Sd2-B)

Gravel Drop Inlet Protection **Sd2-G**

- Applicable where heavy concentrated flows are expected.
- 3:1 or flatter slope toward the inlet.

- Leave a minimum 1 ft wide level stone area between the structure and the inlet to prevent gravel from entering the inlet.
- Place stone 3” in diameter or larger on the slope toward the inlet.
- Place 1/2” to 3/4” gravel on the slope away from the inlet at a minimum thickness of 1 foot.

Sod Inlet Protection **Sd2-S**

- Applicable only at the time of permanent seeding in order to protect the inlet from sediment and mulch material.
- Place the sod to form a turf mat covering the soil for a distance of 4 ft from each side of the inlet.
- Stagger sod strips so that adjacent ends are not aligned.

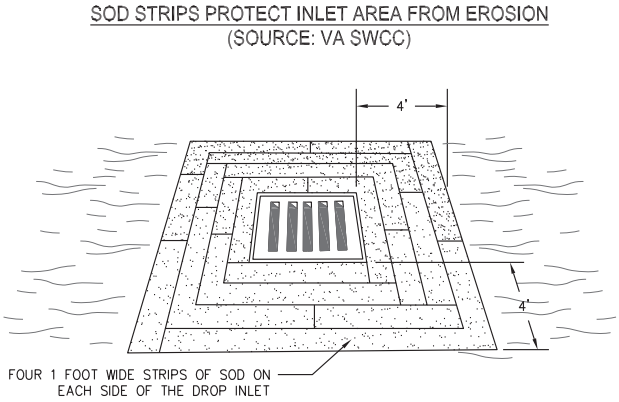


Figure 4. Sod Inlet Protection Installation Requirements (Sd2-S)

Curb Inlet Protection **Sd2-P**

- Applicable once pavement has been installed.
- The method of inlet protection shall be removed if a safety hazard is created.

- For the “pigs-in-a-blanket” method, wrap 8” concrete blocks in filter fabric and span across catch basin inlet.
- Face openings in blocks outward.
- Leave a gap of ~4” between the inlet filter and the inlet to allow for overflow and prevent hazardous ponding in the roadway.
- Another method uses gravel bags constructed by wrapping GADOT #57 stone with filter fabric, wire, plastic mesh, or equivalent material.

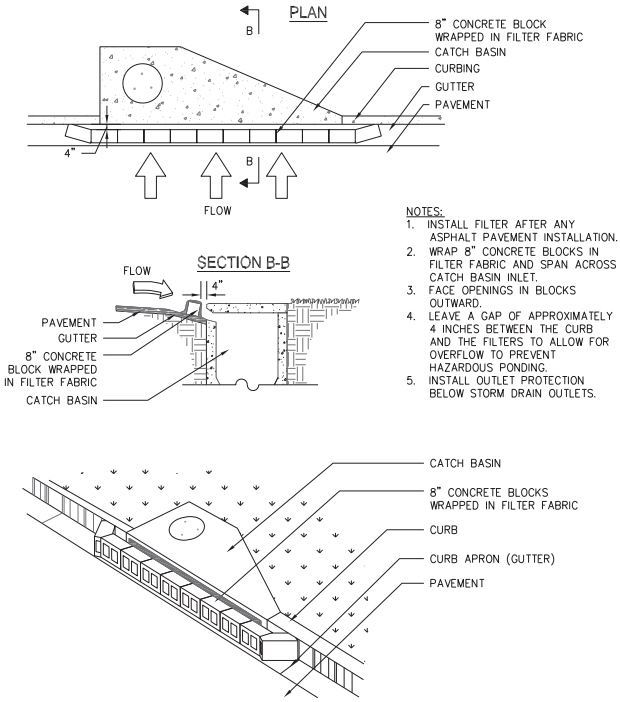


Figure 5. Curb Inlet Protection Installation Requirements (Sd2-P)

MAINTENANCE

- Inspect, clear, and/or repair trap at the end of each working day.
- Do not remove inlet protection and wash sediment into the inlet.
- Remove sediment when accumulation has reached one-half the height of the trap.
- Remove sediment from curb inlet protection immediately.
- Remove all materials and any sediment once the contributing drainage area has been permanently stabilized.
- Appropriately stabilize all disturbed areas around the inlet.

REFERENCES

Ds4 Disturbed Area Stabilization (With Sodding)

Sd1 Sediment Barrier

(This page left blank intentionally.)

Sd3

TEMPORARY SEDIMENT BASIN

DEFINITION

A basin created by the construction of a barrier or dam across a concentrated flow area, or by excavating a basin, or by a combination of both.

PURPOSE

- Detain runoff waters and trap sediment from erodible areas.
- Protect properties and drainage ways below the installation from damage by excessive sedimentation and debris.

INSTALLATION

- Construct all basins according to the approved plan unless modified by the design professional.
- Remove all trees, vegetation, roots, and other objectionable material.

Location

- Never place basin in a live stream.
- Storm drains should discharge into the basin.
- Install on sites where (1) failure will not result in loss of life or interruption of use or service of public utilities and (2) the drainage area does not exceed 150 acres.

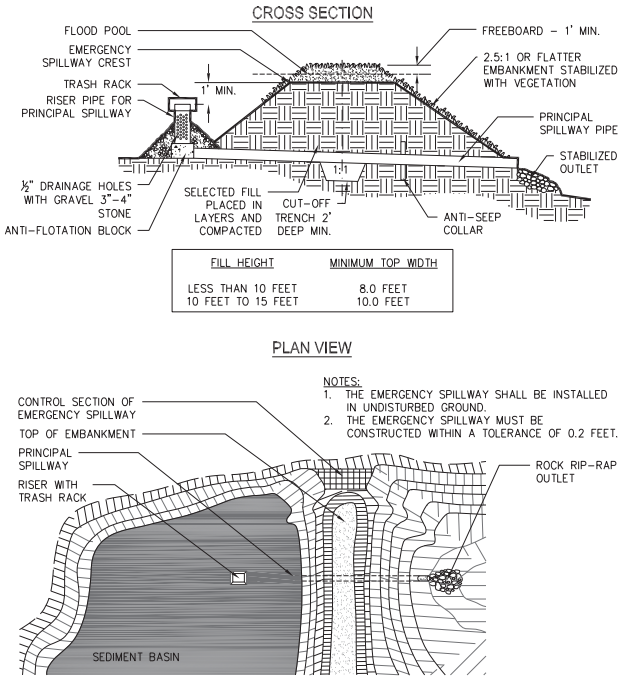


Figure 1. Components of a Typical Temporary Sediment Basin

Shape

- Length to width ratio shall be greater than 2:1
- The basin should be wedge shaped with the inlet at the narrow end.
- Install baffles and diversions when necessary.

Principal Spillway

- Join vertical pipe or box type riser to a pipe that extends through the embankment and exits beyond the downstream toe of the fill.
- The crest elevation of the riser should be 1 ft below the elevation of the control section of the emergency spillway.
- The riser and all pipe connections shall be completely watertight.
- Install pipe with a minimum diameter of 8”.

- If using the conventional method for dewatering a sediment basin, Perforate lower half of riser with 1/2” holes spaced approximately 3”, and cover with 2 ft of 3”-4” stone.
- If constructing the basin with a skimmer outlet, please refer to the specification **Sk - Floating Surface Skimmer.**
- Install a trash rack and anti-vortex device securely on top of the riser.
- Attach riser to the base with a watertight connection. Embed riser 9” into an 18” thick concrete base.
- Provide an adequte outlet that allows discharge in an erosion free manner.
- Place the fill material around the the pipe spillway in 4” layers and compact to at least the same density as the adjacent embankment.
- A minimum depth of 2 ft of hand compacted backfil shall be placed over the pipe spillway before crossing it with construction equipment.

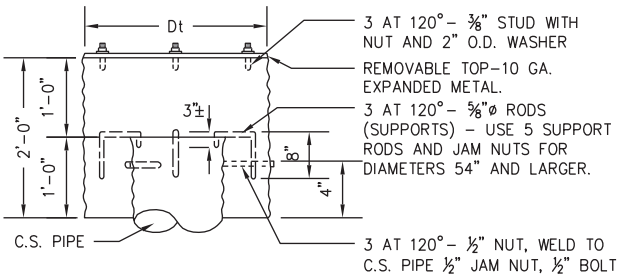


Figure 2. Typical Sediment Basin Trash Rack

Emergency Spillway

- Construct on undisturbed ground (not fill).
- Excavate a trapezoidal channel with minimum bottom width of 8 ft.

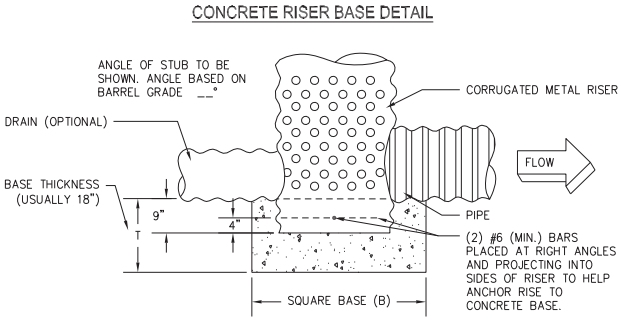
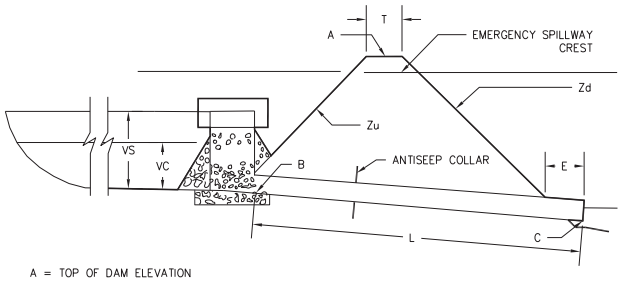


Figure 3. Concrete Riser Base Detail

- Construct a channel with a straight control section of at least 20 ft in length and a straight outlet section that is at least 25 ft in length.
- Stabilize with vegetation, asphalt, riprap or concrete.

Entrance of Runoff into Basin

- Install dikes, swales, or other water control devices to direct runoff into the basin.
- Locate points of entry as far away from the riser as possible.



A = TOP OF DAM ELEVATION

B = LOWEST ELEVATION OF PIPE AT RISER

C = LOWEST ELEVATION OF PIPE AT OUTLET

E = EXTENDED LENGTH OF PIPE BEYOND TOE OF DAM

L = TOTAL LENGTH OF PIPE, FT.

$L = [A - (B + C) /2] [ZU + ZD] + T + E$

T = TOP WIDTH OF DAM, FT.

Zu = UPSTREAM SIDE SLOPE

Zd = DOWNSTREAM SIDE SLOPE

Figure 4. Principle Spillway

- Stabilize the embankment and all other disturbed areas in accordance with the appropriate permanent vegetative measure, Ds3, immediately following construction.

Figure 5. Clean-out marker

Cut-off Trench

- Excavate a cut-off trench with a minimum depth of 2 ft along the center-line of the earth-fill embankment.
- Extend both abutments up to the riser crest with a minimum bottom width of 4 ft in order to permit operation of compaction equipment.
- Side slopes shall be no steeper than 1:1

Embankment

- Place fill material in 6”-8” thick continous layers over entire length of fill.
- Construct the embankment to an elevation 5% higher than the design height to allow for settlement.
- Fill material shall be free of rocks, woody vegetation, oversized stones, rocks, etc.

Table 1. Dam Width Requirements

Fill Height (ft)	Minimum Top Width (ft)
<10	8
10-15	10

MAINTENANCE

- Repair all damages caused by soil erosion or construction equipment at or before the end of each working day.
- Remove sediment from the basin when one-third of the storage volume has been lost to accumulation.
- Do not allow sediment to enter adjacent streams or drainage ways during the sediment removal process.
- Do not deposit sediment downstream from the embankment, adjacent to a stream or floodplain.
- Dispose of all temporary structures when they have served their intended purpose and the contributing drainage basin has been properly stabilized.

REFERENCES

Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Ds4	Disturbed Area Stabilization (With Sodding)
Ch	Channel Stabilization
Sk	Floating Surface Skimmer
St	Storm Drain Outlet Protection

Sd4

TEMPORARY SEDIMENT TRAP

DEFINITION

A small temporary pond that drains a disturbed area so that sediment can settle out.

PURPOSE

- Collect and store sediment from uphill sites cleared and/or graded during construction.
- For use on small tributary areas with no unusual drainage features.

INSTALLATION

- Install according to the approved plan.
- Sediment traps are effective against coarse sediment, but not against silt or clay particles.
- The maximum drainage area is 5 acres depending on the type of installation.
- The maximum depth of a trap is 4 ft as measured from the bottom of the trap to the invert of the emergency spillway.
- Ensure the length to width ratio is great than 2:1.
- The height of the embankment shall not exceed 5.5 ft from the downstream toe to the top of the berm. The top width shall be at least 3 ft.
- Slopes shall not exceed 2:1.

- Construct side slopes 3:1 or flatter to allow people and equipment to enter the trap.

Methods

Overflow Outlet Sd4-A

- Limited to small drainage areas less than 1 acre with gentle slopes(1-2%).
- The maximum life span is 6 months.
- Silt fence, straw bale barriers or grass filter strips are used to “polish” the overflow water as it leaves the sediment trap.

Combination Outlet Sd4-B

- A combination of straw bales and silt fence are used to dewater the trap.
- Properly install and stake the straw bales and ensure the silt fence has a wire backing so that the materials can resist 1 ft or more of ponded water.
- The maximum drainage area is 1 acre.
- The life span is less than 1 year.
- Requires frequent maintenance and adjustments.

Rock Outlet Sd4-C

- This type relies on filtering through layers of aggregate, rock or riprap material to dewater the sediment trap.
- This is the sturdiest design of the three and requires less maintenance.
- The maximum drainage area is 5 acres.
- The life span is typically 1 year.

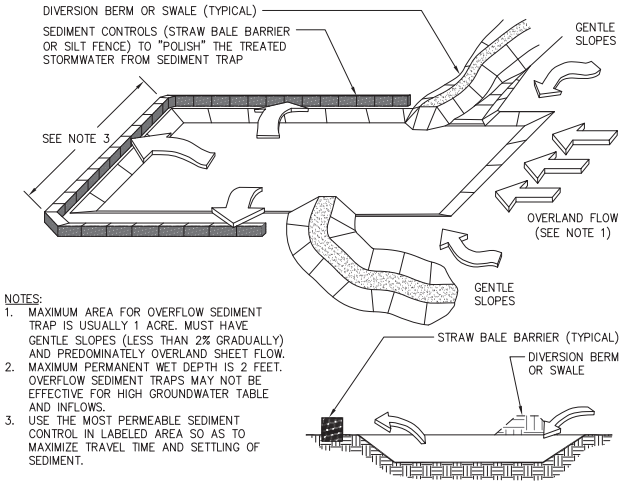


Figure 1. Overflow Outlet

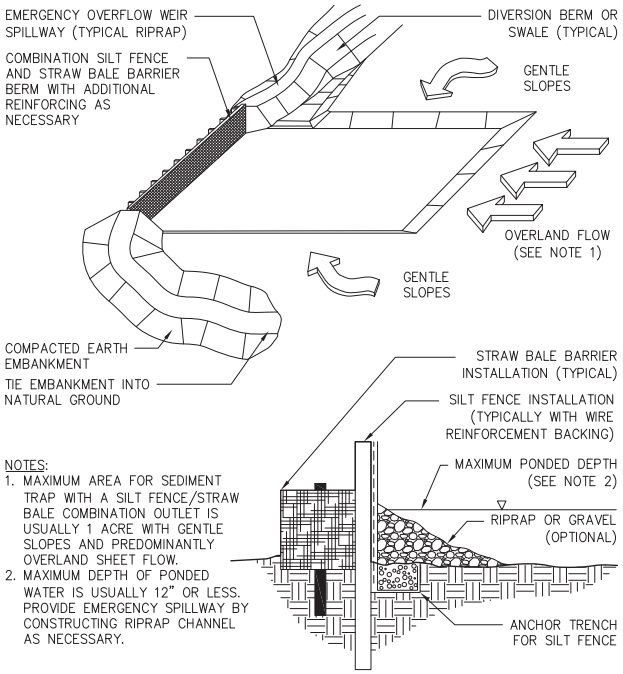


Figure 2. Combination Outlet

Emergency Spillway

- Stabilize with rock, geotextile, vegetation, or another suitable material that is resistent to erosion.
- Must be able to convey the 10-year storm event.

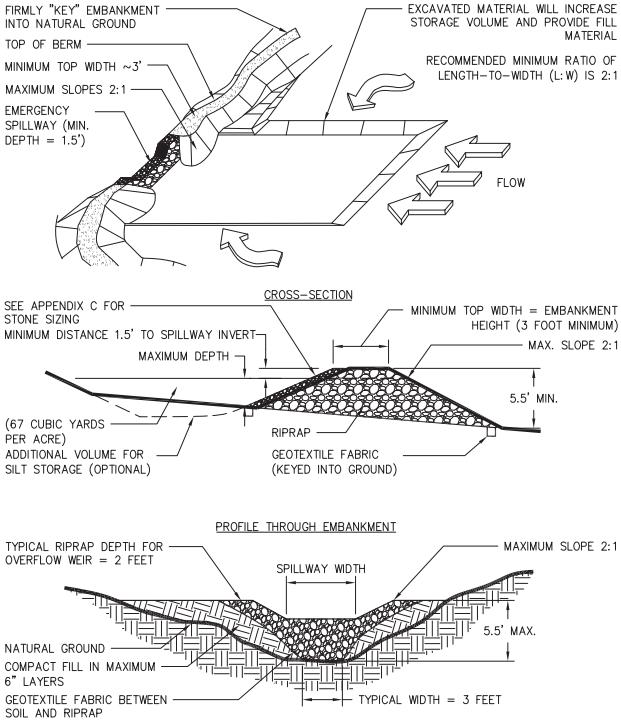


Figure 3. Rock Outlet

MAINTENANCE

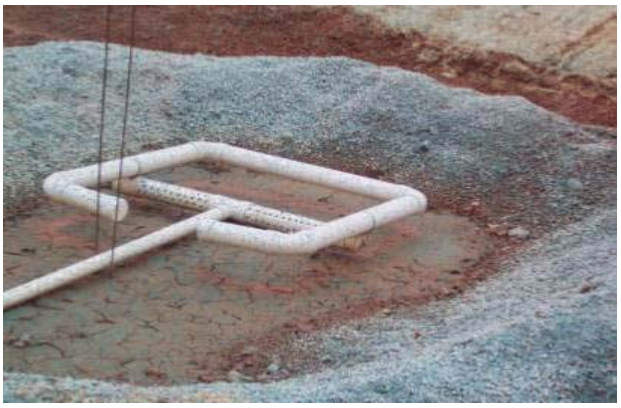
- Repair all damages caused by soil erosion or construction equipment at or before the end of each working day.
- The cleanout volume for a temporary sediment trap is <u>one-third</u> of the total storage volume.

Sk

FLOATING SURFACE SKIMMER

DEFINITION

A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.



PURPOSE

- Discharge clearer water from the surface of a sediment pond, trap, or basin at relatively uniform rate.
- Reduce the retention time associated with meeting a desired water quality standard for discharge from a sediment pond, trap or basin.

INSTALLATION

- Install according to the approved plan.
- It can replace the riser pipe as the principal spillway, but does **not** replace the emergency spillway.
- A portion of the skimmer must be visible above the water surface at all times.
- Excavate a pit filled with riprap under the floating surface skimmer to account for sediment accumulation around the device.
- At a minimum, the pit has dimensions of 4x4 ft with a minimum depth of 2 ft.

- Ensure the pit is lower than the invert of the outlet barrel from the riser.
- Use floating surface skimmers constructed of PVC (Schedule 40 or greater) or other appropriate materials.
- Install the device according to the approved plan and manufacturer's instructions.

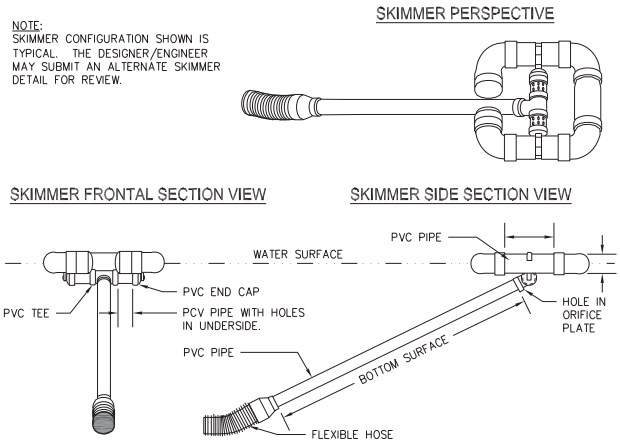


Figure 1. "Typical" Skimmer Design

MAINTENANCE

- Inspect Floating Surface Skimmers together with the Sediment Basin (Sd3) inspections.
- Inspect for any structural damage, clogging, or excessive sediment accumulation.
- Install trash guard to prevent larger debris from entering the skimmer and cause internal blocking.
- Use a floatable maintenance rope to remove trash and debris that accumluates on the outside of the trash guard.
- Free the skimmer from being stuck in the mud at the bottom of the basin to allow for normal operation.

SpB

SEEP BERM

DEFINITION

A 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.

PURPOSE

- Allows the 2 year, 24-hour storm to seep out while allowing larger flows to be diverted to a sediment storage area.

INSTALLATION

- Install according to the approved plan.
- Install where runoff can be stored behind the seep berm without damaging the berm or submerged area behind the intermediate dike points.
- Do not use above fill slopes that have not achieved permanent stabilization.
- Do not install across streams, ditches, or waterways.
- The top of the berm shall have a minimum width of 12” and a height of 4 ft.

- Maximum spacing between the dikes should be such that the toe of the upstream dike is at the same elevation as the top of the downstream dike.
- Install clean out markers at each intermediate dike using a sediment storage calculation.
- Compact the earthen berm by using a skid-loader with a full bucket, tracking with a dozer and applying pressure with the bucket, or rubber tired backhoe.
- Compaction must meet a minimum of 90% standard proctor density test.
- Apply seed at 70% germination or better prior to other land disturbing activities taking place.

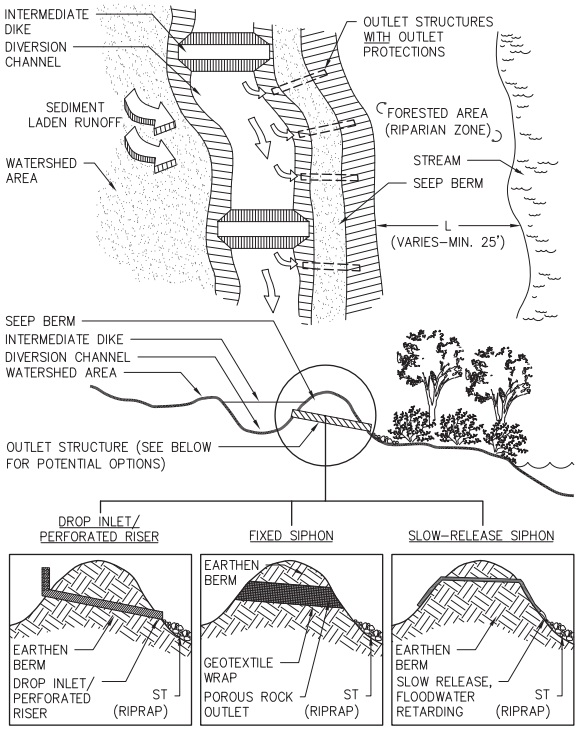


Figure 1. “Typical” Seep Berm System

SpB

- Seeps can be placed 3 different ways:
  - During the construction of the berm,
  - After construction has been completed, excavate at the location of the seeps, place in the trench and back-fill. Compact the berm to finalize,
  - After construction has been completed, using a steel pipe with a conical end, insert pipes through the berm.

MAINTENANCE

- Inspect the dam from the seep and supporting berm after every 1/2” or greater rainfall.
- Make any repairs promptly.
- Remove sediment when it has accumulated to <u>one-third</u> the height of the intermediate dike.

SpB

(This page left blank intentionally.)

Sr

TEMPORARY STREAM CROSSING

DEFINITION

A temporary structure installed across a flowing stream or watercourse for use by construction equipment.

PURPOSE

- Provide a means for construction vehicles to cross streams or watercourses without moving sediment into streams, damaging the streambed or channel, or causing flooding.

INSTALLATION

- Install according to the approved plan.
- The drainage area is not to exceed one square mile, unless specifically designed to accomodate the additional drainage area by the design professional.
- Structures include bridges, round pipes, or pipe arches.
- Do not allow for use by the general public.
- Install perpendicular to the stream. The crossing may vary 15° from the perpendicular.
- Divert all surface water from the construction site onto undisturbed areas adjoining the stream.

- Convey full bank flow of stream without appreciably altering the stream flow characteristics.
- Washout protection may include elevation of bridges above adjacent flood plain lands, crowning of fills over pipes, or the use of diversions, dikes or island type structures.
- A Stream Buffer Variance from the GA EPD may be required and all other appropriate agencies, including the U.S. Army Corps of Engineers, must be contacted to ensure compliance with other laws.

Types of Stream Crossings

Temporary Bridge Crossing Sr-B

- This method causes the least amount of erosion of the stream channel.
- Provides the least obstruction to flow and fish migration.
- Construct at or above the bank elevation to prevent entrapment of floating materials.
- Place abutments parallel to and on stable banks.
- Construct the bridge to span the entire channel. Install a footing, pier, or bridge support if the span exceeds 8 ft.
- Securely anchor the bridge at one end with a steel cable or chain, large trees, large boulders, or driven steel anchors.

Temporary Culvert Crossing Sr-C

- The most common stream crossing design.
- Can be easily constructed and enables heavy equipment loads to be used.
- Creates the greatest obstruction to stream flows and are subject to blockages.

- Install the invert elevation of the culvert on the natural streambed grade.
- Extend the culvert(s) a minimum of 1 ft beyond the upstream and downstream toe of the aggregate placed around the culvert.
- Do not exceed 40 ft in length of the culvert.
- Cover the culvert(s) with a minimum of 1 ft of aggregate.
- If using multiple culverts, separate them with compacted aggregate fill by a minimum of 12 in.

Table 1. Pipe Diameters for Stream Crossings (in)

Drainage		Average Slope of Watershed		
Acres	**1%**	**4%**	**8%**	**16%**
1-25	24	24	30	30
26-50	24	30	36	36
51-100	30	36	42	48
101-150	30	42	48	48
151-200	36	42	48	54
201-250	36	48	54	54
251-300	36	48	54	60
301-350	42	48	60	60
351-400	42	54	60	60
401-450	42	54	60	72
451-500	42	54	60	72
501-550	48	60	60	72
551-600	48	60	60	72
601-640	48	60	72	72

MAINTENANCE

- Inspect structure after every rainfall and at least once a week.
- Repair all damages immediately.
- Remove the structure immediately after construction is finished.
- Stabilize the streambed and banks.

REFERENCES

Ds1 Disturbed Area Stabilization (With Mulching Only)

Ds2 Disturbed Area Stabilization (With Temporary Seeding)

Ds3 Disturbed Area Stabilization (With Permanent Vegetation)

Ds4 Disturbed Area Stabilization (With Sodding)

Bf Buffer Zone

St

STORM DRAIN OUTLET PROTECTION

DEFINITION

Paved and/or riprapped channel sections placed below storm drain outlets.

PURPOSE

- Reduce the velocity of flow before entering receiving channels below storm drain outlets.

INSTALLATION

- Install according to the approved plan.
- The apron may be lined with riprap, grouted riprap, or concrete.
- Compact any fill required in the subgrade to the density of the surrounding undisturbed material.
- Ensure that the riprap and gravel filter conform to the specified grading limits on the plan.
- Install geotextile between the riprap and the soil base.
- Protect the geotextile from punching or tears during installation. Overlap connecting joints a minimum of 1 ft.
- The minimum thickness of the riprap should be 1.5x the maximum stone diameter.
- Place riprap by hand or equipment. Be careful to avoid damaging the filter fabric.

St

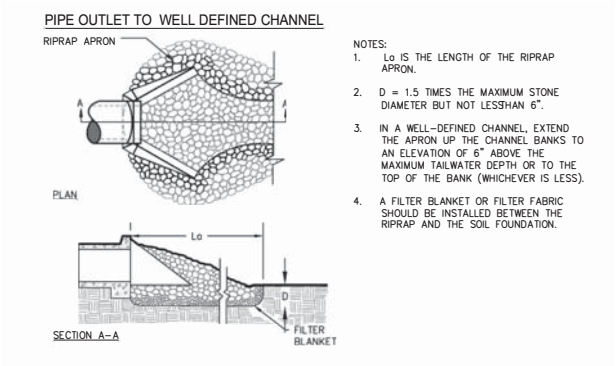


Figure 1. Outlet Protection for a Well-Defined Channel

- Construct the apron on zero grade with no overfall at the end. Ensure the top of the riprap at the downstream end is level with the receiving area or slightly below it.
- Place any necessary curves in the upper section of the apron.
- Ensure the apron is properly aligned and preferably straight throughout its length.
- Stabilize all distubed areas after construction.

Apron Width for a Well-Defined Channel

- Side slopes of the channel shall be no steeper than 2:1.
- Extend the apron across the channel bottom.
- Extend the apron up the channel banks to an elevation one foot above the maximum tailwater depth or to the top of the bank (whichever is less).

Apron Width for a Flat Area

- The upstream end of the apron shall have a width 3x the diameter of the outlet pipe.
- For a Minimum Tailwater Condition, the downstream end of the apron shall have a width equal to the pipe diameter plus the length of the apron.

- For a Maximum Tailwater Condition, the downstream end shall have a width equal to the pipe diameter plus 0.4x the length of the apron.

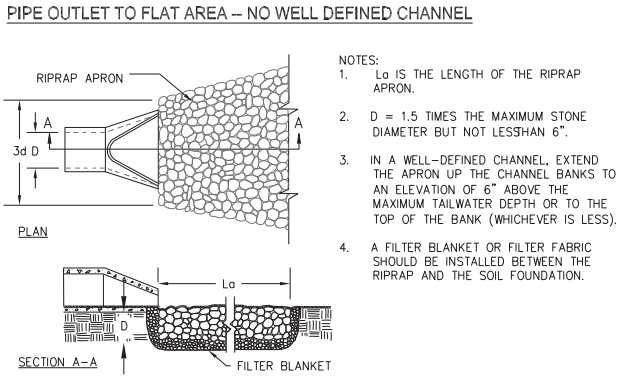


Figure 2. Outlet Protection for a Flat Area

MAINTENANCE

- Inspect riprap outlet structures after heavy rain events to see if any erosion has taken place around or below the riprap.
- Make all needed repairs immediately to prevent further damage.

(This page left blank intentionally.)

Su

SURFACE ROUGHENING

DEFINITION

Providing a rough soil surface with horizontal depressions created by operating a tillage or other suitable implement on the contour.

PURPOSE

- Aid in the establishment of vegetative cover with seed.
- Reduce runoff velocity and increase infiltration.
- Reduce erosion and provide for sediment trapping.

INSTALLATION

- Conduct according to the approved plan.
- Required on all slopes steeper than 3:1 if they are to be stabilized with vegetation.
- If slope is to be stabilized with matting and blankets, the surface should not be roughened.
- Not required on slopes with a stable rock face.
- Lightly roughen and loosen soil to a depth of 2”-4” on slopes 3:1 or flatter.
- Areas that will be mowed should have slopes less than 3:1.
- Groove or maintain roughness of fill slopes steeper than 3:1.

- Stair-step grade or groove cut slopes steeper than 3:1.

Roughening Methods

Stair-Step Grading

- May be carried out on any material soft enough to be ripped with a bulldozer.
- Particularly good for slopes with soft rock and some subsoil.
- The ratio of the vertical cut distance to the horizontal distance shall be less than 1:1.
- Horizontal portion of the “step” shall slope toward the vertical wall.

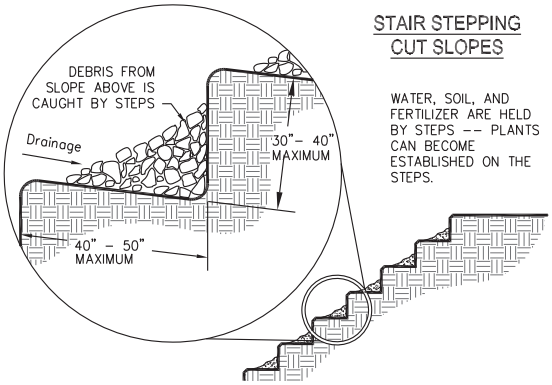


Figure 1. Stair-Stepping Cut Slopes

- Individual vertical cuts are not to exceed 30” on soft materials and not more than 40” in rocky materials.

Grooving

- Use discs, tillers, spring harrows, or the teeth on a front-end loader.
- On un-mowed slopes, minimum groove depth of 3” and maximum groove spacing of 15”.
- On mowed slopes, minimum depth of 1” and maximum groove spacing of 12”.

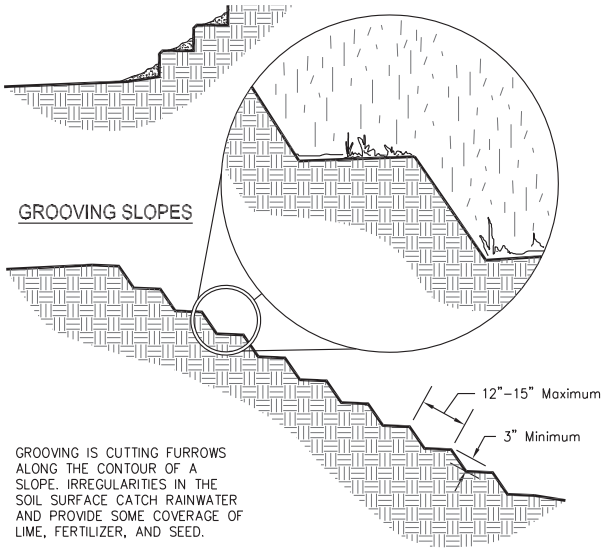


Figure 2. Grooving Slopes

Tracking

- Not recommended on clayed soils unless no alternatives are available.
- Sandy soils may be tracked because they do not compact severely.
- Minimize machine passes to minimize compaction.
- Roughened areas shall be seeded and mulched as soon as possible to obtain optimum seed germination and growth.

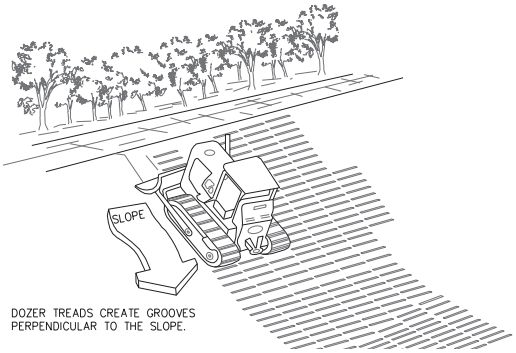


Figure 3. Tracking

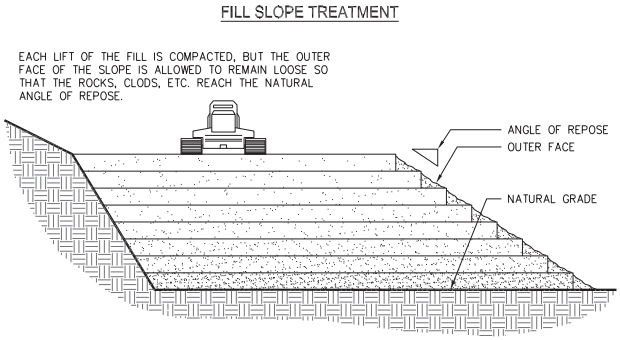


Figure 4. Fill Slope Treatment

REFERENCES

Ds1 Disturbed Area Stabilization (With Mulching Only)

Ds2 Disturbed Area Stabilization (With Temporary Seeding)

Ds3 Disturbed Area Stabilization (With Permanent Vegetation)

Ds4 Disturbed Area Stabilization (With Sodding)

Tc

TURBIDITY CURTAIN

DEFINITION

A floating or staked barrier installed within the water.

PURPOSE

- Minimize turbidity and silt migration from work occurring within the water or as a supplement to perimeter control BMPs at the water's edge.
- Allow suspended particles to drop out of the water column over time.

INSTALLATION

- Install according to the approved plan.
- This practice is only allowed as a primary device when required permitting has been obtained for the site that approves the filling of State or U.S. waters.
- A Stream Buffer Variance from the GA EPD may be required and all other appropriate agencies, including the U.S. Army Corps of Engineers, must be contacted to ensure compliance with other laws.
- Not to be used as sediment storage.

Tc

- The installation of a turbidity curtain as a supplemental BMP is allowed provided the stream or other water "body" is not altered in any manner by the installation.
- Place barrier approximately 25 ft outside of the affected construction area for large water bodies.
- Place barrier parallel to flow whenever there is significant velocity or current in the body of water.
- Never allow the silt dispersion to exceed the allowances the filling permit has authorized.
- Installation dimensions and methods shall be fitted to the conditions, permitted activity, and construction methods.

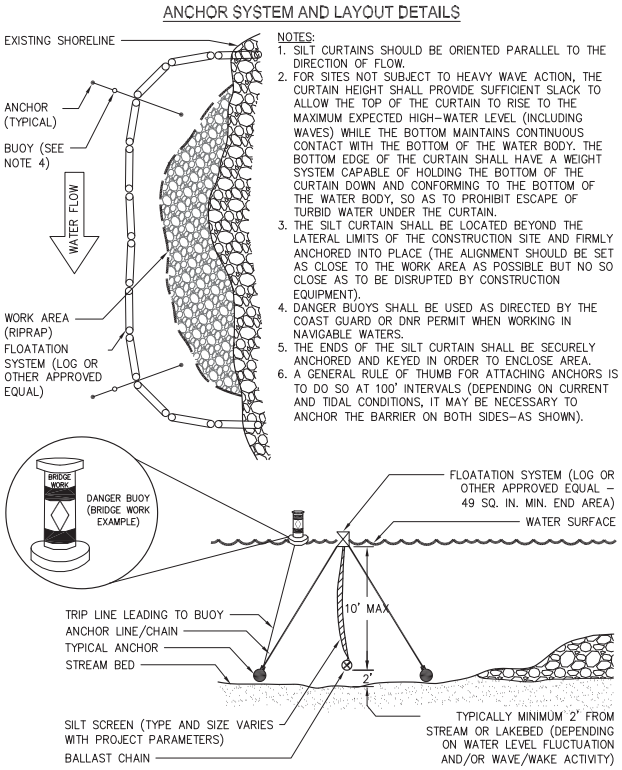


Figure 1. Turbidity Curtain System

Installation Types

Floating Turbidity Curtain **Tc-F**

- Typical installation include large bodies of water such as rivers and lakes.
- Extend curtain to a depth of 5 ft from the bottom of the water body.

Staked Turbidity Curtain **Tc-S**

- Typical installations include shallow inundations where construction is required.
- Extend the barrier to the bottom of the streambed.
- Limit the height to 5 ft whenever possible and extend 2 ft above the normal water elevation.

MAINTENANCE

- Remove the curtain when it is no longer required.
- Carefully remove any sediment that exceeds the allowance of the filling permit.
- If using Tc as a supplemental BMP, it should be removed once the contributing drainage area reaches final stabilization and perimeter control removal has occurred.

(This page left blank intentionally.)

Tp

TOPSOILING

DEFINITION

The stripping off of the fertile topsoil, storing it, then spreading it over the disturbed area after the completion of construction activities.

PURPOSE

- Provide a suitable soil medium for vegetative growth on areas where other measures will not produce or maintain a desirable stand.

SPECIFICATIONS

- Recommended for sites with slopes 2:1 or flatter where:
  - (1) the texture of the exposed subsoil or parent material is not suitable to produce adequate vegetative growth.
  - (2) the soil material is so shallow that the rooting zone is not deep enough to support plants with continuing supplies of moisture and food.
  - (3) the soil to be vegetated contains material toxic to plant growth.
- Topsoil should be friable and loamy, free of debris, objectionable weed and stones, and contain no toxic substance that may be harmful to plant growth.

- A stripping depth of 4”-6” is common and should be confined to the immediate construction area.
- Stockpiles should not obstruct natural drainage or cause off-site environmental damage.
- Stockpiles shall be contained by sediment barriers and stabilized with temporary vegetative measures.
- Where the pH of the subsoil is 5.0 or less or composed of heavy clays, agricultural lime shall be spread at a rate of 100lbs/1000 sq.ft.
- Subsoil shall be loosened by discing or scarifying to a minimum depth of 3” to permit bonding of the topsoil to the subsoil. Tracking by a bulldozer is also adequate.
- Topsoil should be applied at a uniform depth of 5” (unsettled), but may be adjusted at the discretion of the design professional.
- Topsoil should be handled only when dry in order to prevent damaging the soil structure.

Table 1. Cubic Yards of Topsoil Required for Application to Various Depths

Depth (in.)	Per 1,000 Sq. Ft.	Per Acre
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806

Tr

TREE PROTECTION

DEFINITION

The protection of desirable trees from injury during construction activity.

PURPOSE

- Ensure the survival of desirable trees where they will be effective for erosion and sediment control, watershed protection, landscape beautification, dust and pollution control, noise reduction, shade and other environmental benefits while the land is being converted.

SPECIFICATIONS

- Contact the local government to obtain information regarding tree ordinances BEFORE ES&PC plans are designed.

Tree Protection Zones

(1) Measure the diameter of the tree trunk in inches 4.5 ft from the ground. This is the Diameter Breast Height (DBH).

(2) Multiply this value by 1.5. This result is the radius of the root protection zone in ft Also considered the critical rooting distance.

Tr

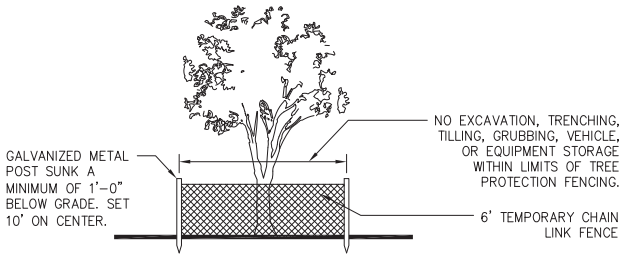


Figure 1. Chain Link Fence Installation

Tree Protection Zone Fencing

Tree protection zone fencing may be one of the following:

- For areas of large remnant forest to be protected, use 4 ft high orange plastic fabric fencing stapled in 3 locations to 2x4 treated wood stakes. Set stakes 6 ft on center. Do not use rebar as stakes.
- For single family homes use a treated wood fencing. It may have orange fabric attached to it.
- For all other developments use 6 ft high chain link fencing attached to galvanized metal post.

*Please refer to the American National Standard(ANSI) or the International Society of Arborculture for more information regarding standards for adequate tree protection.

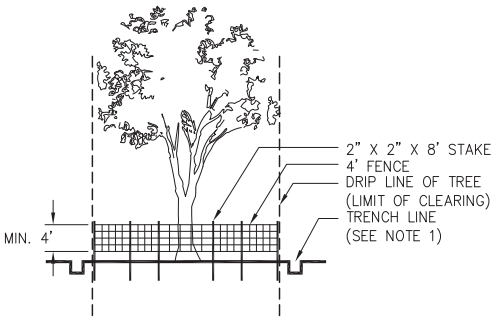


Figure 2. "Snow" Fence Installation

Wt

VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL

DEFINITION

A natural or constructed channel that is shaped or graded to required dimensions and established in suitable vegetation for the stable conveyance of runoff.

PURPOSE

- Dispose of runoff without causing damage either by erosion or flooding.

INSTALLATION

- Install according to the approved plan.
- Remove all trees, brush, stumps, obstructions and other objectionable material so as not to interfere with the proper functioning of the waterway.
- Ensure the channel is free of bank projections or other irregularities that will impede normal flow.
- Compact fills as needed to prevent unequal settlement.
- Dispose of all excess earth fill so that it will not interfere with waterway functioning.
- Stabilize the channel in accordane with applicable vegetative standards.

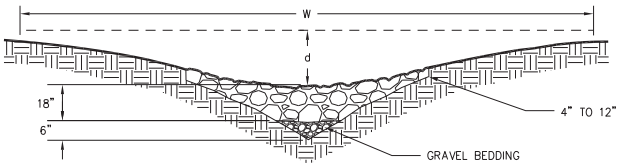
- Channel shape may be parabolic, trapezoidal, or triangular.
- The bottom width shall not exceed 50 ft unless multiple or divided waterways or other means are provided to control meandering of low flows within this limit.
- Please refer to Table 1 for design velocities of the grassed waterways.

Table 1. Permissible Velocities for Vegetated and Rock-Lined Waterways

Vegetative Cover	Maximum Permissible Velocity (fps)
Bermuda	5
Bahia	4
Tall Fescue	4
Sericea Lespedeza Weeping Lovegrass	3
Stone Center	Design Required

- Tile or other subsurface drainage measure shall be provided for sites having high water tables or seepage problems. Where there is base flow, a stone center or lined channel will be required.
- Mulching is required for all seeded or sprigged channels.
- Geotextiles should be used as an erosion control measure beneath the riprap center.
- If conditions permit, water should be temporarily diverted from the channel, or otherwise disposed of, during the establishment of vegetation.

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



WATERWAY WITH STONE CENTER DRAIN AND
ROUNDED SECTION SHAPED BY BULLDOZER

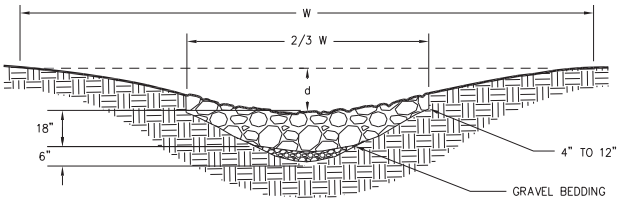


Figure 1. Stone Center Waterway

REFERENCES

Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Ds4	Disturbed Area Stabilization (With Sodding)
Ss	Slope Stabilization

(This page left blank intentionally.)

Insert Tab 9

Sample Plan Review

Back of Tab

1

SAMPLE PLAN REVIEW

GSWCC

Level II: Introduction to Design July 2016

Purpose

2

- This sample plan review is based on the ES&PC Plan located in your notebook and the Manual for Erosion & Sediment Control
- You should break into small groups and use the applicable checklist provided to review the plan
- Please note all deficiencies during your review
- The class will group back up to go through the presentation of what should have been noted for each checklist item

GAR100003 Checklist

3

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
COMMON DEVELOPMENT CONSTRUCTION PROJECTS (Primary and Tertiary Permittees)
SWCD: _____

Project Name: _____ Address: _____
City/County: _____ Date on Plans: _____

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
		1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of Janu of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
		2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed) The Level II certification must be issued to the Design Professional whose signature and seal are on the Plan

Level II Number, Signature, Seal

4

SEAL

EROSION CONTROL CERTIFICATION

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

BY Harry Highball

HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

50 Acre Site?

N/A

5

This site does not disturb more than 50 acres at one time

Name & Number of 24-hour Contact

6

1. THE PRIMARY PERMITTEE OF THIS PROJECT IS A. DUNLOP, 3162 COUNTRY CLUB ROAD, VALDOSTA, GA 31605. CONTACT PERSON: MR. ANDREW DUNLOP, TEL : 229-653-5022.

Name, Address, Phone of Permittee

7

1. THE PRIMARY PERMITTEE OF THIS PROJECT IS A. DUNLOP, 3162 COUNTRY CLUB ROAD, VALDOSTA, GA 31605. CONTACT PERSON: MR. ANDREW DUNLOP, TEL : 229-653-5022.

Total & Disturbed Acreage

8

2. THE TOTAL ACREAGE OF THE PROPERTY IS ±1.66 ACRES AND THE TOTAL DISTURBED AREA IS ±1.40 ACRES.

GPS Location

9

3. THE PROPERTY IS LOCATED ON AT GPS LOCATION LATITUDE: 31° 26' 22"N LONGITUDE: 83° 30' 20"W 2700 SOUTH US HIGHWAY 41, TIFTON, TIFT COUNTY, GA 31794. THERE ARE NO CRITICAL AREAS REQUIRING ADDITIONAL MEASURES.

Initial Date of the Plan

10

BARGAIN BUYS STORES DEVELOPMENT		
HARRY HIGHBALL CONSULTING ENGINEERS		
OWNER A. DUNLOP	COUNTY, STATE TIFT, GEORGIA	
DRAWN BY JAN JACOBY	LAND LOT 336	
DATE MARCH 4, 2013	LAND DISTRICT 6th	
REVISION NUMBER	REQUESTED BY GSWCC	DATE

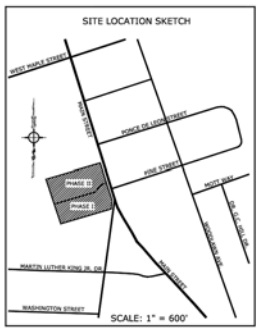
Description of Construction Activity

11

9. THE EXISTING SITE IS A VACANT PARTLY WOODED COMMERCIAL LOT WHICH WILL BE IMPROVED WITH A RETAIL STORE AND APPURTENANT ACCESS DRIVEWAYS, PARKING SPACES AND INFRASTRUCTURE.

Vicinity Map

12



Project Receiving Waters

13

5. THE RECEIVING WATERS OF THIS PROJECT IS WASHBURN CREEK, WHICH IS AN IMPAIRED STREAM SEGMENT LOCATED APPROXIMATELY 50 L.F. DOWNSTREAM ~~TO THE WEST OF~~ THE PROPERTY, ULTIMATELY LEADING TO THE SMALL RIVER. A TMDL HAS NOT BEEN FINALIZED FOR THIS SEGMENT OF WASHBURN CREEK. NO OTHER ADJACENT STREAMS, LAKES, RESIDENTIAL AREAS, WETLANDS, ETC. WILL BE AFFECTED.

Certification Statement

14

11. 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 SUPERVISION.

12. I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT ~~THE DESIGNED SYSTEM OF~~ BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100003.
SIGNATURE .....Henry Highbell.....

Certification Statement

15

11. 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 SUPERVISION.

12. I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100003.
SIGNATURE .....Henry Highbell.....

Statement

16

16. THE PRIMARY PERMITTEE AND TERTIARY PERMITTEE(S) MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, 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.

Statement

17

15. WHERE APPLICABLE, NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

Statement is missing the wording "or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line"

Statement

N/A

18

There are no buffer encroachments on site

Statement

19

17. THE PRIMARY, SECONDARY OR TERTIARY PERMITTEES, AS APPLICABLE, SHALL AMEND THEIR PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT. AMENDMENTS TO THE PLANS MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL. ALL REVISIONS OR AMENDMENTS SHALL BE SUBMITTED TO THE LOCAL ISSUING AUTHORITY FOR REVIEW.

Statement

20

18. NO WASTE MATERIALS, INCLUDING BUT NOT LIMITED TO WASTE BUILDING MATERIALS, CONSTRUCTION AND DEMOLITION DEBRIS, CONCRETE WASHOUT OR EXCAVATED SEDIMENT, SHALL BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

Statement

21

27. **THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.**

Statement

22

28. **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.**

Statement

23

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

Secondary Permittees

24

19. THE PRIMARY PERMITTEE SHALL COMPLETE A LIST OF ALL SECONDARY PERMITTEES AND CONTACT INFORMATION IN THE SPACE PROVIDED BELOW, AND PROVIDE A COPY OF THE PLAN (AND ANY SUBSEQUENT REVISIONS TO THE PLAN) TO EACH SECONDARY PERMITTEE. EACH SECONDARY PERMITTEE SHALL SIGN AS WRITTEN ACKNOWLEDGEMENT OF RECEIPT OF THE PLAN IN THE SPACE PROVIDED BELOW. THE PRIMARY PERMITTEE SHALL KEEP A COPY OF THE ACKNOWLEDGEMENTS ON-SITE IN HIS RECORDS.

SECONDARY PERMITTEES :

1. NAME ..... COMPANY ..... ADDRESS ..... CITY/ST/ZIP ..... LEVEL IA CERT NO. ..... SIGNATURE .....
2. NAME ..... COMPANY ..... ADDRESS ..... CITY/ST/ZIP ..... LEVEL IA CERT NO. ..... SIGNATURE .....
3. NAME ..... COMPANY ..... ADDRESS ..... CITY/ST/ZIP ..... LEVEL IA CERT NO. ..... SIGNATURE .....
4. NAME ..... COMPANY ..... ADDRESS ..... CITY/ST/ZIP ..... LEVEL IA CERT NO. ..... SIGNATURE .....

Impaired Stream Segment

25

IMPAIRED STREAM SEGMENT NOTE

BEING LOCATED ADJACENT TO, AND DISCHARGING STORM WATER INTO AN IMPAIRED STREAM SEGMENT, THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CLAUSE:
NPDES PERMIT NO. GAR100003, PART III, SECTION C. 2.
IN ORDER TO ENSURE THAT THE PERMITTEE'S DISCHARGES DO NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF STATE WATER QUALITY STANDARDS, THE PLAN MUST INCLUDE THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT:
c. USE BAFFLES IN THE TEMPORARY SEDIMENT BASIN TO AT LEAST DOUBLE THE CONVENTIONAL FLOW PATH LENGTH TO THE OUTLET STRUCTURE.
d. PLACE A LARGE SIGN (MINIMUM 4 FEET X 8 FEET) ON THE SITE VISIBLE FROM THE ROADWAY IDENTIFYING THE CONSTRUCTION SITE, THE PERMITTEE(S), AND THE CONTACT PERSON(S) AND TELEPHONE NUMBER(S).
h. LIMIT THE TOTAL PLANNED SITE DISTURBANCE TO LESS THAN 50% IMPERVIOUS SURFACES (EXCLUDING ANY STATE MANDATED BUFFER AREAS FROM SUCH CALCULATIONS).
p. INSTALL SOD FOR A MINIMUM 20 FOOT WIDTH, IN LIEU OF SEEDING, ALONG THE SITE PERIMETER WHEREVER STORM WATER MAY BE DISCHARGED.

TMDL Plan

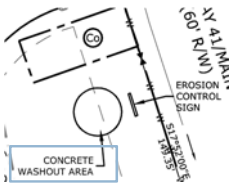
26

5. THE RECEIVING WATERS OF THIS PROJECT IS WASHBURN CREEK, WHICH IS AN IMPAIRED STREAM SEGMENT LOCATED APPROXIMATELY 50 L.F. DOWNSTREAM TO THE WEST OF THE PROPERTY, ULTIMATELY LEADING TO THE SMALL RIVER. A TMDL HAS NOT BEEN FINALIZED FOR THIS SEGMENT OF WASHBURN CREEK. NO OTHER ADJACENT STREAMS, LAKES, RESIDENTIAL AREAS, WETLANDS, ETC. WILL BE AFFECTED.

BMPs for Concrete

27

7. WASHOUT OF THE DRUM OF A CONCRETE TRUCK AT THE CONSTRUCTION SITE IS PROHIBITED. CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES WILL ONLY BE ALLOWED IN A DESIGNATED AREA PROVIDED FOR THIS PURPOSE, AS SHOWN ON THE DRAWINGS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE FOLLOWED:
(1) CONTAIN ALL WASH WATER ON SOIL, IN A BOWL SHAPED AREA CREATED IN THE DESIGNATED WASH AREA TO PREVENT THE WASH WATER FROM FLOWING FROM THE WASHOUT AREA;
(2) USE THE MINIMUM AMOUNT OF WATER TO WASH DOWN THE TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES;
(3) REMOVE ANY CONCRETE SEDIMENT FROM THE AREA SURROUNDING THE WASHOUT AREA BEFORE IT HARDENS; AND
(4) REMOVE ALL CONCRETE RESIDU FROM THE DESIGNATED AREA ONCE IT HAS HARDENED.



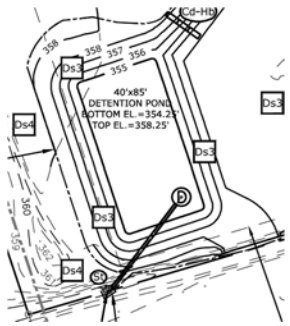
BMPs for Petroleum Spills

28

8. SPILL CLEANUP AND CONTROL PRACTICES:
LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802. FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.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.

Post-construction Stormwater

29



Reduce pollutants in storm water

30

PRODUCT SPECIFIC PRACTICES:

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.

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.

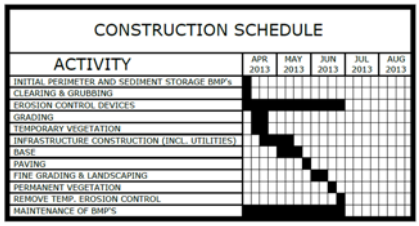
CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE.

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.

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.

Construction Timeline

31



Inspections & Record Keeping

32

21. INSPECTIONS:
A. PRIMARY PERMITTEE.
(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 RAINFALL ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY UNTIL A NOTICE OF TERMINATION IS SUBMITTED. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS 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 NON-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): (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE;

Sampling Frequency & Reporting

33

22. 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, SAMPLES MUST BE TAKEN WITHIN FORTY-FIVE (45) MINUTES OF:
(A) THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT, IF THE STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL HAS BEGUN AT OR PRIOR TO THE ACCUMULATION, OR
(B) THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL, IF THE DISCHARGE BEGINS AFTER THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT.
(2). HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT) OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.
(3). SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING EVENTS:
(A). FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS* (MONDAY THRU FRIDAY, 8:00 AM TO 5:00 PM AND SATURDAY 8:00 AM TO 5:00 PM, EXCLUDING ALL NON-WORKING FEDERAL HOLIDAYS, WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY PERMITTEE) THAT OCCURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED 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 STREAM, THE FIRST RAIN EVENT* THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS* THAT OCCURS EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST.
(C). AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS ARE FOUND TO BE PROPERLY DESIGNED, INSTALLED AND MAINTAINED, NO FURTHER ACTION IS REQUIRED. IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED; AND
(D). EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.
*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING AT ANY TIME OF THE DAY OR WEEK.

Sampling Frequency & Reporting

34

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

Retention of Records

35

24. RETENTION OF RECORDS:
1. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:
A. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
B. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
C. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;
D. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
E. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT;
F. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND
G. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2). OF THIS PERMIT.

Analytical Methods

36

25. SAMPLING REQUIREMENTS. 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. THE FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING TURBIDITY.

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 COMMON DEVELOPMENT. (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 STORM WATER IS DISCHARGED AND (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 STORM WATER(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). THE ANALYTICAL METHOD USED TO COLLECT AND ANALYZE THE SAMPLES INCLUDING QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES. THIS NARRATIVE MUST INCLUDE PRECISE SAMPLING METHODOLOGY FOR EACH SAMPLING LOCATION;
(3). WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OUTFALLS WILL BE MONITORED, A RATIONALE MUST BE INCLUDED 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.

Analytical Methods

37

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 STORM WATER 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, CLEAN 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. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED USING A DIRECT READING, 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.

Analytical Methods

38

C. SAMPLING POINTS.
(1). FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:
(A). THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE 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 STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
(C). IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM WATER OUTFALL CHANNEL(S).
(D). CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL.
(E). THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
(F). THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.
(G). PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS THE USE OF RIP RAP, GABIONS, PERMANENT MULCHES OR GEOTEXTILES) HAVE BEEN USED. PERMANENT VEGETATION SHALL CONSIST OF: PLANTED TREES, SHRUBS, PERENNIAL VINES; A CROP OF PERENNIAL VEGETATION APPROPRIATE FOR THE TIME OF YEAR AND REGION; OR A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION. FINAL STABILIZATION APPLIES TO EACH PHASE OF CONSTRUCTION.
(H). ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4., WHICHEVER IS APPLICABLE.

Appendix B Rationale

N/A

39

26. THE ALLOWABLE INCREASE IN TURBIDITY BETWEEN THE DOWNSTREAM AND UPSTREAM SAMPLING POINTS IN THE RECEIVING WATERS, WHICH ARE CLASSIFIED AS WARM WATER, FOR THIS PROJECT IS 25 NTU.

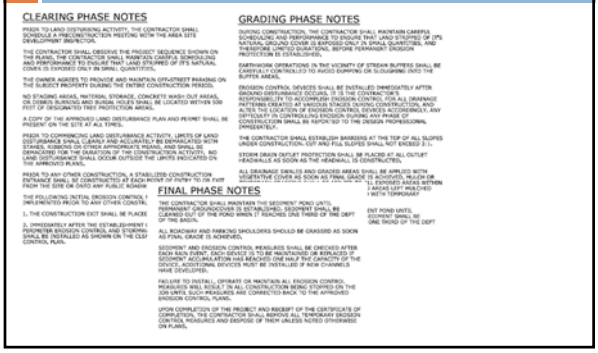
Sampling Locations

40

While the sampling points are clearly labeled, there are possible stormwater inputs the permittee would not be responsible for. For this site, an outfall sampling methodology would better reflect the site conditions

Description of Controls & Measures

41



CLEARING PHASE NOTES

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

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

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

NO STAGING AREAS, MATERIAL STORAGE, CONCRETE WASH OUT AREAS, OR DEBRIS BURNING AND BURIAL HOLES SHALL BE LOCATED WITHIN 50ft FEET OF DESIGNATED TREE PROTECTION AREAS.

A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.

PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, LIMITS OF LAND DISTURBANCE SHALL CLEARLY AND ACCURATELY BE DEMARCATED WITH STAKES, RIBBONS OR OTHER APPROPRIATE MEANS, AND SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE APPROVED PLANS.

PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADW

THE FOLLOWING INITIAL EROSION CONTROL I IMPLEMENTED PRIOR TO ANY OTHER CONSTR.

1. THE CONSTRUCTION EXIT SHALL BE PLACE

2. IMMEDIATELY AFTER THE ESTABLISHMENT PERIMETER EROSION CONTROL AND STORMW SHALL BE INSTALLED AS SHOWN ON THE CLEA CONTROL PLAN.

GRADING PHASE NOTES

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

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

EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION, AND ALTER THE LOCATION OF EROSION CONTROL DEVICES ACCORDINGLY. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.

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

LL EXPOSED AREAS WITHIN
I AREAS LEFT INACTIVE
I WITH TEMPORARY

ENT POND UNTIL
EDIMENT SHALL BE
ONE THIRD OF THE DEPT

FINAL PHASE NOTES

THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT POND UNTIL PERMANENT GROUNDCOVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE POND WHEN IT REACHES ONE THIRD OF THE DEPT OF THE BASIN.

ALL ROADWAY AND PARKING SHOULDERS SHOULD BE GRASSED AS SOON AS FINAL GRADE IS ACHIEVED.

SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

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

UPON COMPLETION OF THE PROJECT AND RECEIPT OF THE CERTIFICATE OF COMPLETION, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED OTHERWISE ON PLANS.

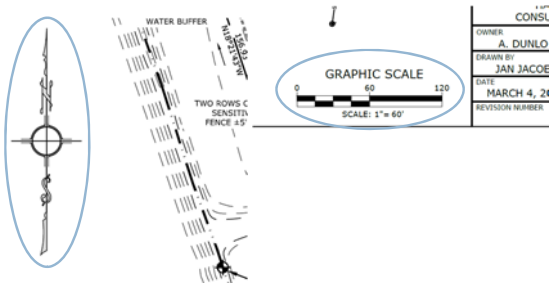
Typical Lot Detail

42

This common development does not require the use of a typical lot detail

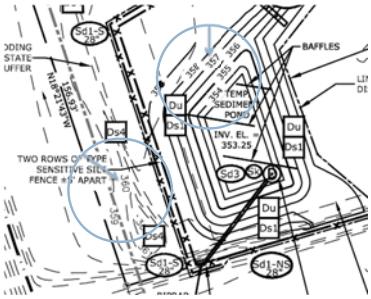
Graphic Scale & North Arrow

43



Existing & Proposed Contour Lines

44



Alternative BMP

N/A

45

There are no alternative BMPs being used on this project

Equivalent BMP Applicant

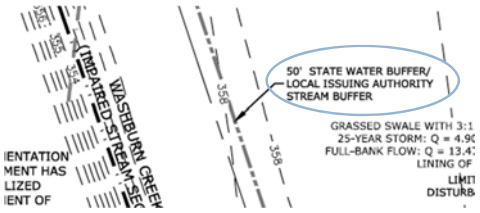
N/A

46

There are no alternative BMPs applying for the Equivalent BMP List

Buffer Delineation

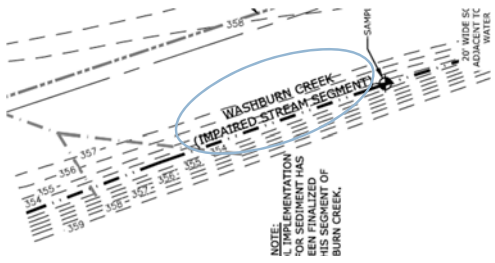
47



The State & Local Buffers should be shown separately. The minimum 25 ft State-mandated buffer is not shown

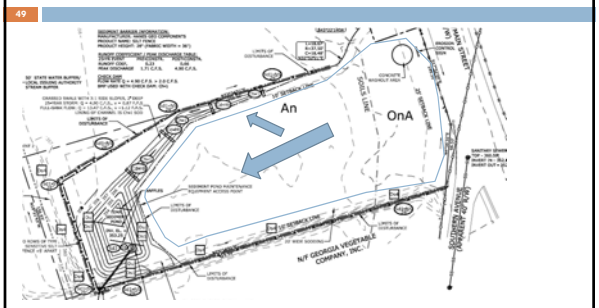
State Waters Delineation

48



Contributing Drainage Basins

49



All offsite drainage basins shall be delineated as well as onsite

Hydrology Study

50

If applicable, the Hydrology Study should always accompany the ES&PC Plan

14. AN HYDROLOGY STUDY ACCOMPANIES THESE ES&PC DRAWINGS AND FORMS PART OF THE PLANS.

Curve Numbers

51

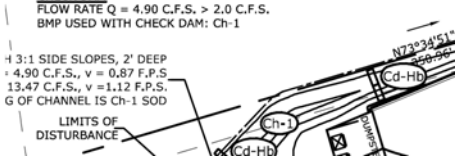
RUNOFF COEFFICIENT / PEAK DISCHARGE TABLE:

25-YR EVENT	PRE-CONSTR.	POST-CONSTR.
RUNOFF COEF.	0.23	0.66
PEAK DISCHARGE	1.71 C.F.S.	4.90 C.F.S.

CHECK DAM
FLOW RATE Q = 4.90 C.F.S. > 2.0 C.F.S.
BMP USED WITH CHECK DAM: Ch-1

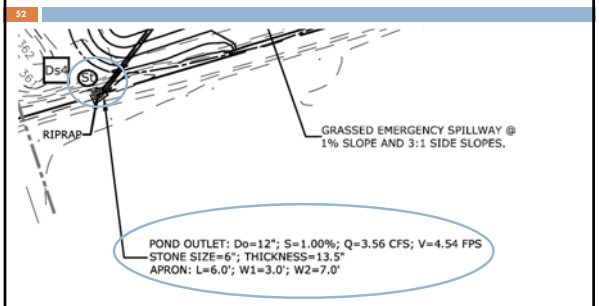
H 3:1 SIDE SLOPES, 2' DEEP
= 4.90 C.F.S., v = 0.87 F.P.S
13.47 C.F.S., v =1.12 F.P.S.
G OF CHANNEL IS Ch-1 SOD

LIMITS OF DISTURBANCE



Storm drain outlet protection

52

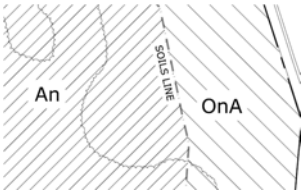


Soil Series & Delineation

53

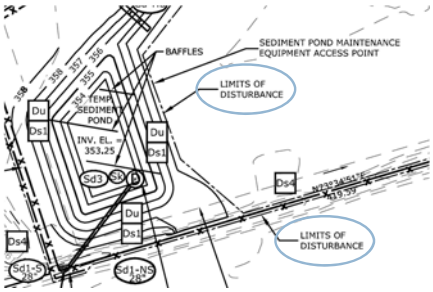
SOIL INFORMATION

SOIL SYMBOL	SOIL TYPE	SLOPE %	K	LIMITATION	SYMBOL	REASONS FOR LIMITATION
An	ALAPAHA URBAN LAND COMPLEX	0 - 2	0.10	VERY LIMITED		FLOODING, DEPTH TO SATURATED ZONE
OnA	OCILLA-URBAN LAND COMPLEX	0 - 2	0.10	SOMEWHAT LIMITED		DEPTH TO SATURATED ZONE



Limits of Disturbance

54



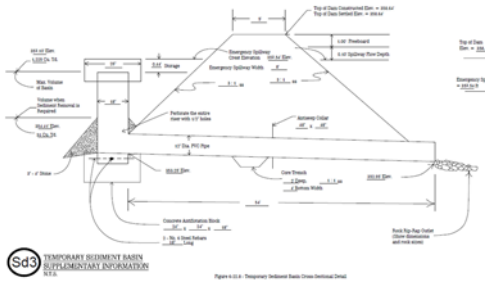
Sed. Storage – 67 cy/ac

55

RISER WITH FLOATING SURFACE SKIMMER
POND SIZE 60' x 40' x 5'
TIME TO DRAIN = 24 HOURS
SKIMMER ORIFICE = 6"
SKIMMER HEAD SIZE = 3' x 3'

Sed. Storage – 67 cy/ac

56



Location of BMPs

57

STRUCTURAL PRACTICES

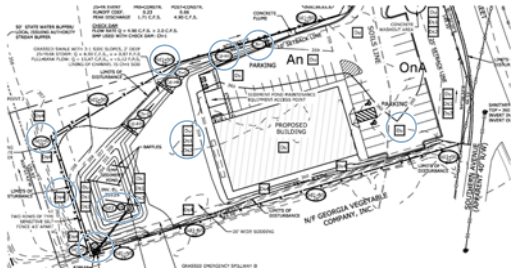
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT			A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
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.
Sd3	TEMPORARY SEDIMENT BASIN			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.
Sk	FLOATING SURFACE SKIMMER			A transport device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.
St	STORMDRAIN OUTLET PROTECTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds1	DISTURBED AREA STABILIZATION (SEEDING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedings may not have a suitable growing season to produce an erosion retarding cover
Ds2	DISTURBED AREA STABILIZATION WITH TEMP SEEDING		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION WITH PERM SEEDING		Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SODDING)		Ds4	A permanent vegetative cover using sods on highly erodable or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.

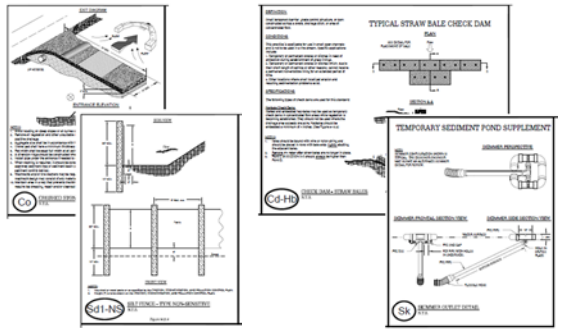
Location of BMPs

58



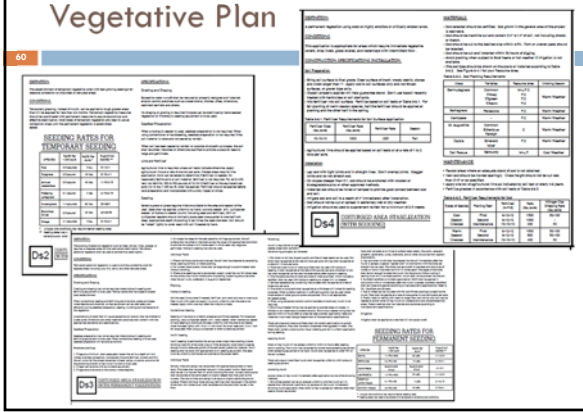
Structural Details

59



Vegetative Plan

60



Insert Yellow Sheet

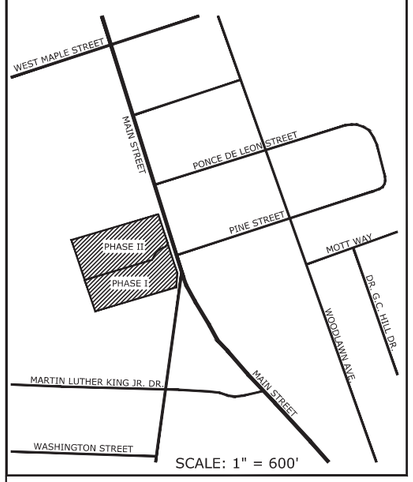
Back of Yellow Sheet

DRAWING 1
SOILS, VEGETATION AND DRAINAGE

SOIL INFORMATION

SOIL SYMBOL	SOIL TYPE	SLOPE %	K	LIMITATION	SYMBOL	REASONS FOR LIMITATION
An	ALAPAHA URBAN LAND COMPLEX	0 - 2	0.10	VERY LIMITED		FLOODING, DEPTH TO SATURATED ZONE
OnA	OCILLA-URBAN LAND COMPLEX	0 - 2	0.10	SOMEWHAT LIMITED		DEPTH TO SATURATED ZONE

SITE LOCATION SKETCH

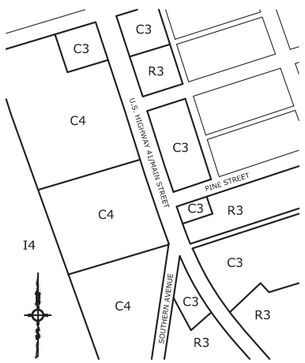


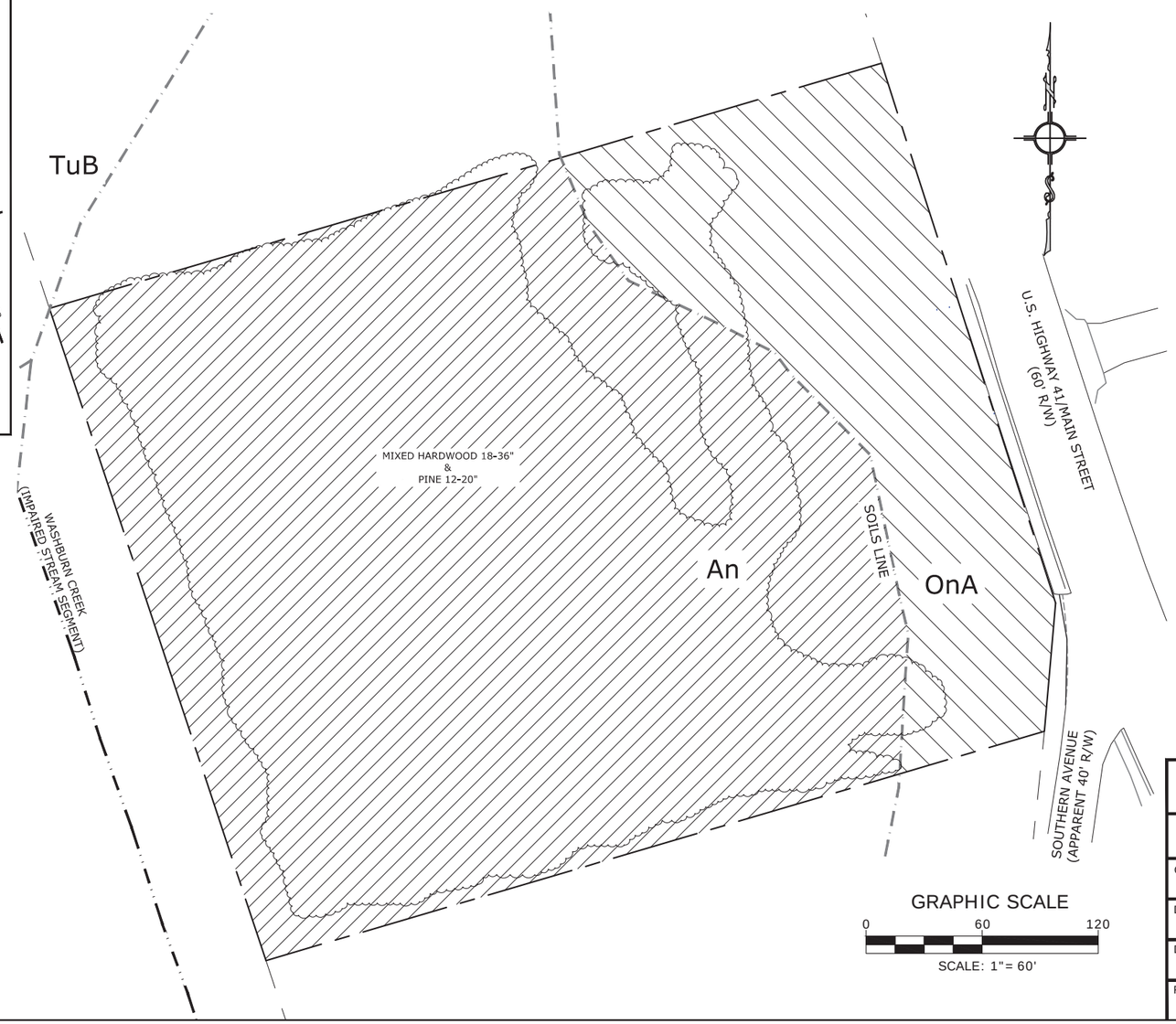
LEGEND

- PROPERTY LINE
- TYPE - VEGETATION
- SOIL BOUNDARY
- OnA - SOIL SYMBOL
- IMPAIRED CREEK

ZONING SKETCH

R3 - RESIDENTIAL
C3 - COMMERCIAL 3
C4 - COMMERCIAL 4
I4 - INDUSTRIAL





GRAPHIC SCALE

0 60 120

SCALE: 1"= 60'

SEAL

EROSION CONTROL CERTIFICATION

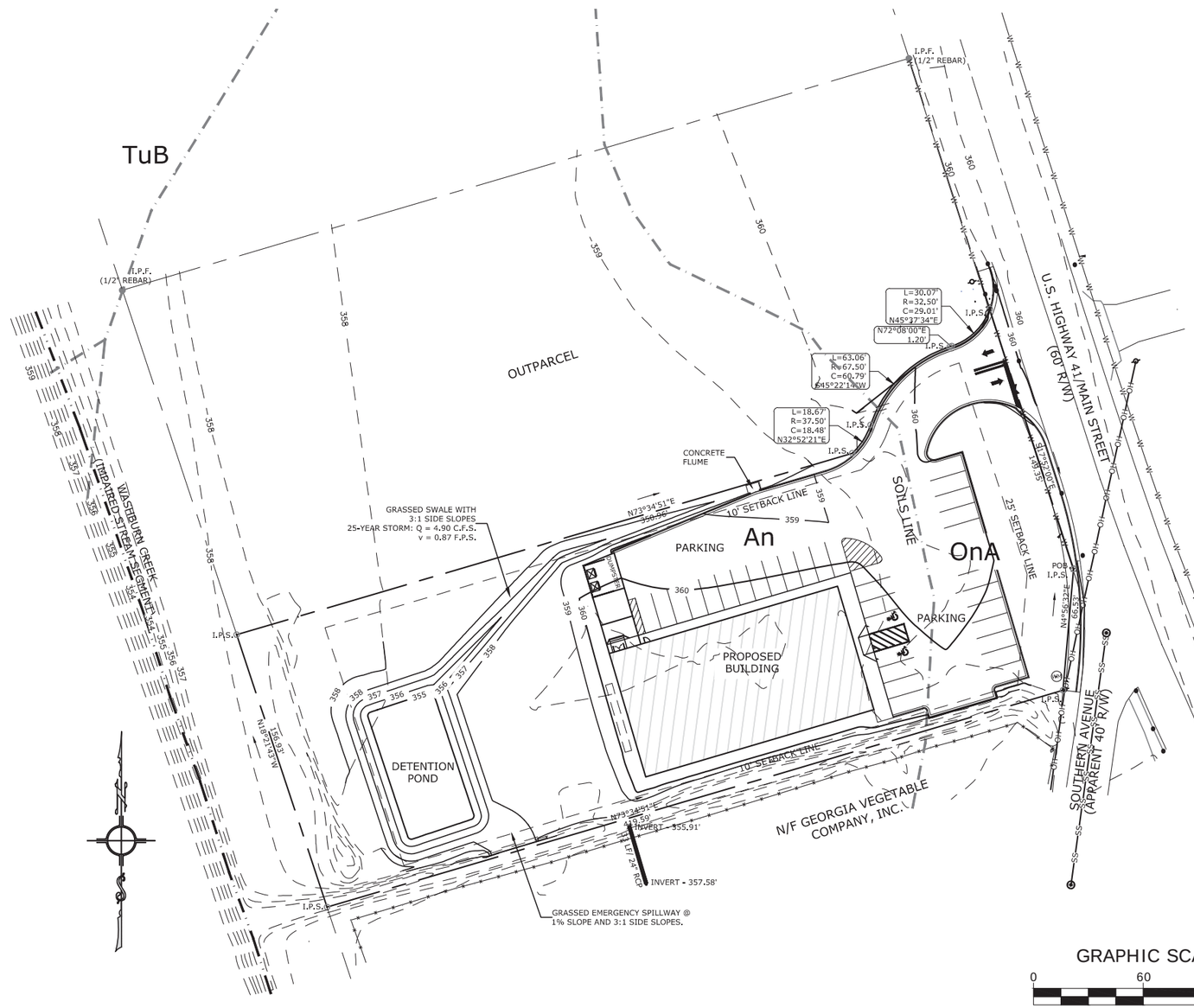
I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION.

BY _____

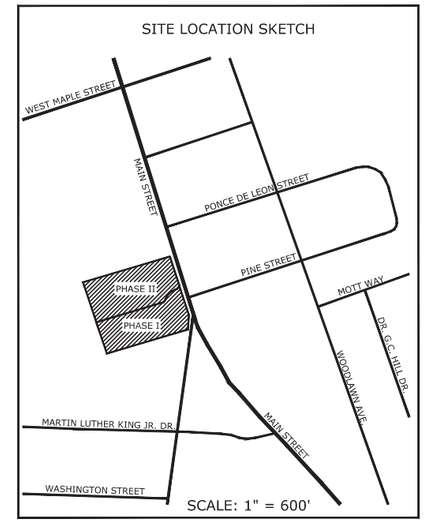
HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

BARGAIN BUYS STORES DEVELOPMENT		
HARRY HIGHBALL CONSULTING ENGINEERS		
OWNER: A. DUNLOP	COUNTY, STATE: TIFT, GEORGIA	
DRAWN BY: JAN JACOBY	LAND LOT: 336	
DATE: MARCH 4, 2013	LAND DISTRICT: 6th	
REVISION NUMBER	REQUESTED BY: GSWCC	DATE

DRAWING 2
DETAILED BOUNDARY LINE AND TOPOGRAPHIC SURVEY WITH FIXED IMPROVEMENTS



SITE LOCATION SKETCH



SCALE: 1" = 600'

LEGEND

- IRON PIN FOUND
- IRON PIN SET
- PROPERTY LINE
- OH — POWER LINE
- SS — SANITARY SEWER LINE
- W — WATER LINE
- CONTOUR LINE, EXISTING
- CONTOUR LINE, FINISH

SEAL

EROSION CONTROL CERTIFICATION

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

BY

HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

GRAPHIC SCALE

0 60 120

SCALE: 1"= 60'

BARGAIN BUYS STORES DEVELOPMENT		
HARRY HIGHBALL CONSULTING ENGINEERS		
OWNER: A. DUNLOP	COUNTY, STATE: TIFT, GEORGIA	
DRAWN BY: JAN JACOBY	LAND LOT: 336	
DATE: MARCH 4, 2013	LAND DISTRICT: 6th	
REVISION NUMBER	REQUESTED BY: GSWCC	DATE

DRAWING 3
EROSION AND SEDIMENT CONTROL PLAN
CLEARING PHASE

CONSTRUCTION SCHEDULE

ACTIVITY	APR 2013	MAY 2013	JUN 2013	JUL 2013	AUG 2013
INITIAL PERIMETER AND SEDIMENT STORAGE BMP's					
CLEARING & GRUBBING					
EROSION CONTROL DEVICES					
GRADING					
TEMPORARY VEGETATION					
INFRASTRUCTURE CONSTRUCTION (INCL. UTILITIES)					
BASE					
PAVING					
FINE GRADING & LANDSCAPING					
PERMANENT VEGETATION					
REMOVE TEMP. EROSION CONTROL					
MAINTENANCE OF BMP'S					

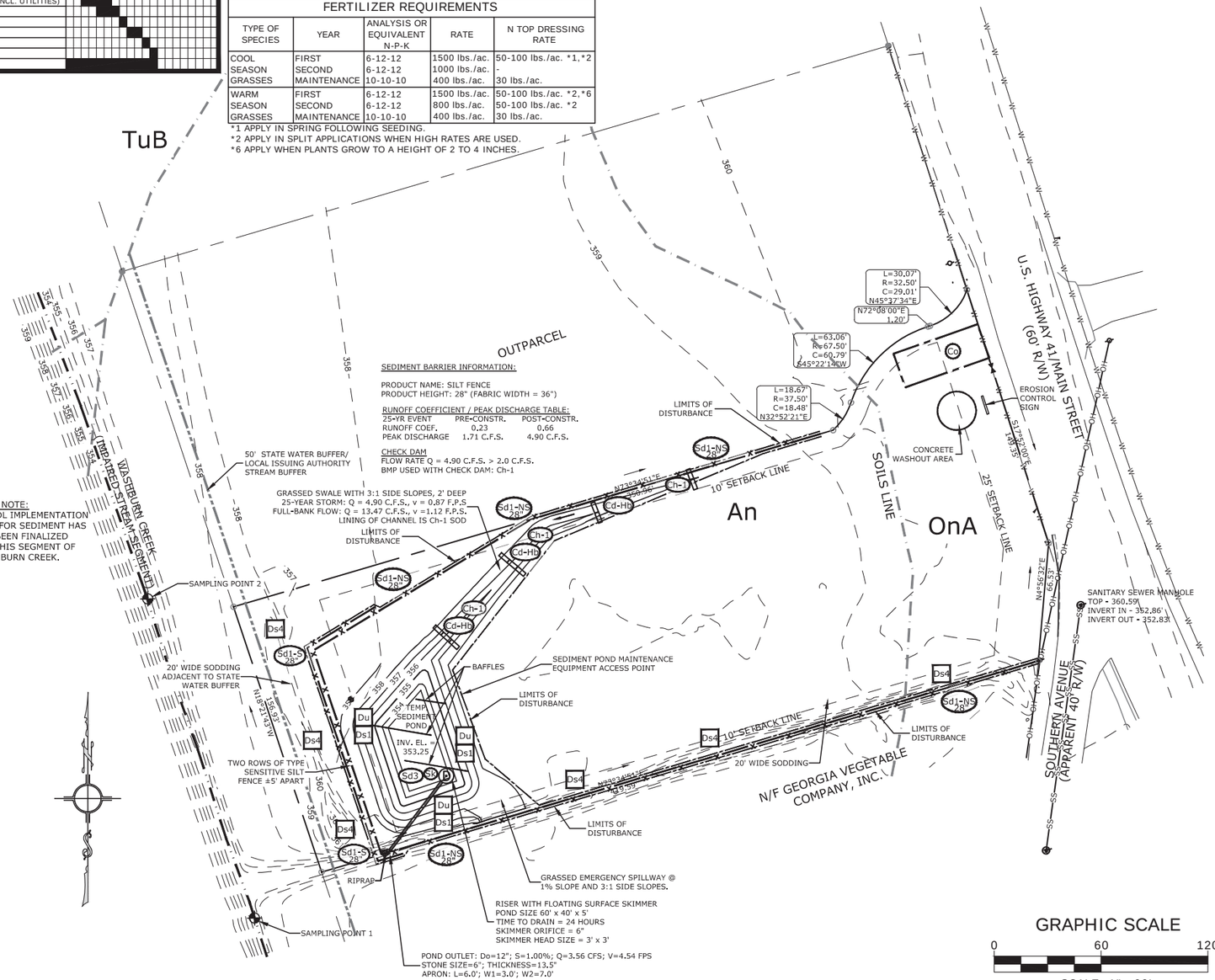
IMPAIRED STREAM SEGMENT NOTE.

BEING LOCATED ADJACENT TO, AND DISCHARGING STORM WATER INTO AN IMPAIRED STREAM SEGMENT, THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CLAUSE:
NPDES PERMIT NO. GAR100003, PART III, SECTION C. 2.
IN ORDER TO ENSURE THAT THE PERMITTEE'S DISCHARGES DO NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF STATE WATER QUALITY STANDARDS, THE PLAN MUST INCLUDE THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT:
c. USE BAFFLES IN THE TEMPORARY SEDIMENT BASIN TO AT LEAST DOUBLE THE CONVENTIONAL FLOW PATH LENGTH TO THE OUTLET STRUCTURE.
d. PLACE A LARGE SIGN (MINIMUM 4 FEET X 8 FEET) ON THE SITE VISIBLE FROM THE ROADWAY IDENTIFYING THE CONSTRUCTION SITE, THE PERMITTEE(S), AND THE CONTACT PERSON(S) AND TELEPHONE NUMBER(S).
h. LIMIT THE TOTAL PLANNED SITE DISTURBANCE TO LESS THAN 50% IMPERVIOUS SURFACES (EXCLUDING ANY STATE MANDATED BUFFER AREAS FROM SUCH CALCULATIONS).
p. INSTALL SOD FOR A MINIMUM 20 FOOT WIDTH, IN LIEU OF SEEDING, ALONG THE SITE PERIMETER WHEREVER STORM WATER MAY BE DISCHARGED.

FERTILIZER REQUIREMENTS

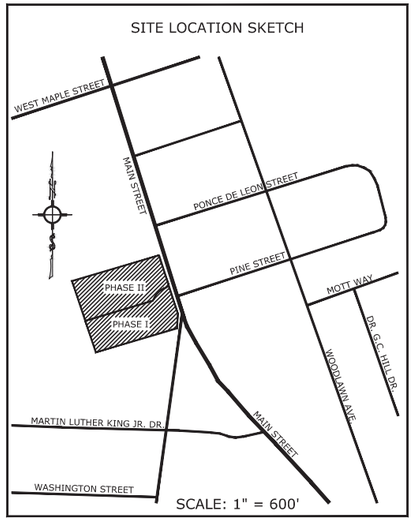
TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. *1,*2 - 30 lbs./ac.
WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. *2,*6 50-100 lbs./ac. *2 30 lbs./ac.

*1 APPLY IN SPRING FOLLOWING SEEDING.
*2 APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
*6 APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.



GRAPHIC SCALE
0 60 120
SCALE: 1"= 60'

SITE LOCATION SKETCH



SCALE: 1" = 600'

LEGEND

- IRON PIN FOUND
- IRON PIN SET
- PROPERTY LINE
- POWER LINE
- SANITARY SEWER LINE
- WATER LINE
- CONTOUR LINE, EXISTING
- CONTOUR LINE, FINISH
- CLEARING LIMIT LINE

SEAL

EROSION CONTROL CERTIFICATION

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

BY _____
HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

BARGAIN BUYS STORES DEVELOPMENT		
HARRY HIGHBALL CONSULTING ENGINEERS		
OWNER: A. DUNLOP	COUNTY, STATE: TIFT, GEORGIA	
DRAWN BY: JAN JACOBY	LAND LOT: 336	
DATE: MARCH 4, 2013	LAND DISTRICT: 6th	
REVISION NUMBER	REQUESTED BY: GSWCC	DATE

DRAWING 4
EROSION AND SEDIMENT CONTROL PLAN
GRADING PHASE

CONSTRUCTION SCHEDULE

ACTIVITY	APR 2013	MAY 2013	JUN 2013	JUL 2013	AUG 2013
INITIAL PERIMETER AND SEDIMENT STORAGE BMP's					
CLEARING & GRUBBING					
EROSION CONTROL DEVICES					
GRADING					
TEMPORARY VEGETATION					
INFRASTRUCTURE CONSTRUCTION (INCL. UTILITIES)					
BASE					
PAVING					
FINE GRADING & LANDSCAPING					
PERMANENT VEGETATION					
REMOVE TEMP. EROSION CONTROL					
MAINTENANCE OF BMP'S					

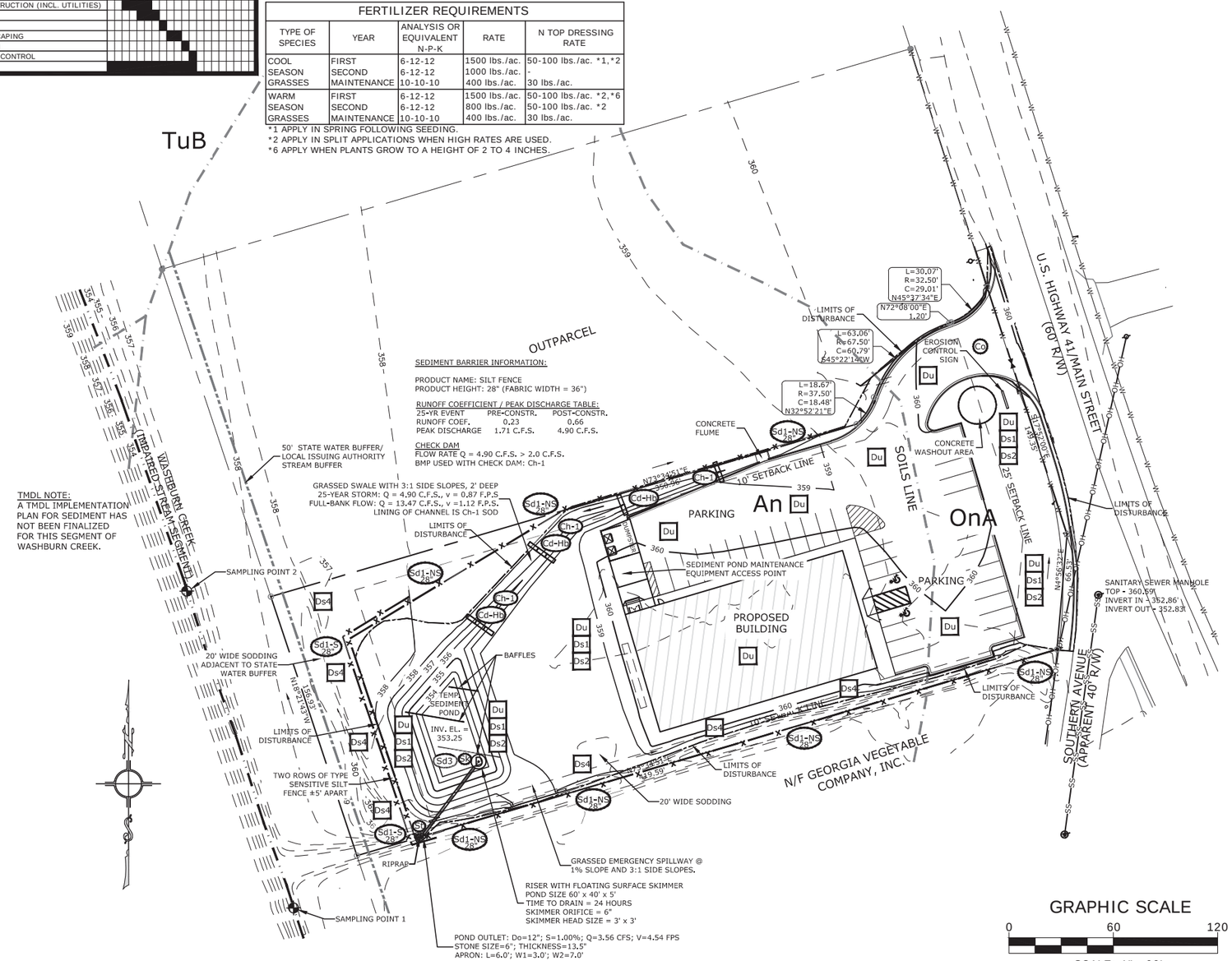
IMPAIRED STREAM SEGMENT NOTE.

BEING LOCATED ADJACENT TO, AND DISCHARGING STORM WATER INTO AN IMPAIRED STREAM SEGMENT, THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CLAUSE:
NPDES PERMIT NO. GAR100003, PART III, SECTION C. 2.
IN ORDER TO ENSURE THAT THE PERMITTEE'S DISCHARGES DO NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF STATE WATER QUALITY STANDARDS, THE PLAN MUST INCLUDE THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT:
c. USE BAFFLES IN THE TEMPORARY SEDIMENT BASIN TO AT LEAST DOUBLE THE CONVENTIONAL FLOW PATH LENGTH TO THE OUTLET STRUCTURE.
d. PLACE A LARGE SIGN (MINIMUM 4 FEET X 8 FEET) ON THE SITE VISIBLE FROM THE ROADWAY IDENTIFYING THE CONSTRUCTION SITE, THE PERMITTEE(S), AND THE CONTACT PERSON(S) AND TELEPHONE NUMBER(S).
h. LIMIT THE TOTAL PLANNED SITE DISTURBANCE TO LESS THAN 50% IMPERVIOUS SURFACES (EXCLUDING ANY STATE MANDATED BUFFER AREAS FROM SUCH CALCULATIONS).
p. INSTALL SOD FOR A MINIMUM 20 FOOT WIDTH, IN LIEU OF SEEDING, ALONG THE SITE PERIMETER WHEREVER STORM WATER MAY BE DISCHARGED.

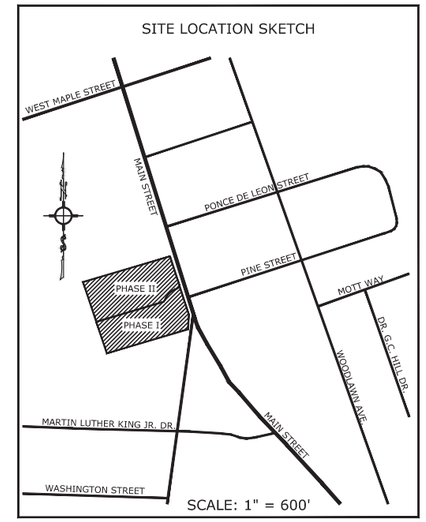
FERTILIZER REQUIREMENTS

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. *1,*2 - 30 lbs./ac.
WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. *2,*6 50-100 lbs./ac. *2 30 lbs./ac.

*1 APPLY IN SPRING FOLLOWING SEEDING.
*2 APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
*6 APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.



SITE LOCATION SKETCH



LEGEND

- IRON PIN FOUND
- IRON PIN SET
- PROPERTY LINE
- POWER LINE
- SANITARY SEWER LINE
- WATER LINE
- CONTOUR LINE, EXISTING
- CONTOUR LINE, FINISH
- CLEARING LIMIT LINE

SEAL

EROSION CONTROL CERTIFICATION

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

BY _____
HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

GRAPHIC SCALE

0 60 120

SCALE: 1"= 60'

BARGAIN BUYS STORES DEVELOPMENT	
HARRY HIGHBALL CONSULTING ENGINEERS	
OWNER: A. DUNLOP	COUNTY, STATE: TIFT, GEORGIA
DRAWN BY: JAN JACOBY	LAND LOT: 336
DATE: MARCH 4, 2013	LAND DISTRICT: 6th
REVISION NUMBER	REQUESTED BY: GSWCC / DATE

DRAWING 5
EROSION AND SEDIMENT CONTROL PLAN
FINAL PHASE

CONSTRUCTION SCHEDULE

ACTIVITY	APR 2013	MAY 2013	JUN 2013	JUL 2013	AUG 2013
INITIAL PERIMETER AND SEDIMENT STORAGE BMP's					
CLEARING & GRUBBING					
EROSION CONTROL DEVICES					
GRADING					
TEMPORARY VEGETATION					
INFRASTRUCTURE CONSTRUCTION (INCL. UTILITIES)					
BASE					
PAVING					
FINE GRADING & LANDSCAPING					
PERMANENT VEGETATION					
REMOVE TEMP. EROSION CONTROL					
MAINTENANCE OF BMP'S					

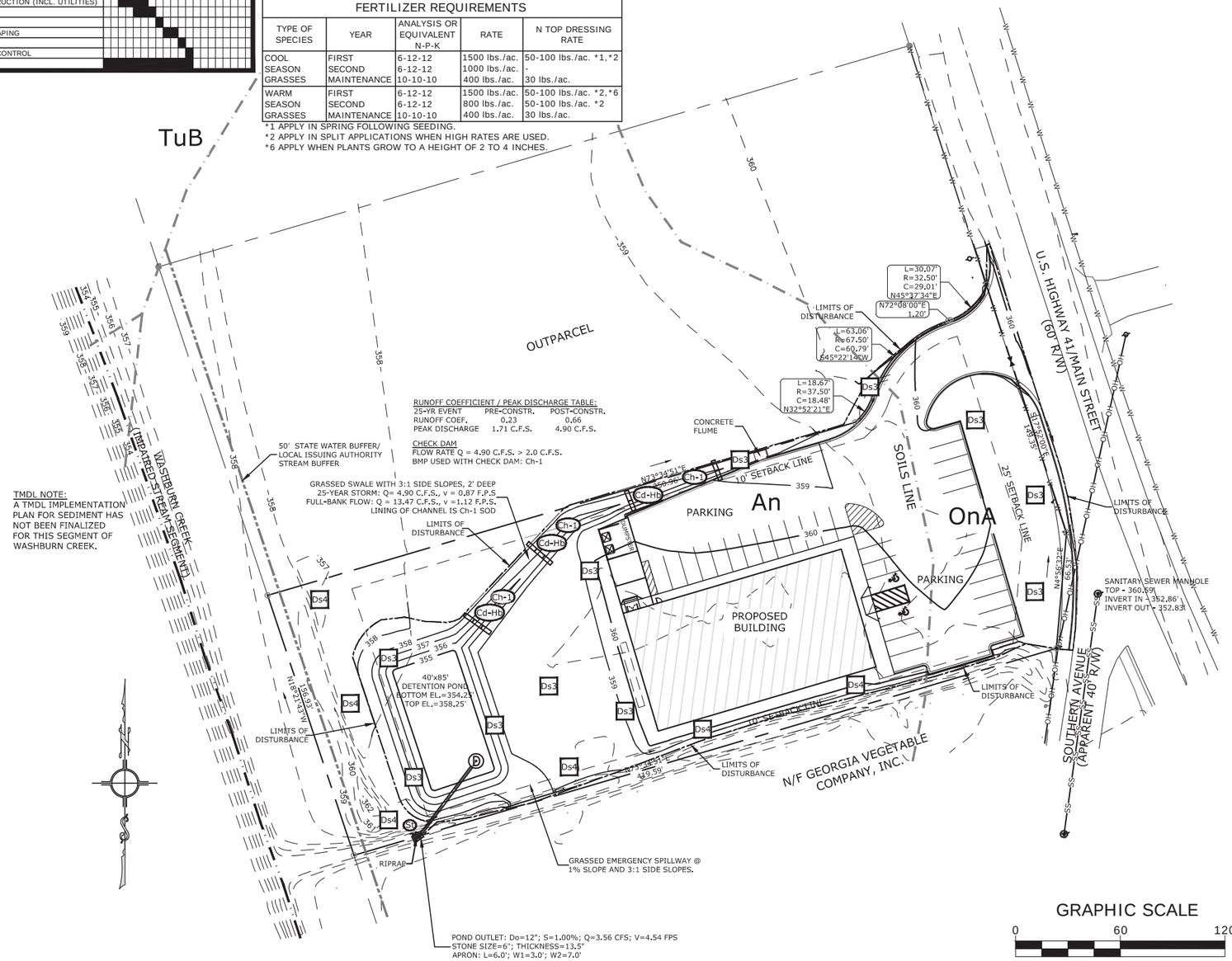
IMPAIRED STREAM SEGMENT NOTE.

BEING LOCATED ADJACENT TO, AND DISCHARGING STORM WATER INTO AN IMPAIRED STREAM SEGMENT, THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CLAUSE:
NPDES PERMIT NO. GAR100003, PART III, SECTION C. 2.
IN ORDER TO ENSURE THAT THE PERMITTEE'S DISCHARGES DO NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF STATE WATER QUALITY STANDARDS, THE PLAN MUST INCLUDE THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT:
c. USE BAFFLES IN THE TEMPORARY SEDIMENT BASIN TO AT LEAST DOUBLE THE CONVENTIONAL FLOW PATH LENGTH TO THE OUTLET STRUCTURE.
d. PLACE A LARGE SIGN (MINIMUM 4 FEET X 8 FEET) ON THE SITE VISIBLE FROM THE ROADWAY IDENTIFYING THE CONSTRUCTION SITE, THE PERMITTEE(S), AND THE CONTACT PERSON(S) AND TELEPHONE NUMBER(S).
h. LIMIT THE TOTAL PLANNED SITE DISTURBANCE TO LESS THAN 50% IMPERVIOUS SURFACES (EXCLUDING ANY STATE MANDATED BUFFER AREAS FROM SUCH CALCULATIONS).
p. INSTALL SOD FOR A MINIMUM 20 FOOT WIDTH, IN LIEU OF SEEDING, ALONG THE SITE PERIMETER WHEREVER STORM WATER MAY BE DISCHARGED.

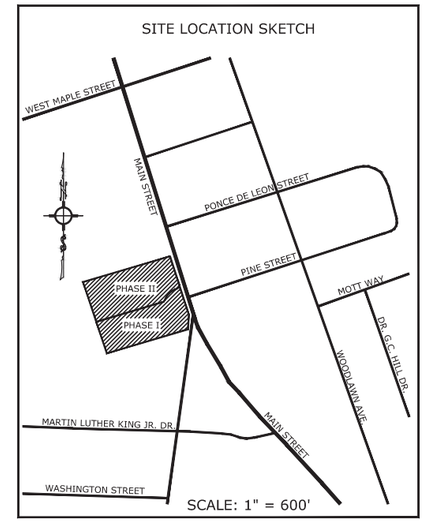
FERTILIZER REQUIREMENTS

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. *1,*2 - 30 lbs./ac.
WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. *2,*6 50-100 lbs./ac. *2 30 lbs./ac.

*1 APPLY IN SPRING FOLLOWING SEEDING.
*2 APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
*6 APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.



SITE LOCATION SKETCH



LEGEND

- IRON PIN FOUND
- IRON PIN SET
- PROPERTY LINE
- OH — POWER LINE
- SS — SANITARY SEWER LINE
- W — WATER LINE
- CONTOUR LINE, EXISTING
- CONTOUR LINE, FINISH
- CLEARING LIMIT LINE

SEAL

EROSION CONTROL CERTIFICATION

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

BY _____
HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

GRAPHIC SCALE

0 60 120

SCALE: 1"= 60'

BARGAIN BUYS STORES DEVELOPMENT		
HARRY HIGHBALL CONSULTING ENGINEERS		
OWNER: A. DUNLOP	COUNTY, STATE: TIFT, GEORGIA	
DRAWN BY: JAN JACOBY	LAND LOT: 336	
DATE: MARCH 4, 2013	LAND DISTRICT: 6th	
REVISION NUMBER	REQUESTED BY: GSWCC	DATE

EROSION, SEDIMENTATION & POLLUTION CONTROL NOTES

1. THE PRIMARY PERMITTEE OF THIS PROJECT IS A. DUNLOP, 3162 COUNTRY CLUB ROAD, VALDOSTA, GA 31605. CONTACT PERSON: MR. ANDREW DUNLOP, TEL : 229-653-5022.

2. THE TOTAL ACREAGE OF THE PROPERTY IS ±1.66 ACRES AND THE TOTAL DISTURBED AREA IS ±1.40 ACRES.

3. THE PROPERTY IS LOCATED ON AT GPS LOCATION LATITUDE: 31° 26' 22"N; LONGITUDE: 83° 30' 20"W, 2700 SOUTH US HIGHWAY 41, TIFTON, TIFT COUNTY, GA 31794. THERE ARE NO CRITICAL AREAS REQUIRING ADDITIONAL MEASURES.

4. THE PRESENCE OF ON-SITE WETLANDS HAS BEEN INVESTIGATED AND IT WAS DETERMINED THAT THERE IS NONE PRESENT. ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE HAVE BEEN IDENTIFIED AND WILL BE PROTECTED BY ASSOCIATED STATE AND COUNTY PROTECTION REGULATIONS AND BUFFERS.

5. THE RECEIVING WATERS OF THIS PROJECT IS WASHBURN CREEK, WHICH IS AN IMPAIRED STREAM SEGMENT LOCATED APPROXIMATELY 50 L.F. DOWNSTREAM TO THE WEST OF THE PROPERTY, ULTIMATELY LEADING TO THE SMALL RIVER. A TMDL HAS NOT BEEN FINALIZED FOR THIS SEGMENT OF WASHBURN CREEK. NO OTHER ADJACENT STREAMS, LAKES, RESIDENTIAL AREAS, WETLANDS, ETC. WILL BE AFFECTED.

6. THE MOST EFFICIENT METHOD OF DUST CONTROL FOR THE SITE SHALL BE DETERMINED EXPERIMENTALLY AND MAY CONSIST OF TEMPORARY MEASURES SUCH AS MULCHES, VEGETATIVE COVER, SPRAY-ON ADHESIVES, TILLAGE, IRRIGATION, BARRIERS AND/OR THE APPLICATION OF CALCIUM CHLORIDE. LIKEWISE, IF THE ACTION OF THE VEHICLE TRAVELING OVER THE GRAVEL CONSTRUCTION EXIT PAD DOES NOT SUFFICIENTLY REMOVE THE MUD FROM VEHICLE TIRES, THE TIRES SHOULD BE WASHED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND PROVISIONS THAT INTERCEPT THE SEDIMENT-LADEN RUNOFF AND DIRECT IT INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

7. WASHOUT OF THE DRUM OF A CONCRETE TRUCK AT THE CONSTRUCTION SITE IS PROHIBITED. CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES WILL ONLY BE ALLOWED IN A DESIGNATED AREA PROVIDED FOR THIS PURPOSE, AS SHOWN ON THE DRAWINGS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE FOLLOWED:
(1) CONTAIN ALL WASH WATER ON SOIL, IN A BOWL SHAPED AREA CREATED IN THE DESIGNATED WASH AREA TO PREVENT THE WASH WATER FROM FLOWING FROM THE WASHOUT AREA;
(2) USE THE MINIMUM AMOUNT OF WATER TO WASH DOWN THE TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES;
(3) REMOVE ANY CONCRETE SEDIMENT FROM THE AREA SURROUNDING THE WASHOUT AREA BEFORE IT HARDENS; AND
(4) REMOVE ALL CONCRETE RESIDU FROM THE DESIGNATED AREA ONCE IT HAS HARDENED.

8. SPILL CLEANUP AND CONTROL PRACTICES:
LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802. FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.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.

9. THE EXISTING SITE IS A VACANT PARTLY WOODED COMMERCIAL LOT WHICH WILL BE IMPROVED WITH A RETAIL STORE AND APPURTENANT ACCESS DRIVEWAYS, PARKING SPACES AND INFRASTRUCTURE.

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

PRODUCT SPECIFIC PRACTICES:

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.

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.

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

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.

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.

11. 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 SUPERVISION.

12. I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100003.
SIGNATURE .....

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

NAME : ...ANDREW DUNLOP... COMPANY: ...AD DEVELOPMENTS..... ADDRESS: ...AS ABOVE.....

CITY/ST/ZIP: ....AS ABOVE.... LEVEL IA CERT NO...0000004321..... SIGNATURE .....

14. AN HYDROLOGY STUDY ACCOMPANIES THESE ES&PC DRAWINGS AND FORMS PART OF THE PLANS.

15. WHERE APPLICABLE, NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

16. THE PRIMARY PERMITTEE AND TERTIARY PERMITTEE(S) MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, 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.

17. THE PRIMARY, SECONDARY OR TERTIARY PERMITTEES, AS APPLICABLE, SHALL AMEND THEIR PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT. AMENDMENTS TO THE PLANS MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL. ALL REVISIONS OR AMENDMENTS SHALL BE SUBMITTED TO THE LOCAL ISSUING AUTHORITY FOR REVIEW.

18. NO WASTE MATERIALS, INCLUDING BUT NOT LIMITED TO WASTE BUILDING MATERIALS, CONSTRUCTION AND DEMOLITION DEBRIS, CONCRETE WASHOUT OR EXCAVATED SEDIMENT, SHALL BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

19. THE PRIMARY PERMITTEE SHALL COMPLETE A LIST OF ALL SECONDARY PERMITTEES AND CONTACT INFORMATION IN THE SPACE PROVIDED BELOW, AND PROVIDE A COPY OF THE PLAN (AND ANY SUBSEQUENT REVISIONS TO THE PLAN) TO EACH SECONDARY PERMITTEE. EACH SECONDARY PERMITTEE SHALL SIGN AS WRITTEN ACKNOWLEDGEMENT OF RECEIPT OF THE PLAN IN THE SPACE PROVIDED BELOW. THE PRIMARY PERMITTEE SHALL KEEP A COPY OF THE ACKNOWLEDGEMENTS ON-SITE IN HIS RECORDS.

SECONDARY PERMITTEES :

1. NAME ..... COMPANY..... ADDRESS.....
CITY/ST/ZIP..... LEVEL IA CERT NO..... SIGNATURE .....

2. NAME ..... COMPANY..... ADDRESS.....
CITY/ST/ZIP..... LEVEL IA CERT NO..... SIGNATURE .....

3. NAME ..... COMPANY..... ADDRESS.....
CITY/ST/ZIP..... LEVEL IA CERT NO..... SIGNATURE .....

4. NAME ..... COMPANY..... ADDRESS.....
CITY/ST/ZIP..... LEVEL IA CERT NO..... SIGNATURE .....

20. HAZARDOUS WASTES:
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE AND/OR FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS. THE JOB SITE SUPERINTENDENT, WHO WILL ALSO BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED, WILL INSTRUCT SITE PERSONNEL IN THESE PRACTICES. MATERIAL SAFETY DATA SHEETS (MSDS's) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. A MSDS SHEET SHOULD BE MAINTAINED IN THE ESPCP FILE AT THE JOB SITE CONSTRUCTION TRAILER OFFICE. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES.

THE CONTRACTOR WILL IMPLEMENT THE SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN FOUND WITHIN THIS ESPCP AND WILL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIAL OR HAZARDOUS WASTES WILL BE ALLOWED TO COME IN CONTACT WITH STORMWATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORMWATER DISCHARGE WILL BE CONTAINED ON SITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORMWATER. IT SHALL BE THE RESPONSIBILITY OF THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN ALL PERSONNEL IN THE USE OF THE SPCC PLAN.

SANITARY WASTES:
A MINIMUM OF ONE PORTABLE SANITARY UNIT WILL BE PROVIDED TO EVERY TEN (10) WORKERS ON THE SITE. ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONE TIME PER WEEK BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.

ALL SANITARY WASTE UNITS WILL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORMWATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMP'S MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES FROM CONTRIBUTING TO STORM WATER DISCHARGES. THE LOCATION OF WASTE UNITS MUST BE IDENTIFIED ON THE EROSION CONTROL PLAN GRADING PHASE BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED.

SANITARY SEWER WILL BE PROVIDED BY MUNICIPAL AUTHORITY AT THE COMPLETION OF THE PROJECT.

21. INSPECTIONS:
A. PRIMARY PERMITTEE.
(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 RAINFALL DAILY WHERE VERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY UNTIL A NOTICE OF TERMINATION IS SUBMITTED. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS 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 NON-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): (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE;
(B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION ; AND
(C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
(4). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION IS SUBMITTED TO EPD) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).
(5). BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. THE PRIMARY PERMITTEE MUST AMEND THE PLAN IN ACCORDANCE WITH PART IV.D.4.B.(5). WHEN A SECONDARY PERMITTEE NOTIFIES THE PRIMARY PERMITTEE OF ANY PLAN DEFICIENCIES.
(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 PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY AN INCIDENT, THE INSPECTION REPORT SHALL CONTAIN A STATEMENT 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.
B. SECONDARY PERMITTEE:
(1). EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A SECONDARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE SECONDARY PERMITTEE SHALL INSPECT: (A) ALL AREAS USED BY THE SECONDARY PERMITTEE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT; AND (B) ALL LOCATIONS AT THE SECONDARY PERMITTEE SITE WHERE THAT PERMITTEE'S 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. THIS PARAGRAPH IS NOT APPLICABLE TO UTILITY COMPANIES AND UTILITY CONTRACTORS IF THEY ARE SECONDARY PERMITTEES.
(2). CERTIFIED PERSONNEL (PROVIDED BY THE UTILITY COMPANIES AND UTILITY CONTRACTORS IF THEY ARE SECONDARY PERMITTEES) SHALL INSPECT THE FOLLOWING EACH DAY ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT THE CONSTRUCTION SITE: (A) AREAS OF THE CONSTRUCTION SITE DISTURBED BY THE UTILITY COMPANIES AND UTILITY CONTRACTORS THAT HAVE NOT UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION; (B) AREAS USED BY THE UTILITY COMPANIES AND UTILITY CONTRACTORS FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION THAT HAVE NOT UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE UTILITY COMPANIES AND UTILITY CONTRACTORS' CONSTRUCTION ACTIVITIES 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). THIS PARAGRAPH IS NOT APPLICABLE TO UTILITY COMPANIES AND UTILITY CONTRACTORS WHEN THEY ARE SECONDARY PERMITTEES PERFORMING SERVICE LINE INSTALLATIONS OR WHEN THEY ARE OPERATING CORRECTLY.
(3). CERTIFIED PERSONNEL (PROVIDED BY THE SECONDARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN 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 NON-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): (A) DISTURBED AREAS OF THE SECONDARY PERMITTEE'S CONSTRUCTION SITE ; (B) AREAS USED BY THE SECONDARY 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 SECONDARY 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.B.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED. THIS PARAGRAPH IS NOT APPLICABLE TO UTILITY COMPANIES AND UTILITY CONTRACTORS IF THEY ARE SECONDARY PERMITTEES.

DRAWING 6
EROSION AND
SEDIMENT CONTROL
NOTES
SHEET # 1

EROSION CONTROL CERTIFICATION
I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION.
BY ..... DATE .....
HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED EROSION PROFESSIONAL - CERTIFICATION NUMBER 0000001994

SEAL

BARGAIN BUYS STORES
DEVELOPMENT

HARRY HIGHBALL
CONSULTING ENGINEERS

OWNER	A. DUNLOP
COUNTY, STATE	TIFT, GEORGIA
DRAWN BY	JAN JACOBY
DATE	MARCH 4, 2013
LAND LOT	336
LAND DISTRICT	6th
REQUESTED BY	GSWCC
DATE	
REVISION NUMBER	

(4). CERTIFIED PERSONNEL (PROVIDED BY THE SECONDARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION IS SUBMITTED TO EPD) THE AREAS OF THEIR SITES 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). THIS PARAGRAPH IS NOT APPLICABLE TO UTILITY COMPANIES AND UTILITY CONTRACTORS IF THEY ARE SECONDARY PERMITTEES.

(5). BASED ON THE RESULTS OF EACH INSPECTION, THE SECONDARY PERMITTEE MUST NOTIFY THE PRIMARY PERMITTEE WITHIN 24-HOURS OF ANY SUSPECTED BMP DESIGN DEFICIENCIES. THE PRIMARY PERMITTEE MUST EVALUATE WHETHER THESE DEFICIENCIES EXIST WITHIN 48-HOURS OF SUCH NOTICE, AND IF THESE DEFICIENCIES ARE FOUND TO EXIST MUST AMEND THE PLAN IN ACCORDANCE WITH PART IV.C. OF THIS PERMIT TO ADDRESS THOSE DEFICIENT BMPS WITHIN SEVEN (7) DAYS OF BEING NOTIFIED BY THE SECONDARY PERMITTEE. WHEN THE PLAN IS AMENDED, THE PRIMARY PERMITTEE MUST NOTIFY AND PROVIDE A COPY OF THE AMENDMENT TO ALL AFFECTED SECONDARY PERMITTEE(S) WITHIN THIS SEVEN (7) DAY PERIOD. THE SECONDARY PERMITTEES MUST IMPLEMENT ANY NEW PLAN REQUIREMENTS AFFECTING THEIR SITE(S) WITHIN 48-HOURS OF NOTIFICATION BY THE PRIMARY PERMITTEE.

(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.B.(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 HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY THE END OF THE SECOND BUSINESS DAY AND /OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT. HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT. THIS PARAGRAPH IS NOT APPLICABLE TO UTILITY COMPANIES AND UTILITY CONTRACTORS IF THEY ARE SECONDARY PERMITTEES PERFORMING ONLY SERVICE LINE INSTALLATIONS OR WHEN CONDUCTING REPAIRS ON EXISTING LINE INSTALLATIONS.

C. TERTIARY PERMITTEE.

(1). EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A TERTIARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE TERTIARY PERMITTEE SHALL INSPECT: (A) ALL AREAS USED BY. THE TERTIARY PERMITTEE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT; AND (B) ALL LOCATIONS AT THE TERTIARY PERMITTEE SITE WHERE THAT PERMITTEE'S 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. THIS PARAGRAPH IS NOT APPLICABLE TO UTILITY COMPANIES AND UTILITY CONTRACTORS PERFORMING ONLY SERVICE LINE INSTALLATIONS OR WHEN CONDUCTING REPAIRS ON EXISTING LINE INSTALLATIONS.

(2).MEASURE RAINFALL ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY UNTIL A NOTICE OF TERMINATION IS SUBMITTED. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.

(3). CERTIFIED PERSONNEL (PROVIDED BY THE TERTIARY PERMITTEE) SHALL INSPECT AT LEAST THE FOLLOWING ONCE EVERY SEVEN 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 NON-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): (A) DISTURBED AREAS OF THE TERTIARY PERMITTEE'S CONSTRUCTION SITE ; (B) AREAS USED BY THE TERTIARY 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 TERTIARY 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.C.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED. THIS PARAGRAPH IS NOT APPLICABLE TO UTILITY COMPANIES AND UTILITY CONTRACTORS PERFORMING ONLY SERVICE LINE INSTALLATIONS OR WHEN CONDUCTING REPAIRS ON EXISTING LINE INSTALLATIONS.

(4). CERTIFIED PERSONNEL (PROVIDED BY THE TERTIARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION IS SUBMITTED TO EPD) THE AREAS OF THEIR SITES 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). THIS PARAGRAPH IS NOT APPLICABLE TO UTILITY COMPANIES AND UTILITY CONTRACTORS PERFORMING ONLY SERVICE LINE INSTALLATIONS OR WHEN CONDUCTING REPAIRS ON EXISTING LINE INSTALLATIONS.

(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 THE 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.C.(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 HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY THE END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT. THIS PARAGRAPH IS NOT APPLICABLE TO UTILITY COMPANIES AND UTILITY CONTRACTORS PERFORMING ONLY SERVICE LINE INSTALLATIONS OR WHEN CONDUCTING REPAIRS ON EXISTING LINE INSTALLATIONS.

22. 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, SAMPLES MUST BE TAKEN WITHIN FORTY-FIVE (45) MINUTES OF:
(A) THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT, IF THE STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL HAS BEGUN AT OR PRIOR TO THE ACCUMULATION, OR
(B) THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL, IF THE DISCHARGE BEGINS AFTER THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT.
(2). HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.
(3). SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING EVENTS:
(A). FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS* (MONDAY THRU FRIDAY, 8:00 AM TO 5:00 PM AND SATURDAY 8:00 AM TO 5:00 PM, EXCLUDING ALL NON-WORKING FEDERAL HOLIDAYS, WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY PERMITTEE) THAT OCCURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED 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 STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS* THAT OCCURS EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST;
(C). AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS ARE FOUND TO BE PROPERLY DESIGNED, INSTALLED AND MAINTAINED, NO FURTHER ACTION IS REQUIRED. IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED; AND
(D). EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.
*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING AT ANY TIME OF THE DAY OR WEEK.

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

24. RETENTION OF RECORDS:
1. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:
A. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
B. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
C. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;
D. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
E. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT;
F. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND
G. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2). OF THIS PERMIT.
2. 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:
A. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
B. 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;
C. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.B. OF THIS PERMIT; AND
D.A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT.
3. 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 WITH PART VI:
A. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
B. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
C. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;
D. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
E. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.C. OF THIS PERMIT;
F. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND
G. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.C.(2). OF THIS PERMIT.
4. 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.

25. SAMPLING REQUIREMENTS. 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. THE FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING TURBIDITY.

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 COMMON DEVELOPMENT; (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 STORM WATER IS DISCHARGED AND (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 STORM WATER(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). THE ANALYTICAL METHOD USED TO COLLECT AND ANALYZE THE SAMPLES INCLUDING QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES. THIS NARRATIVE MUST INCLUDE PRECISE SAMPLING METHODOLOGY FOR EACH SAMPLING LOCATION;
(3). WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OUTFALLS WILL BE MONITORED, A RATIONALE MUST BE INCLUDED 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 STORM WATER 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, CLEAN 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. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED USING A DIRECT READING, 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.

C. SAMPLING POINTS.
(1). FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:
(A). THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE 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 STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
(C). IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM WATER OUTFALL CHANNEL(S).
(D). CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL.
(E). THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
(F). THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.
(G). PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS THE USE OF RIP RAP, GABIONS, PERMANENT MULCHES OR GEOTEXTILES) HAVE BEEN USED. PERMANENT VEGETATION SHALL CONSIST OF: PLANTED TREES, SHRUBS, PERENNIAL VINES; A CROP OF PERENNIAL VEGETATION APPROPRIATE FOR THE TIME OF YEAR AND REGION; OR A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION. FINAL STABILIZATION APPLIES TO EACH PHASE OF CONSTRUCTION.
(H). ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4., WHICHEVER IS APPLICABLE.

26. THE ALLOWABLE INCREASE IN TURBIDITY BETWEEN THE DOWNSTREAM AND UPSTREAM SAMPLING POINTS IN THE RECEIVING WATERS, WHICH ARE CLASSIFIED AS WARM WATER, FOR THIS PROJECT IS 25 NTU.

27. **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.**

28. **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.**

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

30. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM WITH THE GUIDELINES OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL".

31. ACCORDING TO FLOOD INSURANCE RATE MAP 13277C0109E DATED SEPTEMBER 29, 2010 THE PROPERTY IS LOCATED IN FLOOD ZONE X WHICH IS AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

32. EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

33. **ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY FIELD INSPECTOR.**

BY Harry Highball
HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

DRAWING 7
EROSION AND SEDIMENT CONTROL NOTES
SHEET #2

SEAL

EROSION CONTROL CERTIFICATION

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

BY Harry Highball
HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

BARGAIN BUYS STORES DEVELOPMENT		
HARRY HIGHBALL CONSULTING ENGINEERS		
OWNER: A. DUNLOP	COUNTY, STATE: TIFT, GEORGIA	
DRAWN BY: JAN JACOBY	LAND LOT: 336	
DATE: MARCH 4, 2013	LAND DISTRICT: 6th	
REVISION NUMBER	REQUESTED BY: GSWCC	DATE

CLEARING PHASE NOTES

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

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

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

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

A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.

PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, LIMITS OF LAND DISTURBANCE SHALL CLEARLY AND ACCURATELY BE DEMARCATED WITH STAKES, RIBBONS OR OTHER APPROPRIATE MEANS, AND SHALL BE DEMACATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE APPROVED PLANS.

PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.

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

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

2. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION EXIT, ALL PERIMETER EROSION CONTROL AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL PLAN.

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

AFTER APPROVAL OF INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. AS CLEARING PERMITS, THE CONTRACTOR SHALL CONSTRUCT SEDIMENT PONDS AS SHOWN ON PLANS.

THE CONTRACTOR CAN UTILIZE CLEARED TREES AS BARRIER BRUSH SEDIMENT CONTROL WHERE INITIAL GRADING ACTIVITIES WILL NOT OCCUR.

NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE ENGINEER OF RECORD.

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.

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.

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.

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.

CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE PROPER FUCTIONING.

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

GRADING PHASE NOTES

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

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

EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION, AND ALTER THE LOCATION OF EROSION CONTROL DEVICES ACCORDINGLY. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.

THE CONTRACTOR SHALL ESTABLISH BARRIERS AT THE TOP OF ALL SLOPES UNDER CONSTRUCTION. CUT AND FILL SLOPES SHALL NOT EXCEED 3:1.

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.

THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT POND UNTIL PERMANENT GROUNDCOVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE POND WHEN IT REACHES ONE THIRD OF THE DEPT OF THE BASIN.

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING.

SEDIMENT AND 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.

CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 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.

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

FINAL PHASE NOTES

THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT POND UNTIL PERMANENT GROUNDCOVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE POND WHEN IT REACHES ONE THIRD OF THE DEPT OF THE BASIN.

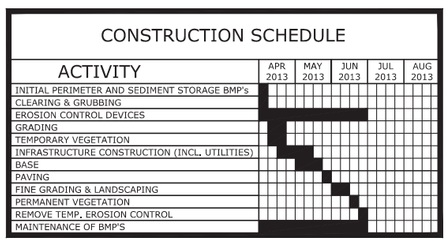
ALL ROADWAY AND PARKING SHOULDERS SHOULD BE GRASSED AS SOON AS FINAL GRADE IS ACHIEVED.

SEDIMENT AND EROSION CONTROL MEASURES SHALL BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

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

UPON COMPLETION OF THE PROJECT AND RECEIPT OF THE CERTIFICATE OF COMPLETION, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED OTHERWISE ON PLANS.

CONSTRUCTION SCHEDULE



PERMIT COVERAGE:

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. GAR100003 FOR AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR COMMON DEVELOPMENTS.

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

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.
2. 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.
3. A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BMP'S HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH DISCHARGE RESULTS IN THE TURBIDITY OF RECEIVING WATER(S) BEING INCREASED BY MORE THAN TEN (10) NEPHELOMETRIC TURBIDITY UNITS FOR WATERS 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.

AUTHORIZED DISCHARGES (PART I.C):

1. ALL DISCHARGES OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE ACRE. PART I.C.1.a.
2. ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORM WATER EXCEPT AS PROVIDED IN PART I.C.2 AND PART III.A.2 OF THE PERMIT. PART III.A.1.
3. AUTHORIZED MIXED STORM WATER DISCHARGES: PART I.C.2.

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

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

A. FIRE FIGHTING ACTIVITIES;
B. FIRE HYDRANT FLUSHING;
C. POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHING;
D. IRRIGATION DRAINING;
E. AIR CONDITIONING CONDENSATE;
F. SPRINGS;
G. UNCONTAMINATED GROUND WATER; AND
H. FOUNDATION OR FOOTING DRAINS WHERE THE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS OR POLLUTANTS.

LIMITATIONS ON COVERAGE PART I.C.3

THE FOLLOWING STORM WATER DISCHARGES FROM CONSTRUCTION SITES ARE NOT AUTHORIZED BY THIS PERMIT:

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

COMPLIANCE WITH WATER QUALITY PART I.C.4

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.

EROSION CONTROL CERTIFICATION

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

BY: [signature]

HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED EROSION PROFESSIONAL CERTIFICATION NUMBER 0000001234

SEAL

BARGAIN BUYS STORES
DEVELOPMENT

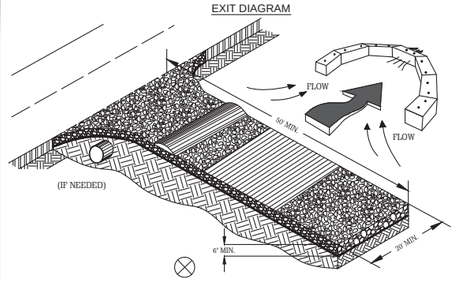
HARRY HIGHBALL
CONSULTING ENGINEERS

OWNER	COUNTY, STATE
A. DUNLOP	TIFT, GEORGIA
DRAWN BY	LAND LOT
JAN JACOBY	336
DATE	LAND DISTRICT
MARCH 4, 2013	6th
REVISION NUMBER	REQUESTED BY
	GSWCC
	DATE

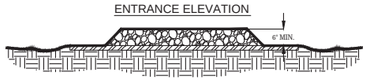
DRAWING 8
EROSION AND
SEDIMENT CONTROL
NOTES
SHEET #3

DRAWING 9
EROSION AND SEDIMENT CONTROL DETAILS
SHEET #1

EXIT DIAGRAM



ENTRANCE ELEVATION



NOTES:
1. Avoid locating on steep slopes or at curves on public roads.
2. Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
3. Aggregate size shall be in accordance with National Stone Association R-2 (1.5"-3.5" Stone).
4. Gravel pad shall have a minimum thickness of 6".
5. Pad width shall be equal full width at all points of vehicular egress, but no less than 20'.
6. A diversion ridge should be constructed when grade toward paved area is greater than 2%..
7. Install pipe under the entrance if needed to maintain drainage ditches.
8. When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin (divert all surface runoff and drainage from the entrance to a sediment control device).
9. Washracks and/or tire washers may be required depending on scale and circumstance. If necessary, washrack design may consist of any material suitable for truck traffic that remove mud and dirt.
10. Maintain area in a way that prevents tracking and/or flow of mud onto public rights-of-ways. This may require top dressing, repair and/or cleanout of any measures used to trap sediment.

Co — CRUSHED STONE CONSTRUCTION EXIT
N.T.S.

Figure 6-11.1

DEFINITION

Small temporary barrier, grade control structure, or dam constructed across a swale, drainage ditch, or area of concentrated flow.

CONDITIONS

This practice is applicable for use in small open channels and is not to be used in a live stream. Specific applications include:
1. Temporary or permanent swales or ditches in need of protection during establishment of grass linings.
2. Temporary or permanent swales or ditches which, due to their short length of service or other reasons, cannot receive a permanent non-erodible lining for an extended period of time.
3. Other locations where small localized erosion and resulting sedimentation problems exist.

SPECIFICATIONS

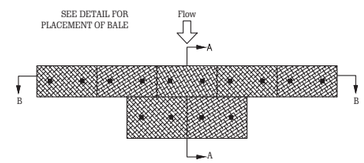
The following types of check dams are used for this standard:

Haybale Check Dams
Staked and embedded hay-bales may be used as temporary check dams in concentrated flow areas while vegetation is becoming established. They should not be used where the drainage area exceeds one acre. Haybales should be embedded a minimum of 4 inches. (See Figure 6-10.3)

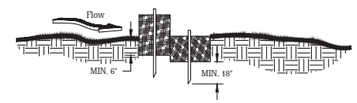
NOTES:
1. Bales should be bound with wire or nylon string and should be placed in rows with bale ends tightly abutting the adjacent bales.
2. Remove #4 rebar after straw bales are no longer in place.
3. Point C of SECTION B-B should always be higher than Point D.

TYPICAL STRAW BALE CHECK DAM

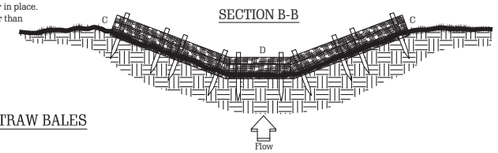
PLAN



SECTION A-A



SECTION B-B



Cd-Hb — CHECK DAM - STRAW BALES
N.T.S.

Figure 6-10.3

DEFINITION

Improving, constructing or stabilizing an open channel for water conveyance.

CONDITIONS

This standard applies to the improvement, construction or stabilization of open channels and existing ditches with drainage areas less than one square mile. This standard applies only to channels conveying intermittent flow, not to channels conveying a continuous, live stream.

An adequate outlet for the modified channel length must be available for discharge by gravity flow. Construction or other improvements of the channel should not adversely affect the environmental integrity of the area and must not cause significant erosion upstream or flooding and/or sediment deposition downstream.

CHANNEL LININGS AND STRUCTURAL MEASURES

Where channel velocities exceed safe velocities for vegetated lining due to increased grade or a change in channel cross-section, or where durability of vegetative lining is adversely affected by seasonal changes, channel linings of rock, concrete or other durable material may be needed. Grade stabilization structures may also be needed.

Channels may be stabilized by using one or more of the following methods:

Vegetated Lining (Ch-1)

Vegetated lining shall be designed to resist erosion when the channel is flowing at the bankfull discharge or 25-year frequency discharge, whichever is the lesser. Temporary erosion control blankets or sod shall be used on all channels and concentrated flow areas to aid in the establishment of the vegetated lining. If a vegetated lining is desired in a channel with velocities between 5-10 ft/sec, permanent soil reinforcement matting shall be used. Refer to specifications Ds3 - Disturbed Area Stabilization (With Permanent Vegetation), Ds4 - Disturbed Area Stabilization (With Sodding), and Mb - Matting and Blankets.

Rock Riprap Lining (Ch-2)

Rock riprap shall be designed to resist displacement when the channel is flowing at the bankfull discharge or 25-year frequency discharge, whichever is the lesser. Rock riprap lining should be used when channel velocities are between 5 and 10 ft/sec.

Dumped and machine placed riprap should not be installed on slopes steeper than 1-1/2 horizontal to 1 vertical. Rock shall be dense, resistant to the action of air and water, and suitable in all other respects for the purpose intended. Rock shall be installed according to standards specified in Riprap, Appendix C.

A filter blanket layer consisting of an appropriately designed graded filter sand and/or gravel or geotextile material shall be placed between the riprap and base material. The gradation of the filter blanket material shall be designed to create a graded filter between the base material and the riprap. A geotextile can be used as a substitution for a layer of sand in a graded filter or as the filter blanket. Criteria for selecting an appropriate geotextile and guidance for recommended drop heights and stone weights are found in AASH-TO M288-96 Section 7.5, Permanent Erosion Control Specifications.

Concrete Lining (Ch-3)

If a channel has velocities high enough to require a concrete lining (when channel velocities exceed 10 ft/sec), methods should be utilized to reduce the velocity of the runoff and reduce erosion at the outlet - a common problem created by the smooth, concrete lining. Refer to specification St - Storm Drain Outlet Protection for information regarding energy dissipators.
If a concrete lining is chosen, it shall be designed according to currently accepted guides for structural and hydraulic adequacy. It must be designed to carry the required discharge and to withstand the loading imposed by site conditions.
A separation geotextile should be placed under concrete linings to prevent undermining in the event of stress cracks due to settlement of the base material. The separation geotextile will keep the base material soils in place and minimize the likelihood of a system failure.

Grade Stabilization Structures

Grade stabilization structures are used to reduce or prevent excessive erosion by reduction of velocities in the watercourse or by providing structures that can withstand and reduce the higher velocities. They may be constructed of concrete, rock, masonry, steel, aluminum, or treated wood.

These structures are constructed where the capability of earth and vegetative measures is exceeded in the safe handling of water at permissible velocities, where excessive grades or overall conditions are encountered or where water is to be lowered structurally from one elevation to another. These structures should generally be planned and installed along with or as a part of other erosion control practices.

The structures shall be designed hydraulically to adequately carry the channel discharge and structurally to withstand loadings imposed by the site conditions.
The structure shall meet requirements of Gr - Grade Stabilization Structure.

SPECIFICATIONS

1. Where needed, all trees, brush, stumps and other objectionable materials shall be removed so they will not interfere with the construction or proper functioning of the channel.
2. Where possible, trees will be left standing, and stumps will not be removed.
3. Excavation shall be at the locations and grades shown on the drawings. The lining shall not compromise the capacity of the channel, e.g. the emergency spillway shall be over-excavated so that the lining will be flush with the slope surface.
4. The geotextile shall be placed on a smooth graded surface. The geotextile shall be placed in such a manner that it will not excessively stretch or tear upon placement of the overlying materials. Care should be taken to place the geotextile in intimate contact with the soil such that no void spaces exist between the underlying soil and the geotextile.
5. Construction plans will specifically detail the location and handling of spoils. Spoil material resulting from clearing, grubbing and channel excavation shall be disposed of in a manner which will:
a. not cause an increase in flood stage,
b. minimize overbank wash,
c. not cause an adverse effect on the environmental integrity of the area,
d. provide for the free flow of water between the channel and flood plain unless the valley routing and water surface profile are based on continuous dikes being installed,
e. leave the right-of-way in the best condition feasible, and
f. improve the aesthetic appearance of the site to the extent feasible.
6. Channel linings shall be established or installed immediately after construction or as soon as weather conditions permit.
7. Structures shall be installed according to lines and grades shown on the plan. The foundation for structures shall be cleared of all undesirable materials prior to the installation of the structures.
8. Materials used in construction shall be of permanency commensurate with the design frequency and life expectancy of the facility.
9. Earthfill, when used as a part of the structures, shall be placed according to the installation requirements for sediment basin embankments.
10. Construction operations shall be carried out in such a manner that erosion and air and water pollution will be minimized. State and local laws concerning pollution abatement shall be complied with.
11. Vegetation shall be established on all disturbed areas immediately after construction. If weather conditions cause a delay in establishing vegetation, the area shall be mulched in accordance with the standard for mulching. Refer to specification Ds1 - Disturbed Area Stabilization (With Mulching Only). Seeding, fertilizing and mulching shall conform to the standard for permanent vegetative cover. Refer to specification Ds3-Disturbed Area Stabilization (With Permanent Vegetation).
12. All temporary access roads or travelways shall be appropriately closed to exclude traffic.
13. Trees and other fallen natural vegetation not causing a deterrent to stream flow should be left for the purpose of habitat.

Ch — CHANNEL STABILIZATION
N.T.S.

DEFINITION

Applying plant residues or other suitable materials, produced on the site if possible, to the soil surface.

CONDITIONS

Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Mulch can be used as a singular erosion control device for up to six months, but it shall be applied at the appropriate depth, depending on the material used, anchored, and have a continuous 90% cover or greater of the soil surface. Maintenance shall be required to maintain appropriate depth and 90% cover. Temporary vegetation may be employed instead of mulch if the area will remain undisturbed for less than six months. If an area will remain undisturbed for greater than six months, permanent vegetative techniques shall be employed.

SPECIFICATIONS

MULCHING WITHOUT SEEDING
This standard applies to grades or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

Site Preparation
1. Grade to permit the use of equipment for applying and anchoring mulch.
2. Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.
3. Loosen compact soil to a minimum depth of 3 inches.

Mulching Materials
Select one of the following materials and apply at the depth indicated:
1. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application.
2. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.
3. Cutback asphalt (slow curing) shall be applied at 1200 gallons per acre (or 1/4 gallon per sq.yd.).
4. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and reused.

Applying Mulch
When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area.
1. Dry straw or hay mulch and wood chips shall be applied uniformly by hand or by mechanicalequipment.
2. If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the decomposition of the organic mulches.
3. Cutback asphalt shall be applied uniformly. Care should be taken in areas of pedestrian traffic due to problems of "tracking in" or damage to shoes, clothing, etc.
4. Apply polyethylene film on exposed areas.

Anchoring Mulch
1. Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special "packer disk." Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving much of it in an erect position. Straw or hay mulch shall be anchored immediately
after application. Straw or hay mulch spread with special blower-type equipment may be anchored with emulsified asphalt (Grade AE-5 or SS-1). The asphalt emulsion shall be sprayed onto the mulch as it is ejected from the machine. Use
100 gallons of emulsified asphalt and 100 gallons of water per ton of mulch. Tackifers and binders can be substituted for emulsified asphalt. Please refer to specification Tb -Tackifers and Binders. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.
2. Netting of the appropriate size shall be used to anchor wood waste. Openings of the netting shall not be larger than the average size of the wood waste chips.
3. Polyethylene film shall be anchor trenched at the top as well as incrementally as necessary.

Ds1 — DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

SEAL

EROSION CONTROL CERTIFICATION

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

BY _____
HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

BARGAIN BUYS STORES DEVELOPMENT

HARRY HIGHBALL CONSULTING ENGINEERS

OWNER: A. DUNLOP	COUNTY, STATE: TIFT, GEORGIA
DRAWN BY: JAN JACOBY	LAND LOT: 336
DATE: MARCH 4, 2013	LAND DISTRICT: 6th

REVISION NUMBER	REQUESTED BY	DATE
	GSWCC	

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

DEFINITION

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

CONDITIONS

Temporary grassing, instead of mulch, can be applied to rough graded areas that will be exposed for less than six months. Temporary vegetative measures should be coordinated with permanent measures to assure economical and effective stabilization. Most types of temporary vegetation are ideal to use as companion crops until the permanent vegetation is established.
eeded.

SEEDING RATES FOR TEMPORARY SEEDING

SPECIES	RATE Per 1,000 sq.ft.	RATE Per Acre *	PLANTING DATES **
Rye	3.9 pounds	3 bu.	9/1-3/1
Ryegrass	0.9 pound	40 lbs.	8/15-4/1
Annual Lespedeza	0.9 pound	40 lbs.	1/15-3/15
Weeping Lovegrass	0.1 pound	4 lbs.	2/15-6/15
Sudangrass	1.4 pounds	60 lbs.	**3/1-8/1**
Browntop Millet	0.9 pound	40 lbs.	**4/1-7/15**
Wheat	4.1 pounds	3 bu.	9/15-2/1

* Unusual site conditions may require heavier seeding rates
** Seeding dates may need to be altered to fit temperture variations and conditions.

SPECIFICATIONS

Grading and Shaping

Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others.

No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.

Seedbed Preparation

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

When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

Lime and Fertilizer

Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at a rate of one ton per acre. Graded areas require lime application. Soils can be tested to determine if fertilizer is needed. On reasonably fertile soils or soil material, fertilizer is not required. For soils with very low fertility, 500 to 700 pounds of 10-10-10 fertilizer or the equivalent per acre (12-16 lbs./1,000 sq. ft.) shall be applied. Fertilizer should be applied before land preparation and incorporated with a disk, ripper or chisel.

Seeding

Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand.

Mulching

Temporary vegetation can, in most cases, be established without the use of mulch. Mulch without seeding should be considered for short term protection. Refer to Ds1 - Disturbed Area Stabilization (With Mulching Only).

Irrigation

During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.

Ds4 DISTURBED AREA STABILIZATION (WITH SODDING)

DEFINITION

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

CONDITIONS

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

CONSTRUCTION SPECIFICATIONS INSTALLATION

Soil Preparation

- Bring soil surface to final grade. Clear surface of trash, woody debris, stones and clods larger than 4". Apply sod to soil surfaces only and not frozen surfaces, or gravel type soils.
- Topsoil properly applied will help guarantee stand. Don't use topsoil recently treated with herbicides or soil sterilants.
- Mix fertilizer into soil surface. Fertilize based on soil tests or Table 6-6.1. For fall planting of warm season species, half the fertilizer should be applied at planting and the other half in the spring.

Table 6-6.1. Fertilizer Requirements for Soil Surface Application

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

- Agricultural lime should be applied based on soil tests or at a rate of 1 to 2 tons per acre.

Installation

- Lay sod with tight joints and in straight lines. Don't overlap joints. Stagger joints and do not stretch sod.
- On slopes steeper than 3:1, sod should be anchored with wooden or biodegradable pins or other approved methods.
- Installed sod should be rolled or tamped to provide good contact between sod and soil.
- Irrigate sod and soil to a depth of 4" immediately after installation.
- Sod should not be cut or spread in extremely wet or dry weather.
- Irrigation should be used to supplement rainfall for a minimum of 2-3 weeks.

MATERIALS

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

Table 6-6.2. Sod Planting Requirements

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

MAINTENANCE

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

Table 6-6.3. Fertilizer Requirements for Sod

Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Top Dressing Rate (lbs./acre)
Cool Season Grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100 - 30
Warm Season Grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 800 400	50-100 50-100 30

Du DUST CONTROL ON DISTURBED AREAS

DEFINITION

Controlling surface and air movement of dust on construction sites, roads, and demolition sites.

CONDITIONS

This practice is applicable to areas subject to surface and air movement of dust where on and off-site damage may occur without treatment.

METHOD AND MATERIALS

A. TEMPORARY METHODS

Mulches. See standard Ds1 - Disturbed Area Stabilization (With Mulching Only). Synthetic resins may be used instead of asphalt to bind mulch material. Refer to standard Tb-Tackifiers and Binders. Resins such as Curasol or Terratack should be used according to manufacturer's recommendations.

Vegetative Cover. See standard Ds2 - Disturbed Area Stabilization (With Temporary Seeding).

Spray-on Adhesives. These are used on mineral soils (not effective on muck soils). Keep traffic off these areas. Refer to standard Tb-Tackifiers and Binders.

Tillage. This practice is designed to roughen and bring clods to the surface. It is an emergency measure which should be used before wind erosion starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.

Irrigation. This is generally done as an emergency treatment. Site is sprinkled with water until the surface is wet. Repeat as needed.

Barriers. Solid board fences, snow fences, burlap fences, crate walls, bales of hay and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 15 times their height are effective in controlling wind erosion.

Calcium Chloride. Apply at rate that will keep surface moist. May need retreatment.

B. PERMANENT METHODS

Permanent Vegetation. See standard Ds3 -Disturbed Area Stabilization (With Permanent Vegetation). Existing trees and large shrubs may afford valuable
protection if left in place.

Topsoiling. This entails covering the surface with less erosive soil material. See standard Tp - Topsoiling.

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

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

DEFINITION

The planting of perennial vegetation such as trees, shrubs, vines, grasses, or legumes on exposed areas for final permanent stabilization. Permanent perennial vegetation shall be used to achieve final stabilization..

CONDITIONS

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

SPECIFICATIONS

Grading and Shaping

Grading and shaping may not be required where hydraulic seeding and fertilizing equipment is to be used. Vertical banks shall be sloped to enable plant establishment.

When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so that equipment can be used safely and efficiently during seedbed preparation, seeding, mulching and maintenance of the vegetation.

oncentrations of water that will cause excessive soil erosion shall be diverted to a safe outlet. Diversions and other treatment practices shall conform with the appropriate standards and specifications.

Seedbed Preparation

Seedbed preparation may not be required where hydraulic seeding and fertilizing equipment is to be used. When conventional seeding is to be used, seedbed preparation will be done as follows:

Broadcast plantings

1. Tillage at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches; alleviate compaction; incorporate lime and fertilizer; smooth and firm the soil; allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used.
2. Tillage may be done with any suitable equipment.
3. Tillage should be done on the contour where feasible.
4. On slopes too steep for the safe operation of tillage equipment, the soil surface shall be pitted or trenched across the slope with appropriate hand tools to provide two places 6 to 8 inches apart in which seed may lodge and germinate. Hydraulic seeding may also be used.

Individual Plants

1. Where individual plants are to be set, the soil shall be prepared by excavating holes, opening furrows, or dibble planting.
2. For nursery stock plants, holes shall be large enough to accommodate roots without crowding.
3. Where pine seedlings are to be planted, subsoil under the row 36 inches deep on the contour four to six months prior to planting. Subsoiling should be done when the soil is dry, preferably in August or September.

Planting

Hydraulic Seeding

Mix the seed (innoculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.

Conventional Seeding

Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a cultipacker seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other suitable equipment.

No-Till Seeding

No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment. The seed must be uniformly distributed and planted at the proper depth.

Individual Plants

Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. Pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots. Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at the nursery. The tips of vines and sprigs must be at or slightly above the ground surface. Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the plant shall be set in the hole.

Mulching

Mulch is required for all permanent vegetation applications. Mulch applied to seeded areas shall achieve 75% soil cover. Select the mulching material from the following and apply as indicated:

1. Dry straw or dry hay of good quality and free of weed seeds can be used. Dry straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.
2. Wood cellulose mulch or wood pulp fiber shall be used with hydraulic seeding. It shall be applied at the rate of 500 pounds per acre. Drystraw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.
3. One thousand pounds of wood cellulose or wood pulp fiber, which includes a tackifier, shall be used with hydraulic seeding on slopes 3/4:1 or steeper.
4. Sericea lespedeza hay containing mature seed shall be applied at a rate of three tons per acre.
5. Pine straw or pine bark shall be applied at a thickness of 3 inches for bedding purposes. Other suitable materials in sufficient quantity may be used where ornamentals or other ground covers are planted. This is not appropriate for seeded areas.
6. When using temporary erosion control blankets or block sod, mulch is not required.
7. Bituminous treated roving may be applied on planted areas on slopes, in ditches or dry waterways to prevent erosion. Bituminous treated roving shall be applied within 24 hours after an area has been planted. Application rates and materials must meet Georgia Department of Transportation specifications.

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

Applying Mulch

Straw or hay mulch will be spread uniformly within 24 hours after seeding and/or planting. The mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% of the soil surface.

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

Anchoring Mulch

Anchor straw or hay mulch immediately after application by one of the following methods:
1. Emulsified asphalt can be (a) sprayed uniformly onto the mulch as it is ejected from the blower machine or (b) sprayed on the mulch immediately following mulch application when straw or hay is spread by methods other than special blower equipment.

The combination of asphalt emulsion and water shall consist of a homogeneous mixture satisfactory for spraying. The mixture shall consist of 100 gallons of grade SS-1h or CSS-1h emulsified asphalt and 100 gallons of water per ton of mulch.
Care shall be taken at all times to protect state waters, the public, adjacent property, pavements, curbs, sidewalks, and all other structures from asphalt discoloration.
2. Hay and straw mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk" or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving much of it in an erect position. Mulch shall not be plowed into the soil.
3. Synthetic tackifiers or binders approved by GDOT shall be applied in conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's specifications. Refer to Tb - Tackifiers and Binders.
4. Rye or wheat can be included with Fall and Winter plantings to stabilize the mulch. They shall be applied at a rate of one-quarter to one half bushel per acre.
5. Plastic mesh or netting with mesh no larger than one inch by one inch may be needed to anchor straw or hay mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's specifications.

Irrigation

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

SEEDING RATES FOR PERMANENT SEEDING

SPECIES	RATE Per 1,000 sq.ft.	RATE Per Acre *	PLANTING DATES **
BAHIA	1.4 POUNDS	60 LBS.	1/1-12/31
BERMUDA	0.2 POUND	10 LBS.	2/15-7/1
CENTIPEDE	BLOCK SOD ONLY	BLOCK SOD ONLY	4/1-7/1
LESPEDEZA	1.7 POUNDS	75 LBS.	1/1-12/31
WEEPING LOVE GRASS	0.1 POUND	4 LBS.	2/1-6/15
SWITCH GRASS	0.9 POUND	40 LBS.	3/15-6/1

* Unusual site conditions may require heavier seeding rates
** Seeding dates may need to be altered to fit temperature variations and conditions.

DRAWING 10 EROSION AND SEDIMENT CONTROL DETAILS SHEET #2

SEAL

EROSION CONTROL CERTIFICATION

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

BY Harry Highball

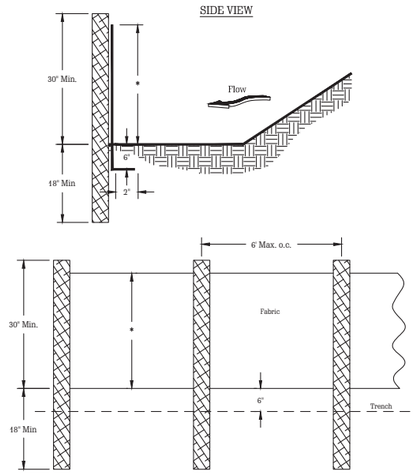
HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

BARGAIN BUYS STORES DEVELOPMENT

HARRY HIGHBALL CONSULTING ENGINEERS

OWNER A. DUNLOP	COUNTY, STATE TIFT, GEORGIA
DRAWN BY JAN JACOBY	LAND LOT 336
DATE MARCH 4, 2013	LAND DISTRICT 6th

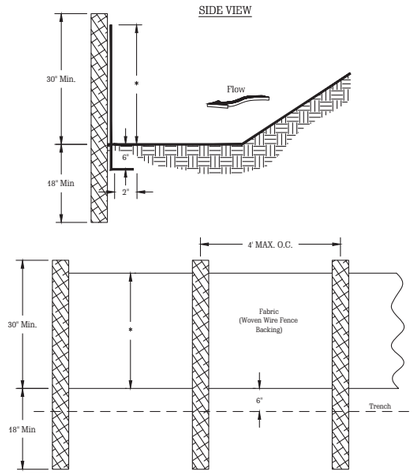
REVISION NUMBER	REQUESTED BY	DATE
	GSWCC	



NOTES:
1. Use steel or wood posts or as specified by the EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. Height (*) is to be shown on the EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Sd1-NS SILT FENCE - TYPE NON-SENSITIVE
N.T.S.

Figure 6-20.4



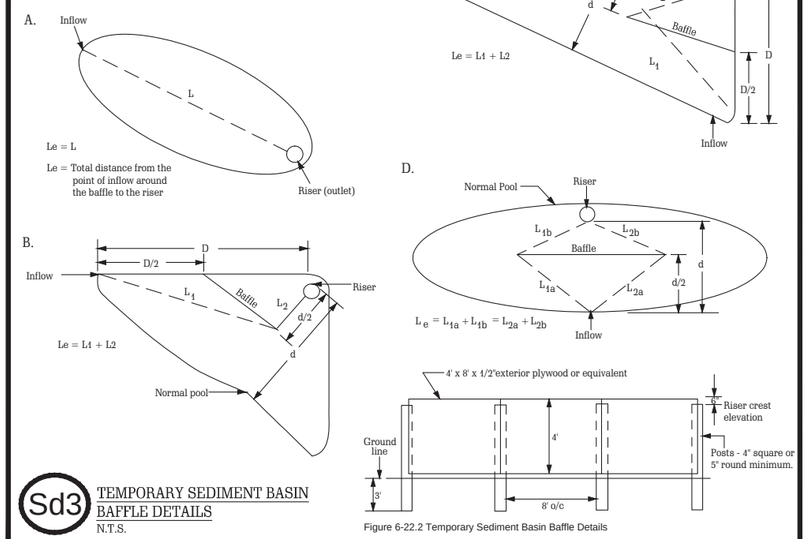
NOTES:
1. Use steel or wood posts or as specified by the EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. Height (*) is to be shown on the EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Sd1-S SILT FENCE - TYPE SENSITIVE
N.T.S.

Figure 6-20.6

SEDIMENT BASIN BAFFLES

Examples: Plan Views - not to scale



Sd3 TEMPORARY SEDIMENT BASIN BAFFLE DETAILS
N.T.S.

Figure 6-22.2 Temporary Sediment Basin Baffle Details

DRAWING 11
EROSION AND SEDIMENT CONTROL DETAILS
SHEET #3

DEFINITION

A basin created by the construction of a barrier or dam across a concentrated flow area or by excavating a basin or by a combination of both. A sediment basin typically consists of a dam, a pipe outlet, and an emergency spillway. The size of the structure will depend upon the location, size of the drainage area, soil type, and rainfall pattern.

CONDITIONS

This practice applies to critical areas where physical site conditions, construction schedules, or other restrictions preclude the installation or establishment of erosion control practices to satisfactorily reduce runoff, erosion, and sedimentation. The structure may be used in combination with other practices and should remain in effect until the sediment-producing area is permanently stabilized.

This standard applies to the installation of temporary (to be removed within 18 months) sediment basins on sites where: (1) failure of the structure would not result in loss of life or interruption of use or service of public utilities, and (2) the drainage area does not exceed 150 acres.

SPECIFICATIONS

Site Preparation

Areas under the embankment and under structural works shall be cleared, grubbed, and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed and disposed of by approved methods. In order to facilitate clean-out or restoration, the pool area (measured at the top of the pipe spillway) will be cleared of all brush and trees.

Cut-off Trench

A cut-off trench will be excavated along the centerline of earth fill embankments. The minimum depth shall be 2 feet. The cut-off trench shall extend up both abutments to the riser crest elevation. The minimum bottom width shall be 4 feet, but wide enough to permit operation of compaction equipment. The side slopes shall be no steeper than 1:1. Compaction requirements shall be the same as those for the embankment. The trench shall be drained during the backfilling and compaction operations.

Embankment

The fill material shall be taken from approved areas shown on the plans. It shall be clean mineral soil free of roots, woody vegetation, oversized stones, rocks or other objectionable material. Relatively pervious materials such as sand or gravel (Unified Soil Classes GW, GP, SW & SP) shall be placed in the downstream section of the embankment. Areas on which fills are to be placed shall be scarified prior to placement of fill. The fill material shall contain sufficient moisture so that it can be formed by hand into a ball without crumbling. If water can be squeezed out of the ball, it is too wet for proper compaction. Fill material shall be placed in six-inch to eight-inch thick continuous layers over the entire length of the fill. Compaction shall be obtained by routing and hauling the construction equipment over the fill so that the entire surface of the fill is traversed by at least one wheel or tread track of the equipment or by the use of a compactor. The embankment shall be constructed to an elevation 5 percent higher than the design height to allow for settlement.

Principal Spillway

The riser shall be securely attached to the pipe or pipe stub by welding the full circumference making a watertight structural connection. The pipe stub must be attached to the riser at the same percent (angle) of grade as the outlet conduit. The connection between the riser and the riser base shall be watertight. All connections between pipe sections must be achieved by approved watertight band assemblies. The pipe and riser shall be placed on a firm, smooth foundation of impervious soil as the embankment is constructed. Breaching the embankment is unacceptable. Pervious materials such as sand, gravel, or crushed stone shall not be used as backfill around the pipe or anti-seep collar. The fill material around the pipe spillway shall be placed in four inch layers and compacted under and around the pipe to at least the same density as the adjacent embankment. Care must be taken not to raise the pipe from firm contact with its foundation when compacting under the pipe haunches. A minimum depth of two feet of hand compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment.

Emergency Spillway

The emergency spillway shall be installed in undisturbed ground. The achievement of planned elevations, grades, design width, entrance and exit channel slopes are critical to the successful operation of the emergency spillway and must be constructed within a tolerance of ± 0.2 feet. If the emergency spillway requires erosion protection other than vegetation, the lining shall not compromise the capacity of the emergency spillway, e.g. the emergency spillway shall be over-excavated so that the lining will be flush with the slope surface.

Vegetative Treatment

Stabilize the embankment and all other disturbed areas in accordance with the appropriate permanent vegetative measure, Ds3, immediately following construction. In no case shall the embankment remain unstabilized for more than seven (7) days. Refer to specifications Ds2, Ds3, and Ds4 - Disturbed Area Stabilization (Temporary Seeding, Permanent Vegetation and Sodding) respectively.
Erosion and Pollution Control Construction operations will be carried out in such a manner that erosion and water pollution will be minimized. State and local law concerning pollution abatement shall be complied with.

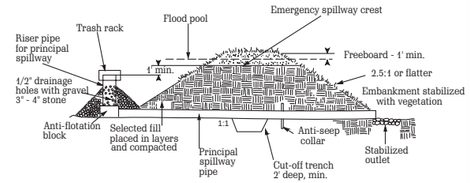
Safety

State and local requirements shall be met concerning fencing and signs warning the public of hazards of soft sediment and floodwater.

FINAL DISPOSAL

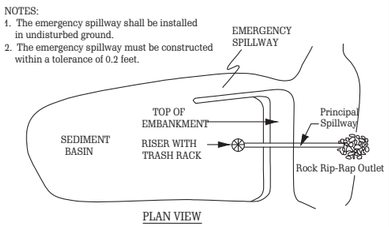
When temporary structures have served their intended purpose and the contributing drainage area has been properly stabilized, the embankment and resulting sediment deposits are to be leveled or otherwise disposed of in accordance with approved sediment control plan. The proposed use of a sediment basin site will often dictate final disposition of the basin and any sediment contained therein. If the site is scheduled for future construction, then the embankment and trapped sediment must be removed, safely disposed of, and backfilled with a structural fill. When the basin area is to remain open space, the pond may be pumped dry, graded and backfilled.

Sd3 TEMPORARY SEDIMENT BASIN
N.T.S.



Fill Height	Minimum Top Width
less than 10 ft	8.0 ft
10 feet to 15 ft	10.0 ft

NOTES:
1. The emergency spillway shall be installed in undisturbed ground.
2. The emergency spillway must be constructed within a tolerance of 0.2 feet.



BASIC COMPONENTS OF A TEMPORARY SEDIMENT BASIN

Figure 6-22.1

SEAL

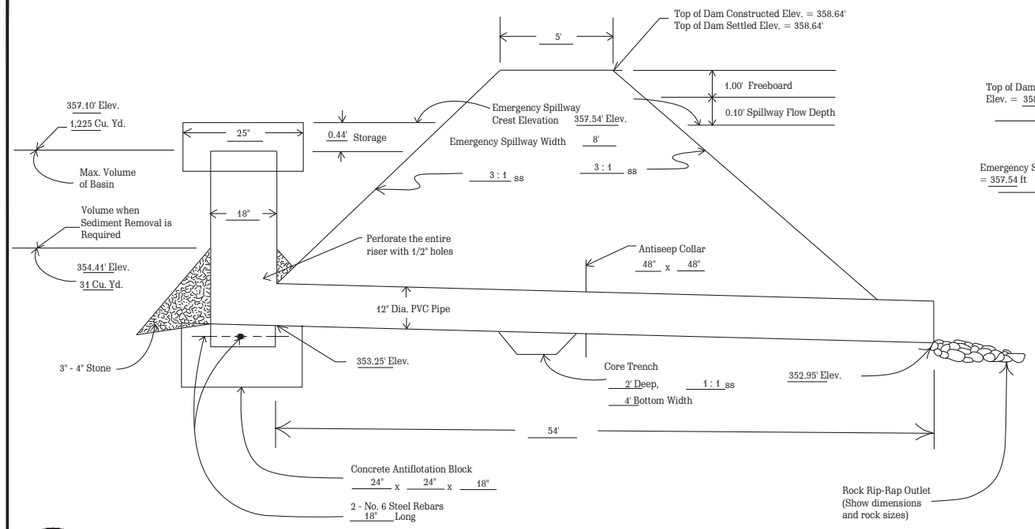
EROSION CONTROL CERTIFICATION

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

BY Harry Highball

HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

BARGAIN BUYS STORES DEVELOPMENT		
HARRY HIGHBALL CONSULTING ENGINEERS		
OWNER: A. DUNLOP	COUNTY, STATE: TIFT, GEORGIA	
DRAWN BY: JAN JACOBY	LAND LOT: 336	
DATE: MARCH 4, 2013	LAND DISTRICT: 6th	
REVISION NUMBER	REQUESTED BY: GSWCC	DATE



Sd3 TEMPORARY SEDIMENT BASIN SUPPLEMENTARY INFORMATION
N.T.S.

Figure 6-22.8 - Temporary Sediment Basin Cross-Sectional Detail

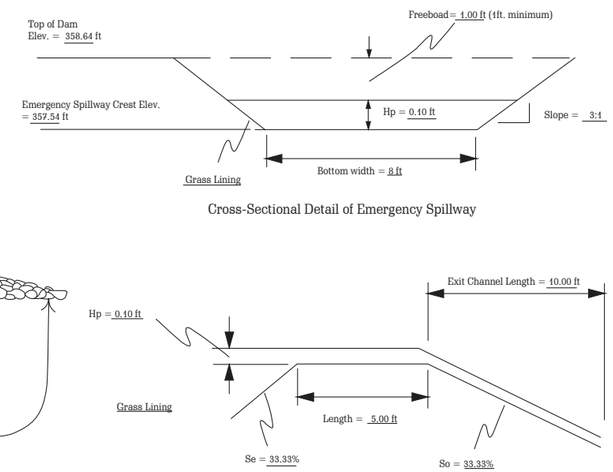
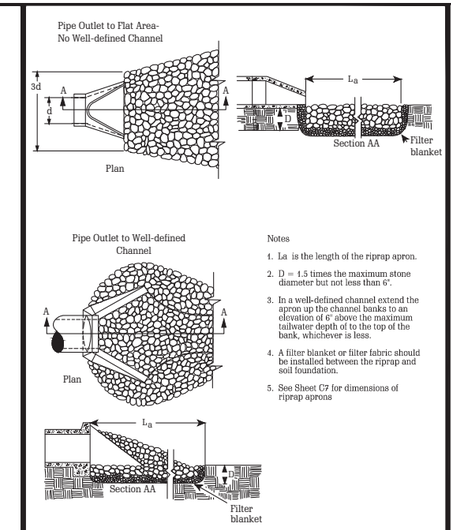


Figure 6-22.9 - Cross-Sectional Detail of Emergency Spillway

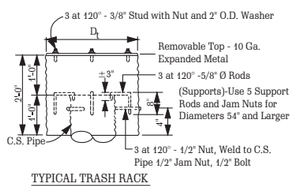


Notes

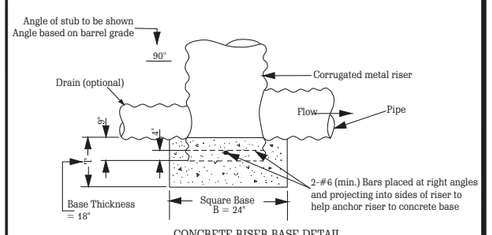
1. La is the length of the riprap apron.
2. D = 1.5 times the maximum stone diameter but not less than 6".
3. In a well-defined channel extend the apron up the channel banks to an elevation of 6" above the maximum tailwater depth of to the top of the bank, whichever is less.
4. A filter blanket or filter fabric should be installed between the riprap and soil foundation.
5. See Sheet C7 for dimensions of riprap aprons

St STORM DRAIN OUTLET PROTECTION
N.T.S.

Figure 6-24.3

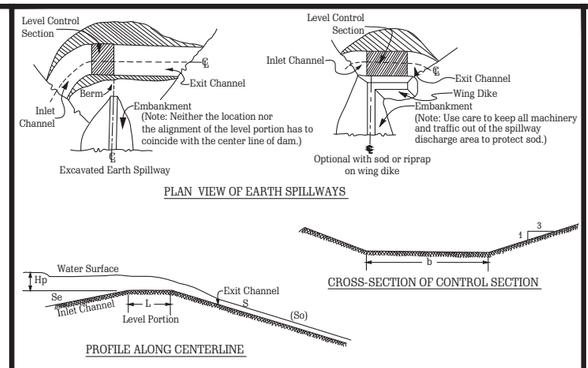


TYPICAL TRASH RACK
Figure 6-22.5



CONCRETE RISER BASE DETAIL
Figure 6-22.6

Sd3 TEMPORARY SEDIMENT BASIN RISER DETAILS
N.T.S.



LEGEND:
Hp = Difference in Elevation between Crest of Earth Spillway at the Control Section and Water Surface in resevoir, in feet.
b = Bottom Width of Earth Spillway at the Control Section, in feet. (Table 6-22.4)
Q = Total Discharge, in cfs.
V = Velocity, in feet per second, that will exist in Channel below Control Section, at Design Q, if constructed to slope (S) that is shown (Table 6-22.4)
S = Flattest Slope (S), in %, allowable for Channel below Control Section. (Table 6-22.4)
Se = Entry Slope
So = Exit Slope

NOTES:
1. For Q, V, S relationship see the chart on the following page.
2. For a given Hp, a decrease in the exit slope as given in the table decreases spillway discharge, but increasing the exit slope from S does not increase discharge. If an exit slope (So) is steeper than S is used, then velocity (Vo) in the exit channel will increase according to the following relationship:

$$Vo = V(So/S)^{0.3}$$

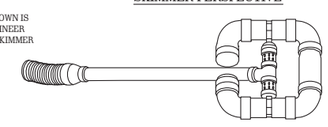
Figure 6-22.7

Sd3 TEMPORARY SEDIMENT BASIN SPILLWAY DETAILS
N.T.S.

TEMPORARY SEDIMENT POND SUPPLEMENT

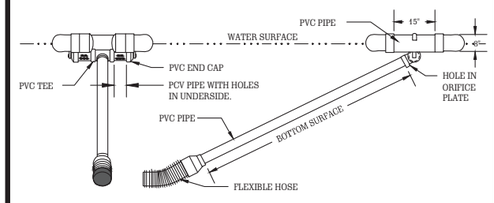
NOTE:
SKIMMER CONFIGURATION SHOWN IS TYPICAL. THE DESIGNER/ENGINEER MAY SUBMIT AN ALTERNATE SKIMMER DETAIL FOR REVIEW.

SKIMMER PERSPECTIVE



SKIMMER FRONTAL SECTION VIEW

SKIMMER SIDE SECTION VIEW



Sk SKIMMER OUTLET DETAIL
N.T.S.

DRAWING 12
EROSION AND SEDIMENT CONTROL DETAILS
SHEET #4

SEAL

EROSION CONTROL CERTIFICATION

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

BY _____
HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

BARGAIN BUYS STORES DEVELOPMENT		
HARRY HIGHBALL CONSULTING ENGINEERS		
OWNER: A. DUNLOP	COUNTY, STATE: TIFT, GEORGIA	
DRAWN BY: JAN JACOBY	LAND LOT: 336	
DATE: MARCH 4, 2013	LAND DISTRICT: 6th	
REVISION NUMBER	REQUESTED BY: GSWCC	DATE

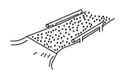
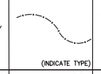
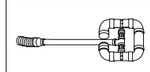
DRAWING 13
EROSION AND
SEDIMENT CONTROL
DETAILS
SHEET #5

GEORGIA
UNIFORM CODING SYSTEM

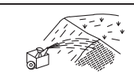
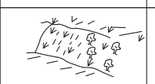
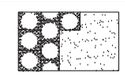
FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT			A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
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.
Sd3	TEMPORARY SEDIMENT BASIN			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.
Sk	FLOATING SURFACE SKIMMER			A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.
St	STORMDRAIN OUTLET PROTECTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)		Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SODDING)		Ds4	A permanent vegetative cover using sods on highly erodable or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.

SEAL

EROSION CONTROL CERTIFICATION

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

BY Harry Highball

HARRY HIGHBALL REGISTERED GEORGIA ENGINEER No. PE123456
LEVEL II CERTIFIED DESIGN PROFESSIONAL - CERTIFICATION NUMBER 0000001234

BARGAIN BUYS STORES DEVELOPMENT	
HARRY HIGHBALL CONSULTING ENGINEERS	
OWNER: A. DUNLOP	COUNTY, STATE: TIFT, GEORGIA
DRAWN BY: JAN JACOBY	LAND LOT: 336
DATE: MARCH 4, 2013	LAND DISTRICT: 6th
REVISION NUMBER	REQUESTED BY: GSWCC / DATE

Insert Yellow Sheet

Back of Yellow Sheet

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
COMMON DEVELOPMENT CONSTRUCTION PROJECTS (Primary and Tertiary Permittees)

SWCD:_____

Project Name:_____ **Address:**_____

City/County:_____ **Date on Plans:**_____

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
		1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
		2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed)
		3 Limit of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist.* (A copy of the written approval by EPD must be attached to the Plan for the Plan to be reviewed.)
		4 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.
		5 Provide the name, address and phone number of the primary permittee or tertiary permittee.
		6 Note total and disturbed acreage of the project or phase under construction.
		7 Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.
		8 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
		9 Description of the nature of construction activity.
		10 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
		11 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
		12 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 18 of the permit.
		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 page 17 &18 of the permit.
		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."*
		15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."

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

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

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."

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

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

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

22 Indication that the applicable portion of the primary permittees ES&PC Plan is to be provided to each secondary permittee prior to the secondary conducting any construction activity and that each secondary shall sign the Plan or portion of the Plan applicable to their site. List the names and addresses of all secondary permittees.*

23 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as any portion of an Biota Impaired Stream Segment, must comply with Part III. C. of thePermit. 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.*

24 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 23 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.*

25 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.

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

27 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.

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

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).

30 Provide complete requirements of inspections and record keeping by the primary permittee or tertiary permittee.

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

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

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

34 Appendix B rationale for NTU values at all outfall sampling points where applicable.*

35 Delineate all sampling locations if applicable, perennial and intermittent streams and other water bodies into which storm water is discharged. *

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.

37 Plan addresses BMPs for all phases of common development including individual building lots and out-parcels, etc. regardless of who owns or operates the individual sites. Include a typical and any situational lots applicable.

38 Graphic scale and North arrow.

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

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or larger scale	Flat 0 - 2%	0.5 or 1
	Rolling 2 - 8%	1 or 2
	Steep 8% +	2,5 or 10

40 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.

41 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.

42 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.

43 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.

44 Delineation and acreage of contributing drainage basins on the project site.

45 Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions.*

46 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed. *

47 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.

48 Soil series for the project site and their delineation.

49 The limits of disturbance for each phase of construction.

50 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justfication explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasable, a written justification explaining this decision must be included in the plan.

51 Location of Best Management Practices that are consistent with, and no less stringent than, the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.

52 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.

53 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.

*This requirement of the Common Development permit is not applicable to Tertiary Permittees with a Plan(s) for a typical individual lot(s), if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each individual lot is less than one (1) acre. If applicable, the * checklist item would be N/A.

Effective January 1, 2016

Insert Tab 10

Resource Information

Back of Tab

Commonly Used Acronyms

BMP: Best Management Practices

CPESC: Certified Professional in Erosion & Sediment Control

CWA: Clean Water Act

DNR: Department of Natural Resources

EMC: Electric Membership Corporation

EPA: Environmental Protection Agency

EPD: Environmental Protection Division

ES&PC: Erosion, Sedimentation & Pollution Control

FEMA: Federal Emergency Management Agency

FERC: Federal Energy Regulatory Commission

GACD: Georgia Association of Conservation Districts

GDOT: Georgia Department of Transportation

GESA: Georgia Erosion & Sediment Control Act

GFC: Georgia Forestry Commission

GSWCC: Georgia Soil & Water Conservation Commission

LDA: Land Disturbing Activity

LIA: Local Issuing Authority

MLRA: Major Land Resource Area

MOA: Memorandum of Agreement

NOI: Notice of Intent

NOT: Notice of Termination

NOV: Notice of Violation

NPDES: National Pollutant Discharge Elimination System

NRCS: Natural Resource Conservation Service

NTU: Nephelometric Turbidity Unit

O.C.G.A.: Official Code of Georgia Annotated

PSC: Public Service Commission

SWCD: Soil & Water Conservation District

TMDL: Total Maximum Daily Load

USACE: United States Army Corps of Engineers

USDA: United States Department of Agriculture

Glossary

Accelerated Erosion – Alteration of the land surface that is intensified by human activities

Agricultural Lime – A soil amendment consisting principally of calcium carbonate ($CaCO_3$)

Base Flow – the discharge that enters the stream channel through the soil

Best Management Practices – schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion & Sediment Control in Georgia" (Manual) published by the State Soil & Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia

Buffer – An area of land immediately adjacent to the banks of State waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat

Certified Personnel – a person who has successfully completed the appropriate certification course approved by GSWCC

Channel Stabilization – improving, constructing or stabilizing an open channel for water conveyance

Check Dam – a temporary grade control structure, or dam constructed across a swale, drainage ditch, or area of concentrated flow

Climate – the statistics of weather. It is measured, usually over a 30-year period, by assessing the patterns of variation in temperature, humidity, atmospheric pressure or precipitation

Coagulant – neutralizes the repulsive electrical charge surrounding a particle allowing it to stick together with other particles to form a clump or floc

Coastal Dune Stabilization – the planting of vegetation on dunes that are denuded, artificially constructed, or re-nourished

Common Development – A contiguous area where multiple, separate, and distinct construction activities will be taking place at different times on different schedules under one plan of development on or after August 1, 2000

Conservation – the protection, improvement and use of natural resources according to principles that will assure their highest economic or social benefit

Construction Activity – The disturbance of soils associated with clearing, grading, excavating, filling of land, or other similar activities

Construction Exit – a stone stabilized pad located at any point where traffic will be leaving a construction site to a public right-of-way, street, alley, sidewalk or parking area

Construction Road Stabilization – a travel-way constructed as part of a construction plan including access roads, subdivision roads, parking areas, and other on-site vehicle transportation routes

Cut-and-Fill – The process of earth moving by excavating part of an area and using the excavated material for adjacent embankments or fill areas

Design Professional – a professional licensed by the State of Georgia in the field of engineering, architecture, landscape architecture, forestry, geology, or land surveying; or a person that is a Certified Professional in Erosion & Sediment Control with a current certification by EnviroCert International Inc.

Direct runoff – the water entering stream channels promptly after rainfalls or snow melts

Disturbed Area Stabilization (with mulching) – the application of plant residue or other suitable material, produced on site if possible, to the soil surface

Disturbed Area Stabilization (with temporary vegetation) – the establishment of temporary vegetative cover with fast growing species for seasonal protection on disturbed or denuded areas

Disturbed Area Stabilization (with permanent vegetation) – the planting of perennial vegetation such as trees, shrubs, vines, grasses, or legumes on exposed areas for final permanent stabilization

Disturbed Area Stabilization (with sodding) – A permanent vegetative cover using sod on highly erodible or critically eroded lands

Diversion – a ridge of compacted soil, constructed above, across, or below a slope

Drainage Structure – a device composed of a virtually non-erodible material such as concrete, steel, plastic or other such material that conveys water from one place to another by intercepting the flow and carrying it to a release point for storm water management, drainage control, or flood control purposes

Dust Control – The control of surface and air movement of dust on construction, roads, and demolition sites

Ephemeral Stream – a stream that flows only in direct response to precipitation

Erosion – The process by which the land surface is worn away by the action of water, wind, ice and gravity

ES&PC Plan – An Erosion, Sediment & Pollution Control Plan for the control of soil erosion and sediment resulting from a land-disturbing activity

Filling – the placement of any soil or solid material either organic or inorganic on a natural ground surface or an excavation

Filter Ring – a temporary stone barrier constructed at storm drain inlets and pond outlets

Final Stabilization – all soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by 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)

Floating Surface Skimmer – a buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow

Flocculant – facilitates the agglomeration or aggregation of coagulated particles to form larger floccules that slowly drop out of suspension

Gabion – a large, multi-celled, welded wire or rectangular wire mesh box used to stabilize highly erosive slopes

Grade Stabilization Structure – a structure used to stabilize the grade in a natural or artificial channel

Grade – the slope of a road, channel, or natural ground

Gradient – The number of horizontal units per vertical units

Geologic Erosion – The natural erosion caused by geologic processes acting over long geologic periods

Geotextile – a term used to describe woven or non-woven fabric materials used to reinforce or separate soil and other materials

Hydric soils – soils that were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season

Hydrophytic vegetation – a plant that grows partially or fully submerged in water

Infrastructure Construction – Construction activities that are not part of a common development that include the construction, installation, and maintenance of roadway and railway projects and conduits, pipes, pipelines, substations, cables, wires, trenches, vaults, manholes, and similar or related structures for the conveyance of natural gas, liquid petroleum products, electricity, telecommunications, water, storm water, or sewage

Inlet Sediment Trap – a temporary protective device formed at or around an inlet to a storm drain to trap sediment

Intermittent Stream – a stream, or portion of a stream, that flows only in direct response to precipitation

Interstate Commerce – as had, presently has, or potential to have interstate commerce

Land-disturbing Activity – Any activity which may result in soil erosion from water or wind and the movement of sediments into state water or onto state lands, including, but not limited to clearing, dredging, grading, excavating, transporting, and filling of land

Level Spreader – a storm flow outlet device constructed at zero grade across the slope

Local issuing Authority – The governing authority of any county or municipality which is certified pursuant to subsection (a) of Code Section 12-7-8

Marshlands – any marshland intertidal area, mud flat, tidal water bottom, or salt marsh in the State within the estuarine area of the state, whether or not the tidewaters reach the littoral areas through natural or artificial watercourses

Mass Grading – the movement of earth by mechanical means to alter the gross topographic features (elevations, slopes, etc.) in order to prepare a site for final grading and the construction of facilities (buildings, roads, parking, etc.)

Manual – The Manual for Erosion & Sediment Control in Georgia is the published guidance of the GSWCC governing the design and practices to be utilized in the protection of the state's natural resources from erosion and sedimentation

Navigable waters – waters subject to the ebb and flow of the tide and has a connection to the transportation of interstate commerce

Nephelometric Turbidity Unit – a numerical unit of measure based upon photometric analytical techniques for measuring the light scattered by fine particles of a substance in suspension.

Normal Business Hours – Monday thru Friday, 8:00 AM to 5:00 PM, excluding any non-working Saturday, non-working Sunday and non-working Federal holiday.

Normal Stream Flow – any stream flow that consists solely of base flow or consists of both base flow and direct runoff during any period of the year

Outfall – the location where storm water, in a discernible, confined and discrete conveyance, leaves a facility or construction site or, if there is a receiving water on site, becomes a point source discharging into that receiving water

Perennial Stream – a stream with base flow that maintains stream flow throughout the year under normal circumstances

Permanent Downdrain – a permanent structure used to safely convey surface runoff from the top of a slope to the bottom of the slope

pH – a numerical measure of the acidity or hydrogen ion activity

Primary Permittee – The owner or operator or both of a tract of land for a construction project subject to the permit

Primary Trout Waters – any stream supporting a self-sustaining population of Rainbow, Brown, or Brook Trout

Receiving Water(s) – all perennial and intermittent waters of the State into which the runoff of storm water from a construction activity will actually discharge, either directly or indirectly

Retaining Wall – a wall constructed of one or more of the following: concrete masonry, reinforced concrete, cribbing, treated timbers, steel pilings, gabions, stone drywall, rock riprap, etc….

Retrofit – a device or structure placed in front of a permanent storm water detention pond outlet or roadway drainage structure to serve as a temporary filter

Rill Erosion – an erosion process in which numerous small channels, only several inches deep, occur mainly on recently disturbed and exposed soils

Riprap – broken rocks, cobbles, or boulders placed

Roadway Drainage Structure – a device such as a bridge, culvert, or ditch, composed of a virtually non-erodible material such as concrete, steel, plastic, or other such material that

conveys water under a roadway by intercepting the flow on one side of a traveled roadway consisting of one or more defined lanes, with or without shoulder areas, and carrying water to a release point on the other side

Rock Filter Dam – a temporary stone filter dam installed across a drainage way or in conjunction with a temporary sediment trap

Secondary Permittee – An owner, individual builder, utility company, or utility contractor that conducts a construction activity within a common development with an existing primary permittee

Secondary Trout Waters – streams with no evidence of natural trout reproduction but capable of supporting trout throughout the year

Sediment – solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by, wind, water, ice, or gravity as a product of erosion

Sediment barrier – a temporary structure made of a porous material typically supported by steel or wood posts

Sedimentation – The process by which eroded material is transported and deposited by water, wind, ice and gravity

Seep Berm – a linear control device constructed as a diversion perpendicular to the direction of runoff to enhance dissipation and infiltration of the runoff, while creating multiple sedimentation chambers with the employment of intermediate dikes

Sheetflow – runoff which flows over the ground surface as a thin, even layer, not concentrated in a channel

Sheet Erosion – the removal of a fairly uniform layer of soil from the land surface by runoff water

Slope Stabilization – A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shorelines, or channels

Soil – the unconsolidated mineral and organic material on the immediate surface of the Earth that serves as natural medium for the growth of land plants

Splash Erosion – The spattering of small soil particles caused by the impact of raindrops on wet soils

Stand Alone Construction – Construction activities that are not part of a common development where the primary permittee chooses not to use secondary permittees

State waters – includes any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the state, which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation

Storm Drain Outlet Protection – a paved and/or riprap channel section placed below storm drain outlets

Storm Water – storm water runoff, snow melt runoff, and surface runoff and drainage

Stream Diversion Channel – a temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed in the stream channel

Streambank Stabilization – the use of readily available native plant materials to maintain and enhance streambanks

Sub-contractor – an entity employed or retained by the permittee to conduct any type of construction activity (as defined in this permit) at a stand alone construction site

Surface Roughening – providing a rough soil surface with horizontal depressions created by operating a tillage or other suitable implement on the contour

Tackifier – A tie-down for soil, compost, seed, straw, hay or mulch

Temporary Downdrain – a temporary structure used to convey concentrated storm water runoff down the face of cut or fill slopes

Temporary Sediment Basin – a basin created by the construction of a barrier or dam across a concentrated flow area, or by excavating a basin, or by a combination of both

Temporary Sediment Trap – a small temporary pond that drains a disturbed area so that sediment can settle out

Temporary Stream Crossing – a temporary structure installed across a flowing stream or watercourse for use by construction equipment

Tertiary Permittee – The owner or operator of remaining lot(s) within a common development conducting a construction activity where the primary permittee and all secondary permittees have submitted a Notice of Termination or where a primary permittee no longer exists

Topography – The arrangement of the natural or artificial physical features of an area

Topsoiling – the stripping off of the more fertile top soil, storing it, and then spreading it over the disturbed area after completion of construction activities

Tree Protection – protection for desirable trees from injury during construction activity

Turbidity Curtain – a floating or staked barrier installed within the water column

Turf Reinforcement Matting – a permanent geo-synthetic matting that is used to stabilize the soil while permanent vegetation is taking root

Vegetated Waterway – a natural or constructed channel that is shaped and graded to the required dimensions and established in suitable vegetation

Wetland – those areas inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support a prevalence of vegetation adapted for life in saturated soil conditions

Wrested vegetation – the point where vegetation has been wrested away by normal stream flow or wave action

P.O. Box 8024
Athens, GA 30603
P: (706) 552-4470
F: (706) 552-4486

Commission Members

Garland Thompson	Harold Fallin	Jason Winters	Drew Echols	Bob Martin
Chair	Vice Chair	Lyerly, GA	Alto, GA	Ocilla, GA
Douglas, GA	Thomaston, GA	Region 1	Region 2	Region 5
Region 3	Region 4			

Headquarters Staff

Brent Dykes – Executive Director – bdykes@gaswcc.org
La Shawn Jennings – Administrative Assistant – ljennings@gaswcc.org

Financial Personnel

Cynthia Wilbur – Administrative Operations Manager – cwilbur@gaswcc.org
Karen Parson – Procurement Officer – kparson@gaswcc.org
Andy Pope – Personnel Representative – apope@gaswcc.org

Information Technology Program

Erik McCutheon – IT Director – emccutcheon@gaswcc.org
Ernell Babb – IT Project Specialist – ebabb@gaswcc.org
Bryan Johnson – GIS Analyst – bjohnson@gaswcc.org

Urban Program

Ben Ruzowicz – Program Manager – bruzowicz@gaswcc.org
Brady Hart – Technical Specialist – bhart@gaswcc.org
Jennifer Standridge – Data Entry Specialist – jstandridge@gaswcc.org
Melanie Hill – Administrative Assistant – mhill@gaswcc.org

Rural Program

Bob Fulmer – Program Manager – bfulmer@gaswcc.org
Jessica Bee – Agricultural Water Quality Project Specialist – jbee@gaswcc.org

GEORGIA SOIL & WATER CONSERVATION COMMISSION

gaswcc.georgia.gov

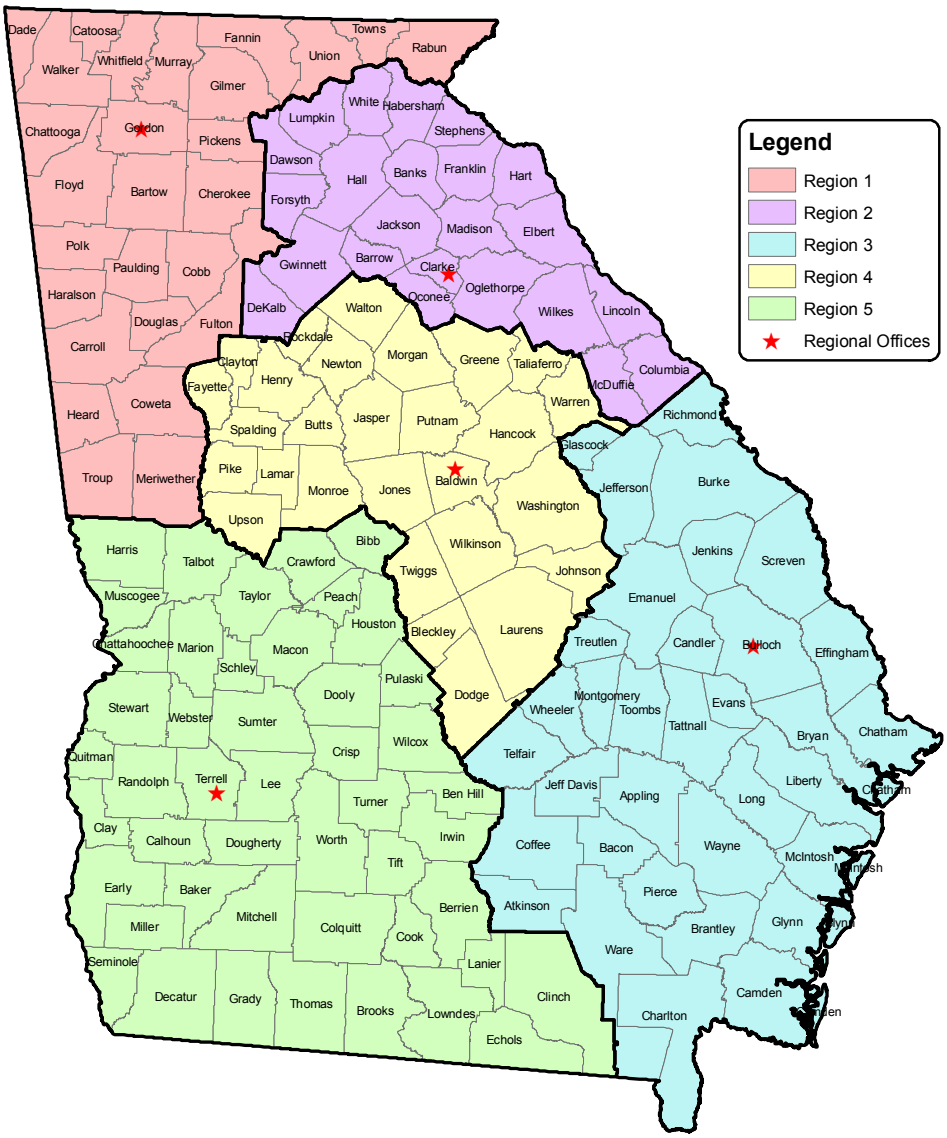
Region 1
1282 SR 53 Spur SW
Suite 300
Calhoun, GA 30701
(706) 624-1434

Region 2
4310 Lexington Road
Athens, GA 30603
(706) 552-4479

Region 3
151 Langston Chapel Rd
Suite 700
Statesboro, GA 30459
(912) 681-5241

Region 4
3014 Heritage Road
Suite 1
Milledgeville, GA 301061
(478) 445-5766

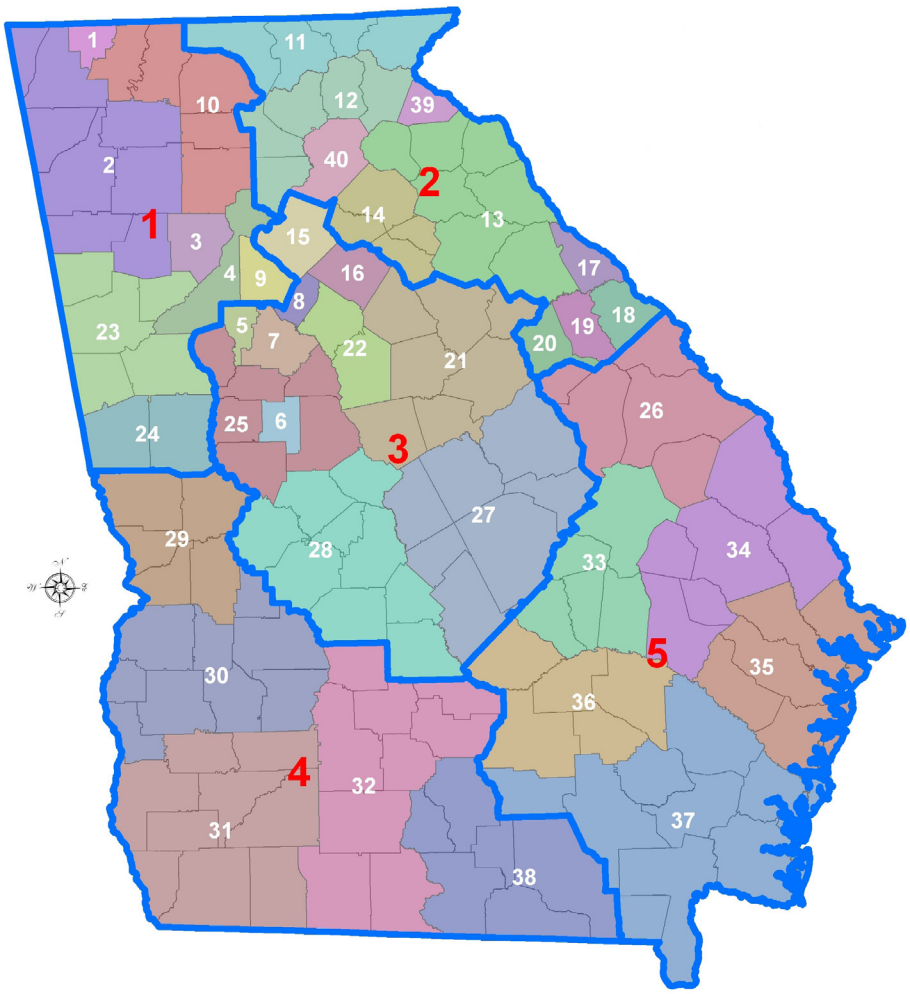
Region 5
4344 Albany Highway
Dawson, GA 39842
(229) 995-6001



Georgia Soil & Water Conservation Districts

www.gacd.us

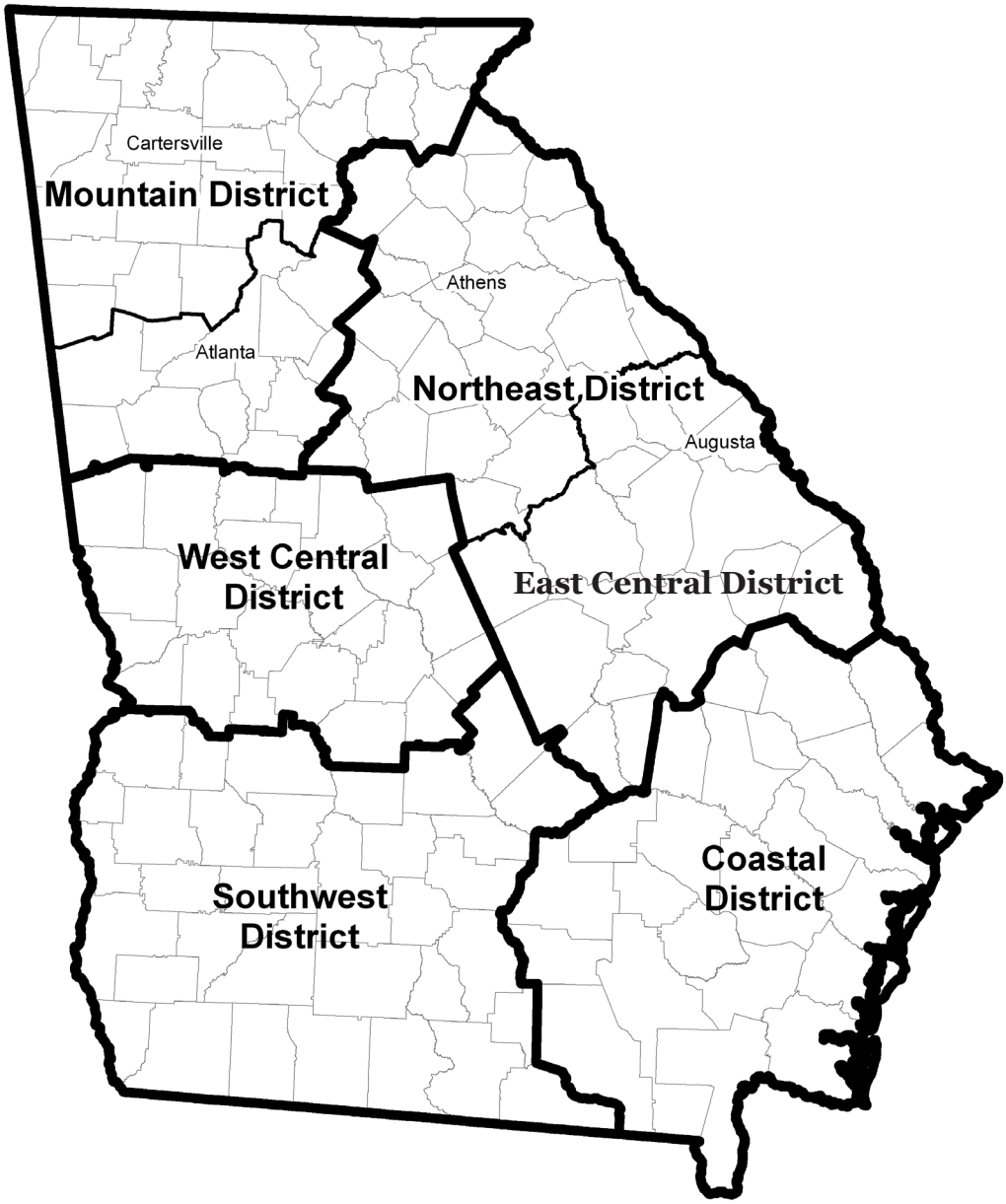
1. Catoosa County
2. Coosa River
3. Cobb County
4. Fulton County
5. Clayton County
6. Lamar County
7. Henry County
8. Rockdale County
9. Dekalb County
10. Limestone Valley
11. Blue Ridge Mountain
12. Upper Chattahoochee River
13. Broad River
14. Oconee River
15. Gwinnett County
16. Walton County
17. Lincoln County
18. Columbia County
19. McDuffie County
20. Warren County
21. Piedmont
22. Upper Ocmulgee River
23. West Georgia
24. Roosevelt
25. Towaliga
26. Brier Creek
27. Central Georgia
28. Ocmulgee River
29. Pine Mountain
30. Lower Chattahoochee River
31. Flint River
32. Middle South Georgia
33. Ohoopee River
34. Ogeechee River
35. Coastal Georgia
36. Altamaha
37. Satilla River
38. Alapaha
39. Stephens County
40. Hall County



GA DNR
Environmental Protection Division

epd.georgia.gov

GEORGIA
DEPARTMENT OF NATURAL RESOURCES



West Central District
2640 Shurling Drive
Macon, GA 31211
(478) 751-6612

Mountain District (Atlanta)
4244 International Parkway
Atlanta, GA 30354
(404) 362-2671

Northeast District
745 Gaines School Road
Athens, GA 30605
(706) 369-6376

Mountain District (Cartersville)
P.O. Box 3250
16 Center Road
Cartersville, GA 30120
(770) 387-4900

Southwest District
2024 Newton Road
Albany, GA 31701
(229) 430-4144

Coastal District
400 Commerce Center Dr.
Brunswick, GA 31523
(912) 264-7284

East Central District
3525 Walton Way Ext.
Augusta, GA 30909
(706) 667-4343

Georgia Department of Transportation

www.dot.ga.gov

District 1
2505 Athens Hwy SE
Gainesville, GA 30507
(770) 531-5721

District 2
643 Hwy 15 S
Tennille, GA 31089
(478) 553-3301

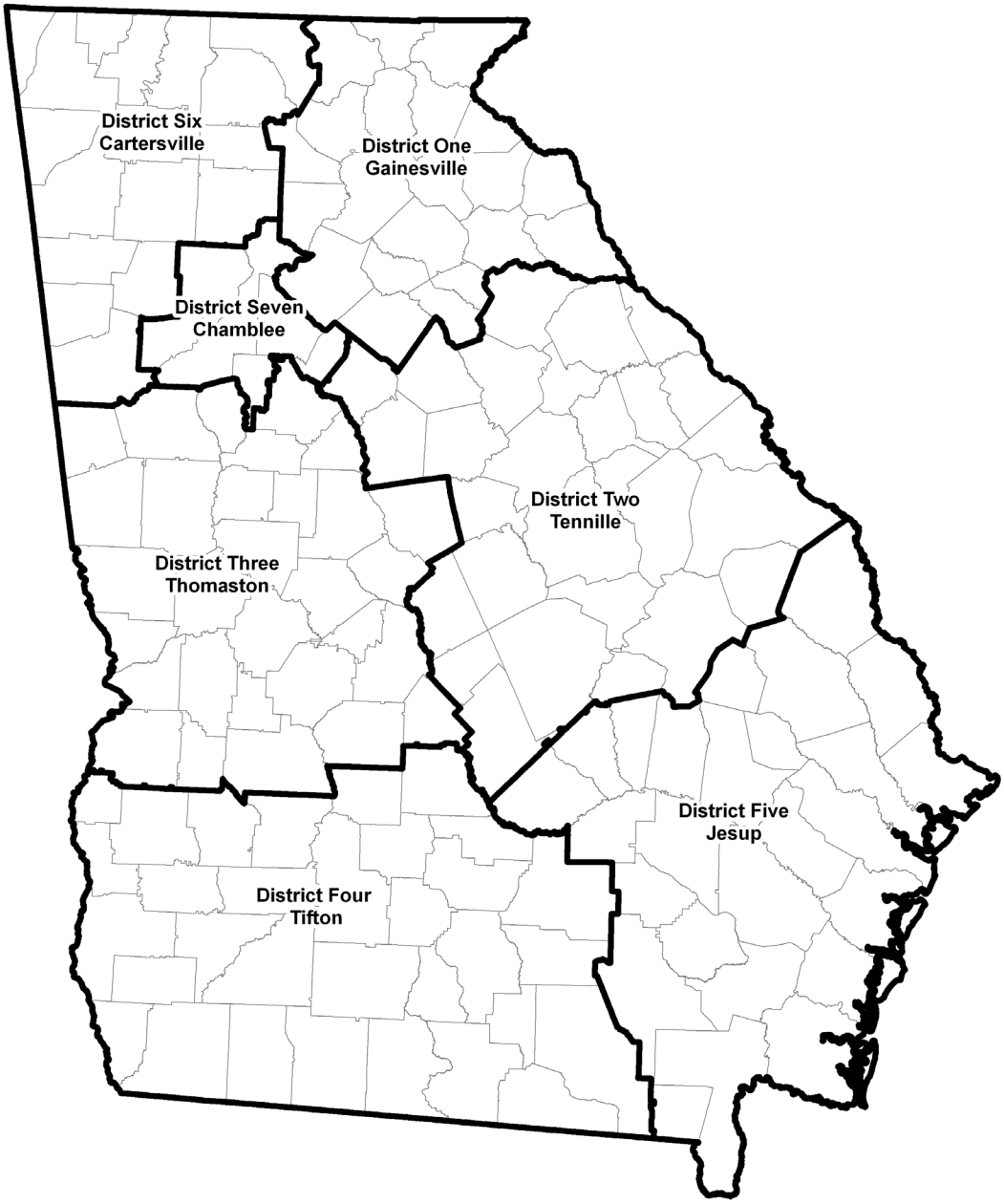
District 3
115 Transportation Blvd
Thomaston, GA 30286
(706) 646-6900

District 4
710 West 2nd St.
Tifton, GA 31794
(229) 386-3280

District 5
204 North Highway 301
Jesup, GA 31546
(912) 427-5711

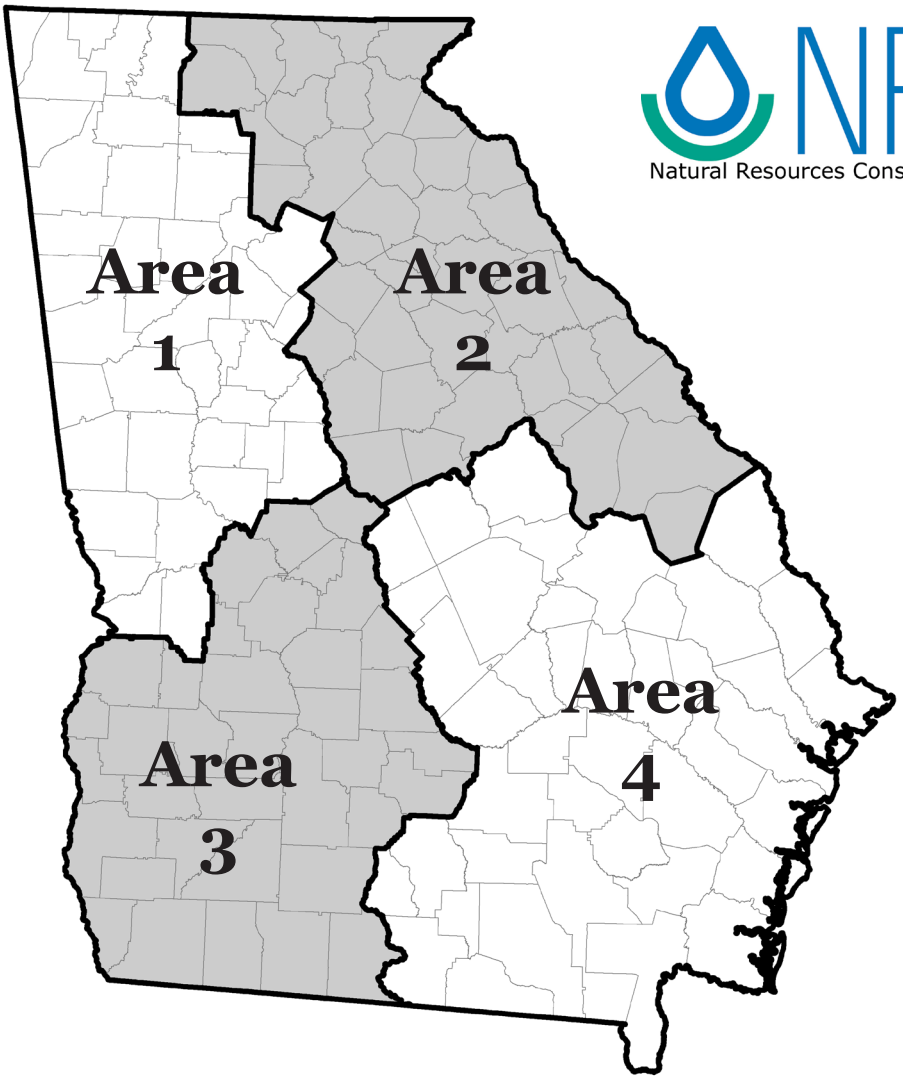
District 6
500 Joe Frank Harris Pkwy
Cartersville, GA 30120
(770) 387-3602

District 7
5025 New Peachtree Rd
Chamblee, GA 30341
(770) 986-1011



Natural Resources Conservation Service

www.nrcs.usda.gov



Area 1
Federal Building Room G-27
201 West Solomon St.
Griffin, GA 30224
(770) 227-1026

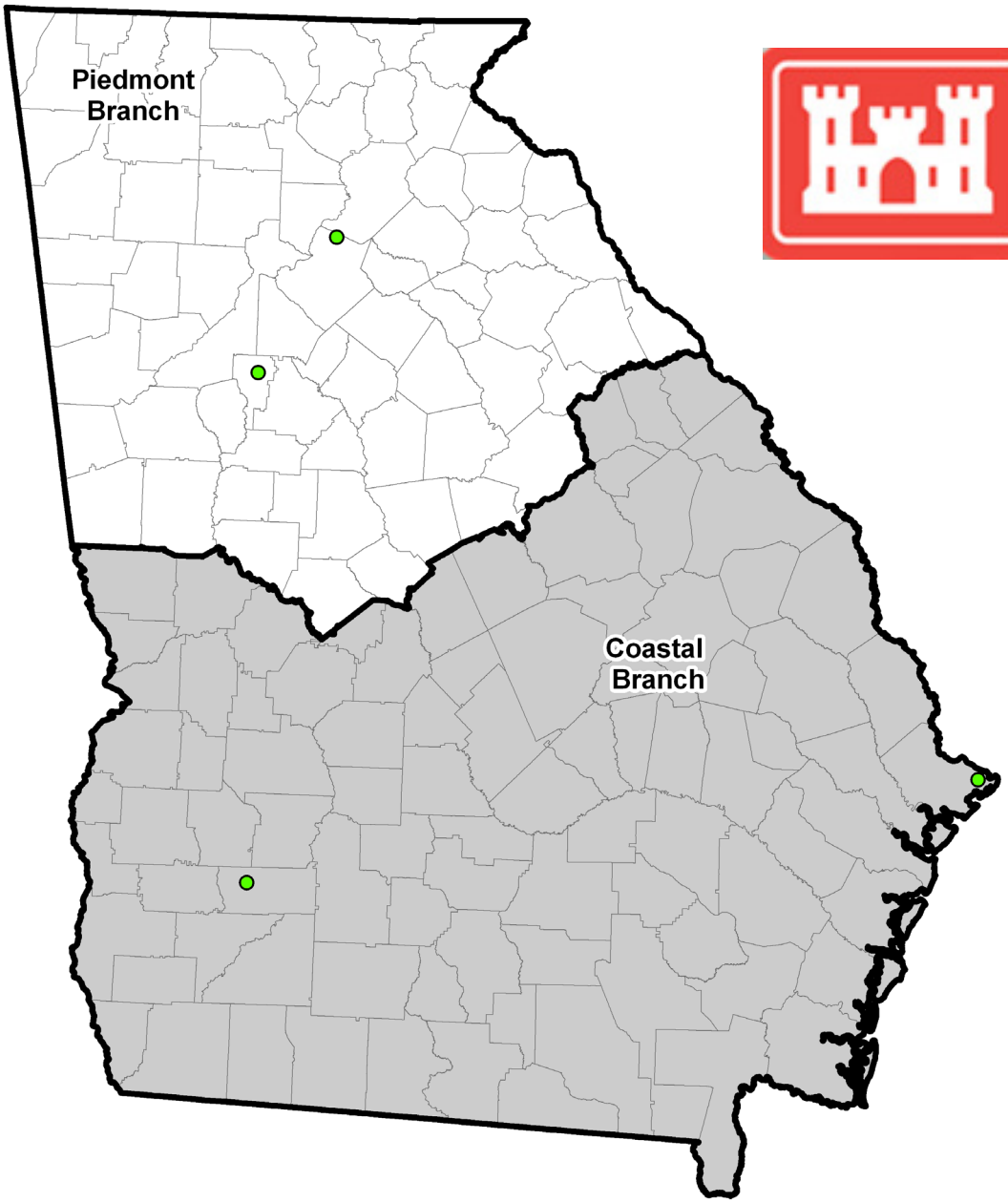
Area 2
Federal Building
355 East Hancock Ave.
Athens, GA 30601
(706) 546-2039

Area 3
Plant Materials Center
295 Morris Drive
Americus, GA 31709
(229) 924-0544

Area 4
Federal Building Room 214
601 Tabeau St.
Waycross, GA 31502
(912) 283-5598

United States Army Corps of Engineers

www.sas.usace.army.mil/



Coastal Branch
100 W. Oglethorpe Ave
Savannah, GA 31401
(912) 652-5279

Piedmont Branch
1590 Adamson Parkway
Suite 200
Morrow, GA 30260
(678) 422-2735

Georgia Forestry Commission

www.gfc.state.ga.us

Coosa District (1)
Gainesville Office
3005 Atlanta Hwy
Gainesville, GA 30507
(770) 531-6043/6048

Rome Office
3086 Martha Berry Hwy NE
Rome, GA 30165
(706) 295-6021/6022

Flint District (2)
Camilla Office
3561 Hwy 112
Camilla, GA 31730
(229) 522-3580/3581

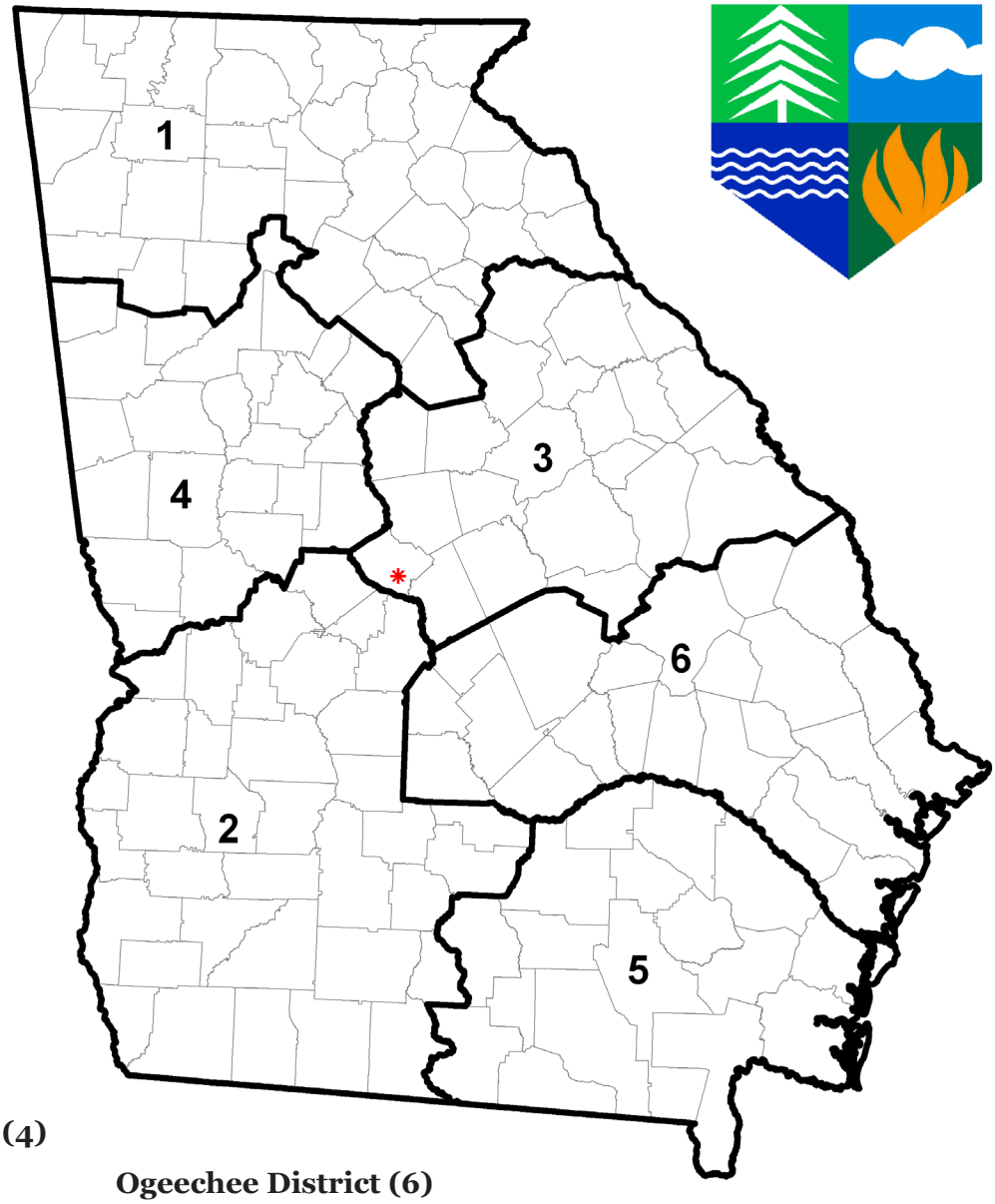
Americus Office
243 US Hwy 19 North
Americus, GA 31719
(229) 931-2436/2437

Oconee District (3)
Milledgeville Office
119 Hwy 49
Milledgeville, GA 31061
(478) 445-5164/5548

Washington Office
1465 Tignall Road
Washington, GA 30673
(706) 678-2015

Chattahoochee District (4)
Newnan Office
187 Corinth Rd
Newnan, GA 30263
(770) 254-7218

Satilla District (5)
Waycross Office
5003 Jacksonville Hwy
Waycross, GA 31503
(912) 287-4915



Ogeechee District (6)
McRae Office
Route 1 Box 67
Helena, GA 31037
(229) 868-3385

Statesboro Office
18899 US Hwy 301 North
Statesboro, GA 30461
(912) 681-0490/0496

ID Number	County	Municipality	Local Issuing Authority	LIA Contact	Email		SWCD	GSWCC Region	EPD District Office
LIA-001-00	**Appling**		NO				Altamaha	Region III	Coastal District - Brunswick
LIA-001-01	Appling	Baxley	YES	Milton (Shane) Crosby	scrosby@atc.cc	(912) 367-8300	Altamaha	Region III	Coastal District - Brunswick
LIA-001-02	Appling	Graham	NO				Altamaha	Region III	Coastal District - Brunswick
LIA-001-03	Appling	Surrency	NO				Altamaha	Region III	Coastal District - Brunswick
LIA-002-00	**Atkinson**		NO				Satilla River	Region III	Coastal District - Brunswick
LIA-002-01	Atkinson	Pearson	YES	Gary Jewell, Acting Police Chief	pearson_ga@planttel.net	(912) 422-7411	Satilla River	Region III	Coastal District - Brunswick
LIA-002-02	Atkinson	Willacoochee	NO				Satilla River	Region III	Coastal District - Brunswick
LIA-003-00	**Bacon**		NO				Altamaha	Region III	Coastal District - Brunswick
LIA-003-01	Bacon	Alma	NO				Altamaha	Region III	Coastal District - Brunswick
LIA-004-00	**Baker**		NO				Flint River	Region V	Southwest District - Albany
LIA-004-01	Baker	Newton	NO				Flint River	Region V	Southwest District - Albany
LIA-005-00	**Baldwin**		YES	Robert West, Code Enforcement		(478) 445-4205	Piedmont	Region IV	Northeast District - Athens
LIA-005-01	Baldwin	Milledgeville	YES	Mervin G. Graham, Zoning Administrator	mervin@milledgevillega.us	(478) 414-4021	Piedmont	Region IV	Northeast District - Athens
LIA-006-00	**Banks**		YES	Keith Covington	kcovington@co.banks.ga.us	(706) 677-4272	Broad River	Region II	Northeast District - Athens
LIA-006-01	Banks	Homer	YES				Broad River	Region II	Northeast District - Athens
LIA-006-02	Banks	Maysville	YES	Clarence J. Sullens	cchief661@windstream.net	(706) 652-3494	Broad River	Region II	Northeast District - Athens
LIA-007-00	**Barrow**		YES	Rebecca Whiddon, Senior Planner	rwhiddon@barrowga.gov	(770) 307-3034	Oconee River	Region II	Northeast District - Athens
LIA-007-01	Barrow	Auburn	YES				Oconee River	Region II	Northeast District - Athens
LIA-007-02	Barrow	Bethlehem	NO				Oconee River	Region II	Northeast District - Athens
LIA-007-03	Barrow	Carl	NO				Oconee River	Region II	Northeast District - Athens
LIA-007-04	Barrow	Statham	NO				Oconee River	Region II	Northeast District - Athens
LIA-007-05	Barrow	Winder	NO				Oconee River	Region II	Northeast District - Athens
LIA-008-00	**Bartow**		YES	Lamont Kiser, County Engineer	kiserl@bartowga.org	(770) 387-5030	Coosa River	Region I	Mountain District - Cartersville
LIA-008-01	Bartow	Adairsville	YES	Ben Skipper, Community Development		(770) 773-3451	Coosa River	Region I	Mountain District - Cartersville
LIA-008-02	Bartow	Cartersville	YES	Randy Mannino, Planning and Development		(770) 607-6181	Coosa River	Region I	Mountain District - Cartersville
LIA-008-03	Bartow	Emerson	YES	Kevin McBurnett, City Manager		(770) 382-9819	Coosa River	Region I	Mountain District - Cartersville
LIA-008-04	Bartow	Euharlee	YES	Ronn Goss, Planning and Zoning Director	ron@pennanctcm.com	(770) 386-1542	Coosa River	Region I	Mountain District - Cartersville
LIA-008-05	Bartow	Kingston	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-008-06	Bartow	Taylorsville	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-008-07	Bartow	White	YES	Jane L. Richards, City Manager		(770) 382-5466	Coosa River	Region I	Mountain District - Cartersville
LIA-009-00	**Ben Hill**		YES	Jason Miller, Building Inspector		(229) 426-5149	Middle South Georgia	Region V	Southwest District - Albany
LIA-009-01	Ben Hill	Fitzgerald	YES	Justin N. Poole	commdev@fitzgeraldga.org	(229) 426-5063	Middle South Georgia	Region V	Southwest District - Albany
LIA-010-00	**Berrien**		YES	Benjamin Warren, Public Works Director		(229) 686-5421	Alapaha	Region V	Southwest District - Albany
LIA-010-01	Berrien	Alapaha	NO				Alapaha	Region V	Southwest District - Albany
LIA-010-02	Berrien	Enigma	NO				Alapaha	Region V	Southwest District - Albany
LIA-010-03	Berrien	Nashville	YES	Henry Yawn, Planning and Zoning Office	nashvillecitycode@windstream.net	(229) 686-6589	Alapaha	Region V	Southwest District - Albany
LIA-010-04	Berrien	Ray City	NO				Alapaha	Region V	Southwest District - Albany
LIA-011-00	**Bibb**		YES	Keith Braswell, Engineer	kbraswell@co.bibb.ga.us	(478) 621-6660	Ocmulgee River	Region V	West Central District - Macon
LIA-011-01	Bibb	Macon	YES	Keith Braswell, Engineer	kbraswell@co.bibb.ga.us	(478) 621-6660	Ocmulgee River	Region V	West Central District - Macon
LIA-011-02	Bibb	Payne City	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-012-00	**Bleckley**		NO				Central Georgia	Region IV	West Central District - Macon
LIA-012-01	Bleckley	Cochran	NO				Central Georgia	Region IV	West Central District - Macon
LIA-013-00	**Brantley**		NO				Satilla River	Region III	Coastal District - Brunswick
LIA-013-01	Brantley	Hoboken	NO				Satilla River	Region III	Coastal District - Brunswick
LIA-013-02	Brantley	Nahunta	NO				Satilla River	Region III	Coastal District - Brunswick
LIA-014-00	**Brooks**		NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-014-01	Brooks	Morven	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-014-02	Brooks	Quitman	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-015-00	**Bryan**		YES	Kirk D. Croasmun, PE, County Engineer	kcroasmun@bryan-county.org	(912) 756-7953	Coastal	Region III	Coastal District - Brunswick
LIA-015-01	Bryan	Pembroke	YES				Coastal	Region III	Coastal District - Brunswick
LIA-015-02	Bryan	Richmond Hill	YES	Steve Scholar, Planning and Zoning	sscholar@richmondhill-ga.gov	(912) 756-3851	Coastal	Region III	Coastal District - Brunswick
LIA-016-00	**Bulloch**		YES	Robert (Larry) Evans, Building Department	inspections@bullochcounty.net	(912) 489-1356	Ogeechee River	Region III	Coastal District - Brunswick
LIA-016-01	Bulloch	Brooklet	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-016-02	Bulloch	Portal	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-016-03	Bulloch	Register	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-016-04	Bulloch	Statesboro	YES	Brad Deal, Assistant City Engineer	bdeal@statesboroga.net	(912) 764-0655	Ogeechee River	Region III	Coastal District - Brunswick
LIA-017-00	**Burke**		NO				Brier Creek	Region III	Northeast District - Augusta
LIA-017-01	Burke	Girard	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-017-02	Burke	Keysville	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-017-03	Burke	Midville	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-017-04	Burke	Sardis	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-017-05	Burke	Vidette	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-017-06	Burke	Waynesboro	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-018-00	**Butts**		YES	Douglas Manning, Community Development	dmanning@buttscounty.org	(770) 775-8210	Towaliga	Region IV	Northeast District - Athens
LIA-018-01	Butts	Flovilla	NO				Towaliga	Region IV	Northeast District - Athens
LIA-018-02	Butts	Jackson	YES	Douglas Manning, Community Development	dmanning@buttscounty.org	(770) 775-8210	Towaliga	Region IV	Northeast District - Athens
LIA-018-03	Butts	Jenkinsburg	NO				Towaliga	Region IV	Northeast District - Athens
LIA-019-00	**Calhoun**		NO				Flint River	Region V	Southwest District - Albany
LIA-019-01	Calhoun	Arlington	NO				Flint River	Region V	Southwest District - Albany

LIA-019-02	Calhoun	Edison	NO				Flint River	Region V	Southwest District - Albany
LIA-019-03	Calhoun	Leary	NO				Flint River	Region V	Southwest District - Albany
LIA-019-04	Calhoun	Morgan	NO				Flint River	Region V	Southwest District - Albany
LIA-020-00	**Camden**		YES				Satilla River	Region III	Coastal District - Brunswick
LIA-020-01	Camden	Kingsland	YES	Ken Kessler, Planning and Development	kkessler@kingslandgeorgia.com	(912) 729-8279	Satilla River	Region III	Coastal District - Brunswick
LIA-020-02	Camden	St. Marys	YES	Christopher Cox, Public Works Department	christopher.cox@ci.st-marys.ga.us	(912) 882-4415	Satilla River	Region III	Coastal District - Brunswick
LIA-020-03	Camden	Woodbine	NO				Satilla River	Region III	Coastal District - Brunswick
LIA-021-00	**Candler**		YES	James Flynt, Administrator	candler@pineland.net	(912) 685-2835	Ogeechee River	Region III	Coastal District - Brunswick
LIA-021-01	Candler	Metter	YES	Cliff Hendrix, Public Works Director	chendrix@pineland.net	(912) 685-7845	Ogeechee River	Region III	Coastal District - Brunswick
LIA-021-02	Candler	Pulaski	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-022-00	**Carroll**		YES	Brian Kent, County Engineer	bkent@carrollcountyga.com	(770) 830-5861	West Georgia	Region I	Mountain District - Atlanta
LIA-022-01	Carroll	Bowdon	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-022-02	Carroll	Carrollton	YES	Jeff Cantrell, Building Inspector	jcantrell@carrollton-ga.gov		West Georgia	Region I	Mountain District - Atlanta
LIA-022-03	Carroll	Mt. Zion	YES	Teresa Ferguson, City Manager	teresa@cityofmountzion.com	(770) 832-1622	West Georgia	Region I	Mountain District - Atlanta
LIA-022-04	Carroll	Roopville	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-022-05	Carroll	Temple	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-022-06	Carroll	Villa Rica	YES				West Georgia	Region I	Mountain District - Atlanta
LIA-022-07	Carroll	Whitesburg	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-023-00	**Catoosa**		YES	James Davis, Zoning Administrator	james.davis@catoosa.com	(706) 965-3787	Catoosa County	Region I	Mountain District - Cartersville
LIA-023-01	Catoosa	Ft. Oglethorpe	YES	Jillian Lacy	jalacy@fortogov.com	(706) 866-2544	Catoosa County	Region I	Mountain District - Cartersville
LIA-023-02	Catoosa	Ringgold	YES	Thomas Catlett, Code Enforcement		(706) 935-3061	Catoosa County	Region I	Mountain District - Cartersville
LIA-024-00	**Charlton**		YES	Al Crace, County Administrator	al.crage12.charlton@gmail.com	(912) 496-2549	Satilla River	Region III	Coastal District - Brunswick
LIA-024-01	Charlton	Folkston	YES	Lenoard (Pender) H. Lloyd, City Manager		(912) 496-2563	Satilla River	Region III	Coastal District - Brunswick
LIA-024-02	Charlton	Homeland	YES	Austin Hickox, Mayor		(912) 496-7332	Satilla River	Region III	Coastal District - Brunswick
LIA-025-00	**Chatham**		YES				Coastal	Region III	Coastal District - Brunswick
LIA-025-01	Chatham	Bloomingdale	YES				Coastal	Region III	Coastal District - Brunswick
LIA-025-02	Chatham	Garden City	YES				Coastal	Region III	Coastal District - Brunswick
LIA-025-03	Chatham	Pooler	YES				Coastal	Region III	Coastal District - Brunswick
LIA-025-04	Chatham	Port Wentworth	NO				Coastal	Region III	Coastal District - Brunswick
LIA-025-05	Chatham	Savannah	YES				Coastal	Region III	Coastal District - Brunswick
LIA-025-06	Chatham	Thunderbolt	NO				Coastal	Region III	Coastal District - Brunswick
LIA-025-07	Chatham	Tybee Island	YES	Downer Davis, Code Enforcement		(912) 472-5030	Coastal	Region III	Coastal District - Brunswick
LIA-025-08	Chatham	Vernonburg	NO				Coastal	Region III	Coastal District - Brunswick
LIA-026-00	**Chattahoochee**		NO				Pine Mountain	Region V	West Central District - Macon
LIA-026-01	Chattahoochee	Cusseta	NO				Pine Mountain	Region V	West Central District - Macon
LIA-027-00	**Chattooga**		YES				Coosa River	Region I	Mountain District - Cartersville
LIA-027-01	Chattooga	Lyerly	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-027-02	Chattooga	Menlo	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-027-03	Chattooga	Summerville	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-027-04	Chattooga	Trion	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-028-00	**Cherokee**		YES	Kenny Phelps, Development Inspection Mgr	kphelps@cherokeega.com	(678) 493-6077	Limestone Valley	Region I	Mountain District - Cartersville
LIA-028-01	Cherokee	Ball Ground	NO				Limestone Valley	Region I	Mountain District - Cartersville
LIA-028-02	Cherokee	Canton	YES	Merrick McClure, Stormwater Coordinator	merrick.mcclure@canton-georgia.com	(770) 704-1539	Limestone Valley	Region I	Mountain District - Cartersville
LIA-028-03	Cherokee	Holly Springs	YES				Limestone Valley	Region I	Mountain District - Cartersville
LIA-028-04	Cherokee	Waleska	NO				Limestone Valley	Region I	Mountain District - Cartersville
LIA-028-05	Cherokee	Woodstock	YES				Limestone Valley	Region I	Mountain District - Cartersville
LIA-029-00	**Clarke**		YES	John Spagna, Community Protection Division	john.spagna@athensclarkecounty.com	(706) 613-3790	Oconee River	Region II	Northeast District - Athens
LIA-029-01	Clarke	Athens	YES	John Spagna, Community Protection Division	john.spagna@athensclarkecounty.com	(706) 613-3790	Oconee River	Region II	Northeast District - Athens
LIA-029-02	Clarke	Winterville	NO				Oconee River	Region II	Northeast District - Athens
LIA-030-00	**Clay**		NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-030-01	Clay	Bluffton	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-030-02	Clay	Ft. Gaines	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-031-00	**Clayton**		YES	Jeff Matarko, Director, Land Development		(770) 477-3674	Clayton County	Region IV	Mountain District - Atlanta
LIA-031-01	Clayton	Forest Park	YES	Al Wiggins, Planning, Building and Zoning	awiggins@forestparkga.org	(404) 608-2300	Clayton County	Region IV	Mountain District - Atlanta
LIA-031-02	Clayton	Jonesboro	YES	Janice Truhan, City Clerk	jtruhan@jonesboroga.com	(770) 478-3800	Clayton County	Region IV	Mountain District - Atlanta
LIA-031-03	Clayton	Lake City	NO				Clayton County	Region IV	Mountain District - Atlanta
LIA-031-04	Clayton	Lovejoy	YES	Mark Whitley, City Engineer	m_whitley@cityoflovejoy.com	(770) 471-2304	Clayton County	Region IV	Mountain District - Atlanta
LIA-031-05	Clayton	Morrow	YES	Anou Sothsavath, Public Works Director	anou@cityofmorrow.com	(770) 968-5497	Clayton County	Region IV	Mountain District - Atlanta
LIA-031-06	Clayton	Riverdale	NO				Clayton County	Region IV	Mountain District - Atlanta
LIA-032-00	**Clinch**		NO				Alapaha	Region V	Coastal District - Brunswick
LIA-032-01	Clinch	Argyle	NO				Alapaha	Region V	Coastal District - Brunswick
LIA-032-02	Clinch	Dupont	NO				Alapaha	Region V	Coastal District - Brunswick
LIA-032-03	Clinch	Fargo	NO				Alapaha	Region V	Coastal District - Brunswick
LIA-032-04	Clinch	Homerville	YES	Rekasa Deen, City Manager	rdeen@cityofhomerville.com	(912) 487-2375	Alapaha	Region V	Coastal District - Brunswick
LIA-033-00	**Cobb**		YES	Rob Hosack, Community Development	rhosack@cobbcounty.org	(770) 528-2125	Cobb County	Region I	Mountain District - Cartersville
LIA-033-01	Cobb	Acworth	YES	Richard Beard	rbeard@acworth.org	(678) 300-4127	Cobb County	Region I	Mountain District - Cartersville
LIA-033-02	Cobb	Austell	YES	Randy Bowens, Public Works Director		(770) 944-4325	Cobb County	Region I	Mountain District - Cartersville
LIA-033-03	Cobb	Kennesaw	YES	Steve Turner	sturner@kennesaw-ga.gov	(770) 421-8582	Cobb County	Region I	Mountain District - Cartersville
LIA-033-04	Cobb	Marietta	YES	Richard King	rking@mariettaga.gov	(770) 794-8110	Cobb County	Region I	Mountain District - Cartersville
LIA-033-05	Cobb	Powder Springs	YES	Rodger Swaim, Public Works Director	reswaim@cityofpowdersprings.org	(770) 943-8010	Cobb County	Region I	Mountain District - Cartersville

LIA-033-06	Cobb	Smyrna	YES	Keith Williams, PE, City Engineer	kwilliams@ci.smyrna.ga.us	(678) 631-5443	Cobb County	Region I	Mountain District - Cartersville
LIA-034-00	**Coffee**		YES	Wesley Vickers, Administrator		(912) 384-4799	Altamaha	Region III	Coastal District - Brunswick
LIA-034-01	Coffee	Ambrose	NO				Altamaha	Region III	Coastal District - Brunswick
LIA-034-02	Coffee	Broxton	NO				Altamaha	Region III	Coastal District - Brunswick
LIA-034-03	Coffee	Douglas	YES	Ray Parker, Code Enforcement Officer	rparker@cityofdouglas.com	(912) 389-3462	Altamaha	Region III	Coastal District - Brunswick
LIA-034-04	Coffee	Nicholls	NO				Altamaha	Region III	Coastal District - Brunswick
LIA-035-00	**Colquitt**		YES	Russell Moody, Compliance Officer		(229) 616-7417	Middle South Georgia	Region V	Southwest District - Albany
LIA-035-01	Colquitt	Berlin	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-035-02	Colquitt	Doerun	YES				Middle South Georgia	Region V	Southwest District - Albany
LIA-035-03	Colquitt	Ellenton	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-035-04	Colquitt	Funston	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-035-05	Colquitt	Moultrie	YES	Daniel Parrish, Director	daniel.parrish@moultriega.com	(229) 890-5405	Middle South Georgia	Region V	Southwest District - Albany
LIA-035-06	Colquitt	Norman Park	YES				Middle South Georgia	Region V	Southwest District - Albany
LIA-035-07	Colquitt	Riverside	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-036-00	**Columbia**		YES	George Eastman, Environmental Development	geastman@columbiacountyga.gov	(706) 312-7278	Columbia County	Region II	Northeast District - Augusta
LIA-036-01	Columbia	Grovetown	YES	Connie Smith, Zoning Administrator		(706) 860-5094	Columbia County	Region II	Northeast District - Augusta
LIA-036-02	Columbia	Harlem	YES	Jason Rizner, City Manager	jrizner@harlemga.org	(706) 665-0043	Columbia County	Region II	Northeast District - Augusta
LIA-037-00	**Cook**		YES	Chris Davis, Building/Zoning Administrator		(229) 237-2633	Alapaha	Region V	Southwest District - Albany
LIA-037-01	Cook	Adel	YES	John Flythe, City Manager		(229) 896-4504	Alapaha	Region V	Southwest District - Albany
LIA-037-02	Cook	Cecil	NO				Alapaha	Region V	Southwest District - Albany
LIA-037-03	Cook	Lenox	NO				Alapaha	Region V	Southwest District - Albany
LIA-037-04	Cook	Sparks	YES	Chris Davis, Building/Zoning Administrator		(229) 237-2633	Alapaha	Region V	Southwest District - Albany
LIA-038-00	**Coweta**		YES				West Georgia	Region I	Mountain District - Atlanta
LIA-038-01	Coweta	Grantville	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-038-02	Coweta	Haralson	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-038-03	Coweta	Moreland	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-038-04	Coweta	Newnan	YES				West Georgia	Region I	Mountain District - Atlanta
LIA-038-05	Coweta	Senoia	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-038-06	Coweta	Sharpsburg	YES				West Georgia	Region I	Mountain District - Atlanta
LIA-038-07	Coweta	Turin	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-039-00	**Crawford**		NO				Ocmulgee River	Region V	West Central District - Macon
LIA-039-01	Crawford	Roberta	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-040-00	**Crisp**		YES				Middle South Georgia	Region V	Southwest District - Albany
LIA-040-01	Crisp	Arabi	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-040-02	Crisp	Cordele	YES				Middle South Georgia	Region V	Southwest District - Albany
LIA-041-00	**Dade**		YES	Bruce Castleberry		(706) 657-4625	Coosa River	Region I	Mountain District - Cartersville
LIA-041-01	Dade	Trenton	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-042-00	**Dawson**		YES	David McKee, Director	dmckee@dawsoncounty.org	(706) 344-3604	Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-042-01	Dawson	Dawsonville	YES	Gary Barr		(706) 265-3256	Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-043-00	**Decatur**		NO				Flint River	Region V	Southwest District - Albany
LIA-043-01	Decatur	Attapulgus	NO				Flint River	Region V	Southwest District - Albany
LIA-043-02	Decatur	Bainbridge	YES				Flint River	Region V	Southwest District - Albany
LIA-043-03	Decatur	Brinson	NO				Flint River	Region V	Southwest District - Albany
LIA-043-04	Decatur	Climax	NO				Flint River	Region V	Southwest District - Albany
LIA-044-00	**DeKalb**		YES	Hari Karikaran, Associate Director	hkarikaran@dekalbcountyga.gov	(404) 371-2160	DeKalb County	Region II	Mountain District - Atlanta
LIA-044-01	DeKalb	Avondale Estates	YES	Caryl Albarran	calbarran@avondaleestates.org	(404) 294-5400	DeKalb County	Region II	Mountain District - Atlanta
LIA-044-02	DeKalb	Chamblee	YES	Marc Johnson, Chief of Police	chiefmj@chambleepd.com	(770) 986-5026	DeKalb County	Region II	Mountain District - Atlanta
LIA-044-03	DeKalb	Clarkston	YES	Keith Barber, City Manager	kbarker@cityofclarkston.com	(404) 296-6489	DeKalb County	Region II	Mountain District - Atlanta
LIA-044-04	DeKalb	Decatur	YES	John Madajewski, PE, Senior Engineer		(404) 377-6198	DeKalb County	Region II	Mountain District - Atlanta
LIA-044-05	DeKalb	Doraville	YES	Steven Strickland, Stormwater Inspector	steven.strickland@doravillega.us	(678) 758-4218	DeKalb County	Region II	Mountain District - Atlanta
LIA-044-06	DeKalb	Lithonia	NO				DeKalb County	Region II	Mountain District - Atlanta
LIA-044-07	DeKalb	Pine Lake	NO				DeKalb County	Region II	Mountain District - Atlanta
LIA-044-08	DeKalb	Stone Mountain	YES	Thurman Johnson, Code Compliance Section		(770) 498-8984	DeKalb County	Region II	Mountain District - Atlanta
LIA-044-09	DeKalb	Dunwoody	YES	Rich Edinger, PE	redinger@clarkpatterson.com	(678) 382-6700	DeKalb County	Region II	Mountain District - Atlanta
LIA-044-10	DeKalb	Brookhaven	YES	Rich Edinger, PE	redinger@clarkpatterson.com	(404) 637-0500	DeKalb County	Region II	Mountain District - Atlanta
LIA-045-00	**Dodge**		NO				Central Georgia	Region IV	Southwest District - Albany
LIA-045-01	Dodge	Chauncey	NO				Central Georgia	Region IV	Southwest District - Albany
LIA-045-02	Dodge	Chester	NO				Central Georgia	Region IV	Southwest District - Albany
LIA-045-03	Dodge	Eastman	YES	Randy Knight, Code Enforcement		(478) 374-7721	Central Georgia	Region IV	Southwest District - Albany
LIA-045-04	Dodge	Rhine	NO				Central Georgia	Region IV	Southwest District - Albany
LIA-046-00	**Dooly**		YES	Gary Houston, Zoning Administrator	inspector@isoa.net	(229) 268-4228	Ocmulgee River	Region V	West Central District - Macon
LIA-046-01	Dooly	Byromville	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-046-02	Dooly	Dooling	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-046-03	Dooly	Lilly	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-046-04	Dooly	Pinehurst	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-046-05	Dooly	Unadilla	YES	Gary Houston, Zoning Inspector	inspector@isoa.net	(229) 268-4228	Ocmulgee River	Region V	West Central District - Macon
LIA-046-06	Dooly	Vienna	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-047-00	**Dougherty**		YES	Larry Cook, Public Works Engr Department		(229) 430-6120	Flint River	Region V	Southwest District - Albany
LIA-047-01	Dougherty	Albany	YES	Brad Little, Engineering Department	dlittle@dougherty.ga.us	(229) 883-6955	Flint River	Region V	Southwest District - Albany
LIA-048-00	**Douglas**		YES				West Georgia	Region I	Mountain District - Atlanta

LIA-048-01	Douglas	Douglasville	YES				West Georgia	Region I	Mountain District - Atlanta
LIA-049-00	**Early**		NO				Flint River	Region V	Southwest District - Albany
LIA-049-01	Early	Blakely	YES				Flint River	Region V	Southwest District - Albany
LIA-049-02	Early	Damascus	NO				Flint River	Region V	Southwest District - Albany
LIA-049-03	Early	Jakin	NO				Flint River	Region V	Southwest District - Albany
LIA-050-00	**Echols**		NO				Alapaha	Region V	Southwest District - Albany
LIA-051-00	**Effingham**		YES	Steve Liotta, County Engineer	sliotta@effinghamcounty.org	(912) 754-8016	Ogeechee River	Region III	Coastal District - Brunswick
LIA-051-01	Effingham	Guyton	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-051-02	Effingham	Rincon	YES	Dulcia King, Building and Zoning Coordinator	dking@cityofrincon.com	(912) 826-5996	Ogeechee River	Region III	Coastal District - Brunswick
LIA-051-03	Effingham	Springfield	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-052-00	**Elbert**		YES	Patrick Hopp, Code Enforcement Officer	phopp@elberton.net	(706) 213-1000	Broad River	Region II	Northeast District - Athens
LIA-052-01	Elbert	Bowman	NO				Broad River	Region II	Northeast District - Athens
LIA-052-02	Elbert	Elberton	YES	Kevin Jordan, Fire & Building Official	kjordan@cityofelberton.net	(706) 213-3203	Broad River	Region II	Northeast District - Athens
LIA-053-00	**Emanuel**		NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-053-01	Emanuel	Garfield	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-053-02	Emanuel	Nunez	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-053-03	Emanuel	Oak Park	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-053-04	Emanuel	Stillmore	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-053-05	Emanuel	Summertown	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-053-06	Emanuel	Swainsboro	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-053-07	Emanuel	Twin City	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-054-00	**Evans**		NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-054-01	Evans	Bellville	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-054-02	Evans	Claxton	YES				Ogeechee River	Region III	Coastal District - Brunswick
LIA-054-03	Evans	Daisy	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-054-04	Evans	Hagan	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-055-00	**Fannin**		YES	Marie Woody, Land Development	mwoody@fannincountyga.org	(706) 258-5170	Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-055-01	Fannin	Blue Ridge	YES	Walter (Roy) Parsons		(706) 632-2091	Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-055-02	Fannin	McCaysville	NO				Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-055-03	Fannin	Mineral Bluff	NO				Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-055-04	Fannin	Morganton	NO				Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-056-00	**Fayette**		YES	Bryan Keller, Environmental Program Enginer	bkeller@fayettecountyga.gov	(770) 305-5142	Towaliga	Region IV	Mountain District - Atlanta
LIA-056-01	Fayette	Brooks	YES				Towaliga	Region IV	Mountain District - Atlanta
LIA-056-02	Fayette	Fayetteville	YES	Don Easterbrook, Public Services Director	deasterbrook@fayetteville-ga.gov	(770) 719-4156	Towaliga	Region IV	Mountain District - Atlanta
LIA-056-03	Fayette	Peachtree City	YES	David Borkowski, PE, City Engineer	dborkowski@peachtree-cityu.org	(770) 631-2538	Towaliga	Region IV	Mountain District - Atlanta
LIA-056-04	Fayette	Tyrone	YES	Beth Vaughn, Enivronmental and Planning		(770) 487-4038	Towaliga	Region IV	Mountain District - Atlanta
LIA-056-05	Fayette	Woolsey	YES	Bryan Keller, Environmental Program Engineer	bkeller@fayettecountyga.gov	(770) 305-5142	Towaliga	Region IV	Mountain District - Atlanta
LIA-057-00	**Floyd**		YES	Howard Gibson, Building Official	hgibson@romega.us	(706) 236-4481	Coosa River	Region I	Mountain District - Cartersville
LIA-057-01	Floyd	Cave Spring	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-057-02	Floyd	Rome	YES	Howard Gibson, Building Official	hgibson@romega.us	(706) 236-4481	Coosa River	Region I	Mountain District - Cartersville
LIA-058-00	**Forsyth**		YES	M. Simon Wilkes, Senior Inspector	smwilkes@forsythco.com	(770) 781-2165	Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-058-01	Forsyth	Cumming	YES	Scott Morgan, Department Director	s.morgan@cityofcumming.net	(770) 781-2024	Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-059-00	**Franklin**		NO				Broad River	Region II	Northeast District - Athens
LIA-059-01	Franklin	Canon	NO				Broad River	Region II	Northeast District - Athens
LIA-059-02	Franklin	Carnesville	NO				Broad River	Region II	Northeast District - Athens
LIA-059-03	Franklin	Franklin Springs	NO				Broad River	Region II	Northeast District - Athens
LIA-059-04	Franklin	Lavonia	NO				Broad River	Region II	Northeast District - Athens
LIA-059-05	Franklin	Royston	NO				Broad River	Region II	Northeast District - Athens
LIA-060-00	**Fulton**		YES	Dick Wilcox, Lead Engineer ECD		(404) 612-7474	Fulton County	Region I	Mountain District - Atlanta
LIA-060-01	Fulton	Alpharetta	YES	Jill Bazinet, Senior Engineer	jbazinet@alpharetta.ga.us	(678) 297-6200	Fulton County	Region I	Mountain District - Atlanta
LIA-060-02	Fulton	Atlanta	YES	Cory Rayburn, Environmental Program Mgr	crayburn@atlantaga.gov	(404) 546-1306	Fulton County	Region I	Mountain District - Atlanta
LIA-060-03	Fulton	College Park	YES	Oscar Hudson, Code Enforcement	ohudson@collegeparkga.com	(404) 669-3762	Fulton County	Region I	Mountain District - Atlanta
LIA-060-04	Fulton	East Point	YES	Lamar Holt, Senior Building Inspector	lholt@eastpointcity.org	(404) 270-7023	Fulton County	Region I	Mountain District - Atlanta
LIA-060-05	Fulton	Fairburn	YES	Rita Fernandes, Code Enforcement		(770) 683-4091	Fulton County	Region I	Mountain District - Atlanta
LIA-060-06	Fulton	Hapeville	YES	Lee Sudduth, Community Services Director	lsudduth@hapeville.org	(404) 669-2120	Fulton County	Region I	Mountain District - Atlanta
LIA-060-07	Fulton	Mountain Park	YES	Karen Segars, City Clerk	city.clerk@mountainpark-ga.gov	(770) 993-4231	Fulton County	Region I	Mountain District - Atlanta
LIA-060-08	Fulton	Palmetto	YES	Frank West, Code Enforcement		(770) 463-3377	Fulton County	Region I	Mountain District - Atlanta
LIA-060-09	Fulton	Roswell	YES	Jean Rearick, PE, City Engineer	jrearick@roswellgov.com	(770) 594-6196	Fulton County	Region I	Mountain District - Atlanta
LIA-060-10	Fulton	Sandy Springs	YES	David Schmid, Community Development		(770) 730-5600	Fulton County	Region I	Mountain District - Atlanta
LIA-060-11	Fulton	Union City	YES	Ann Lippmann, Community Development	alippmann@unioncityga.org	(770) 969-9266	Fulton County	Region I	Mountain District - Atlanta
LIA-060-12	Fulton	Johns Creek	YES	Seth Yurman	seth.yurman@johnscreekga.gov	(678) 512-3284	Fulton County	Region I	Mountain District - Atlanta
LIA-060-13	Fulton	Milton	YES	Jimmy Sanders, Community Development	jimmy.sanders@cityofmiltonga.us	(678) 242-2543	Fulton County	Region I	Mountain District - Atlanta
LIA-060-14	Fulton	Chattahoochee Hills	NO				Fulton County	Region I	Mountain District - Atlanta
LIA-061-00	**Gilmer**		YES	Brian Jones, Director of Planning and Zoning	bjones@gilmercounty-ga.gov	(706) 635-3406	Limestone Valley	Region I	Mountain District - Cartersville
LIA-061-01	Gilmer	East Ellijay	YES	William (Mack) Wood		(706) 276-3111	Limestone Valley	Region I	Mountain District - Cartersville
LIA-061-02	Gilmer	Ellijay	YES	Don Schneider, Code Enforcement Officer	CodeEnforce@ellijay.com	(706) 635-4711	Limestone Valley	Region I	Mountain District - Cartersville
LIA-062-00	**Glascock**		YES				Brier Creek	Region III	Mountain District - Cartersville
LIA-062-01	Glascock	Edgehill	NO				Brier Creek	Region III	Mountain District - Cartersville
LIA-062-02	Glascock	Gibson	NO				Brier Creek	Region III	Mountain District - Cartersville
LIA-062-03	Glascock	Mitchell	NO				Brier Creek	Region III	Mountain District - Cartersville

LIA-063-00	**Glynn**		YES	Paul Andrews, Interim County Engineer	pandrews@glynncounty-ga.gov	(912) 554-7492	Satilla	Region III	Coastal District - Brunswick
LIA-063-01	Glynn	Brunswick	NO				Satilla	Region III	Coastal District - Brunswick
LIA-064-00	**Gordon**		YES	Tom Burgess, Director, Building Inspection	tburgess@gordoncounty.org	(706) 629-0505	Coosa River	Region I	Mountain District - Cartersville
LIA-064-01	Gordon	Calhoun	YES	Curtis Craig, Soil and Erosion Inspector	ccraig@calnet-ga.net	(706) 602-6500	Coosa River	Region I	Mountain District - Cartersville
LIA-064-02	Gordon	Fairmount	YES	Matthew Stamey	cityoffairmount@comcast.net	(706) 337-5306	Coosa River	Region I	Mountain District - Cartersville
LIA-064-03	Gordon	Plainville	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-064-04	Gordon	Ranger	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-064-05	Gordon	Resaca	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-065-00	**Grady**		YES	Larry Ivy, Code Enforcement	livy@windstream.net	(229) 377-8857	Flint River	Region V	Southwest District - Albany
LIA-065-01	Grady	Cairo	YES	Brain Hayes, Code Enforcement	bhayes@cairocity.net	(229) 377-1722	Flint River	Region V	Southwest District - Albany
LIA-065-02	Grady	Whigham	NO				Flint River	Region V	Southwest District - Albany
LIA-066-00	**Greene**		YES	Francis Faxon, Building and Zoning		(706) 453-3333	Piedmont	Region IV	Northeast District - Athens
LIA-066-01	Greene	Greensboro	YES	Rick Zeier, Code Enforcement	rzeier@greensboroga.gov	(706) 453-7967	Piedmont	Region IV	Northeast District - Athens
LIA-066-02	Greene	Siloam	NO				Piedmont	Region IV	Northeast District - Athens
LIA-066-03	Greene	Union Point	YES			(706) 486-4102	Piedmont	Region IV	Northeast District - Athens
LIA-066-04	Greene	White Plains	NO				Piedmont	Region IV	Northeast District - Athens
LIA-066-05	Greene	Woodville	NO				Piedmont	Region IV	Northeast District - Athens
LIA-067-00	**Gwinnett**		YES	Adena Fullard, Plan Review Section Manager	adena.fullard@gwinnettcounty.com	(678) 518-6157	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-01	Gwinnett	Berkeley Lake	YES	Tom Rozier, City Administrator		(770) 368-9484	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-02	Gwinnett	Buford	YES	Kim Wolfe, Planning Director		(770) 945-6761	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-03	Gwinnett	Dacula	YES	Joey Murphy, City Planner		(770) 963-7451	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-04	Gwinnett	Duluth	YES	Glenn Coyne, Planning and Development		(770) 476-1790	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-05	Gwinnett	Grayson	YES	David Elrod, Planning and Zoning		(770) 963-8017	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-06	Gwinnett	Lawrenceville	YES	Paul Austin, City Engineer	engineering@lawrencevillega.org	(770 277-7532	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-07	Gwinnett	Lilburn	YES	Doug Stacks,Planning/Economic Development	dstacks@cityoflilburn.com	(770 921-2210	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-08	Gwinnett	Norcross	YES	Jeffrey Mueller, PE, City Engineer		(678) 421-2027	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-10	Gwinnett	Snellville	YES	Gaye Johnson, Public Works Director		(770) 985-3527	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-11	Gwinnett	Sugar Hill	YES	Tim Schick, City Planner	tschick@cityofsugarhill.com	(770) 945-6734	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-12	Gwinnett	Suwanee	YES	James Miller, PE, Public Works Director		(770) 945-8996	Gwinnett County	Region II	Mountain District - Atlanta
LIA-067-13	Gwinnett	Peachtree Corners	YES	Diana Wheeler		(678) 691-1200	Gwinnett County	Region II	Mountain District - Atlanta
LIA-068-00	**Habersham**		YES	Wendell Sullens	wsullens@habershamga.com	(706) 754-1739	Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-068-01	Habersham	Alto	YES				Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-068-02	Habersham	Baldwin	NO				Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-068-03	Habersham	Clarksville	NO				Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-068-04	Habersham	Cornelia	YES	Jeff Barron, City Planner	jbarron@comeliageorgia.org	(706) 778-8585	Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-068-05	Habersham	Demorest	NO				Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-068-06	Habersham	Mount Airy	NO				Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-068-07	Habersham	Tallulah Falls	NO				Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-069-00	**Hall**		YES	Tammi Croy	tcroy@hallcounty.org	(770) 531-6800	Hall County	Region II	Northeast District - Athens
LIA-069-01	Hall	Clermont	NO				Hall County	Region II	Northeast District - Athens
LIA-069-02	Hall	Flowery Branch	YES	John McHenry, Planning and Development Mgr	johnm@flowerybranchga.org	(770) 967-6279	Hall County	Region II	Northeast District - Athens
LIA-069-03	Hall	Gainesville	YES	Stan Aiken	saiken@gainesville.org	(770) 535-6882	Hall County	Region II	Northeast District - Athens
LIA-069-04	Hall	Gillsville	NO				Hall County	Region II	Northeast District - Athens
LIA-069-05	Hall	Lula	YES	Dennis Bergin, City Manager	lulacity@bellsouth.net	(770) 869-3801	Hall County	Region II	Northeast District - Athens
LIA-069-06	Hall	Oakwood	YES	Joe Hayes, Building Official	jhayes@cityofoakwood.net	(770) 534-2365	Hall County	Region II	Northeast District - Athens
LIA-070-00	**Hancock**		YES	Jimmy Holton, Dept of Building and Zoning	hancockcountybuildingzoning@yahoo.com		Piedmont	Region IV	Northeast District - Athens
LIA-070-01	Hancock	Sparta	NO				Piedmont	Region IV	Northeast District - Athens
LIA-071-00	**Haralson**		YES	Robert W. Smith, Code Enforcement	rws0318@bellsouth.net	(770) 646-2033	West Georgia	Region I	Mountain District - Cartersville
LIA-071-01	Haralson	Bremen	YES	Steve Muse, Building Official	smuse@bremenga.gov	(678) 821-1236	West Georgia	Region I	Mountain District - Cartersville
LIA-071-02	Haralson	Buchanan	NO				West Georgia	Region I	Mountain District - Cartersville
LIA-071-03	Haralson	Tallapoosa	NO				West Georgia	Region I	Mountain District - Cartersville
LIA-071-04	Haralson	Waco	NO				West Georgia	Region I	Mountain District - Cartersville
LIA-072-00	**Harris**		YES	Mike Rucker, Chief Inspector		(706) 628-4700	Pine Mountain	Region V	West Central District - Macon
LIA-072-01	Harris	Hamilton	YES	Buddy Walker, Public Services Director		(706) 628-4768	Pine Mountain	Region V	West Central District - Macon
LIA-072-02	Harris	Pine Mountain	YES	Mike Rucker, Chief Inspector		(706) 628-4700	Pine Mountain	Region V	West Central District - Macon
LIA-072-03	Harris	Shiloh	NO				Pine Mountain	Region V	West Central District - Macon
LIA-072-04	Harris	Waverly Hall	NO				Pine Mountain	Region V	West Central District - Macon
LIA-073-00	**Hart**		NO				Broad River	Region II	Northeast District - Athens
LIA-073-01	Hart	Bowersville	NO				Broad River	Region II	Northeast District - Athens
LIA-073-02	Hart	Hartwell	NO				Broad River	Region II	Northeast District - Athens
LIA-074-00	**Heard**		NO				West Georgia	Region I	Mountain District - Atlanta
LIA-074-01	Heard	Centralhatchee	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-074-02	Heard	Corinth	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-074-03	Heard	Ephesus	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-074-04	Heard	Franklin	NO				West Georgia	Region I	Mountain District - Atlanta
LIA-075-00	**Henry**		YES	George Patterson, Environmental Compliance	gpatterson@co.henry.ga.us	(770) 288-6069	Henry County	Region IV	Mountain District - Atlanta
LIA-075-01	Henry	Hampton	YES	JD Matthews, Community Development	jmatthews@cityofhampton-ga.gov	(770) 946-4306	Henry County	Region IV	Mountain District - Atlanta
LIA-075-02	Henry	Locust Grove	YES	Bert Foster, Community Development Director	bfoster@locustgrove-ga.gov	(770) 692-2322	Henry County	Region IV	Mountain District - Atlanta
LIA-075-03	Henry	McDonough	YES	Mark Dobson, Building Official	mdobson@mcdonough-ga.gov	(404) 427-7670	Henry County	Region IV	Mountain District - Atlanta
LIA-075-04	Henry	Stockbridge	YES	Melinda Davies, Code Enforcement Officer	mdavies@cityofstockbridge-ga.gov	(770) 389-7900	Henry County	Region IV	Mountain District - Atlanta

LIA-076-00	**Houston**		YES	Jeff Chandler, Environmental Specialist		(478) 987-4280	Ocmulgee River	Region V	West Central District - Macon
LIA-076-01	Houston	Centerville	YES	Mike Brumfield, Superintendent	mrbfield@centerville.mgacoxmail.com	(478) 953-3222	Ocmulgee River	Region V	West Central District - Macon
LIA-076-02	Houston	Perry	YES	Mike Beecham, Community Development		(478) 988-2720	Ocmulgee River	Region V	West Central District - Macon
LIA-076-03	Houston	Warner Robins	YES				Ocmulgee River	Region V	West Central District - Macon
LIA-077-00	**Irwin**		YES	Donald Pate, Statewide Engineering, Inc.	donald.pate@swe.us.com	(912) 384-7723	Middle South Georgia	Region V	Southwest District - Albany
LIA-077-01	Irwin	Ocilla	YES				Middle South Georgia	Region V	Southwest District - Albany
LIA-078-00	**Jackson**		YES	Gina Mitsdarffer, Director	gmitsdarffer@jacksoncountygov.com	(706) 367-5908	Oconee River	Region II	Northeast District - Athens
LIA-078-01	Jackson	Arcade	YES	Guy Herring, McFarland-Dyer and Associates	gherring@gomda.net	(770) 932-6550	Oconee River	Region II	Northeast District - Athens
LIA-078-02	Jackson	Braselton	YES	Yvett Wise, Environmental Specialist	ywise@braselton.net	(706) 654-3915	Oconee River	Region II	Northeast District - Athens
LIA-078-03	Jackson	Commerce	YES	Tony Daniel	tonyd@commercega.org	(706) 335-4200	Oconee River	Region II	Northeast District - Athens
LIA-078-04	Jackson	Hoschton	NO				Oconee River	Region II	Northeast District - Athens
LIA-078-05	Jackson	Jefferson	YES	Danny Atkins	datkins@cityofjeffersonga.com	(706) 215-0070	Oconee River	Region II	Northeast District - Athens
LIA-078-06	Jackson	Nicholson	NO				Oconee River	Region II	Northeast District - Athens
LIA-078-07	Jackson	Pendergrass	YES	Bob Russell		(706) 693-2494	Oconee River	Region II	Northeast District - Athens
LIA-078-08	Jackson	Talmo	YES	Danny Atkins	datkins@cityofjeffersonga.com	(706) 215-0070	Oconee River	Region II	Northeast District - Athens
LIA-079-00	**Jasper**		YES	Sherry Braley, Planning and Zoning		(706) 468-4905	Upper Ocmulgee River	Region IV	Northeast District - Athens
LIA-079-01	Jasper	Monticello	YES	Peggy Billerman, City Clerk	wmweb@bellsouth.net	(706) 468-6062	Upper Ocmulgee River	Region IV	Northeast District - Athens
LIA-079-02	Jasper	Shady Dale	NO				Upper Ocmulgee River	Region IV	Northeast District - Athens
LIA-080-00	**Jeff Davis**		NO				Altamaha	Region III	Coastal District - Brunswick
LIA-080-01	Jeff Davis	Denton	NO				Altamaha	Region III	Coastal District - Brunswick
LIA-080-02	Jeff Davis	Hazlehurst	NO				Altamaha	Region III	Coastal District - Brunswick
LIA-081-00	**Jefferson**		YES	Paul Bryan, Administrator	pbryan@jeffersoncountyga.gov	(478) 625-3332	Brier Creek	Region III	Northeast District - Augusta
LIA-081-01	Jefferson	Avera	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-081-02	Jefferson	Bartow	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-081-03	Jefferson	Louisville	YES	James Rhodes, City Administrator		(912) 625-3166	Brier Creek	Region III	Northeast District - Augusta
LIA-081-04	Jefferson	Stapleton	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-081-05	Jefferson	Wadley	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-081-06	Jefferson	Wrens	YES	Arty Thrift	athrift@cityofwrens.com	(706) 547-3000	Brier Creek	Region III	Northeast District - Augusta
LIA-082-00	**Jenkins**		NO				Brier Creek	Region III	Northeast District - Augusta
LIA-082-01	Jenkins	Millen	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-083-00	**Johnson**		NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-083-01	Johnson	Adrian	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-083-02	Johnson	Kite	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-083-03	Johnson	Wrightsville	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-084-00	**Jones**		YES	Tim Pitrowski, Zoning Director	tim@jonescountyga.org	(478) 986-8245	Piedmont	Region IV	West Central District - Macon
LIA-084-00	Jones	Gray	YES	Decius Aaron, City Superintendent		(478) 986-2020	Piedmont	Region IV	West Central District - Macon
LIA-085-00	**Lamar**		YES	Danny Gunter, Building and Zoning	dogunter_lczoning@yahoo.com	(770) 358-5364	Lamar County	Region IV	West Central District - Macon
LIA-085-01	Lamar	Aldora	NO				Lamar County	Region IV	West Central District - Macon
LIA-085-02	Lamar	Barnesville	YES	David Rose, Building and Zoning	dkrob@charterinternet.com	(770) 358-6290	Lamar County	Region IV	West Central District - Macon
LIA-085-03	Lamar	Milner	NO				Lamar County	Region IV	West Central District - Macon
LIA-086-00	**Lanier**		YES	Tony Collins, County Administrator		(229) 482-2088	Alapaha	Region V	Southwest District - Albany
LIA-086-01	Lanier	Lakeland	YES	Diane Westberry, City Planner		(229) 482-3100	Alapaha	Region V	Southwest District - Albany
LIA-087-00	**Laurens**		YES	Bryan Rogers, County Administrator	RogersB@dlcga.com	(478) 272-4755	Central Georgia	Region IV	Northeast District - Augusta
LIA-087-01	Laurens	Cadwell	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-087-02	Laurens	Dexter	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-087-03	Laurens	Dublin	YES	James Ivey, Engineer Planner/Developer	iveyj@dlcga.com	(478) 296-1009	Central Georgia	Region IV	Northeast District - Augusta
LIA-087-04	Laurens	Dudley	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-087-05	Laurens	East Dublin	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-087-06	Laurens	Montrose	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-087-07	Laurens	Rentz	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-088-00	**Lee**		YES	Jim Wright, Code Enforcement Officer	jwright@lee.ga.us	(229) 759-6000	Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-088-01	Lee	Leesburg	YES				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-088-02	Lee	Smithville	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-089-00	**Liberty**		YES	Paul Zechman, Building and Licensing		(912) 876-8454	Coastal	Region III	Coastal District - Brunswick
LIA-089-01	Liberty	Allenhurst	YES	Nils Gustavson, LCPC Chief Inspector	ngustavson@cityofhinesville.org	(912) 408-2030	Coastal	Region III	Coastal District - Brunswick
LIA-089-02	Liberty	Flemington	YES	Nils Gustavson, LCPC Chief Inspector	ngustavson@cityofhinesville.org	(912) 408-2030	Coastal	Region III	Coastal District - Brunswick
LIA-089-03	Liberty	Gum Branch	YES	Nils Gustavson, LCPC Chief Inspector	ngustavson@cityofhinesville.org	(912) 408-2030	Coastal	Region III	Coastal District - Brunswick
LIA-089-04	Liberty	Hinesville	YES	Nils Gustavson, LCPC Chief Inspector	ngustavson@cityofhinesville.org	(912) 408-2030	Coastal	Region III	Coastal District - Brunswick
LIA-089-05	Liberty	Midway	YES	Nils Gustavson, LCPC Chief Inspector	ngustavson@cityofhinesville.org	(912) 408-2030	Coastal	Region III	Coastal District - Brunswick
LIA-089-06	Liberty	Riceboro	YES	Nils Gustavson, LCPC Chief Inspector	ngustavson@cityofhinesville.org	(912) 408-2030	Coastal	Region III	Coastal District - Brunswick
LIA-089-07	Liberty	Walthourville	YES	Nils Gustavson, LCPC Chief Inspector	ngustavson@cityofhinesville.org	(912) 408-2030	Coastal	Region III	Coastal District - Brunswick
LIA-090-00	**Lincoln**		YES	Roby Seymour, Planning and Zoning Director	rseymour@lincolncountyga.com	(706) 359-5525	Lincoln	Region II	Northeast District - Athens
LIA-090-01	Lincoln	Lincolnton	YES				Lincoln	Region II	Northeast District - Athens
LIA-091-00	**Long**		YES	Trent R. Long, PE	trlong@trlongeng.com	(912) 368-5664	Coastal	Region III	Coastal District - Brunswick
LIA-091-01	Long	Ludowici	NO				Coastal	Region III	Coastal District - Brunswick
LIA-092-00	**Lowndes**		YES				Alapaha	Region V	Southwest District - Albany
LIA-092-01	Lowndes	Dasher	NO				Alapaha	Region V	Southwest District - Albany
LIA-092-02	Lowndes	Hahira	YES				Alapaha	Region V	Southwest District - Albany
LIA-092-03	Lowndes	Lake Park	YES				Alapaha	Region V	Southwest District - Albany
LIA-092-04	Lowndes	Naylor	NO				Alapaha	Region V	Southwest District - Albany

LIA-092-05	Lowndes	Remerton	NO				Alapaha	Region V	Southwest District - Albany
LIA-092-06	Lowndes	Valdosta	YES	Willie Jones, Stormwater Technician	wjones@valdostacity.com	(229) 259-3530	Alapaha	Region V	Southwest District - Albany
LIA-093-00	**Lumpkin**		YES	Larry Reiter, Planning Director	larry.reiter@lumpkincounty.gov	(706) 864-6894	Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-093-01	Lumpkin	Dahlonega	YES	Chris Head, Planning and Zoning Administrator		(706) 864-6133	Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-094-00	**Macon**		NO				Ocmulgee River	Region V	West Central District - Macon
LIA-094-01	Macon	Ideal	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-094-02	Macon	Marshallville	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-094-03	Macon	Montezuma	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-094-04	Macon	Oglethorpe	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-095-00	**Madison**		NO				Broad River	Region II	Northeast District - Athens
LIA-095-01	Madison	Carlton	NO				Broad River	Region II	Northeast District - Athens
LIA-095-02	Madison	Colbert	NO				Broad River	Region II	Northeast District - Athens
LIA-095-03	Madison	Comer	NO				Broad River	Region II	Northeast District - Athens
LIA-095-04	Madison	Danielsville	NO				Broad River	Region II	Northeast District - Athens
LIA-095-05	Madison	Ila	YES				Broad River	Region II	Northeast District - Athens
LIA-095-05	Madison	Hull	NO				Broad River	Region II	Northeast District - Athens
LIA-096-00	**Marion**		NO				Pine Mountain	Region V	West Central District - Macon
LIA-096-01	Marion	Buena Vista	NO				Pine Mountain	Region V	West Central District - Macon
LIA-097-00	**McDuffie**		YES	Gail Newsome, Planning and Zoning	Gail.Newsome@thomson-mcduffie.net	(706) 595-2591	McDuffie County	Region II	Northeast District - Augusta
LIA-097-01	McDuffie	Dearing	NO				McDuffie County	Region II	Northeast District - Augusta
LIA-097-02	McDuffie	Thomson	YES	Gail Newsome, Planning and Zoning	Gail.Newsome@thomson-mcduffie.net	(706) 595-2591	McDuffie County	Region II	Northeast District - Augusta
LIA-098-00	**McIntosh**		NO				Coastal	Region III	Coastal District - Brunswick
LIA-098-01	McIntosh	Darien	YES				Coastal	Region III	Coastal District - Brunswick
LIA-099-00	**Meriwether**		YES	Ron Garrett, Building Inspector		(706) 672-1283	Roosevelt	Region I	West Central District - Macon
LIA-099-01	Meriwether	Gay	NO				Roosevelt	Region I	West Central District - Macon
LIA-099-02	Meriwether	Greenville	NO				Roosevelt	Region I	West Central District - Macon
LIA-099-03	Meriwether	Lone Oak	NO				Roosevelt	Region I	West Central District - Macon
LIA-099-04	Meriwether	Luthersville	NO				Roosevelt	Region I	West Central District - Macon
LIA-099-05	Meriwether	Manchester	YES				Roosevelt	Region I	West Central District - Macon
LIA-099-06	Meriwether	Warm Springs	NO				Roosevelt	Region I	West Central District - Macon
LIA-099-07	Meriwether	Woodbury	NO				Roosevelt	Region I	West Central District - Macon
LIA-100-00	**Miller**		NO				Flint River	Region V	Southwest District - Albany
LIA-100-01	Miller	Colquitt	NO				Flint River	Region V	Southwest District - Albany
LIA-101-00	**Mitchell**		NO				Flint River	Region V	Southwest District - Albany
LIA-101-01	Mitchell	Baconton	NO				Flint River	Region V	Southwest District - Albany
LIA-101-02	Mitchell	Camilla	YES	Tekla Sellars, Planning and Zoning	teklas@cityofcamilla.com	(229) 336-2207	Flint River	Region V	Southwest District - Albany
LIA-101-03	Mitchell	Pelham	NO				Flint River	Region V	Southwest District - Albany
LIA-101-04	Mitchell	Sale City	NO				Flint River	Region V	Southwest District - Albany
LIA-102-00	**Monroe**		YES	Bentley Cox, Chief Building Official		(478) 994-7618	Towaliga	Region IV	West Central District - Macon
LIA-102-01	Monroe	Culloden	NO	Lisa Elder, City Clerk		(478) 885-2249	Towaliga	Region IV	West Central District - Macon
LIA-102-02	Monroe	Forsyth	YES				Towaliga	Region IV	West Central District - Macon
LIA-103-00	**Montgomery**		NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-103-01	Montgomery	Ailey	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-103-02	Montgomery	Alston	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-103-03	Montgomery	Higgston	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-103-04	Montgomery	Mt. Vernon	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-103-05	Montgomery	Tarrytown	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-103-06	Montgomery	Uvalda	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-104-00	**Morgan**		YES				Piedmont	Region III	Northeast District - Athens
LIA-104-01	Morgan	Bostwick	NO				Piedmont	Region III	Northeast District - Athens
LIA-104-02	Morgan	Buckhead	NO				Piedmont	Region III	Northeast District - Athens
LIA-104-03	Morgan	Madison	YES				Piedmont	Region III	Northeast District - Athens
LIA-104-04	Morgan	Rutledge	NO				Piedmont	Region III	Northeast District - Athens
LIA-105-00	**Murray**		YES	Dick Barnes, Land Use Administrator	mcldo@windstream.net	(706) 517-1400	Limestone Valley	Region I	Mountain District - Cartersville
LIA-105-01	Murray	Chatsworth	YES	Dick Barnes, Land Use Administrator	mcldo@windstream.net	(706) 517-1400	Limestone Valley	Region I	Mountain District - Cartersville
LIA-105-02	Murray	Eton	YES	Dick Barnes, Land Use Administrator	mcldo@windstream.net	(706) 517-1400	Limestone Valley	Region I	Mountain District - Cartersville
LIA-106-00	**Muscogee**		YES				Pine Mountain	Region V	West Central District - Macon
LIA-106-01	Muscogee	Bibb City	NO				Pine Mountain	Region V	West Central District - Macon
LIA-106-02	Muscogee	Columbus	YES	Michael Burgess, Program Manager	mburgess@columbusga.org	(706) 225-3952	Pine Mountain	Region V	West Central District - Macon
LIA-107-00	**Newton**		YES	Ray Spencer, Stormwater Management	rspencer@co.newton.ga.us	(678) 625-1684	Upper Ocmulgee River	Region IV	Northeast District - Athens
LIA-107-01	Newton	Covington	YES	Tres Thomas, Engineering Department	tthomas@cityofcovington.org	(770) 385-2022	Upper Ocmulgee River	Region IV	Northeast District - Athens
LIA-107-02	Newton	Mansfield	NO				Upper Ocmulgee River	Region IV	Northeast District - Athens
LIA-107-03	Newton	Newborn	NO				Upper Ocmulgee River	Region IV	Northeast District - Athens
LIA-107-04	Newton	Oxford	NO				Upper Ocmulgee River	Region IV	Northeast District - Athens
LIA-107-05	Newton	Porterdale	NO				Upper Ocmulgee River	Region IV	Northeast District - Athens
LIA-108-00	**Oconee**		YES	B.R. White, Planning and Code Enforcement	bwhite@oconee.ga.us	(706) 769-3907	Oconee River	Region II	Northeast District - Athens
LIA-108-01	Oconee	Bishop	NO				Oconee River	Region II	Northeast District - Athens
LIA-108-02	Oconee	Bogart	NO				Oconee River	Region II	Northeast District - Athens
LIA-108-03	Oconee	North High Shoals	NO				Oconee River	Region II	Northeast District - Athens
LIA-108-04	Oconee	Watkinsville	YES	Mark Campbell, Carter Engineering	mark@carterengineering.net	(706) 559-7430	Oconee River	Region II	Northeast District - Athens

LIA-109-00	**Oglethorpe**		NO				Broad River	Region II	Northeast District - Athens
LIA-109-01	Oglethorpe	Arnoldsville	NO				Broad River	Region II	Northeast District - Athens
LIA-109-02	Oglethorpe	Crawford	NO				Broad River	Region II	Northeast District - Athens
LIA-109-03	Oglethorpe	Lexington	NO				Broad River	Region II	Northeast District - Athens
LIA-109-04	Oglethorpe	Maxeys	NO				Broad River	Region II	Northeast District - Athens
LIA-110-00	**Paulding**		YES				Coosa River	Region I	Mountain District - Cartersville
LIA-110-01	Paulding	Braswell	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-110-02	Paulding	Dallas	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-110-03	Paulding	Hiram	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-111-00	**Peach**		YES				Ocmulgee River	Region V	West Central District - Macon
LIA-111-01	Peach	Byron	YES				Ocmulgee River	Region V	West Central District - Macon
LIA-111-02	Peach	Ft. Valley	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-112-00	**Pickens**		YES	Rodney Buckingham, Land Development		(706) 253-8850	Limestone Valley	Region I	Mountain District - Cartersville
LIA-112-01	Pickens	Jasper	YES	Michael Castagna, Planning and Development	mcastagna@jasper-ga.us	(706) 692-9100	Limestone Valley	Region I	Mountain District - Cartersville
LIA-112-02	Pickens	Nelson	YES				Limestone Valley	Region I	Mountain District - Cartersville
LIA-112-03	Pickens	Talking Rock	NO				Limestone Valley	Region I	Mountain District - Cartersville
LIA-113-00	**Pierce**		YES				Satilla River	Region III	Coastal District - Brunswick
LIA-113-01	Pierce	Blackshear	YES				Satilla River	Region III	Coastal District - Brunswick
LIA-113-02	Pierce	Patterson	YES				Satilla River	Region III	Coastal District - Brunswick
LIA-114-00	**Pike**		YES	K. Morris, Planning and Development	kmorris_pikeco@bellsouth.net	(770) 567-2007	Towaliga	Region IV	West Central District - Macon
LIA-114-01	Pike	Concord	NO				Towaliga	Region IV	West Central District - Macon
LIA-114-02	Pike	Meansville	NO				Towaliga	Region IV	West Central District - Macon
LIA-114-03	Pike	Molena	NO				Towaliga	Region IV	West Central District - Macon
LIA-114-04	Pike	Williamson	NO				Towaliga	Region IV	West Central District - Macon
LIA-114-05	Pike	Zebulon	NO				Towaliga	Region IV	West Central District - Macon
LIA-115-00	**Polk**		NO				Coosa River	Region I	Mountain District - Cartersville
LIA-115-01	Polk	Aragon	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-115-02	Polk	Cedartown	YES	Bill Ferrell, Building Inspection	bferrell@cedartowngeorgia.gov	(770) 748-3220	Coosa River	Region I	Mountain District - Cartersville
LIA-115-03	Polk	Rockmart	YES	Stacey Smith, Community Development	stacey.smith@rockmart-ga.gov	(770) 684-5454	Coosa River	Region I	Mountain District - Cartersville
LIA-116-00	**Pulaski**		YES	Alan (Keith) Carter, Code Enforcement	kcarter@pulaskico.com	(478) 783-1418	Ocmulgee River	Region V	West Central District - Macon
LIA-116-01	Pulaski	Hawkinsville	YES	Alan (Keith) Carter, Code Enforcement	kcarter@pulaskico.com	(478) 784-1418	Ocmulgee River	Region V	West Central District - Macon
LIA-117-00	**Putnam**		YES	David (Glynn) Leverett, Code Enforcement	gleverett@putnamga.com	(706) 485-2776	Piedmont	Region IV	Northeast District - Athens
LIA-117-01	Putnam	Eatonton	YES	David (Glynn) Leverett, Code Enforcement	gleverett@putnamga.com	(706) 485-2776	Piedmont	Region IV	Northeast District - Athens
LIA-118-00	**Quitman**		NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-118-01	Quitman	Georgetown	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-119-00	**Rabun**		YES	James (Les) Neely, Planning Administrator	lneely@rabuncountygov.com	(706) 782-1579	Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-119-01	Rabun	Clayton	YES	Scott Crane, Code Enforcement	claytoncitymarshal@yahoo.com	(706) 490-1352	Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-119-02	Rabun	Dillard	NO				Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-119-03	Rabun	Mountain City	NO				Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-119-04	Rabun	Sky Valley	YES	Keith Krieger, City Building Inspector	skyvalleycode@windstream.net	(706) 746-2204	Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-119-05	Rabun	Tiger	NO				Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-120-00	**Randolph**		NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-120-01	Randolph	Coleman	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-120-02	Randolph	Cuthbert	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-120-03	Randolph	Shellman	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-121-00	**Richmond**		YES	Hameed Malik, Augusta Engineering Dept	hmalik@augustaga.gov	(706) 796-5068	Brier Creek	Region III	Northeast District - Augusta
LIA-121-01	Richmond	Augusta	YES	Hameed Malik, Augusta Engineering Dept	hmalik@augustaga.gov	(706) 796-5068	Brier Creek	Region III	Northeast District - Augusta
LIA-121-02	Richmond	Blythe	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-121-03	Richmond	Hephzibah	NO				Brier Creek	Region III	Northeast District - Augusta
LIA-122-00	**Rockdale**		YES	Orlando Robinson, Erosion Control Specialist	orlando.robinson@rockdalecounty.org	(770) 278-7108	Rockdale County	Region IV	Mountain District - Atlanta
LIA-122-01	Rockdale	Conyers	YES	Steven Owens, Chief Building Inspector		(770) 929-4280	Rockdale County	Region IV	Mountain District - Atlanta
LIA-123-00	**Schley**		NO				Lower Chattahoochee River	Region V	West Central District - Macon
LIA-123-01	Schley	Ellaville	NO				Lower Chattahoochee River	Region V	West Central District - Macon
LIA-124-00	**Screven**		YES				Ogeechee River	Region III	Northeast District - Augusta
LIA-124-01	Screven	Hiltonia	NO				Ogeechee River	Region III	Northeast District - Augusta
LIA-124-02	Screven	Newington	NO				Ogeechee River	Region III	Northeast District - Augusta
LIA-124-03	Screven	Oliver	NO				Ogeechee River	Region III	Northeast District - Augusta
LIA-124-04	Screven	Rocky Ford	NO				Ogeechee River	Region III	Northeast District - Augusta
LIA-124-05	Screven	Sylvania	YES	Stacy Mathis, Interim City Manager		(912) 564-2121	Ogeechee River	Region III	Northeast District - Augusta
LIA-125-00	**Seminole**		YES	Donna Jones, County Manager	djones39845@yahoo.com	(229) 524-2878	Flint River	Region V	Southwest District - Albany
LIA-125-01	Seminole	Donalsonville	NO				Flint River	Region V	Southwest District - Albany
LIA-125-02	Seminole	Iron City	NO				Flint River	Region V	Southwest District - Albany
LIA-126-00	**Spalding**		YES				Towaliga	Region IV	Mountain District - Atlanta
LIA-126-01	Spalding	Griffin	YES				Towaliga	Region IV	Mountain District - Atlanta
LIA-126-02	Spalding	Orchard Hill	NO				Towaliga	Region IV	Mountain District - Atlanta
LIA-126-03	Spalding	Sunny Side	NO				Towaliga	Region IV	Mountain District - Atlanta
LIA-127-00	**Stephens**		NO				Stephens County	Region II	Northeast District - Athens
LIA-127-01	Stephens	Avalon	NO				Stephens County	Region II	Northeast District - Athens
LIA-127-02	Stephens	Martin	NO				Stephens County	Region II	Northeast District - Athens
LIA-127-03	Stephens	Toccoa	YES				Stephens County	Region II	Northeast District - Athens

LIA-128-00	**Stewart**		YES				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-128-01	Stewart	Lumpkin	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-128-02	Stewart	Richland	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-129-00	**Sumter**		YES	Michael Sudduth, Code Enforcement	msudduth@sumtercountyga.us	(229) 928-4547	Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-129-01	Sumter	Americus	YES	Josh Roth, Building Official	pubwrks@cityofamericus.net	(229) 924-4411	Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-129-02	Sumter	Andersonville	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-129-03	Sumter	DeSoto	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-129-04	Sumter	Leslie	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-129-05	Sumter	Plains	YES	Michael Sudduth, Code Enforcement	msudduth@sumtercountyga.us	(229) 928-4547	Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-130-00	**Talbot**		NO				Pine Mountain	Region V	West Central District - Macon
LIA-130-01	Talbot	Geneva	NO				Pine Mountain	Region V	West Central District - Macon
LIA-130-02	Talbot	Junction City	NO				Pine Mountain	Region V	West Central District - Macon
LIA-130-03	Talbot	Talbotton	NO				Pine Mountain	Region V	West Central District - Macon
LIA-131-00	**Taliaferro**		NO				Piedmont	Region IV	Northeast District - Athens
LIA-131-01	Taliaferro	Crawfordville	NO				Piedmont	Region IV	Northeast District - Athens
LIA-131-02	Taliaferro	Sharon	NO				Piedmont	Region IV	Northeast District - Athens
LIA-132-00	**Tattnall**		NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-132-01	Tattnall	Cobbtown	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-132-02	Tattnall	Collins	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-132-03	Tattnall	Glennville	YES	Willie Bland, Code Enforcement		(912) 654-2461	Ogeechee River	Region III	Coastal District - Brunswick
LIA-132-04	Tattnall	Manassas	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-132-05	Tattnall	Reidsville	NO				Ogeechee River	Region III	Coastal District - Brunswick
LIA-133-00	**Taylor**		NO				Ocmulgee River	Region V	West Central District - Macon
LIA-133-01	Taylor	Butler	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-133-02	Taylor	Reynolds	NO				Ocmulgee River	Region V	West Central District - Macon
LIA-134-00	**Telfair**		YES	Charles White, Public Works Director		(229) 868-5688	Altamaha	Region III	Southwest District - Albany
LIA-134-01	Telfair	Helena	NO				Altamaha	Region III	Southwest District - Albany
LIA-134-02	Telfair	Jacksonville	NO				Altamaha	Region III	Southwest District - Albany
LIA-134-03	Telfair	Lumber City	NO				Altamaha	Region III	Southwest District - Albany
LIA-134-04	Telfair	McRae	YES	Anthony (Andy) Dykes, Public Works Director		(229) 868-6126	Altamaha	Region III	Southwest District - Albany
LIA-134-05	Telfair	Milan	NO				Altamaha	Region III	Southwest District - Albany
LIA-134-06	Telfair	Scotland	NO				Altamaha	Region III	Southwest District - Albany
LIA-135-00	**Terrell**		YES	Martha Ann Coe		(229) 995-4476	Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-135-01	Terrell	Bronwood	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-135-02	Terrell	Dawson	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-135-03	Terrell	Parrot	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-135-04	Terrell	Sasser	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-136-00	**Thomas**		NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-136-01	Thomas	Barwick	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-136-02	Thomas	Boston	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-136-03	Thomas	Coolidge	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-136-04	Thomas	Meigs	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-136-05	Thomas	Ochlocknee	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-136-06	Thomas	Pavo	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-136-07	Thomas	Thomasville	YES	James Petrak, City Engineer		(229) 227-7000	Middle South Georgia	Region V	Southwest District - Albany
LIA-137-00	**Tift**		YES	Carl Forston, Tift County Development Services	carl.fortson@tiftcounty.org	(229) 386-7961	Middle South Georgia	Region V	Southwest District - Albany
LIA-137-01	Tift	Omega	YES	Carl Forston, Tift County Development Services	carl.fortson@tiftcounty.org	(229) 386-7961	Middle South Georgia	Region V	Southwest District - Albany
LIA-137-02	Tift	Tifton	YES	Bert Crowe, Environmental Management	bcrowe@tifton.net	(229) 391-3950	Middle South Georgia	Region V	Southwest District - Albany
LIA-137-03	Tift	TyTy	NO	Carl Fortson, Tift County Development Services	carl.fortson@tiftcounty.org	(229) 386-7961	Middle South Georgia	Region V	Southwest District - Albany
LIA-138-00	**Toombs**		YES	John Jones, County Manager		(912) 526-3311	Ohoopee River	Region III	Coastal District - Brunswick
LIA-138-01	Toombs	Lyons	NO				Ohoopee River	Region III	Coastal District - Brunswick
LIA-138-02	Toombs	Santa Claus	NO				Ohoopee River	Region III	Coastal District - Brunswick
LIA-138-03	Toombs	Vidalia	YES	Shaun Oliver, Code Enforcement		(912) 526-7661	Ohoopee River	Region III	Coastal District - Brunswick
LIA-139-00	**Towns**		NO				Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-139-01	Towns	Hiawassee	NO				Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-139-02	Towns	Young Harris	YES	Gary Willer, Hayes / James	info@hayesjames.com	(706) 632-4981	Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-140-00	**Treulten**		NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-140-01	Treulten	Soperton	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-141-00	**Troup**		YES				Roosevelt	Region I	West Central District - Macon
LIA-141-01	Troup	Hogansville	YES	Scott Harris, Farner Barley and Associates	sharris@farnerbarley.com	(706) 645-5885	Roosevelt	Region I	West Central District - Macon
LIA-141-02	Troup	LaGrange	YES	Homer Samuels, Senior Building Inspector	hsamuels@lagrange-ga.org	(706) 883-2059	Roosevelt	Region I	West Central District - Macon
LIA-141-03	Troup	Westpoint	YES	Matthew (Matt) Livingston, Building Inspector	Mlivingston@CityOfWestPointGA.com	(706) 645-3537	Roosevelt	Region I	West Central District - Macon
LIA-142-00	**Turner**		NO	Mary Wynn, County Clerk		(229) 567-4313	Middle South Georgia	Region V	Southwest District - Albany
LIA-142-01	Turner	Ashburn	YES	Ben Taylor, City Manager		(229) 567-3431	Middle South Georgia	Region V	Southwest District - Albany
LIA-142-02	Turner	Rebecca	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-142-03	Turner	Sycamore	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-143-00	**Twiggs**		NO				Central Georgia	Region IV	West Central District - Macon
LIA-143-01	Twiggs	Danville	NO				Central Georgia	Region IV	West Central District - Macon
LIA-143-02	Twiggs	Jeffersonville	NO				Central Georgia	Region IV	West Central District - Macon
LIA-144-00	**Union**		YES	Randy Day, Supervisor	ucpermit@uniongov.com	(706) 439-6039	Blue Ridge Mountain	Region I	Mountain District - Cartersville

LIA-144-01	Union	Blairsville	YES	Randy Day, Supervisor	ucpermit@uniongov.com	(706) 439-6039	Blue Ridge Mountain	Region I	Mountain District - Cartersville
LIA-145-00	**Upson**		YES				Towaliga	Region IV	West Central District - Macon
LIA-145-01	Upson	Thomaston	YES				Towaliga	Region IV	West Central District - Macon
LIA-145-02	Upson	Yatesville	NO				Towaliga	Region IV	West Central District - Macon
LIA-146-00	**Walker**		YES	Wayland Butler	planning@walkerga.us	(706) 638-4048	Coosa River	Region I	Mountain District - Cartersville
LIA-146-01	Walker	Chickamauga	YES	James Powell, Zoning Administrator	jpowell-zoning@comcast.net	(706) 375-3177	Coosa River	Region I	Mountain District - Cartersville
LIA-146-02	Walker	LaFayette	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-146-03	Walker	Lookout Mountain	NO				Coosa River	Region I	Mountain District - Cartersville
LIA-146-04	Walker	Rossville	YES	Sherry Foster, City Clerk	sfoster@rossvillega.com	(706) 866-1325	Coosa River	Region I	Mountain District - Cartersville
LIA-147-00	**Walton**		YES				Walton County	Region IV	Northeast District - Athens
LIA-147-01	Walton	Between	YES				Walton County	Region IV	Northeast District - Athens
LIA-147-02	Walton	Good Hope	YES				Walton County	Region IV	Northeast District - Athens
LIA-147-03	Walton	Jersey	NO				Walton County	Region IV	Northeast District - Athens
LIA-147-04	Walton	Loganville	YES				Walton County	Region IV	Northeast District - Athens
LIA-147-05	Walton	Monroe	YES				Walton County	Region IV	Northeast District - Athens
LIA-147-06	Walton	Social Circle	NO				Walton County	Region IV	Northeast District - Athens
LIA-147-07	Walton	Walnut Grove	YES				Walton County	Region IV	Northeast District - Athens
LIA-148-00	**Ware**		YES	Wayne Kilmark, Planning and Code Director		(912) 287-4379	Satilla River	Region III	Coastal District - Brunswick
LIA-148-01	Ware	Waycross	YES	Gene Thomas, Engineering Department	gthomas@waycrossga.com	(912) 287-2945	Satilla River	Region III	Coastal District - Brunswick
LIA-149-00	**Warren**		YES				Warren County	Region IV	Northeast District - Augusta
LIA-149-01	Warren	Camak	NO				Warren County	Region IV	Northeast District - Augusta
LIA-149-02	Warren	Norwood	NO				Warren County	Region IV	Northeast District - Augusta
LIA-149-03	Warren	Warrenton	YES				Warren County	Region IV	Northeast District - Augusta
LIA-150-00	**Washington**		NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-150-01	Washington	Davisboro	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-150-02	Washington	Deepstep	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-150-03	Washington	Harrison	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-150-04	Washington	Oconee	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-150-05	Washington	Riddleville	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-150-06	Washington	Sandersville	YES	Chad Forehand, Building Official	cforehand@sandersville.net	(478) 552-2525	Central Georgia	Region IV	Northeast District - Augusta
LIA-150-07	Washington	Tennille	YES				Central Georgia	Region IV	Northeast District - Augusta
LIA-151-00	**Wayne**		NO				Satilla River	Region III	Coastal District - Brunswick
LIA-151-01	Wayne	Jesup	NO				Satilla River	Region III	Coastal District - Brunswick
LIA-151-02	Wayne	Odum	NO				Satilla River	Region III	Coastal District - Brunswick
LIA-151-03	Wayne	Screven	NO				Satilla River	Region III	Coastal District - Brunswick
LIA-152-00	**Webster**		NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-152-01	Webster	Preston	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-152-02	Webster	Weston	NO				Lower Chattahoochee River	Region V	Southwest District - Albany
LIA-153-00	**Wheeler**		NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-153-01	Wheeler	Alamo	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-153-02	Wheeler	Glenwood	NO				Ohoopee River	Region III	Northeast District - Augusta
LIA-154-00	**White**		YES	Harry Barton	hbarton@whitecounty.net	(706) 865-6768	Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-154-01	White	Cleveland	YES	Connie Tracas		(706) 865-2017	Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-154-02	White	Helen	NO				Upper Chattahoochee River	Region II	Mountain District - Cartersville
LIA-155-00	**Whitfield**		YES	Christopher Hester, Inspections	chester@whitfieldcountyga.com	(706) 876-2512	Limestone Valley	Region I	Mountain District - Cartersville
LIA-155-01	Whitfield	Cohutta	NO				Limestone Valley	Region I	Mountain District - Cartersville
LIA-155-02	Whitfield	Dalton	YES	Dena Haverland, Regulatory Compliance	dhaverland@dutil.com	(706) 529-1010	Limestone Valley	Region I	Mountain District - Cartersville
LIA-155-03	Whitfield	Tunnel Hill	YES	Blake Griffin, City Administrator		(706) 673-2355	Limestone Valley	Region I	Mountain District - Cartersville
LIA-155-04	Whitfield	Varnell	YES	Jason Hall, City Administrator	jhall@cityofvarnell.com	(706) 694-8800	Limestone Valley	Region I	Mountain District - Cartersville
LIA-156-00	**Wilcox**		NO				Ocmulgee River	Region V	Southwest District - Albany
LIA-156-01	Wilcox	Abbeville	NO				Ocmulgee River	Region V	Southwest District - Albany
LIA-156-02	Wilcox	Pineview	NO				Ocmulgee River	Region V	Southwest District - Albany
LIA-156-03	Wilcox	Pitts	NO				Ocmulgee River	Region V	Southwest District - Albany
LIA-156-04	Wilcox	Rochelle	NO				Ocmulgee River	Region V	Southwest District - Albany
LIA-157-00	**Wilkes**		YES	David Tyler, County Administrator	wilkescountyadm@yahoo.com	(706) 678-2511	Broad River	Region II	Northeast District - Athens
LIA-157-01	Wilkes	Rayle	NO				Broad River	Region II	Northeast District - Athens
LIA-157-02	Wilkes	Tignall	NO				Broad River	Region II	Northeast District - Athens
LIA-157-03	Wilkes	Washington	YES	David VanHart, Building Official	buildingoff@washingtonwilkes.org	(706) 678-3277	Broad River	Region II	Northeast District - Athens
LIA-158-00	**Wilkinson**		NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-158-01	Wilkinson	Allentown	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-158-02	Wilkinson	Gordon	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-158-03	Wilkinson	Irwinton	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-158-04	Wilkinson	Ivey	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-158-05	Wilkinson	McIntyre	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-158-06	Wilkinson	Toomsboro	NO				Central Georgia	Region IV	Northeast District - Augusta
LIA-159-00	**Worth**		NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-159-01	Worth	Poulan	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-159-02	Worth	Sumner	NO				Middle South Georgia	Region V	Southwest District - Albany
LIA-159-03	Worth	Sylvester	YES	Angel Gray, Code Enforcement	ag903@cityofsylvester.com	(229) 776-8505	Middle South Georgia	Region V	Southwest District - Albany
LIA-159-04	Worth	Warwick	NO				Middle South Georgia	Region V	Southwest District - Albany

Local Issuing Authority

Go Rows 200 Actions Create

Is Moa? = 'Yes'

1 - 63

LIA	Is Moa?	Is Active?	County	Swcd	Region
Acworth	Yes	Yes	Cobb	Cobb County	Region 1
Albany	Yes	Yes	Dougherty	Flint River	Region 5
Alpharetta	Yes	Yes	Fulton	Fulton County	Region 1
Athens-Clarke County	Yes	Yes	Clarke	Oconee River	Region 2
Atlanta	Yes	Yes	Fulton	Fulton County	Region 1
Augusta-Richmond County	Yes	Yes	Richmond	Brier Creek	Region 3
Bibb County	Yes	Yes	Bibb	Ocmulgee River	Region 5
Buford	Yes	Yes	Gwinnett	Gwinnett County	Region 2
Carroll County	Yes	Yes	Carroll	West Georgia	Region 1
Cartersville	Yes	Yes	Bartow	Coosa River	Region 1
Charlton County	Yes	Yes	Charlton	Satilla River	Region 3
Clayton County	Yes	Yes	Clayton	Clayton County	Region 4
Cobb County	Yes	Yes	Cobb	Cobb County	Region 1
Columbia County	Yes	Yes	Columbia	Columbia County	Region 2
Columbus-Muscogee County	Yes	Yes	Muscogee	Pine Mountain	Region 5
Conyers	Yes	Yes	Rockdale	Rockdale County	Region 4
Covington	Yes	Yes	Newton	Upper Ocmulgee River	Region 4
Coweta County	Yes	Yes	Coweta	West Georgia	Region 1
Dalton	Yes	Yes	Whitfield	Limestone Valley	Region 1

Dekalb County	Yes	Yes	DeKalb	Dekalb County	Region 2
Dougherty County	Yes	Yes	Dougherty	Flint River	Region 5
Douglas County	Yes	Yes	Douglas	West Georgia	Region 1
Douglasville	Yes	Yes	Douglas	West Georgia	Region 1
Duluth	Yes	Yes	Gwinnett	Gwinnett County	Region 2
Fairburn	Yes	Yes	Fulton	Fulton County	Region 1
Fayette County	Yes	Yes	Fayette	Towaliga	Region 4
Fayetteville	Yes	Yes	Fayette	Towaliga	Region 4
Floyd County	Yes	Yes	Floyd	Coosa River	Region 1
Forest Park	Yes	Yes	Clayton	Clayton County	Region 4
Griffin	Yes	Yes	Spalding	Towaliga	Region 4
Gwinnett County	Yes	Yes	Gwinnett	Gwinnett County	Region 2
Henry County	Yes	Yes	Henry	Henry County	Region 4
Holly Springs	Yes	Yes	Cherokee	Limestone Valley	Region 1
Houston County	Yes	Yes	Houston	Ocmulgee River	Region 5
Johns Creek	Yes	Yes	Fulton	Fulton County	Region 1
Jonesboro	Yes	Yes	Clayton	Clayton County	Region 4
Kennesaw	Yes	Yes	Cobb	Cobb County	Region 1
LaGrange	Yes	Yes	Troup	Roosevelt	Region 1
Lilburn	Yes	Yes	Gwinnett	Gwinnett County	Region 2
Lowndes County	Yes	Yes	Lowndes	Alapaha	Region 5
Macon	Yes	Yes	Bibb	Ocmulgee River	Region 5
McDonough	Yes	Yes	Henry	Henry County	Region 4
Milton	Yes	Yes	Fulton	Fulton County	Region 1
Newnan	Yes	Yes	Coweta	West Georgia	Region 1
Peachtree City	Yes	Yes	Fayette	Towaliga	Region 4

	Peachtree Corners	Yes	Yes	Gwinnett	Gwinnett County	Region 2
	Pine Lake	Yes	Yes	DeKalb	Dekalb County	Region 2
	Rockdale County	Yes	Yes	Rockdale	Rockdale County	Region 4
	Rome	Yes	Yes	Floyd	Coosa River	Region 1
	Roswell	Yes	Yes	Fulton	Fulton County	Region 1
	Sandy Springs	Yes	Yes	Fulton	Fulton County	Region 1
	Smyrna	Yes	Yes	Cobb	Cobb County	Region 1
	Snellville	Yes	Yes	Gwinnett	Gwinnett County	Region 2
	Stockbridge	Yes	Yes	Henry	Henry County	Region 4
	Troup County	Yes	Yes	Troup	Roosevelt	Region 1
	Tunnell Hill	Yes	Yes	Whitfield	Limestone Valley	Region 1
	Tyrone	Yes	Yes	Fayette	Towaliga	Region 4
	Valdosta	Yes	Yes	Lowndes	Alapaha	Region 5
	Varnell	Yes	Yes	Whitfield	Limestone Valley	Region 1
	Warner Robins	Yes	Yes	Houston	Ocmulgee River	Region 5
	Waycross	Yes	Yes	Ware	Satilla River	Region 3
	Whitfield County	Yes	Yes	Whitfield	Limestone Valley	Region 1
	Woodstock	Yes	Yes	Cherokee	Limestone Valley	Region 1

1 - 63

GEORGIA SOIL AND WATER CONSERVATION DISTRICT SUPERVISORS

(C) Chairman (VC) Vice Chairman (ST) Secretary Treasurer *Appointed Supervisors

		ALAPAHA	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Jake Ford	Berrien	21435 US Highway, Alapaha, GA 31622-	(229) 532-9715	
*		Carlos Vickers	Berrien	436 Rev. Hendley Rd, Nashville, GA 31639-	(229) 543-1630	
		VACANT	Clinch			
*		Roy Crumbley	Clinch	384 Wood Lake Drive, Homerville, GA 31634-	(912) 487-5141	
		Julian Howell	Cook	3245 Antioch Road, Adel, GA 31620	(229) 549-5818	
		Harold Simpson Jr.	Cook	400 Math Chaney Road, Adel, GA 31620-	(229) 549-7276	(229) 549-7276
	C	Owen C Prince	Echols	461 Roy Padgett Road, Lake Park, GA 31636-	(229) 559-5577	
*		Tim Hughes	Echols	350 Broadway Street, Lake Park, GA 31636-	(229) 559-8283	(229) 561-1467
		Paul W Folsom	Lanier	430 N Pecan Street, Lakeland, GA 31635-	(229) 482-3340	
*	ST	William P Darsey	Lanier	111 W. Main Street, Lakeland, GA 31635-	(229) 482-2495	(229) 460-3125
		E. David Fields	Lowndes	6170 Cat Creek Road, Hahira, GA 31632-	(229) 243-7817	
*		Johnny O Swilley	Lowndes	3693 Hickory Grove Road, Valdosta, GA 31606-9624	(229) 242-5318	(229) 242-5318

		ALTAMAHA	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Robert Mathews	Appling	3452 County Farm Road, Baxley, GA 31513-	(912) 367-6431	
*		Jeff Deen	Appling	595 Jeff Deen Road, SE, Baxley, GA 31513-	(912) 367-6432	(912) 282-9886
		George M Yearty	Bacon	1017 Wolf Pit Church Road, Nicholls, GA 31554-3664	(912) 632-5792	
*		Charles P Tanner	Bacon	119 Biscayne Road, Alma, GA 31510-	(912) 632-5036	
		Orson Adams	Coffee	P O Box 665, Douglas, GA 31533-	(912) 384-3610	
*	VC	Garland Thompson	Coffee	P O Box 2703, Douglas, GA 31534-	(912) 384-7614	(912) 384-9224
	T	Tabatha K. Wooten	Jeff Davis	466 W.H. Smith Road, Denton, GA 31532-	(912) 375-5246	(912) 375-5246
*		B H Claxton	Jeff Davis	50 Dogwood Road, Hazlehurst, GA 31539-	(912) 375-5838	
		Garry R Spires	Telfair	636 Grahamville Road, McRae, GA 31055-	(229) 868-5285	(229) 868-5285
*	C	Travis P Cook	Telfair	P O Box 277, McRae, GA 31055-	(229) 868-6268	(229) 868-5619

		BLUE RIDGE MOUNTAIN	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Richard A Stanley	Fannin	Box 157 Toccoa Valley Dr., Blue Ridge, GA 30513-	(706) 838-4324	
*		Damon Davenport	Fannin	10623 Old Highway 76, Morganton, GA 30560-	(706) 374-6585	(706) 455-3008
		Richard Godfrey	Rabun	6595 Warwoman Road, Clayton, GA 30525-	(706) 782-3603	
*		James Neely	Rabun	130 Louisiana Circle, Clayton, GA 30525	(706) 982-9434	(706) 782-1579
	ST	Virginia D. Palmer	Towns	1340 Palmer Place 76E, Hiawassee, GA 30546-	(706) 896-3851	(706) 896-3943
*	C	John Wesley Kay	Towns	P O Box 125, Young Harris, GA 30582-	(706) 994-6272	(706) 379-3111
		Mickey Cummings	Union	290 Wellborn Branch Drive, Blairsville, GA 30512-	(706) 745-1568	(706) 781-8802
*		George Daves	Union	P O Box 206, Blairsville, GA 30514-		

		BRIER CREEK	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Henry Wayne Syms	Burke	622 Lake Pearl Road, Waynesboro, GA 30830-	(706) 554-4510	
*	C	Art M. Rider	Burke	5506 Highway 56 S., Waynesboro, GA 30830-	(706) 554-0908	
		VACANT	Glascock			
*		Robert Snider	Glascock	4744 Bethel Acres Road, Gibson, GA 30810-	(706) 598-0191	
		Larry M Hodges	Jefferson	1004 James Road, Louisville, GA 30434-	(478) 625-8323	(478) 625-2000
*		Jerry D. Dowdy	Jefferson	P. O. Box 12, Wrens, GA 30833-	(706) 547-6207	(706) 830-7467
		W Elbert Burke	Jenkins	1676 Highway 23 North, Millen, GA 30442-	(478) 982-5413	
*	T	Lamar Black	Jenkins	932 Tillmanstone Road, Millen, GA 30442-	(478) 982-5458	(478) 982-4285
		Charles Byrd	Richmond	5170 Henderson Rd, Hephzibah, GA 30810-	(706) 592-0155	(706) 664-8842
*	VC	Tom Mims	Richmond	P.O. Box 192, Hephzibah, GA 30815-	(706) 592-6322	

		BROAD RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	VC	Dennis T Brown	Banks	2063 Georgia Highway 326, Commerce, GA 30530-	(706) 335-2953	
*		Carol H Hodgkins	Banks	1665 Georgia Highway 326, Commerce, GA 30530-	(706) 335-5042	
		O. Dan Holmes	Elbert	2723 Winns Mill Road, Royston, GA 30662-	(706) 245-5631	
*		Laura Bass	Elbert	3601 Mize Farm Drive, Bowman, GA 30624-	(706) 245-4334	
		VACANT	Franklin			
*		O. M. Thomason	Franklin	1040 Crenshaw Road, Martin, GA 30557-	(706) 384-4463	(706) 384-4813
		VACANT	Hart			
*	Ch	Charles A Brown	Hart	1407 Airline & Goldmine Road, Canon, GA 30502-		
	C	George Smith	Madison	625 Donald Smith Road, Hull, GA 30646-	(706) 789-2531	
*		Clay Wilson	Madison	9766 Highway 98 W, Commerce, GA 30530-	(706) 335-7905	(706) 621-1892
		Charles E Andrews	Oglethorpe	340 Old Edwards Road, Arnoldsville, GA 30619-	(706) 742-2040	
*	ST	Russ Yeany	Oglethorpe	563 Hutchins Road, Crawford, GA 30639-	(706) 743-5947	
		Shane Moore	Wilkes	1277 Tignall Rd, Washington, GA 30673-	(706) 678-5705	(706) 318-0445
*		Eric Holton	Wilkes	6895 Elberton Road, Tignall, GA 30668-		

		CATOOSA COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	C	Roger O Bowman Jr	Catoosa	360 Bowman Springs Road, Ringgold, GA 30736-	(706) 935-5584	(706) 935-5572
		James Lyles	Catoosa	370 Houston Valley Road, Ringgold, GA 30736-	(706) 965-9173	(423) 227-7929
	T	Keith Bonnell	Catoosa	2269 Three Notch Road, Ringgold, GA 30736-	(706) 965-8542	(706) 876-1108
*	VC	J M Plemons	Catoosa	P O Box 295, Ringgold, GA 30736-	(706) 935-4324	(404) 635-4600
		Marjorie Berry	Catoosa	546 Tom Hunt Road, Chickamauga, GA 30707-	(706) 375-4049	(423) 598-3867

		CENTRAL GEORGIA	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Wayne Dykes	Bleckley	176 Nicholson Carr Rd., Cochran, GA 31014-	(478) 934-6856	(478) 290-8695
*		Paul F English	Bleckley	108 Marie Drive, Cochran, GA 31014-	(478) 934-2932	(478) 278-0204
		Michael Jones	Dodge	2391 Milan Eastman Road, Eastman, GA 31023-	(478) 285-1343	(478) 374-6055
*		James McCranie	Dodge	2594 Chauncey-Rhine Highway, Eastman, GA 31023-	(478) 374-4259	
		Nick Holton	Johnson	997 Bill Oliver Road, Wrightsville, GA 31096-	(478) 864-2253	
*	C	Ralph Veal, Jr.	Johnson	5 Pleasant Grove Church Rd., Wrightsville, GA 31096-	(478) 864-3754	
		Danny B Hogan	Laurens	888 Hillbridge Road, Dexter, GA 31019-	(478) 875-3476	(478) 875-3476
*		Harry D Green	Laurens	936 Green Loop, Montrose, GA 31065-	(478) 676-3489	(877) 678-2863
		Sam Floyd Jr	Twiggs	881 Sam Floyd Road, Danville, GA 31017-	(478) 945-3793	
*		Alton V White III	Twiggs	8358 Bullard Road, Dry Branch, GA 31020-	(478) 945-3069	
		Rufus Hodges Hartley Jr	Washington	270 News Bridge Road, Tennille, GA 31089-	(478) 552-0361	(478) 552-7413
*		Wendell Glenn Waller	Washington	1289 Brantley Road, Harrison, GA 31035-	(478) 552-9430	(478) 357-1300
		Frank G Wall Jr	Wilkinson	135 Springhill Drive, Irwinton, GA 31042-	(478) 946-2081	(478) 946-2667
*	ST	Dan M Dixon	Wilkinson	P O Box 362, Gordon, GA 31031-	(478) 628-2551	(478) 946-6045

		CLAYTON COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	VC	Joseph C Shelnutt	Clayton	7761 Morant Drive, Jonesboro, GA 30236-	(770) 478-5642	(770) 477-3798
		Vacal Dee Caldwell	Clayton	4613 Bouldercrest Road, Ellenwood, GA 30294-	(404) 968-3105	(770) 473-5480
	C	Kyrishia Johnson	Clayton	7026 New Dale Road, Rex, GA 30273-	(478) 251-8525	(770) 467-4252
*	T	Rufus Ladson	Clayton	7753 Kennington Lane, Jonesboro, GA 30236-	(770) 478-2040	
*		Daniel Small	Clayton	2587 Carnes Crossing Way, Jonesboro, GA 30236-	(678) 817-3735	(678) 634-0953

		COASTAL	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
\/		William C Tillman	Bryan	276 Sterling Woods Drive, Richmond Hill, GA 31324-	(912) 727-2848	(912) 727-4290
*	ST	Charles F. Warnell Jr.	Bryan	374 Strathy Hall Drive, Richmond Hill, GA 31324-	(912) 727-3334	
		Horace B Waller	Chatham	702 Bloomingdale Road, Bloomingdale, GA 31302-	(912) 748-4241	(912) 748-4210
*		Edward H Zipperer	Chatham	126 Grove Point Island Road, Savannah, GA 31419-	(912) 925-7790	(912) 920-8100
		Jerry Holcomb	Liberty	P O Box 2187, Hinesville, GA 31310-	(912) 368-5920	(912) 271-0133
*	C	M L Coffer	Liberty	1172 Fleming Loop Road, Fleming, GA 31309-	(912) 884-2304	(912) 876-3130
		Cecil Stafford Jr	Long	484 Stafford Avenue, Ludowici, GA 31316-	(912) 545-9421	
*		Roger Houston	Long	1547 Elim Church Road, NE, Ludowici, GA 31316-	(912) 266-0005	
		Bob Monroe	McIntosh	P.O. Box 2298, Darien, GA 31305-	(912) 832-2401	
*		Daniel Russell Hawthorne	McIntosh	P O Box 196, Darien, GA 31305-	(912) 437-4526	

		COBB COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	C	Fred W Snell III	Cobb	4880 Lower Roswell Rd., Ste 165# 524, Marietta, GA 30068-4385	(770) 993-9992	(404) 512-4583
	T	Donald Ayres	Cobb	2100 Cannon Way, Marietta, GA 30064-	(770) 422-4676	(770) 421-8140
		Alice M Champagne	Cobb	3587 Spencer Lane, Marietta, GA 30066-	(770) 928-2430	(770) 641-3707
*	T	Jim Lanier	Cobb	605-B Mauldin Drive, Woodstock, GA 30188	(770) 973-2288	(678) 445-0077
*		Alan Bowling	Cobb	2681 Moon Cabin Drive, Powder Springs, GA 30127-	(770) 943-7237	(678) 461-3412

		COLUMBIA COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	VC	Jeanie Hill	Columbia	2102 Magnolia Parkway, Grovetown, GA 30813-	(706) 860-1039	(706) 868-3736
		Michael Rorick	Columbia	P. O. Box 204014, Martinez, GA 30917-	(706) 863-2885	(706) 799-7920
	ST	Edward E. Hair	Columbia	5260 Columbia Road, Grovetown, GA 30813-	(706) 863-1413	
*		John C Shearouse	Columbia	152 Misty Woods Drive, Grovetown, GA 30813-	(706) 860-4763	(706) 868-3711
*	C	Rick Crawford Jr	Columbia	189 Kestwick Drive, Martinez, GA 30907-	(706) 860-7850	(706) 868-4670

		COOSA RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Brent Nelson	Bartow	161 Jimmie Nelson Road, Kingston, GA 30145-	(770) 655-5406	(770) 655-5406
*	C	Davis R Nelson	Bartow	20 Angus Trail, Cartersville, GA 30120-	(770) 382-4963	(404) 656-2804
		Greg Hurley	Chattooga	1407 Fish Hatchery Road, Summerville, GA 30747-	(706) 857-7689	
*		Jim Parker	Chattooga	333 Parker Lane, Lyerly, GA 30730-	(706) 875-4834	(706) 857-0700
		Loyd C. Gass	Dade	1688 Highway 136, Trenton, GA 30752-	(706) 657-2001	
*		Larry Williams	Dade	, Trenton, GA 30752-		
		Jarrell R. Cagle	Floyd	462 Reynolds Bend Drive SE, Rome, GA 30161-	(706) 291-8651	
*		Thad Rush	Floyd	3853 Calhoun Road NE, Rome, GA 30161-	(706) 291-4849	
		VACANT	Gordon			
*	VC	George Stewart	Gordon	P O Box 1269, Calhoun, GA 30703-	(706) 629-3534	(706) 346-5599
		VACANT	Paulding			
*		James S. Smith	Paulding	3836 Hiram Douglasville Hwy, Hiram, GA 30141-	(770) 943-2253	
		Jewell Tuck	Polk	206 Judkin Mill Road, Cedartown, GA 30125-	(770) 748-1867	
*		John Groover	Polk	558 Runyon Road, Cedartown, GA 30125-	(770) 749-9239	(770) 317-5630
	ST	J B Lemons	Walker	3617 Chamberlain Road, LaFayette, GA 30728-	(706) 638-1885	
*		Roger Neal	Walker	6204 W. Armuchee Road, Summerville, GA 30747-	(706) 397-2407	(706) 638-0258

		DEKALB COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	C/	Dell MacGregor	DeKalb	432 Burlington Road NE, Atlanta, GA 30307-	(404) 378-6040	
		Jeff Bragg	DeKalb	1703 Dyson Drive NE, Atlanta, GA 30307-1315		
		William D Denton	DeKalb	P O Box 1341, Decatur, GA 30031-	(404) 377-8388	(404) 372-1051
		Tony Gobert	DeKalb	3967 Belmont Ridge Drive, Lithonia, GA 30038-	(770) 480-9887	(678) 418-9460
*		Jan D Dunaway	DeKalb	4672 Fellswoods Drive, Stone Mountain, GA 30083-	(404) 290-9019	

		FLINT RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Shane Kelley	Baker	3952 Newton Highway, Newton, GA 39870-	(229) 734-4046	(229) 336-3306
*		Chris Moore	Baker	5486 GA Highway 253, Colquitt, GA 39837-	(229) 416-8107	
	C	Martin L McLendon	Calhoun	P. O. Box 10, Leary, GA 39862	(229) 881-2767	
*		Graham Ginn	Calhoun	14060 Georgia Highway 37, Morgan, GA 39866-	(229) 835-2585	
	VC	Wayne Thomas	Decatur	801 Attapulgus Road, Climax, GA 39834-	(229) 246-2504	
*		Parker D "Pete" Miller Jr.	Decatur	2107 Backlake Circle, Bainbridge, GA 39819-	(229) 465-3987	(229) 465-3987
		Richard Thomas	Dougherty	1930 Dawson Road, Albany, GA 31707-	(229) 347-9197	(229) 883-1143
*		Doug Wilson	Dougherty	2617 East Doublegate Dr, Albany, GA 31721-	(229) 436-0016	(229) 430-2900
		Steve Singletary	Early	P O Box 628, Blakely, GA 39823	(229) 723-3808	(229) 723-3525
*		Hal Haddock Jr	Early	14050 Highway 200 West, Damascus, GA 39841-	(229) 725-4202	
		John C Harrell	Grady	2536 Harrell Road, Whigham, GA 39897-	(229) 377-2255	(229) 221-8255
*		Jeffrey Brinson	Grady	192 Harrell Avenue, Whigham, GA 39897-	(229) 762-4207	
		M Louie Grimes	Miller	233 Bush Grimes Road, Colquitt, GA 39837-	(229) 758-2102	(229) 221-1781
*		Billy W. Roland	Miller	209 Mayhaw Road, Colquitt, GA 39837-	(229) 758-3847	(229) 758-3847
		James Cox	Mitchell	5067 River Road, Camilla, GA 31730-	(229) 336-0241	
*		David G Holton	Mitchell	5806 Horseshoe Road, Camilla, GA 31730	(229) 336-7767	(229) 336-7767
	T	Steve Bailey	Seminole	5966 Highway 91 South, Donalsonville, GA 39845-	(229) 524-2814	(229) 524-5720
*		Judson Hornsby	Seminole	5133 Hornsby Road, Iron City, GA 39859-	(229) 724-2915	(229) 220-5751

		FULTON COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	C/	Alan O Toney	Fulton	330 River Knoll Drive, Sandy Springs, GA 30328-	(678) 615-7980	(770) 433-3552
		Preston D Mason	Fulton	2631 Forrest Avenue NW, Atlanta, GA 30318-	(404) 794-1507	(770) 361-6661
	VC	John M Spotts	Fulton	4274 McClatchey Circle NE, Atlanta, GA 30342-	(404) 252-9218	(770) 263-1012
*		Cory Rayburn	Fulton	1538 Jones Road, Roswell, GA 30075-	(706) 614-9047	(678) 614-2369
*		Walter S Rekuc Jr	Fulton	615 Scarlet Oak Trail, Milton, GA 30004-0914	(770) 998-1276	(404) 867-8283

		GWINNETT COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		David VanLandingham	Gwinnett	3763 Galdway Drive, Snellville, GA 30039-	(770) 985-4269	
	VC	Lawrence K Kaiser	Gwinnett	325 Amberbrook Circle, Grayson, GA 30017-	(770) 609-6193	(404) 909-5619
	C	Ellis R Lamme	Gwinnett	676 Tanner Road, Dacula, GA 30019-	(770) 365-2593	(770) 365-2593
*		Louis Young Jr	Gwinnett	935 Hazel Court, SW, Lilburn, GA 30047-	(770) 335-4142	(770) 325-0357
*		Matthew Retter	Gwinnett	3012 Loreli Lane, Lawrenceville, GA 30044-	(770) 231-0652	(770) 963-7944

		HALL COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Edward E Anderson	Hall	5118 High Meadow Run, Gainesville, GA 30506-	(770) 506-0400	(770) 531-6988
	C	Mike R Haynes	Hall	4877 Clarks Bridge Road, Gainesville, GA 30506-	(770) 983-3035	(770) 983-3352
	ST	T Larry Nix	Hall	3776 Anglin Drive, Gainesville, GA 30507-	(770) 534-7890	(770) 534-7890
*		Jane R Hemmer	Hall	3645 White Sulphur Road, Gainesville, GA 30507-	(770) 532-2768	(770) 532-1203
*		Thomas S Blackstock	Hall	3721 Blackstock Road, Talmo, GA 30575-	(770) 535-0242	(770) 533-0363

		HENRY COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Vikki Consiglio	Henry	305 Broadmoor Way, McDonough, GA 30253-	(770) 507-3232	(404) 362-9995
	C	Ronald M Turpin	Henry	812 Elliott Road, McDonough, GA 30252-	(770) 474-1543	
		Amy Rollins	Henry	52 New Hope Drive, McDonough, GA 30252-	(678) 850-2466	
*		Butch Oliver	Henry	2425 McGarity Road, McDonough, GA 30252-	(770) 914-7863	(770) 862-0266
*	VC	Hugh M Simpson	Henry	688 Oakland Road, McDonough, GA 30253		

		LAMAR COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Russ Walters	Lamar	956 Johnstonville Road, Barnesville, GA 30204-	(404) 444-0274	
		Roy Studle	Lamar	374 Piedmont Road, Barnesville, GA 30204-	(678) 967-9984	
	S/T	Lynn Parker	Lamar	530 Fredonia Church Rd., Barnesville, GA 30204-	(770) 358-6826	
*		Chad Thompson	Lamar	1211 Ramah Church Rd, Barnesville, GA 30204	(770) 358-3401	(770) 358-8051
*	C	Andy Bush	Lamar	1153 Van Buren Drive, Barnesville, GA 30204-	(770) 358-1311	(770) 358-1311

		LIMESTONE VALLEY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		William Grizzle	Cherokee	762 Lower Union Hill Road, Canton, GA 30115-	(770) 345-5305	(770) 597-6306
*	C	Don Keeter	Cherokee	501 Pineview Drive, Canton, GA 30014-	(770) 265-8704	(706) 253-9665
		Kenny McClure	Gilmer	3883 Mountaintown Road, Ellijay, GA 30540-	(706) 635-7055	(706) 889-7055
*	VC	Paul Nealey	Gilmer	175 Jennifer Drive, Ellijay, GA 30540-	(706) 635-5629	(706) 692-3581
		James F. Petty	Murray	805 Little Murray Road, Crandall, GA 30711-	(706) 695-4374	(706) 264-2368
*		Linda Loughridge	Murray	322 Ballground Road, Chatsworth, GA 30705-	(706) 695-4987	
		Jerry L Edwards	Pickens	49 Cape Trail, Jasper, GA 30143-	(706) 692-5610	(706) 253-7035
*		Robert Jones	Pickens	, Jasper, GA 30143-		
		Wesley Fogle	Whitfield	159 Farmdale Way, Dalton, GA 30721-	(706) 270-5997	(706) 271-7240
		Bob Seaton	Whitfield	P.O. Box 26, Cohutta, GA 30710-	(706) 278-7073	

		LINCOLN COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	Ch	Leroy Bufford	Lincoln	1664 Graball Road, Tignall, GA 30668-	(706) 359-2180	(706) 359-1390
		VACANT	Lincoln	, , GA 30817-		
	S	Stanton E. Tankersley Sr	Lincoln	4458 Double Branches Road, Lincolnton, GA 30817-	(706) 359-3077	
*		T Olin Reed	Lincoln	2167 Reed Road, Lincolnton, GA 30817-	(706) 359-4677	
*	C	Marcus Matthews	Lincoln	4811 Clay Hill Road, Lincolnton, GA 30817-	(706) 359-3802	(706) 359-7179

		LOWER CHATTAHOOCHEE RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Chad Brooks	Clay	162 Enterprise Road, Edison, GA 39846-	(229) 835-3198	
		Gerald Isler	Clay	2902 Edison Highway, Coleman, GA 39836-		
		Wendell Arrington	Lee	P O Box 1277, Leesburg, GA 31763-	(229) 759-8841	
*		Julian Thaggard	Lee	299 Grave-Springs Road, Leesburg, GA 31763-	(220) 975-9060	(229) 759-6321
		George Cathrall	Quitman	110 Sunny View Farms Rd., Georgetown, GA 39854-	(229) 334-9285	(334) 726-1173
*		Ralph M Balkcom Jr	Quitman	344 Ralph Sr Road, Georgetown, GA 39854-	(334) 687-1325	
		Frankie Sauls	Randolph	Route 1 Box 675, Shellman, GA 39886-	(229) 679-2264	
*	C	Hiram Bo Beard	Randolph	452 Five Forks Road, Shellman, GA 39886-	(229) 679-5714	
		VACANT	Schley			
*		Burt Strange	Schley	47 Strange Rd, Ellaville, GA 31806-	(229) 937-2234	(229) 938-2579
		Mac Lane	Stewart	10567 GA Highway 39, Omaha, GA 31821-	(334) 750-1062	
		Richard Morrison	Stewart	1715 Lynch Road, Lumpkin, GA 31815-	(229) 838-4955	(229) 942-3401
		William Reid	Sumter	750 Tallent Store Road, Americus, GA 31719-	(229) 389-1387	(229) 924-2474
*		Bill Bowen	Sumter	789 Highway 49 South, Americus, GA 31719-	(229) 924-7581	
	VC	Jack H Hufstetler	Terrell	1334 Johnson Street, SE, Dawson, GA 39842-	(229) 995-5524	
		Mark Masters	Terrell	5000 Sasser Herod Road, Dawson, GA 39842-	(229) 995-2980	(229) 854-4258
		VACANT	Webster			
*		Andrew Payne	Webster	1872 Payne Pond Road, Weston, GA 31832-	(229) 828-2140	(229) 815-4560

		MCDUFFIE COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	T	George R Reeves	McDuffie	3390 Wrens Highway, Thomson, GA 30824-	(706) 595-2980	
		Larry D Morris	McDuffie	3125 Whiteoak Road, Thomson, GA 30824-	(706) 595-3344	(706) 595-5969
	VC	Frederick R Vergeer	McDuffie	3256 Cedar Road NW, Thomson, GA 30824-	(706) 595-5321	(706) 541-6133
*	C	Donald F Palmer Jr	McDuffie	153 Story-Randall Road, Thomson, GA 30824-	(706) 595-5391	(706) 595-3777
*		Roger Burton	McDuffie	298 Hobbs Mill Road, Dearing, GA 30808-	(706) 595-8736	

		MIDDLE SOUTH GEORGIA	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	C	Milton Ussery	Ben Hill	P.O. Box 1016, Fitzgerald, GA 31750-	(229) 424-3532	
*		Joseph K Phillips	Ben Hill	244 El Harris Road, Fitzgerald, GA 31750	(229) 483-4083	(229) 424-3620
		Dan Niewoehner	Brooks	3152 Highway 84, Dixie, GA 31629-	(229) 264-5889	(229) 263-1922
*		Van F. Murphy	Brooks	9284 Valdosta Highway, Quitman, GA 31643-	(229) 775-2338	(229) 324-2350
		Thomas Ralph Coleman Jr	Colquitt	4518 Dunn Road, Hartsfield, GA 31756-	(229) 941-2930	(229) 941-5394
*		Preston Jimmerson	Colquitt	3618 Funston Sale City Road, Doerun, GA 31744-	(229) 454-9530	
		John Woodard	Crisp	170 Drayton Lane, Cordele, GA 31015-	(229) 273-3510	(229) 273-3510
*	T	James Farrow Baker	Crisp	165 Bodrey Road, Cordele, GA 31015-	(229) 273-3626	(229) 273-7811
		Bob Martin	Irwin	310 Cornflower Road, Ocilla, GA 31774-	(229) 468-4239	
*		Donald McWhorter	Irwin	447 Ocierfield Drive, Fitzgerald, GA 31750-	(229) 468-5124	
		Donald L. Hall Sr	Thomas	1094 Rose Garden Road, Meigs, GA 31765-	(229) 683-3322	(229) 413-3403
*		Michael Wheeler	Thomas	3185 Enon Road, Coolidge, GA 31738-	(229) 263-2552	(229) 263-4164
		Brian Ponder	Tift	121 W R Ponder Road, Tifton, GA 31794-	(229) 528-4714	(229) 392-1374
*		Grady M Thompson Jr	Tift	21 Connell Ray Road, Tifton, GA 31794-	(229) 382-5981	(229) 382-6117
	VC	Ross Kendrick	Turner	510 Wagon Wheel Road, Sycamore, GA 31790-	(229) 567-0641	(229) 238-1774
*		Alex Sumner	Turner	315 Sumner Road, Sycamore, GA 31790-	(229) 567-3721	
		Keith White	Worth	648 Shingler/Sumner Rd., Poulan, GA 31781-	(229) 776-5834	(229) 317-1721
*		William M. Young Jr.	Worth	165 Billy Young Road, Sumner, GA 31789-	(229) 776-4108	(229) 881-0275

		OCMULGEE RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Lindsay Holliday	Bibb	3091 Ridge Avenue, Macon, GA 31204-	(478) 742-8699	(478) 746-5695
*		Donald Newberry	Bibb	5710 Rogers Road, Lizella, GA 31052-5518		
	T	Charlie F Harris	Crawford	6717 U S Highway 341 North, Musella, GA 31066-	(478) 836-4475	
*		Jimmy Moncrief	Crawford	4076 Hollis Road, Roberta, GA 31078-	(478) 836-4749	(478) 825-0865
		John W Sanders Sr	Dooly	1387 Shiloh Road, Vienna, GA 31092-	(229) 938-3456	
*		James D Warbington Sr	Dooly	3200 Tippettville Road, Vienna, GA 31092-	(229) 268-6946	(229) 268-9181
		Larry Morton	Houston	152 Morton Road, Kathleen, GA 31047-	(478) 987-3109	(478) 987-1173
*		David Muse	Houston	P O Box 35, Perry, GA 31069-	(478) 987-3386	(478) 987-3386
		VACANT	Macon			
*		Gary Slaton	Macon	P O Box 235, Oglethorpe, GA 31068-	(478) 472-8675	(478) 472-8675
		George Hancock	Peach	5409 Mosley Road, Byron, GA 31008-	(478) 825-2666	(478) 825-5323
*		VACANT	Peach			
	C	Timothy Allen	Pulaski	2716 Lower River Road, Eastman, GA 31023-	(478) 955-0108	
*		Robert A Lancaster	Pulaski	1240 Eastman Highway, Hawkinsville, GA 31036-	(478) 892-2855	
	VC	James H Willis	Taylor	164 Carpenter Road, Rupert, GA 31081-	(478) 862-5749	(478) 862-3115
*		Jack McGlaun	Taylor	426 W Old Wire Road, Butler, GA 31006-	(478) 862-3240	
		Larry Stubbs	Wilcox	1982 Matthews Road, Abbeville, GA 31001-	(229) 365-2419	(229) 365-3066
*		Leon Arant	Wilcox	456 Clements Road, Pitts, GA 31072-	(229) 365-3612	

		OCONEE RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		VACANT	Barrow			
*		Doug Garrison	Barrow	636 Iris Lane, Winder, GA 30680-	(770) 867-6413	(678) 858-2978
		Ray C. Rozier	Clarke	301 Timber Creek Drive, Athens, GA 30605-	(706) 369-1543	(706) 296-2657
*		Fred O. Smith	Clarke	425 Rivermont Road, Athens, GA 30606	(706) 548-2599	(706) 247-6777
	C	William D Johnson	Jackson	2738 Cedar Grove Church Road, Jefferson, GA 30549-	(706) 367-8634	(706) 215-5322
*		Tony Michael Embrick	Jackson	4356 Highway 334, Commerce, GA 30530-	(706) 335-6681	(206) 296-3885
	T	Janice Marable	Oconee	5981 High Shoals Road, Bishop, GA 30621-	(706) 769-5154	(706) 338-0204
*	VC	Bernard A Garrett	Oconee	1100 Bernard Garrett Road, Statham, GA 30666-	(770) 725-7266	(770) 725-7655

		OGEECHEE RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	ST	Charles L. Finch	Bulloch	3894 Old Portal Road, Portal, GA 30450-	(912) 865-2939	(912) 865-2939
*	C	Fred G Blitch Jr	Bulloch	625 Fred Blitch Road, Statesboro, GA 30458-	(912) 865-5454	(912) 865-5454
		Jerry Lanier	Candler	12982 Salem Church Road, Metter, GA 30439-	(912) 685-2845	
		Randy Durden	Candler	1376 Racco Road, Metter, GA 30439-	(912) 685-3260	
		Joseph Davis	Effingham	4100 Stillwell-Clyo Road, Clyo, GA 31303-	(912) 754-6956	(912) 660-7035
		Joseph Burns	Effingham	5374 Clyo-Kildare Road, Newington, GA 30446-	(912) 754-6606	(912) 213-9133
		Charles Sands Jr	Evans	P O Box 26, Daisy, GA 30423-	(912) 739-1358	(912) 687-1280
*	VC	Gary Bell	Evans	P O Box 36, Bellville, GA 30414-	(912) 739-4177	
		Lamar E Zipperer	Screven	3574 Newington Highway, Sylvania, GA 30467-	(912) 829-4241	(912) 682-2946
*		A.W. Robinson III	Screven	2831 Cameron Road, Sylvania, GA 30467-	(912) 863-7653	
		Adair Branch	Tattnall	14845 Highway 169, Glennville, GA 30427-	(912) 654-4014	
*		Lavanda Lynn	Tattnall	2585 Cedar Creek Church Rd., Collins, GA 30421-	(912) 684-3216	

		OHOOPEE RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Jerry H Fagler	Emanuel	618 Bird Flanders Road, Swainsboro, GA 30401-	(912) 469-3626	
*		F Bennett Whitfield	Emanuel	2561 Lambs Bridge Road, Twin City, GA 30471	(478) 763-2951	(478) 763-3308
	VC	VACANT	Montgomery			
		Howard Morris	Montgomery	3770 Hwy 221, Mount Vernon, GA 30445-	(912) 594-6884	
		Ben Newton	Toombs	123 Sid Newton Road, Lyons, GA 30436-	(912) 565-7150	
*		Chris Hopkins	Toombs	1234 Marvin Church Road, Lyons, GA 30436-	(912) 565-8318	(912) 293-3045
	ST	LaVerne W Davis	Treutlen	5470 3rd Street North, Soperton, GA 30457-	(912) 529-4798	
		Bill Barrett	Treutlen	797 Hwy 221, Soperton, GA 30457-	(912) 529-3519	
		VACANT	Wheeler			
*		Lynn Johnson	Wheeler	429 W. Highway 126, Alamo, GA 30411-	(912) 568-7672	

		PIEDMONT	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Richard Torrance	Baldwin	740 Lake Laurel Road NE, Milledgeville, GA 31061-	(478) 451-3071	(478) 251-6693
*		David Blizzard	Baldwin	179 O'Quinns Pond Road NE, Milledgeville, GA 31061-	(478) 453-3115	
		Tim Duvall	Greene	1440 Copelan Road, Madison, GA 30650	(706) 453-2521	(706) 453-6079
*		Larry J Eley	Greene	2331 Eley Road, White Plains, GA 30678-	(706) 467-2184	
		Richard S Joslyn	Hancock	9687 Jones Street, Sparta, GA 31087-	(706) 444-0407	(706) 444-7412
*	ST	Bob Woodall Jr.	Hancock	1664 Rives Road, Sparta, GA 31087	(706) 444-5464	
		Thomas Yarbrough	Jones	P O Box 426, Gray, GA 31032-0426	(478) 986-4129	(478) 256-2933
*		Hoyt Brown	Jones	126 Oliver Greene Road, Gray, GA 31032-	(478) 986-1765	(478) 986-4739
		John Marvin Ruark	Morgan	6350 Bostwick Road, Bostwick, GA 30623-	(706) 342-3290	(706) 342-0553
*	C	Patrick H Hardy	Morgan	3891 Bethany Road, Madison, GA 30650-	(706) 342-1448	(706) 342-1448
	VC	Heck Davis	Putnam	302 Glades Road NW, Eatonton, GA 31024-	(706) 485-8961	(706) 485-8020
		Pat Weems	Putnam	734 Sparta Highway, Eatonton, GA 31024-	(706) 485-5922	
		Thomas MacFie	Taliaferro	6360 Lower Mill Road NE, Crawfordville, GA 30631-	(770) 307-7311	
*		Stanley Jackson	Taliaferro	1931 Malcom Place Road, SW, Crawfordville, GA 30631-	(706) 456-2757	(706) 456-2757

		PINE MOUNTAIN	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Benjamin M Miller	Chattahoochee	115 Manta Road, Cusseta, GA 31805-	(706) 577-1248	(706) 989-3312
*	VC	Larry F Dillard	Chattahoochee	502 Patterson Road, Cusseta, GA 31805-	(706) 989-1059	(706) 329-3670
		Glen Bray	Harris	57 Fairhaven Drive, Ellerslie, GA 31807-	(706) 587-1084	(706) 562-0048
*		Jerold K Edwards	Harris	2439 Barnes Mill Road, Hamilton, GA 31811-	(706) 628-4844	(706) 582-2833
	T	Joey S Wells	Marion	190 Ronnie Road, Buena Vista, GA 31803-	(229) 649-7181	(229) 649-7267
*	C	Sam T Rigdon Sr	Marion	320 Oliver Street, Buena Vista, GA 31803-	(229) 649-7547	(229) 649-7547
		VACANT	Muscogee			
*		Harvey L Milner	Muscogee	8558 Liberty Hall Drive, Midland, GA 31820-4293	(706) 569-4264	(706) 653-4160
		Lee Lucas Jr.	Talbot	P O Box 454, Talbotton, GA 31827-	(706) 665-8839	(706) 665-8839
*		Frank J Jordan Jr	Talbot	P O Box 456, Talbotton, GA 31827-	(706) 665-8678	(706) 665-8606

		ROCKDALE COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		David Shipp	Rockdale	3061 Stone Bridge Trail, Conyers, GA 30094-	(770) 843-0313	
		Russell Tonning	Rockdale	2644 Paces Landing Drive, Conyers, GA 30012-	(678) 935-8159	
		VACANT	Rockdale			
*	C	Fox McCarthy	Rockdale	1776 Old Camp Trail, Conyers, GA 30012-	(770) 483-9474	(770) 483-9474
*		Edwin Shirey, Jr.	Rockdale	2161 Klondike Road, Conyers, GA 30094-	(770) 365-0480	(770) 483-1110

		ROOSEVELT	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		VACANT	Meriwether			
		Ryan Johnson	Meriwether	165 Flint Drive, Woodbury, GA 30293-		
*	VC	Glen Gosa	Meriwether	1025 Mountain Ridge Drive, Manchester, GA 31816-	(706) 846-4464	
		Marcus Jones	Troup	271 Frost School Road, LaGrange, GA 30241-	(706) 884-6917	(706) 298-1726
	C	Joel David Keith	Troup	2772 Mountville Road, Hogansville, GA 30230-	(706) 637-8818	(706) 637-6236
*	ST	Julian M Jones III	Troup	121 Ashling Drive, LaGrange, GA 30240-	(706) 882-3114	(706) 884-5333

		SATILLA RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Marvin H Giddens Jr	Atkinson	38 Sunnyside Road, Pearson, GA 31642-	(912) 422-3045	(912) 422-8002
*		James C Grantham	Atkinson	49 Guthrie Road, Willacoochee, GA 31650	(912) 534-5413	
		Curtis J Tumlin	Brantley	P O Box 452, Nahunta, GA 31553-	(912) 462-5336	
*		Walter C Thomas	Brantley	1528 Church Street, South, Hoboken, GA 31542-	(912) 458-2353	
		Harold Gay	Camden	354 Cole Drive, Kingsland, GA 31548-	(912) 729-3311	(912) 674-6348
*	C	William R Alexander	Camden	P O Box 416, Woodbine, GA 31569-	(912) 729-2458	
		Ross Ferrell	Charlton	1387 Kingfisher Landing Road, Folkston, GA 31537-	(912) 281-4238	
*		John L Murray	Charlton	P O Box 65, Folkston, GA 31537-	(912) 496-6162	
		Ann T Keene	Glynn	1975 GA Highway 99, Brunswick, GA 31523-	(912) 265-8808	
*		Matthew Raiford	Glynn	163 Florines Way, Brunswick, GA 31253-	(678) 794-3454	
	VC	Jim Waters	Pierce	4625 Highway 203, Blackshear, GA 31516-	(912) 449-8795	(912) 281-8609
		Joe Boyett	Pierce	P.O. Box 1030, Blackshear, GA 30516-		
		VACANT	Ware			
	T	Daniel Good	Ware	1306 Satilla Boulevard, Waycross, GA 31503-	(912) 285-0689	(912) 222-1349
		Kristy Arnold	Wayne	1400 Dry Creek Road, Screven, GA 31560-	(912) 579-2725	(912) 294-3485
*		Jonny Harris	Wayne	334 Kayville Road, Screven, GA 31560-	(912) 586-6585	

		STEPHENS COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Russell Biggers	Stephens	127 Edwards Drive, Toccoa, GA 30577-	(706) 886-2298	
	C	Roger Dale Sheppard	Stephens	1189 Rock Quarry Circle, Toccoa, GA 30577-	(706) 886-9628	(706) 886-3316
		Lakie Meeks	Stephens	3510 Rock Creek Road, Toccoa, GA 30577-	(706) 779-5938	(706) 244-1192
		Evan B. Hellenga	Stephens	641 E. Tugaloo Street, Toccoa, GA 30577-	(706) 886-9700	(706) 779-3341
*	LL	M. Jeanette Jamieson	Stephens	P O Box 852, Toccoa, GA 30577-	(706) 886-1168	(706) 886-6889

		TOWALIGA	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Douglas G Cawthon	Butts	1023 Highway 36 East, Jackson, GA 30233-	(770) 775-4070	
*		Tommy Presley	Butts	815 Keys Ferry Road, Jackson, GA 30233-	(770) 775-3404	(770) 725-4574
		Travis R Hardy	Fayette	108 Mask Road, Brooks, GA 30205-	(770) 719-8376	
		Ricky Minter	Fayette	283 Hills Bridge Road, Fayetteville, GA 30215-	(770) 461-2840	
		Barry S Peters	Monroe	208 Union Gin Road, Forsyth, GA 31029-	(478) 994-2706	(478) 994-9246
*		James Vernon Ham	Monroe	P.O. Box 255, Smarr, GA 31086-	(478) 994-0589	(478) 993-7879
		Thomas M Lacey	Pike	P O Box 114, Williamson, GA 30292-0114	(770) 228-9739	
*	ST	Rex J Yerkes	Pike	14334 Highway 109 East, Meansville, GA 30256-	(770) 567-8659	
		Danny Meadows	Spalding	P O Box 681, Jackson, GA 30233-	(404) 831-1479	
*		Walter Cliff Futral Jr	Spalding	4953 Jackson Road, Griffin, GA 30223-	(770) 227-7017	(770) 228-1811
	C	Sidney L Beach	Upson	P O Box 5074, Thomaston, GA 302860020	(706) 647-9396	(706) 647-0580
*		Harold D Fallin	Upson	461 Atwater Road, Thomaston, GA 30286-	(706) 648-2553	(706) 648-2553

		UPPER CHATTAHOOCHEE RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	T	George W. Lyons	Dawson	2732 Highway 9 South, Dawsonville, GA 30534-	(706) 265-3328	(706) 265-3328
*		Charles A Tatum	Dawson	475 Grizzle Farm Road, Dawsonville, GA 30534-	(706) 216-7182	
		Leonard W. Ridings	Forsyth	5955 Keith Bridge Road, Cumming, GA 30131-	(770) 887-4786	
*		E H Reid	Forsyth	7327 Majors Road, Cumming, GA 30040-	(770) 887-5389	
		Tracy Frady	Habersham	316 Morris Frady Road, Mount Airy, GA 30563-	(706) 754-5582	(706) 499-2461
*		Gilbert Barrett	Habersham	388 Smith Loop, Demorest, GA 30535-	(706) 776-5812	
		Tracy Lee Grizzle	Lumpkin	158 Tracy Grizzle Road, Dahlonega, GA 30533-	(706) 864-3216	
*	VC	Kenneth Beasley	Lumpkin	41 Beasley Circle, Dahlonega, GA 30533-	(706) 864-6261	
	C	David Sills	White	3495 Post Road, Cleveland, GA 30528-	(706) 865-7047	(706) 878-8606
*		Edsel R Nix	White	5177 Westmoreland Road, Cleveland, GA 30528-	(706) 865-3567	

		UPPER OCMULGEE RIVER	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
		Preston Wynens	Jasper	270 Sugar Hill Rd, Hillsboro, GA 31038-	(706) 468-8583	
	VC	William H Whitten	Jasper	2984 Smithboro Road, Monticello, GA 31064-	(706) 468-8955	
*	ST	Charlie Lane	Jasper	659 Avant Road, Monticello, GA 31064-	(706) 468-6037	
		David T Hays	Newton	c/o Mansfield Group 1108 Monticello St, Covington, GA 30014-	(770) 786-7038	(770) 787-5400
		Timothy Anderson	Newton	1634 Campbell Road, Covington, GA 30014-	(770) 787-7095	(770) 787-2300
*	C	Phillip M Standard	Newton	5428 Salem Road, Covington, GA 30016-	(770) 786-4178	(770) 314-4178

		WALTON COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	C	Dan Bennett	Walton	c/o Walton EMC P O Box 260, Monroe, GA 30655-	(770) 267-8829	(770) 267-6253
		Herman Wiley	Walton	2081 Alcovy Station Road, Covington, GA 30014-	(770) 464-3276	(770) 846-6877
	ST	George Nathan Malcom	Walton	830 Pleasant Valley Road, Monroe, GA 30655-	(770) 267-1230	
*	VC	Cristina Carrell	Walton	630 Riverbend Road, Monroe, GA 30655-	(770) 267-3547	(770) 990-6392
*		Sonny Turner	Walton	909 Stillbrook Drive, Monroe, GA 30655-	(770) 267-6337	

		WARREN COUNTY	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	VC	Dan N Crumpton	Warren	P O Box 47, Warrenton, GA 30828-	(706) 465-2488	(706) 465-3241
		Chadwick Mosely	Warren	P.O. Box 7, Warrenton, GA 30828-	(706) 465-2972	(706) 836-0812
	C	James H McMichael	Warren	435 Main Street, Warrenton, GA 30828-	(706) 465-3857	(706) 465-2453
	S/T	Norma Garner	Warren	262 Reynolds Rd, Warrenton, GA 30828	(706) 465-2195	
		Steve Smith	Warren	2055 Thomson Highway, Warrenton, GA 30828-		(706) 465-9255

		WEST GEORGIA	COUNTY	ADDRESS	HOME PHONE	OFFICE PHONE
	VC	Carl Brack	Carroll	25 Maple Lane, Carrollton, GA 30117-	(770) 214-0278	(770) 832-3501
*		Tony Cole	Carroll	771 Mandville Road, Carrollton, GA 30117-	(770) 832-0318	
		Lisle Robinson Bowers	Coweta	4146 Gordon Road, Senoia, GA 30276-	(770) 251-2419	(770) 253-7005
*	ST	Matthew Burns Jr.	Coweta	P O Box 2032, Newnan, GA 30264-	(770) 252-1094	(770) 683-4790
		Tommy E Waldrop	Douglas	2912 Post Road, Winston, GA 30187-	(770) 942-4571	(770) 920-7128
		Nolan Kell	Douglas	3721 Mason Creek Road, Winston, GA 30187-	(770) 942-0138	(770) 942-2696
		Billy Gene Sims	Haralson	969 Seventh Courtground Rd., Bremen, GA 30110-	(770) 537-3585	(770) 537-5159
*		Joan M Boalch	Haralson	2655 Monroe Mill Road, Buchanan, GA 30113-	(770) 646-3277	
		Talmadge Davis	Heard	P O Box 127, Franklin, GA 30217-	(706) 675-3552	
*	C	Denney H Rogers	Heard	24391 Georgia Highway 100, Ephesus, GA 30170-	(770) 854-5957	(770) 854-8412