

**SAMPLING GENERAL NOTES:**

Representative sampling may be utilized on this project as explained here. The individual outfall drainage basins along the project corridor have been carefully evaluated and compared on the basis of four characteristics: the type of construction activity, the disturbed acreage, the average slope about the outfall, and the soil erosion index. 0-10, 10 being the most erodible soil. The construction activity types are new road on fill, new road in cut, road widening, and maintenance/safety. The disturbed area classes are less than or equal to 1 acre, greater than 1 acre to less than 2 acres, and equal to or greater than 2 acres. The average outfall slope is mild if it is equal to or less than 0.03, and steep if it is greater than 0.03. The soil erosion index is low if it is less than or equal to 5 and high if it is greater than 5. After evaluation of these characteristics as presented in the project's drainage area map, hydrology and hydraulic studies, construction plans, geotechnical soil survey, and erosion sedimentation and pollution control plans, the Department has determined that the representative sampling scheme shown below is valid for the duration of the project. The table shows the groups of similar outfall drainage basins.

The increase in turbidity at the specified locations in the table below will be representative of the alternate outfall drainage basins when similar outfall drainage basins exist. Approved primary and alternate representative sampled features are identified in the table below.

Note: The total site area is 68.55 acres.

SAMPLING INFORMATION									OUTFALL CHARACTERISTICS					
Primary Monitoring Feature	Location (station and offset)	Name of Receiving Water	Applicable Construction Stage for Sampling	Sampling Type (outfall or receiving water)	Drainage Area for the receiving water (mi <sup>2</sup> )	Warm or Cold Water Stream	Appendix B NTU Value (outfall sampling only)	Allowable NTU Increase (for receiving water)	Location Description	Construction Activity	Disturbed Area (acres)	Average Outfall Slope (rise/run)	Soil Erosion Index	Alternate Outfall Drainage Basins
1	121+06 150' RT	Oconee River	All	Outfall	4284	Warm	600	N/A	End of Ditch	New Location Cut	> 2	Mild	High	N/A
4	145+93 120' RT	Wetland #18	All	Outfall	0.03	Warm	50	N/A	End of Ditch	New Location Fill	> 2	Mild	Low	3
13	313+21 60' LT	Stream #19	All	Outfall	0.21	Warm	50	N/A	End of Ditch	New Location Cut	0 - 1	Mild	Low	N/A
6a	163+82 48' RT	Stream #19	All	Outfall	0.21	Warm	50	N/A	End of Ditch	New Location Cut	> 2	Mild	Low	6b
6c	165+32 53' LT	Stream #19	All	Outfall	0.21	Warm	50	N/A	End of Ditch	New Location Cut	1 - 2	Mild	Low	6d
8	306+99 100' LT	Stream #19	All	Outfall	0.21	Warm	50	N/A	End of Ditch	Widening	> 2	Steep	High	15
9	206+49 75' RT	Wetland #22	All	Outfall	0.02	Warm	50	N/A	End of Ditch	New Location Cut	> 2	Steep	High	7
10	211+20 49' RT	Wetland #22	All	Outfall	0.02	Warm	50	N/A	End of Ditch	New Location Cut	1 - 2	Mild	High	N/A
11	220+17 95' LT	Big Creek	All	Outfall	34.04	Warm	100	N/A	End of Ditch	New Location Fill	> 2	Mild	High	N/A
12	311+71 60' LT	Stream #19	All	Outfall	0.21	Warm	50	N/A	End of Ditch	Widening	0 - 1	Steep	High	N/A
14	508+58 65' RT	Big Creek	All	Outfall	34.04	Warm	100	N/A	End of Ditch	Widening	0 - 1	Mild	High	N/A

The primary sampled features specified should be used as the initial sampling locations. An alternate sampled feature may be used if additional sampling is required or to replace a primary sampled feature that is no longer located within the active phase of construction.

**INSPECTING AND SAMPLING PROCEDURES**

See Special Provision 167 and other contract documents for the Inspecting and Sampling Procedures.

**POST-CONSTRUCTION BMP'S FOR STORMWATER MANAGEMENT**

All permanent post-construction BMP's are shown in the construction plans and in the ESPCP plan. The post-construction BMP's for this project consist of vegetation, permanent slope drains and/or flumes, rip-rap at pipe outlets for velocity dissipation and outlet stabilization, vegetated swales/ditches where practical, channels/ditch stabilization with Turf Reinforcing Mats, and rip-rap where necessary. The post-construction BMP's will provide permanent stabilization of the site and prevent abnormal transportation of sediment and pollutants into receiving waters.

**SEQUENCE OF MAJOR ACTIVITIES**

The Contractor is responsible for developing the construction schedule for the project. The construction schedule for this project shall be submitted after the project is awarded along with the NOI. A copy of the construction schedule shall be maintained at the project site.

The project budget includes sufficient funds for the payment of construction exits. The Contractor is responsible for establishing at least one (1) construction exit per the specifications of the construction exit detail included in this ESPCP. To facilitate project logistics, the Contractor is also responsible for selecting the location(s) of the construction exit(s).

**Initial Phase - Clearing and Grubbing Operations**

- a. - The contractor shall install silt fence, type C at the base of all fill slopes and along stream buffer perimeters prior to land disturbing activities.
- b. - Orange Barrier fence shall be installed as per the Environmental Commitments Sheet.
- c. - Construction exits shall be installed prior to equipment entering the roadway.
- d. - All disturbed areas shall be mulched in accordance with GDOT Standard Specifications, the Erosion Control Plan, and the Project Special Provisions.
- e. - Install all BMP's as per the erosion control plans.

**Intermediate Phase - Grading Operations - Drainage Installation**

- a. - Installing Pipes: Ensure that additional BMP's are installed as per the erosion control plans prior to extending or replacing existing pipes.
- b. - Grading Ditches and Slopes: As ditches are graded, install stone check dams in accordance with the Erosion Control Plans. Mulch all slopes as per GDOT specifications and the Erosion Control Plans. Mulch and seed grass in accordance with the GDOT Standard Specifications, the Erosion Control Plan, and the Project Special Provisions.

**Final Phase - Paving Operations**

- a. - Paving Widened Roadway- Install all required Erosion Control Mats and rip rap once slopes are constructed to finished grade. Once the pavement has been constructed to the proposed width, temporary and permanent vegetative practices shall be implemented in order to prevent silt from leaving the site in accordance with notes found in the ESPCP General Notes.

**STORM DRAIN OUTLET PROTECTION**

ID	STATION	OFFSET	DESCRIPTION	DISCHARGE (cfs)	VELOCITY (fps)	TAILWATER CONDITION	LENGTH OF APRON (L <sub>a</sub> ) (ft)	WIDTH AT HEADWALL (W <sub>1</sub> ) (ft)	DOWNSTREAM WIDTH (W <sub>2</sub> ) (ft)	AVERAGE STONE DIAMETER (d <sub>50</sub> ) (ft)	STONE DEPTH (D) (ft)
COUNTRY CLUB RD / BEN HALL LAKE DR											
	109+54.9	44.1 Rt	24" Storm Drain *	16.40	5.22	MIN	13.0	6.0	15.0	1.0	2.25
	111+60.2	82.5 Rt	24" Side Drain *	14.50	4.62	MIN	13.0	6.0	15.0	1.0	2.25
	141+65.7	73.9 Rt	36" Storm Drain *	28.80	4.95	MIN	20.0	9.0	23.0	1.0	2.25
	147+82.7	51.0 Rt	36" Storm Drain *	32.60	5.18	MIN	20.0	9.0	23.0	1.0	2.25
	164+37.4	41.2 Rt	Dbl 5' x 5' Box Culvert	100.60	4.37	MIN					
	188+25.2	70.5 Lt	42" Storm Drain *	44.80	5.10	MIN	22.0	10.5	25.5	1.0	2.25
	206+63.4	44.4 Rt	24" Storm Drain *	10.70	3.76	MIN	13.0	6.0	15.0	1.0	2.25
	211+18.4	44.2 Rt	24" Storm Drain *	14.20	4.52	MIN	13.0	6.0	15.0	1.0	2.25
	220+28J	65.2 Rt	2 - 48" Storm Drains *	127.23	5.45	MIN	26.0	20.0	38.0	1.0	2.25
BUCKEYE RD											
	304+06.6	63J Lt	24" Storm Drain *	14.50	4.62	MIN	13.0	6.0	15.0	1.0	2.25
	307+00.0	42.2 Lt	24" Storm Drain *	11.30	3.80	MIN	13.0	6.0	15.0	1.0	2.25
A4	311+63.5	44.3 Lt	30" Storm Drain *	31.50	6.42	MIN	16.0	7.5	22.0	1.0	2.25
	312+19.3	37.8 Rt	24" Side Drain *	14.00	4.46	MIN	13.0	6.0	15.0	1.0	2.25
	313+67.4	34.0 Rt	24" Side Drain *	15.10	4.81	MIN	13.0	6.0	15.0	1.0	2.25
NEW BUCKEYE RD											
	508+56.2	41.6 Rt	30" Storm Drain *	26.40	5.38	MIN	16.0	6.0	22.0	1.0	2.25
	508+56.2	41.6 Rt	24" Storm Drain *	16.90	5.38	MIN	13.0	6.0	15.0	1.0	2.25
	514+37.4	182.64 Rt	18" Storm Drain *	4.40	3.17	MIN	10.0	4.5	14.5	1.0	2.25
	518+04.8	42.46 Rt	18" Storm Drain *	4.00	2.88	MIN	10.0	4.5	14.5	1.0	2.25

\* Based on discharge and pipe diameter, no min rip rap required.



REVISION DATES		STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION	
11-24-14		OFFICE: TENNILLE DESIGN	
		<b>ESP CP GENERAL NOTES</b>	
		COUNTRY CLUB RD OVER OCONEE RIVER	
		PROJECT STP00-0000-00 (833)	DRAWING No.
		COUNTY LAURENS	<b>51-003</b>

USE ON CONSTRUCTION