

STREAM BUFFER ENCROACHMENT

Stream Buffers (are) Impacted by this project.
The contractor is not authorized to enter into stream buffers, except as described in the table below:

Name (name or number of feature)	Location of Buffered Streams and State Waters **			Stream Type (Warm/Cold Water) *	Buffer Impacted (Yes/No)	Buffer Variance Required?
	Alignment	Begin Sta (LJ or RT)	Ending Sta (LJ or Rt)			
KEG CREEK	SR 47	130+44 RT	143+40 RT	WARM	YES	YES
KEG CREEK	SR 47	135+16 LT	143+00 LT	WARM	YES	YES

Construction activities shall consist of utility drive and parking, trail, removal of existing bridge sub and superstructure, construction of new bridge sub and superstructure, endbents, endroll, placement of rock embankment, and erosion control items, in accordance with the GDOT Standard Specifications, current edition.

Unless noted otherwise, utility companies will be submitting the required permits/variances in conjunction with the impacts caused by their activities. If utility impacts are covered by the Department's stream buffer variance, this shall be noted in the buffer-variance required column.

*Warm water streams have a 25-foot minimum buffer as measured from the wretched vegetation. Cold water streams have a 50-foot buffer as measured from the wretched vegetation.

** Locations are approximate, a detailed location of stream buffers and authorized work areas are shown on the individual BMP sheets.

INSPECTING AND SAMPLING PROCEDURES

See Special Provision 167 and other contract documents for Monitoring Sampling Methods and Procedures.

- 1 Sta 130+88 RT: A Sediment Basin is not used at this location. The disturbed area within the drainage area is 0.52 acres. The disturbance activities consists of minor grading. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location. Land disturbance activities associated with constructing and removing a sediment basin at this location would cause additional adverse impacts.
- 2 Sta 151+53 RT: A Sediment Basin is not used at this location. The disturbed area within the drainage area is 0.93 acres. The disturbance activities consists of minor grading. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location. Land disturbance activities associated with constructing and removing a sediment basin at this location would cause additional adverse impacts.
- 3 Sta 153+62 RT: A Sediment Basin is not used at this location. The disturbed area within the drainage area is 0.41 acres. The disturbance activities consists of minor grading. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location. Land disturbance activities associated with constructing and removing a sediment basin at this location would cause additional adverse impacts.

SEDIMENT STORAGE

The site has a total disturbed area of 7.23 acres. The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMP's specified in this table.

OUTFALL ID	TOTAL DRAINAGE	DISTURBED AREA (acres)	REQUIRED SEDIMENT STORAGE VOLUME (yd ³)	TOTAL STORAGE VOLUME PROVIDED (yd ³)	CHECK DAM		SILT FENCE STORAGE	
					* of Devices	Total Volume (yd ³)	LN. FT.	CU. YDS.
S - 1	1.9	0.52	127.3	136.5	15	136.5		
S - 2	5.80	0.93	388.6	398.5	25	398.5		
S - 3	0.83	0.41	55.61	60.36	4	60.36		
SHEET FLOW	5.37	5.37	359.79	861.46			2497	861.46
TOTAL	8.53	7.23	931.30	1402.82	44	595.36	2497	861.46

MONITORING GENERAL NOTES:

The total site size is 13.30 acres. Representative sampling may be utilized on this project. 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. Q-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 and sedimentation and pollution plans, the Department has determined that representative sampling is valid for the duration of the project. The table below 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 monitored features are identified in the table below.

Primary Monitored Feature	SAMPLE INFORMATION								OUTFALL CHARACTERISTICS					
	Location (station and offset)	Name of Receiving Water	Applicable Construction Stage for Monitoring	Sampling Type (outfall or receiving water)	Drainage Area for the receiving water (Ac)	Total Project Size (acres)	Warm or Cold Water Stream	Appendix B NTU Value (outfall monitoring only)	Location Description	Construction Activity	Disturbed Area (acres)	Average Outfall Slope (rise/run)	Soil Erosion Index	Alternate Outfall Drainage Basins
S - 1	130+88 108' RT	CLARK'S HILL LAKE	All	OUTFALL	6.29	13.3	Warm	100	CROSS DRAIN	WIDENING	> 2	STEEP	HIGH	N/A
S - 2	151+53 75' RT	CLARK'S HILL LAKE	All	OUTFALL	2.10	13.3	Warm	50	CROSS DRAIN	WIDENING	0 - 1	STEEP	LOW	S - 3

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

DITCH PROTECTION

LOCATION	SIDE	TYPE DITCH	WIDTH (FT)	DEPTH OF PROTECTION (FT)	ITEM * 711-0200 TRM-2 (SY)	ITEM * 711-0400 TRM-4 (SY)	ITEM * 603-7000 PLASTIC FILTER FABRIC (SY)	ITEM * 441-0204 PLAIN CONC DITCH PAVING, 4 IN (SY)
128+00	134+00	LT	NORMAL	2	1.0	60		
25+50	29+00	LT	NORMAL	2	1.0	60		
25+50	29+00	RT	NORMAL	2	1.0	240		
78+00	79+00	LT	NORMAL	2	1.0	240		
77+00	79+00	RT	NORMAL	2	1.0	240		
TOTAL						60	780	

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.

USE ON CONSTRUCTION

	REVISION DATES 06-23-14	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: Tennille District ESPC GENERAL NOTES
3/1/2007	DRAWING No. 51-002	