

**USE CONSTRUCTION**

**SEDIMENT STORAGE**

The site has a total disturbed area of 24 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	Total Drainage area (acres)	Disturbed Area (acres)	Required Sediment storage Volume (yd <sup>3</sup> )	Total storage Volume provided (yd <sup>3</sup> )	Check Dams		Inlet Sediment Traps		Slit Fence	
					# of devices	Total Volume	# of devices	Total Volume	LF	Total Volume
OUTFALL 1	0.46	0.46	30.82	38.35	5	38.35				
OUTFALL 2	1.92	1.55	128.64	138.06	18	138.06				
OUTFALL 3	2.32	1.88	155.44	345.15	45	345.15				
OUTFALL 4	0.59	0.59	39.53	84.37	11	84.37				
OUTFALL 5	0.87	0.87	58.29	84.37	11	84.37				
OUTFALL 6	2.05	0.86	137.35	161.07	21	161.07				
OUTFALL 7	1.07	1.07	71.69	145.73	19	145.73				
OUTFALL 8	0.54	0.37	36.18	38.35	5	38.35				
OUTFALL 9	0.51	0.25	34.17	38.35	5	38.35				
OUTFALL 10	0.72	0.44	48.24	53.69	7	53.69				
OUTFALL 11	1.10	1.10	73.70	207.09	27	207.09				
OUTFALL 12	6.31	1.45	422.77	237.77	31	237.77				
OUTFALL 13	6.60	0.43	442.2	30.68	4	30.68				
OUTFALL 14	9.78	2.12	655.26	157.96	8	61.36			280	96.60
OUTFALL 15	2.34	2.33	156.78	164.36	19	145.73			54	18.63
OUTFALL 16	0.31	0.24	20.77	30.68	4	30.68				
OUTFALL 17	1.23	0.64	82.41	61.20	6	46.02			44	15.18
SHEET FLOW	2.28	7.35	152.76	997.05					2890	997.05

In order to prevent runoff from bypassing inlet sediment traps, a temporary sump shall be installed around all inlet sediment traps that are not located in a low point or an excavated sump. Construct temporary sumps in accordance with Construction Detail D-24C. Temporary sumps shall be installed in a manner that ensures stormwater does not bypass the inlet. The Contractor may submit alternate temporary containment berm designs to the Project Engineer for approval.

Sediment Basins are not used for this project at the following outfalls. The temporary installation of a sediment basin would require the displacement of a residence and/or an adverse impact to environmentally sensitive areas.

The required sediment storage cannot be provided for Outfall 12. The majority of the total drainage area is impervious and BMP's are shown where practical in the disturbed areas. Perimeter slit fencing, stone/fabric check dams, slope matting, and temporary grassing will be adequate for the disturbed area until final stabilization is reached.

The required sediment storage cannot be provided for Outfall 13. The majority of the total drainage area is impervious and BMP's are shown where practical in the disturbed areas. Perimeter slit fencing, stone/fabric check dams, slope matting, and temporary grassing will be adequate for the disturbed area until final stabilization is reached.

The required sediment storage cannot be provided for Outfall 14. The majority of the total drainage area is impervious and BMP's are shown where practical in the disturbed areas. Perimeter slit fencing, stone/fabric check dams, slope matting, and temporary grassing will be adequate for the disturbed area until final stabilization is reached.

The required sediment storage cannot be provided for Outfall 17. The majority of the total drainage area is impervious and BMP's are shown where practical in the disturbed areas. Perimeter slit fencing, stone/fabric check dams, slope matting, and temporary grassing will be adequate for the disturbed area until final stabilization is reached.

**SEDIMENT BASINS:**

There are no Sediment Basins utilized on this project. All outfall locations are noted on sheet 112A.

**SAMPLING GENERAL NOTES:**

Representative sampling may be utilized on this project. The characteristics of the individual watersheds along the project corridor have been carefully evaluated and compared on the basis of drainage characteristics, watershed size, land disturbance and earth work. After evaluation of these items as presented in the projects drainage area maps, hydrology and hydraulic studies, construction plans and erosion sedimentation and pollution control plans, it has been determined that the increase in turbidity at the specified locations will be representative of the increase in turbidity for all waters leaving the site. Approved primary and alternate representative sampling sites are identified in the table:

Primary Sampling Feature	Location (Sta. and Side)	Name of Receiving water	Applicable construction stage for sampling	Sampling Type (Outfall or Receiving Water)	Drainage Area for receiving water (sq mi)	Total Project Area (acre)	Warm or Cold water Stream	Appendix B NTU value (outfall Sampling Only)	Allowable NTU Increase (For Receiving Water)	Location Description	Construction Activity	Disturbed Area (acre)	Exit Slope	Soil Erosion Index	Alternate Outfall Drainage Basins
6	109+25, 100' R	TRIBUTARY OF BREWTON CREEK	ALL	OUTFALL	1.03	40	WARM	50	N/A	End of Ditch	WIDENING	0-1	Steep	High	1,4,5,8,9,10, 13,16,17
11	215+00, 41' R	HIGHTOWER CREEK	ALL	OUTFALL	.98	40	WARM	50	N/A	End of Ditch	WIDENING	1-2	Steep	High	2,3,7,12
15	238+00, 35' R	HIGHTOWER CREEK	ALL	OUTFALL	.98	40	WARM	50	N/A	End of Ditch	WIDENING	>2	Steep	High	14

The primary site specified should be used as the initial sampling location. The alternate sampling sites may be used if additional sampling is required and/or if the primary sampling site is no longer located within the active phase of construction.

**SAMPLING METHODS & PROCEDURES**

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

**USE OF ALTERNATIVE AND/OR ADDITIONAL BMP'S:**

No alternative or additional BMP's will be used on this project.

**STREAM BUFFER ENCROACHMENT**

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 (LT or RT)	Ending Sta (LT or RT)			
STREAM *3	SR 31	72+91.35 RT	77+43.00 RT	WARM	YES	YES
POND *4	SR 31	73+12.81 LT	74+31.65 LT	WARM	YES	YES
STREAM *9	SR 31	211+35.54 RT	212+09.73 RT	WARM	YES	NO
STREAM *9	SR 31	211+40.64 LT	212+03.09 LT	WARM	YES	NO

\*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.

**READY MIX CHUTE WASH-DOWN**

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of portland cement concrete is prohibited on this site. In accordance with standard Specification 107 - Legal Regulations and Responsibility to the Public, only the discharge "chute" utilized in portland cement concrete delivery may be rinsed free of fresh concrete remains. The Contractor shall excavate a pit outside of State water buffers, at least 25 feet from any storm drain and outside of the travel way, including shoulders, for a wash/pit area. The pit shall be large enough to store all wash-down water without overtopping the pit. Immediately after the wash-down operations are completed and after the wash-down water has soaked into the ground, the pit shall be filled in, and the ground above shall be graded to match the elevation of the surrounding areas smoothed out. Alternate wash down plans must be approved by the Project Engineer.

Wash-down plans describe procedures that prevent wash down water from entering streams and rivers. Never dispose of wash-down water down a storm drain. Establish a wash-down water pit location that includes the following: (1) the pit is located away from a storm drain, stream or river, (2) the pit is accessible to the vehicle being used for wash-down, (3) the pit has enough volume for wash-down water, and (4) make sure you have permission to use the area for wash-down. On some sites, you may not have permission or access to a location which allows for a wash-down pit. In those cases, the Contractor may have to wash-down into a wheelbarrow or other container and carry the container for transport to a proper disposal site. For additional information, refer to the Georgia Small Business Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-down".

**DISCHARGES INTO, OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT**

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an Impaired Stream Segment that has been listed for criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macro Invertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

<p><b>GEORGIA</b> DEPARTMENT OF TRANSPORTATION</p>		<p>REVISION DATES</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>12-9-13</td><td></td><td></td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	12-9-13																		<p>STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: D2 DESIGN</p> <p><b>ESPCP GENERAL NOTES</b></p>	<p>DRAWING No. <b>51-002</b></p>
12-9-13																						
			LAURENS COUNTY																			