

SEDIMENT STORAGE

The site has a total disturbed area of 106 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 area (acres)	Disturbed Area (acres)	Required Sediment storage Volume (cu yd)	Total Storage volume provided (cu yd)	Sediment Basins		Check Dam (0.25 cu yd each)		Inlet sediment Traps (19 cu yd each)		Rock Filter Dam (1.5 cu yd each)		Filter Ring (11 cu yd each)		Comments
					Pond *	Total Volume	* of Devices	Total Volume	* of Devices	Total Volume	* of Devices	Total Volume	* of Devices	Total Volume	
1	1.35	1.35	90	21	N/A	N/A	8	2	1	19	0	0	0	0	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
2	27.04	9.19	1812	126.75	N/A	N/A	51	12.75	6	114	0	0	0	0	TYPICAL BMPs AND REGULAR STABILIZATION MEASURES WILL BE USED TO LIMIT EROSION AND MAXIMIZE STORAGE
3	2.38	2.38	159	21	N/A	N/A	8	2	1	19	0	0	0	0	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
4	7.80	7.8	523	85	N/A	N/A	0	0	1	19	0	0	6	66	TYPICAL BMPs AND REGULAR STABILIZATION MEASURES WILL BE USED TO LIMIT EROSION AND MAXIMIZE STORAGE
5	0.31	0.31	21	76	N/A	N/A	0	0	4	76	0	0	0	0	REQUIRED SEDIMENT STORAGE VOLUME IS PROVIDED
6	15.16	3.09	1016	62	N/A	N/A	8	2	2	38	0	0	2	22	TYPICAL BMPs AND REGULAR STABILIZATION MEASURES WILL BE USED TO LIMIT EROSION AND MAXIMIZE STORAGE
7	0.32	0.32	21	38	N/A	N/A	0	0	2	38	0	0	0	0	REQUIRED SEDIMENT STORAGE VOLUME IS PROVIDED
8	6.97	2.70	467	48	N/A	N/A	16	4	0	0	0	0	4	44	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
9	0.52	0.45	35	11.75	N/A	N/A	3	0.75	0	0	0	0	1	11	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
10	1.17	1.17	78	2	N/A	N/A	8	2	0	0	0	0	0	0	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
11	2.07	2.07	139	4	N/A	N/A	16	4	0	0	0	0	0	0	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
12	2.16	2.16	145	72.75	N/A	N/A	7	1.75	2	38	0	0	3	33	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
13	1.31	1.31	88	35.50	N/A	N/A	10	2.50	0	0	0	0	3	33	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
14	1.37	1.37	92	35.25	N/A	N/A	9	2.25	0	0	0	0	3	33	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
15	0.90	0.90	60	30.50	N/A	N/A	34	8.50	0	0	0	0	2	22	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
16	9.81	5.84	657	29.75	N/A	N/A	43	10.75	1	19	0	0	0	0	TYPICAL BMPs AND REGULAR STABILIZATION MEASURES WILL BE USED TO LIMIT EROSION AND MAXIMIZE STORAGE
17	3.69	3.69	247	96.75	N/A	N/A	35	8.75	0	0	0	0	8	88	DISTURBED AREA IS LESS THAN 4 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
18	5.33	5.33	357	750.75	1	554	35	8.75	7	133	0	0	5	55	REQUIRED SEDIMENT STORAGE VOLUME IS PROVIDED
19	14.59	6.58	978	6.50	N/A	N/A	26	6.50	0	0	0	0	0	0	TYPICAL BMPs AND REGULAR STABILIZATION MEASURES WILL BE USED TO LIMIT EROSION AND MAXIMIZE STORAGE
20	0.76	0.26	51	0.75	N/A	N/A	3	0.75	0	0	0	0	0	0	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
21	9.59	2.16	643	4	N/A	N/A	16	4	0	0	0	0	0	0	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
22	0.30	0.30	20	2.25	N/A	N/A	9	2.25	0	0	0	0	0	0	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.
23	37.29	11.31	2498	1,250	2	857	90	22.50	9	171	1	1.50	18	198	A SEDIMENT BASIN, TYPICAL BMPs, AND REGULAR STABILIZATION WILL BE USED TO LIMIT EROSION AND MAXIMIZE STORAGE
24	4.92	2.08	330	3.25	N/A	N/A	13	3.25	0	0	0	0	0	0	DISTURBED AREA IS LESS THAN 3 ACRES. CONSTRUCTING SEDIMENT BASIN IS IMPRACTICAL AT THIS OUTFALL.

SHEET FLOW LEAVING SITE:

Alignment	Station Range	Side	Total Area (AC)	Disturbed Area (AC)	Required Sediment storage Volume (cu yd)	Provided Sediment storage Volume (perimeter silt fence) (cu yd)
CLEVELAND BYPASS	115+50 to 121+50	RT	2.30	2.30	1541	312
CLEVELAND BYPASS	121+50 to 127+00	RT	3.33	3.33	2231	570
S.R.II	24+00 to 29+50	RT	1.58	1.58	105.8	380
CLEVELAND BYPASS	132+00 to 143+50	LT	1.39	1.39	931	795
CLEVELAND BYPASS	145+00 to 170+00	LT & RT	13.03	13.03	873	3456
CLEVELAND BYPASS	172+50 to 178+50	LT	1.34	1.34	89.8	312
CLEVELAND BYPASS	174+00 to 185+00	RT	2.24	2.24	150.0	570
CLEVELAND BYPASS	182+00 to 191+00	LT	0.98	0.98	65.7	622
CLEVELAND BYPASS	187+00 to 191+00	RT	0.62	0.62	41.5	276
S.R.II5	14+50 to 33+50	LT & RT	4.17	4.17	279.4	2299
S.R.II5	33+50 to 43+50	RT	2.99	2.99	200.3	1570

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.

TEMPORARY SEDIMENT BASIN DETAILS:

LOCATION	SIDE	TOP OF DAM		REQUIRED VOLUME	BASIN DEPTH	MINIMUM BOTTOM OF BASIN		BASIN BOTTOM ELEV.	MINIMUM TOP OF BASIN		BASIN TOP ELEV.	CLEANOUT ELEV.	EFFECTIVE LENGTH L _e	PRINCIPAL SPILLWAY		SECONDARY SPILLWAY WIDTH	SECONDARY SPILLWAY DEPTH	SECONDARY SPILLWAY ELEV.	Q25
		W	L			W	L		W	L				D _s	D ₀				
		FT.	FT.	CU. YD.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	IN.	IN.	FT.	FT.	FT.	CFS.
127+00	R	69	123	857	6	24	78	1481	54	108	1490	1483.67	108	36	24	16	1	1488	66.78
192+00	R	64	114.5	554	4	30	80.5	1450	50	100.5	1457	1451.6	102	36	24	24	1	1455	50.46

USE OF ALTERNATIVE AND/OR ADDITIONAL BMPs:

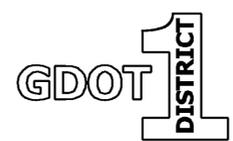
Alternative BMPs are not used on this project. Silt Gates are used on this project as additional BMPs at pipe inlets and are not being used in place of or as a substitute for other conventional BMPs. Temporary check dams are used in ditches to provide interim stabilization and flow velocity reduction. The stability of the site is maintained with other conventional BMPs as shown on the plans. This ESPCP would be fully compliant with permit requirements if the silt gates were removed and as a result are not considered alternative BMPs when used on this project. The silt gates help to prevent pipe clogging during construction that can result from the ingestion of sediments and other large debris like riprap, sand bags, roadway debris and other construction materials that when combined with sediments easily clog roadway drainage pipes. Sediment stored by silt gates is not included in the required minimum sediment storage volume or shown in the sediment storage table.

L_e = LENGTH OF BAFFLED FLOW PATH STABILIZE IN ACCORDANCE WITH SPECIFICATIONS

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 1/2 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).

USE ON CONSTRUCTION



REVISION DATES		STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION	
6/6/2012		OFFICE: DISTRICT ONE DESIGN	
11/16/2012		ESPC GENERAL NOTES	
1/24/2014			
8/22/2014		CLEVELAND BYPASS - PHASE I	
8/12/2015			
		DRAWING No. 51-02	
		WHITE COUNTY	