

**ITEM 33:**

**SAMPLING 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.

**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.1 OR III.D.4, WHICHEVER IS APPLICABLE.

**ITEM 34:** TOTAL SITE SIZE: 14.20 ACRES  
SURFACE DA: 0.09 SQ. MI.  
APPENDIX B NTU VALUES AT OUTFALL SAMPLING POINTS:

SITE SIZE, ACRES	WARM WATER (SUPPORTING WARM WATER FISHERIES)							
	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

**ITEM 35:**

THE SAMPLING LOCATIONS, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED ARE SHOWN ON DRAINAGE AREA MAP, CE 4.01-CE 4.02.

**ITEM 36:**

**INITIAL PHASE EROSION**

A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT, AND NPDES PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.

THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY:

- PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
- THE CONSTRUCTION EXIT IS TO BE INSTALLED AND MAINTAINED AS SHOWN IN DETAILS.
- IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE INITIAL PHASE EROSION CONTROL PLAN.
- STONE CHECK DAMS AND ROCK FILTER RINGS SHALL BE INSTALLED IN AREAS OF CONCENTRATED FLOWS AS SHOWN ON THE PLAN.
- ALL OTHER SITE SPECIFIC EROSION CONTROL BMP'S PER THE PLANS SHEETS IN THIS SET.

**INTERMEDIATE (GRADING) EROSION CONTROL NOTES:**

DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS LIMITED.

EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITIES. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.

AT THE END OF EACH WORK DAY ALL SLOPES 3:1 OR STEEPER AND SLOPES HIGHER THAN 5 FEET SHALL RECEIVE SURFACE ROUGHENING, EROSION CONTROL MATTING, AND SEEDING AS SHOWN ON THE EROSION CONTROL PLAN.

SILT FENCE SHALL BE PLACED AT THE TOE OF ALL DIRT STOCK PILE AREAS AS LOCATED BY CONTRACTOR. COST OF SILT FENCE AND TEMPORARY GRASSING ASSOCIATED WITH STOCK PILE AREAS SHALL BE INCIDENTAL TO MOBILIZATION.

TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF LAND DISTURBANCE.

CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. IN ADDITION, SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT AND MAINTAINED OR REPLACED. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED AT CONTRACTOR'S EXPENSE.

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.

CONTRACTOR SHALL INSTALL TEMPORARY DOWNDRAINS WITH INLET FILTER RINGS AND STORM DRAIN OUTLET PROTECTION AS NEEDED TO CONTROL RUNOFF AND EROSION CONTROL DURING GRADING OPERATIONS. THE COST OF THESE MEASURES SHALL BE CONSIDERED INCIDENTAL TO GRADING.

FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE PROJECT UNTIL SUCH MEASURES ARE CORRECTED AS SHOWN ON THE APPROVED EROSION CONTROL PLANS.

ALL EROSION CONTROL DEVICES SHALL MEET THE REQUIREMENTS SET FORTH IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST EDITION, GEORGIA SOIL AND WATER CONSERVATION COMMISSION AND THE "FIELD MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST EDITION.

**FINAL PHASE EROSION CONTROL NOTES:**

CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. IN ADDITION, SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT AND MAINTAINED OR REPLACED. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

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.

SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED OF SO THAT IT WILL NOT ENTER THE INLETS AGAIN.

EROSION CONTROL MEASURES WILL BE MAINTAINED UNTIL FINAL STABILIZATION WHERE 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER. TEMPORARY EROSION CONTROL DEVICES MAY BE REMOVED AND DISPOSED OF AFTER APPROVAL OF THE ENGINEER.

FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES UNTIL STABILIZATION WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE PROJECT UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

ALL EROSION CONTROL DEVICES SHALL MEET THE REQUIREMENTS SET FORTH IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST EDITION, GEORGIA SOIL AND WATER CONSERVATION COMMISSION.

**ITEM 37:**

GRAPHIC SCALE AND NORTH ARROW ARE ON ALL PLAN SHEETS.

**ITEM 38:**

EXISTING AND PROPOSED CONTOUR LINES WITH CONTOUR LINES DRAWN AT AN INTERVAL IN ACCORDANCE WITH THE FOLLOWING CAN BE FOUND ON ALL SHEETS WITH CONTOURS.

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or larger scale	Flat 0 - 2% Rolling 2 - 8% Steep 8% +	0.5 or 1 1 or 2 2.5 or 10

**ITEM 39:**

**ALTERNATIVE BMPS:**

ALTERNATIVE EROSION CONTROL BMP DESIGNS WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMP'S AS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY EPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION) MUST BE SUBMITTED TO THE DESIGN ENGINEER PRIOR TO THE INSTALLATION.

ALTERNATIVE BMPS USED ON THIS PROJECT: NONE

**ITEM 40:**

THERE ARE NO ALTERNATE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST

**ITEM 41:**

THERE ARE NO BUFFERS WITHIN 200FT OF PROJECT LIMITS.

**ITEM 42:**

THERE ARE NO WETLANDS WITHIN 200FT OF PROJECT LIMITS.

**ITEM 43:**

DRAINAGE BASIN DELINEATION SHOWN ON DRAINAGE AREA MAP, CE 4.01 & CE 4.02.

**ITEM 44:**

HYDROLOGY STUDY AND MAPS OF DRAINAGE BASINS FOR BOTH PRE- AND POST-DEVELOPMENT CONDITIONS SHOWN ON THE DRAINAGE MAP, CE 4.01 & CE 4.02

**ITEM 45:**

THE PRE-PROJECT AND POST-PROJECT CURVE NUMBERS CAN BE FOUND ON THE DRAINAGE AREA MAPS, CE 4.01 & CE 4.02.

**ITEM 46:**

STORM-DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION ARE SHOWN ON THE PIPE PROFILES, CE 5.05.

**ITEM 47:**



SOILS MAP  
N.T.S.

MAP UNIT SYMBOL	MAP UNIT NAME	MAP UNIT SYMBOL	MAP UNIT NAME
RhA	RED BAY FINE SANDY LOAM	GsA	GREENVILLE FINE SANDY LOAM
FoA	FACEVILLE FINE SANDY LOAM	GqA	GREENVILLE FINE SANDY LOAM
		OgA	ORANGEBURG LOAMY SAND

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**REVISIONS**

No.	Description	Date	By

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**APRON EXPANSION PROJECT**

Sheet Name:

**ES&PCP NOTES NO. 4**

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**CE 0.04**