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			GA	STP00-0076-01(028)	184	227

ESPCP GENERAL NOTES

The escape of sediment from the site shall be prevented by the installation of erosion and sedimentation control measures and practices prior to, or concurrent with, land-disturbing activities,

Erosion and sedimentation control measures will be maintained at all times during this project. If full implementation of this approved plan does not provide effective erosion and sedimentation control, additional erosion and sedimentation control measures shall be implemented to control or treat the sediment source.

PLAN ALTERATIONS

The Erosion, Sedimentation, Pollution Control Plan (ESPCP) is provided by the Department. It addresses the the staged construction of the project on the basis of common construction methods and techniques. If the Contractor elects to alter the staged construction from that shown in the plans or utilize construction techniques that render this plan ineffective, the Contractor shall revise the plans in accordance with Special Provision 161 of the contract.

The Contractor, the Certified Design Professional, and the WECS shall carefully evaluate this plan prior to commencing land-disturbing activities. A major modification or deletion of structural BMP's with a hydraulic component requires a formal revision of the ESPCP and the signature of a GSWCC level-II-certified design professional. Additional BMP's may be added per Special Provision 161 - Control of Soil Erosion and Sedimentation.

TEMPORARY MULCHING

EPD Genral Permit GAR100002 states, "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding". However, the Department typically requires disturbed areas to be stabilized every 7 days. The construction documents, special provisions, or specifications may require mulching more often than every 7 days.

VEGETATION AND PLANTING SCHEDULE

All temporary and permanent vegetative practices including plant species, planting dates, seeding, fertilizing, liming and mulching for this project can be found in section 700 of the current edition of the Department's Standard Specifications (or Special Provisions) and other applicable contract documents, or landscaping plans.

SEQUENCE OF MAJOR ACTIVITIES

The Contractor is responsible for developing the construction schedule for the project. The construction schedule for the project shall be submitted after the project is awarded 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).

Phase I - 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. In areas where silt fence is not feasible such as parking lots etc. baled straw shall be used.
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 and the Erosion Conrtol Plan.

Phase 2 - 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 silt fence check dams in accordance with the Erosion Control Plans. Mulch all slopes as per GDOT specifications and the Erosion Control Plans. Install all required Erosion Control Mats once slopes are constructed to finished grade. Mulch and seed grass in accordance with the GDOT Standard Specifications.

Phase 3 - Paving Operations
a. - Paving Widened Roadway- 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.

Phase 4 - Removal of Temporary Items
a. - All temporary erosion control items shall be removed once acceptable ground cover has been established.

PETROLEUM STORAGE, SPILLS AND LEAKS

These plans expressly delegate the responsibility of on-site hazardous material management to the Contractor. The Contractor shall at a minimum provide an action plan and keep the necessary materials on site for the capture, clean up and disposal of any petroleum product, or other hazardous materials leak or spills associated with the servicing, refueling or operation of any equipment utilized at the site. A copy of the action plan shall be submitted to the Project Engineer and maintained on the project site. All personnel operating or servicing equipment shall be familiar with the action plan. The Contractor shall not park, refuel or maintain equipment within stream buffers.

If the Contractor elects to store petroleum products on site the Contractor shall prepare an ESPCP addendum that addresses the additional BMPs needed for onsite storage and spill prevention for petroleum products. This plan shall be prepared by a Certified Design Professional as required by GAR100002 for inclusion with these plans. The Contractor's attention is specifically directed to Standard Specification 107-Legal Regulations and Responsibility to the public for additional requirements.

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 may consist of permanent detention ponds, filter basins, vegetation, permanent slope drains and/or flumes, rip-rap at pipe outlets for velocity dissipation and outlet stabilization, vegetated swales/ditches where practical, channel/ditch stabilization with Turf Reinforcing Mats, rip-rap, and concrete ditch lining where necessary. The post-construction BMP's will provide permanent stabilization of the site and prevent accelerated transportation of sediment and pollutants into receiving waters.)

SILT FENCE INSTALLATION WITH J HOOKS AND SPURS

Silt fence should never be run continuously. The silt fence should turn back into the fill or slope to create small pockets that trap silt and force stormwater to flow through the silt fence. This technique is called using J hooks (or spurs). The J hooks shall be utilized on all silt fences that are located around the perimeter of the project and along the toe of embankments or slopes. The J hooks shall be placed in accordance with GDOT Construction Detail D-24C. The maxium J hook spacing is reached when the top of the J hook is at the same elevation as the bottom of the J hook immediately upgradient. J hooks shall be paid for as silt fence items per linear foot. All cost and other incindental items are included in the cost of installing and maintaining the silt fence.

Silt Fence Installations with J-Hooks and spurs

Silt fence should never be run continuously. The silt fence should turn back into the fill or slope to create small pockets that trap silt and force storm water to flow through the silt fence.
This technique, or configuration, is commonly referred to as J-hooks or spurs. The J-hooks shall be utilized on all silt fences that are located around the perimeter of the project and along
the toe of embankments or slopes. The J-hooks shall be spaced in accordance with the Construction Detail D-24C. The maximum spacing of J hooks is reached when the top of the adjacent
Down gradient J hook is at the same elevation as the bottom of the adjacent up gradient J hook. J
Hooks shall be paid for as silt fence items per foot. All ccst and other incidental items are included in cost of installing and maintaining the silt fence.

SEDIMENT STORAGE

The site has a total disturbed area of 30.16 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	Outfall Location	Total Area Drained (acres)	Disturbed Area (acres)	Required Sediment Storage Volume (yd^3)	Total Storage Volume Provided (yd^3)	Filter Ring # of Devices	Filter Ring Total Volume (yd^3)	Check Dam (# yd^3/each) # of Devices	Check Dam Total Volume (yd^3)	Inlet sediment Traps (# yd^3/each) # of Devices	Inlet sediment Traps Total Volume (yd^3)	Silt Fence (0.3 yd^3/ft) Length of Fence (ft)	Silt Fence Total Volume (yd^3)
1	51+49 RT	3.32	1.15	222.44	71.25	1	14.25	4	57.00		0.00		0.00
2	57+89 RT	2.24	1.79	150.08	171.00	1	14.25	11	156.75		0.00		0.00
3	60+42 RT	1.42	0.91	95.14	71.25	1	14.25	4	57.00		0.00		0.00
4	89+86 LT	505	11.20	33835	122.64	1	14.25	7	99.75		0.00	288	8.64
5	103+74 RT	1.14	1.05	76.38	82.95	1	14.25	3	42.75		0.00	865	25.95
6	106+72 RT	2.72	1.27	182.24	53.19	1	14.25	2	28.50		0.00	348	10.44
7	110+24 RT	2.46	1.66	164.82	142.35	1	14.25	7	99.75		0.00	945	28.35
8	115+13 RT	3.63	2.57	243.21	353.91	1	14.25	22	313.50		0.00	872	26.16
9	125+21 RT	25.26	6.14	1692.42	7.14	1	14.25	4	57.00		0.00	238	7.14
10	30+32 LT	3.55	1.36	237.85	14.25	1	14.25		0.00		0.00		0.00
11	43+52 RT	1.14	1.06	76.38	57.00	1	14.25	3	42.75		0.00		0.00
	Sheet Flow			0	0.00								0.00
	Total		30.16	36976	572.28		85.5		441.75		0.00		106.68

In order to prevent runoff from bypassing inlet sediment traps, a temporary berm shall be installed on the downstream side of all inlet sediment traps that are not located in a low point or an excavated sump. Temporary berms, when necessary, shall be a minimum of 18" high and constructed 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.

SITE STABLIZATION AND BMP MAINTENANCE MEASURES

See the Department's Standard Specifications (or Special Provisions) 161, 163, 165, 700, 710 and other contract documents for stabilization and maintenance measures.

WASTE DISPOSAL

Where attainable, locate waste collection areas, dumpsters, trash cans and portable toilets at least 50 feet away from streets, gutters, watercourses and storm drains. Secondary containment shall be provided around liquid waste collection areas to minimize the likelihood of contaminated discharges. The Contractor shall comply with all applicable state and local waste storage and disposal regulations and obtain all necessary permits. Solid materials, including building materials, shall not be deposited into Waters of the State, unless authorized by a Section 404 Permit.

INSPECTIONS

By agreement with Georgia EPD, the design professional who prepared the ESPCP, or a certified designee, is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days of installation. Additionally, the Department's Construction Project Engineer will be responsible for seven-day inspections for all new BMP installations.

All other inspections shall be documented on the appropriate Department inspection forms. See Standard Specification (or Special Provision) 167 and other contract documents for inspection requirements. These inspections shall continue until the Notice of Termination (NOT) is submitted.

Failure to perform inspections as required by the contract documents and the NPDES permit shall result in the cessation of all construction activities with the exception of Traffic Control and Erosion Control. Continued failure to perform inspections shall result in non-refundable deductions as specified in the contract documents.

NONSTORM WATER DISCHARGES

Nonstorm water discharges defined in Part III.A.2 of the NPDES Permit will be identified after construction has commenced. These discharges shall be subject to the same requirements as storm water discharges required by the Georgia Erosion and Sedimentation Control Act, the NPDES Permit, the Clean Water Act, the Manual for Erosion and Sediment Control in Georgia, Department Standards, and other contract documents.

DE-WATERING AND PUMPING ACTIVITIES

Any pumped discharge from an excavation or disturbed area shall be routed through an appropriately sized sediment basin, silt filter bag or shall be treated equivalently with suitable BMP's. The contractor shall ensure the post BMP treated discharge is sheet flowing. Failure to create sheet flow will obligate the contractor to perform water quality sampling of pumped discharges. The contractor shall prepare sampling plans in accordance with the current GAR100002 NPDES permit by utilizing by a Certified Design Professional. No separate payment will be made for water quality sampling of pump discharges.

OTHER CONTROLS

The Contractor shall follow this ESPCP and ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

The Contractor shall control dust from the site in accordance with Section 161 of the current edition of the Department's Standard Specifications.

RETENTION OF RECORDS

In accordance with Part IV.F of the General Permit GAR100002, the Department will retain all records related to the implementation of this ESPCP for the duration of the project.

1. The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of Construction until such time as a NOT is submitted:
   a. A copy of all Notices of Intent submitted to EPD;
   b. A copy of the Erosion, Sedimentation and Pollution Control Plan;
   c. The design professional's report of the results of the inspection conducted in accordane with Part IV.A.5. of permit GAR100002;
   d. A copy of all monitoring information, results, and reports required by the permit;
   e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of the permit;
   f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of the permit; and
   g. Daily rainfall information collected in accordance with Part IV.D.4.a.(1)(c) of the permit.

2. Copies of all Notices of Intent, Notices of Termination, reports, plans, monitoring reports, monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by the permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the the NOT is submitted in accordance with Part VI of this permit. These records must be maintained at the permittee's primary place of business or at a designated alternative location once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

12/15/2011 GPLN

GEORGIA
DEPARTMENT OF TRANSPORTATION

NTS

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: DISTRICT 2 DESIGN

ESPCP GENERAL NOTES

DRAWING No. 51-001