PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION.
(REV 10-12-11)

SECTION 104 is deleted and the following substituted:

SECTION 104
PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION

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104-1 Description

Provide an erosion and sediment control plan signed and sealed by a Specialty Engineer. Select and install temporary erosion and sediment control features in accordance with the plan for the project and for areas outside the right-of-way where work is accomplished in conjunction with the project and the project permits to prevent pollution of water and wetlands, detrimental effects to public or private property adjacent to the project right-of-way and damage to work on the project. Adjust, maintain, replace, or supplement selected devices as needed to ensure continuous control of erosion, sediment, turbid discharge, water pollution, and compliance with permit conditions until Final Acceptance in accordance with 5-11.

104-2 Features.

Use features identified as Best Management Practices (BMPs) in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual and accepted by the Engineer. The Engineer will base acceptance on visual inspection, review of pertinent toxicity data and BMPs. Products containing geotextile fabric must meet the testing requirements in 985-4.

The Engineer may also approve reuse of erosion and sediment control features, provided those features will not be incorporated into the completed project.

104-3 Preconstruction.

Provide an erosion and sediment control plan prepared by a Specialty Engineer in accordance with BMPs identified in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual. At the preconstruction conference, submit the plan to the Engineer for review, discuss the plan, and review the requirements and special conditions of all permits. As a minimum, include the following items or activities in the plan:

(1) For each phase of construction operations or activities provide:

(a) Locations of features
(b) Types of features
(c) Estimated time features will be in operation
(d) Monitoring schedules for maintenance of features
(e) Methods of maintaining features
(f) Methods of containing or removing pollutants or hazardous wastes
(g) limitations of exposed erodible earth as defined in 104-4.1
(h) Existing and proposed drainage and flow patterns

(i) Positive drainage measures to be employed, installing as soon as practical permanent drainage features

(2) A procedure to control off-site tracking of soil by vehicles and construction equipment.

(3) A procedure for cleanup and reporting of non-stormwater discharges such as contaminated groundwater or accidental spills.

(4) The name and telephone number and copy of inspection qualifications for the person responsible for monitoring and maintaining the features.

Submit the project specific erosion and sediment control plan to the appropriate Water management District for review and approval. Do not begin any construction activities until all approvals are received.

Prior to submitting a Notice of Intent (NOI) to the Florida Department of Environmental Protection (FDEP) to be covered under the FDEP Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP), the Contractor's erosion and sediment control plan shall be incorporated into the Department's Stormwater Pollution Prevention Plan (SWPPP). Do not begin any soil disturbing activities until notification of permit coverage is received.

104-4 Construction.

104-4.1 General: Select and install temporary erosion and sediment control features in accordance with the sediment and erosion control plan. Adjust, maintain, replace, or supplement selected features as needed to ensure continuous control of erosion, sediment or turbid discharge and water pollution.

104-4.2 Erodible Earth Limits: Do not expose more than 750,000 ft^2 of erodible earth, unless otherwise approved by the Engineer. This limitation applies separately to clearing and grubbing operations and excavation and filling operations.

104-4.3 Field Reviews: The Specialty Engineer shall perform field reviews in conjunction with successive operations to verify implementation of the erosion and sediment control plan. Based on the field review, the Specialty Engineer shall provide additions or corrections to the copy of the sediment and erosion control plan kept at the project site and provide the Engineer with 2 copies of the changes.

104-4.4 Control of Operations: Install erosion and sediment control features prior to any soil disturbing operations commencing unless otherwise noted in the permits.

Prevent pollution of surface waters and wetlands including streams, canals, lakes, reservoirs, and other water impoundments with fuels, oils, bitumens, calcium chloride, sediment, turbidity, or other harmful materials. Also, conduct and schedule operations to avoid pollution or siltation of such water impoundments, and to avoid interference with movement of migratory fish. Do not dump any residue from dust collectors or washers into any surface waters.

Onsite fuel storage tanks and any equipment and material storage or maintenance areas within Department right of way must be maintained and stored in compliance with regulatory agency standards.

Locate temporary sanitary provisions away from inlets, streams, canals, lakes, reservoirs, and other water impoundments.

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Restrict construction operations to those conditions allowed by permit in surface waters and wetlands such as rivers, streams, lakes, tidal waters, reservoirs, canals, and other water impoundments to those areas where it is necessary to perform filling or excavation to accomplish the work shown in the plans and permits and to those areas which must be entered to construct temporary or permanent structures using contained or stable materials. As soon as conditions permit, promptly clear rivers, streams, and impoundments of all obstructions placed therein or caused by construction operations back to preconstruction condition. Stabilize exposed areas as required by permit or within seven days, whichever is earlier.

Do not ford any surface waters with construction equipment. Wherever crossings are necessary, use a temporary bridge or other structure.

Except as necessary for construction and unless permitted by regulatory agencies, do not deposit excavated material or other erodable material in areas subject to concentrated flow of stormwater or in surface waters or wetlands such as rivers, streams, canals, or impoundments, or in a position close enough thereto, to be washed away by high water or runoff.

Where pumps are used to remove highly turbid waters from enclosed construction areas such as cofferdams or forms or from trench excavations, treat the water with methods outlined in the Manual to bring it into compliance with water quality standards acceptable to regulatory agencies prior to discharge into State waters. Do not allow discharged water to flow across unstabilized areas prior to entering surface waters or wetlands, and do not allow discharged waters to scour sediments and create turbidity in surface waters or wetlands.

Do not disturb lands or waters outside the limits of construction as staked, except as authorized by the Engineer.

Obtain the Engineer's approval for the location of, and method of operation in, borrow pits, material pits, and disposal areas furnished for waste material from the project (other than commercially operated sources) such that erosion during and after completion of the work will not result in detrimental siltation or water pollution in accordance with 7-1.

104-4.5 Erosion and Sediment Control Methods: Each of the erosion and sediment control methods has intended functions. Utilize the method that best controls erosion, sediment, turbidity, or pollution discharges from the project. Select protection methods from those detailed in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual appropriate to the type of work.

104-4.6 Erosion and Sediment Control Device Inspection and Maintenance: Using a FDEP certified inspector, inspect all erosion and sediment control devices in accordance with the Construction Generic Permit. Immediately correct any deficiencies. In addition, make a daily review of the location of erosion and sediment control devices in areas where construction activities have changed the natural contour and drainage runoff to ensure that the erosion and sediment control devices are properly located for effectiveness. Where deficiencies exist, install additional erosion and sediment control devices to conform to permit requirements.

Maintain permanent and temporary erosion and sediment control features, at no expense to the Department, until the project is complete and accepted. If reconstruction of such erosion and sediment control features is necessary due to the Contractor's negligence or carelessness or, in the case of temporary erosion and sediment control features, failure by the Contractor to install permanent erosion or sediment control features as scheduled, the Contractor

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shall replace such erosion or sediment control features at no expense to the Department. If reconstruction of permanent or temporary erosion and sediment control features is necessary, as determined by the Engineer, due to factors beyond the control of the Contractor, the Department will consider payment for replacement pursuant to 4-4, Unforeseeable Work.

Maintain all erosion and sediment control features as required in the Stormwater Pollution Prevention Plan, Contractor's project specific erosion and sediment control plan and as specified in the State of Florida Department of Environmental Protection Generic Permit for Stormwater Discharge from Large and Small Construction Activities.

Dress any sediment deposits remaining in place after the temporary erosion and sediment control devices are no longer required to conform to the finished grade, and prepare them in accordance with Section 570.

104-4.7 Performance Standards for Sediment and Erosion Control Plan and Water Quality Monitoring Requirements: Completely retain eroded soils and turbid water on the project site and do not discharge into wetlands or surface waters on any portion of the job site for the duration of the project.

Prior to starting construction, conduct water quality sampling in the receiving waters at points above, within and below the project site to establish a baseline assessment of turbidity for the waterbody. Inspect the project site per the requirements of the NPDES CGP. When a visible stormwater discharge is detected during a rain event, sample all stormwater discharge points that leave the project site for turbidity. Provide the turbidity monitoring results to the engineer with the weekly inspection reports required by the CGP. Discharged stormwater turbidity must be ≤ 29 Nephelometric Turbidity Units (NTU) above background for surface waters and must be 0 NTUs above background for any waterbody designated as an Outstanding Florida Water. Sediment migration off site and discharge of turbid water above state standards is a violation of the permit and corrective measures must be performed immediately.

104-4.8 Removal of Temporary Erosion Control Features: Remove temporary erosion and sediment control devices only after the protected areas are permanently stabilized or as directed by the Engineer. Final Acceptance in accordance with 5-11 will not be issued until all required temporary erosion and sediment control devices have been satisfactorily removed and disposed.

104-4.9 Protection During Suspension of Contract Time: If the Engineer determines it is necessary to suspend the construction operations for any appreciable length of time, inspect installed erosion and sediment control devices and install, as needed, additional measures to prevent erosion and sediment transport from the site. During such suspensions of operations, perform additional erosion and sediment control work as required by the Engineer. Payment for additional work during periods of Department directed suspensions will be in accordance with 4-4 as unforeseeable work.

In the event of a suspension of work due to a named storm event, remove existing temporary erosion or sediment control devices as directed by the Engineer. Payment for removal and subsequent replacement, if necessary, will be in accordance with 4-4 as unforeseeable work.

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104-5 Method of Measurement.

The quantity paid will be the lump sum quantity for all work specified in this Section, completed and accepted.

104-6 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section.

Separate payment will not be made for the cost of constructing temporary earth berms along the edges of roadways to prevent erosion or sediment transport during grading and subsequent operations. Include these costs in the unit prices for grading.

If the requirements of this Section are not satisfied, the Engineer may employ outside assistance or use Department employees to perform corrective measures as needed. The monthly progress estimate will be reduced by any such costs incurred, including engineering costs.

Payment will be made under:

Item No. 908-104-1 -Erosion and Sediment Control - LS

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