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

(REV 5-24-04) (FA 7-13-04) (1-05)

ARTICLE 104-5 (Pages 123-125) is deleted and the following substituted:

104-5 Preconstruction Requirements.

At the Preconstruction Conference, provide to the Department an Erosion Control Plan meeting the requirements or special conditions of all permits authorizing project construction. If no permits are required or the approved permits do not contain special conditions or specifically address erosion and water pollution, the project Erosion Control Plan will be governed by 7-1.1, 7-2.2, 7-8.1, 7-8.2, and Section 104.

When a DEP generic permit is issued, the Contractor's Erosion Control Plan shall be prepared to accompany the Department's Stormwater Pollution Prevention Plan (SWPPP). Ensure the Erosion Control Plan includes procedures to control off-site tracking of soil by vehicles and construction equipment and a procedure for cleanup and reporting of non-storm water discharges, such as contaminated groundwater or accidental spills. Do not begin any soil disturbing activities until Department approval of the Contractor's Erosion Control Plan, including required signed certification statements.

Failure to sign any required documents or certification statements will be considered a default of the Contract. Any soil disturbing activities performed without the required signed documents or certification statements may be considered a violation of the DEP Generic Permit.

When the SWPPP is required, prepare the Erosion Control Plan in accordance with the planned sequence of operations and present in a format acceptable to the Department. The Erosion Control Plan shall describe, but not be limited to, the following items or activities:

(1) For each phase of construction operations or activities, supply the following information:

(a) Locations of all erosion control devices

(b) Types of all erosion control devices

(c) Estimated time erosion control devices will be in operation

(d) Monitoring schedules for maintenance of erosion control devices

(e) Methods of maintaining erosion control devices

(f) Containment or removal methods for pollutants or hazardous wastes

(2) The name and telephone number of the person responsible for monitoring and maintaining the erosion control devices.

(3) Submit for approval the Erosion Control Plans meeting paragraphs 3a, 3b, or 3c below:

(a) Projects permitted by the Southwest Florida Water Management District (SWFWMD), require the following:

Submit a copy of the Erosion Control Plan to the Engineer for review and to the appropriate SWFWMD Office for review and approval. Include the SWFWMD permit number on all submitted data or correspondence.

The Contractor may schedule a meeting with the appropriate SWFWMD Office to discuss his Erosion Control Plan in detail, to expedite the review and approval process. Advise the Engineer of the time and place of any meetings scheduled with SWFWMD.

Do not begin construction activities until the Erosion Control Plan receives written approval from both SWFWMD and the Engineer.

(b) Projects permitted by the South Florida Water Management District or the St. Johns River Water Management District, require the following:

Obtain the Engineer's approval of the Erosion Control Plan.

Do not begin construction activities until the Erosion Control Plan receives written approval from the Engineer.

(c) Projects authorized by permitting agencies other than the Water Management Districts or projects for which no permits are required require the following:

The Engineer will review and approve the Contractor's Erosion Control Plan.

Do not begin construction activities until the Erosion Control Plan receives written approval from the Engineer.

Comply with the approved Erosion Control Plan.

SUBARTICLE 104-6.4.9 (Page 127). The text is deleted and the following substituted:

Provide bales having minimum dimensions of 14 by 18 by 36 inches [350 by 450 by 900 mm] at the time of placement. Construct Baled Hay or Straw dams according to details shown in the plans, as directed by the Project Engineer or as shown in the Design Standards to protect against downstream accumulations of sediment.

Use natural baled hay or straw meeting the requirements of Section 981-3 or synthetic hay bales may be used as an alternative to natural baled hay or straw. Synthetic hay bales should be interlocking, have pre-made stake holes, are made of synthetic fibers (polypropylene, nylon, polyester) that meet the Environmental Protection Agency's TCLP standards, and produced into a filter medium with needle-punched fibers. Use synthetic hay bales listed on the QPL. Wash out and remove sediment deposits when the deposits reach 1/2 the height of the reusable synthetic hay bale or as directed by the Engineer. Dispose of the washout in accordance with Section 104-3 or in an area approved by the Engineer. Synthetic hay bales that have had sediment deposits removed may be reinstalled on the project as approved by the Engineer.

ARTICLE 104-6 (Pages 125-128) is expanded by the addition of the following new Subarticle:

104-6.4.13 Artificial Coverings:

General: Install artificial coverings in locations where temporary protection from erosion is needed. Two situations occur that require artificial coverings. The two situations have differing material requirements, which are described below.

(1) Use artificial coverings composed of natural or synthetic fiber mats, plastic sheeting, or netting as protection against erosion, when directed by the Engineer, during temporary pauses in construction caused by inclement weather or other circumstances. Remove the material when construction resumes.

(2) Use artificial coverings as erosion control blankets, at locations shown in the plans, to facilitate plant growth while permanent grassing is being established. For the purpose described, use non-toxic, biodegradable, natural or synthetic woven fiber mats. Install in accordance with Section 571-3 as for plastic erosion mat. Install erosion control blankets capable

of sustaining a maximum design velocity of 6.5 ft/sec [2 m/sec] as determined from tests performed by Utah State University, Texas Transportation Institute or an independent testing laboratory approved by the Department. Furnish to the Engineer, two certified copies of manufacturers test reports showing that the erosion control blankets meet the requirements of this Specification. Certification must be attested, by a person having legal authority to bind the manufacturing company. Also, furnish two 4 by 8 inch [100 by 200 mm] samples for product identification. The manufacturers test records shall be made available to the Department upon request. Leave the material in place, as installed, to biodegrade.

SUBARTICLE 104-7.1 (Page 128) is deleted and the following substituted:

104-7.1 General: Provide routine maintenance of permanent and temporary erosion control features, at no expense to the Department, until the project is complete and accepted. If reconstruction of such erosion control features is necessary due to the Contractor's negligence or carelessness or, in the case of temporary erosion control features, failure by the Contractor to install permanent erosion control features as scheduled, the Contractor shall replace such erosion control features at no expense to the Department. If reconstruction of permanent or temporary erosion control features is necessary due to factors beyond the control of the Contractor, the Department will pay for replacement under the appropriate Contract pay item or items.

Inspect all erosion control features at least once every seven calendar days and within 24 hours of the end of a storm of 0.50 inches [12 mm] or greater. Maintain all erosion control features as required in the Stormwater Pollution Prevention Plan, Contractor's Erosion 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.

SUBARTICLE 104-7.2 (Page 129) is deleted and the following substituted:

104-7.2 Mowing: The Engineer may direct mowing of areas within the limits of the project, in addition to and apart from those areas specified in 580. Mow these designated areas within seven days of receiving such order. Remove and properly dispose of all litter and debris prior to the mowing operation. Use conventional and specialized equipment along with hand labor to mow the entire area including slopes, wet areas, intersections, overpasses and around all appurtenances. Mow all areas to obtain a uniform height of 6 inches [150 mm], unless directed otherwise by the Engineer.

ARTICLE 104-9 (Page 129) is deleted and the following substituted:

104-9 Method of Measurement.

When separate items for temporary erosion control features are included in the Contract, the quantities to be paid for will be: (1) the areas, in square yards [square meters], of Artificial Coverings; (2) the area, in acres [hectares], of Mowing; including litter, debris removal and disposal, equipment, labor, materials and incidentals; (3) the volume, in cubic yards [cubic meters], of Sandbagging, measured in accordance with 530-4.1; (4) the length, in feet [meters], of Slope Drains (Temporary), measured along the surface of the work constructed; (5) the number of Sediment Basins acceptably constructed; (6) the number of Sediment Basin Cleanouts acceptably accomplished; (7) the number of hay or straw bales; (8) the length, in feet [meters], of Floating Turbidity Barrier; (9) the length, in feet [meters], of Staked Turbidity Barrier; (10) the

length, in feet [meters], of Staked Silt Fence; (11) seeding materials in accordance with Section 570 and (12) the number of Rock Bags acceptably placed.

The quantity of floating turbidity barrier, relocated turbidity barrier, staked turbidity barrier, and staked silt fence to be paid for will be the total length, in feet [meters], furnished, installed, and accepted at a new location, regardless of whether materials are new or used or relocated from a previous installation on the project.