

1040000 PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION

COMMENTS FROM INTERNAL/INDUSTRY REVIEW

Catherine Earp
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Comments: (11-16-18, Internal)

FROM: → Rebecca Frimmel, Specifications Development Specialist
SUBJECT: → Proposed Specification 1040000 Prevention, Control, and Abatement of Erosion and Water Pollution
Attached for your review and comments is a copy of the subject proposed Specification.

EC Earp, Catherine
General comment. This spec needs an editorial review. There are multiple sentences saying almost the same thing in each section. I've tried to highlight those sentences that I think could be reworded or condensed with other sentences.

Response: Comment was addressed prior to industry review. No changes.

104-1-Description
Provide erosion control measures on the project and in areas outside the right-of-way where work is accomplished in conjunction with the project, so as to prevent erosion, pollution of water, detrimental effects to public or private property adjacent to the project right-of-way and damage to work on the project. Construct, install and maintain temporary erosion control features devices or, where practical, construct and maintain permanent erosion control features devices as shown in the Plans or as may be directed by the Engineer.

EC Earp, Catherine
Suggest this language match the language changes throughout.
contaminants, pollutants or hazardous substances from migrating off the construction site or from materials and equipment into any surface waters, wetlands, groundwater or property beyond the project limits

Response: Comment was addressed prior to industry review. No changes.

104-2-General
Coordinate the installation of temporary erosion control features devices with the construction of the permanent erosion control features devices to the extent necessary to ensure economical, effective, and continuous control of erosion and water pollution throughout the life of the Contract.
Due to unanticipated conditions, the Engineer may direct the use of control features or methods other than those included in the original Contract. In such event, the Department will pay for this additional work as unforeseeable work.

EC Earp, Catherine
How do we monitor this? Groundwater wells
EC Earp, Catherine
Recommend similar language to latter part of the sentence.

Response: This comment was addressed prior to final industry review version. No Change.

104-3-Control of Contractor's Operations Which May Result in Water Pollution
Prevent contaminants, pollutants or hazardous substances, as defined in Section 376.301, Florida Statutes, from migrating from off the construction site or from materials and equipment into any surface waters, wetlands, groundwater or property beyond the project limits. Conduct and schedule operations to avoid and minimize pollution or siltation from the project to surface waters, wetlands, groundwater, or property beyond the project limits, of streams, canals, lakes, reservoirs, and other water impoundments with fuels, oils, bitumens, calcium chloride, or other harmful materials. Also, conduct and schedule operations to avoid or otherwise minimize 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 live stream.
Restrict construction operations in 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 to those areas which must be entered to construct temporary or permanent structures. As soon as conditions permit, promptly clear rivers, streams, and impoundments of all obstructions placed therein or caused by construction operations.
Do not drive in, operate, or place construction equipment or materials in surface waters, wetlands, groundwater, or property beyond the project limits without permitted authority for permanent or temporary impacts. Water crossings or other wetland impacts must be authorized by permit. Obstructing or impeding the water flow or movement of the water or wildlife must be authorized by permit. frequently ford live streams with construction equipment. Wherever an appreciable number of stream crossings are necessary at any one location, use a temporary bridge or other structure.

EC Earp, Catherine
Same intent as 104-2
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EC Earp, Catherine
Either remove this or add it into the other phrases.
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Response: These comments were addressed prior to final industry review version.

→ Where pumps are used to remove highly turbid waters from enclosed construction areas such as cofferdams or forms, treat the water by one or more of the following methods prior to discharge ~~into State waters from the project~~: pumping into grassed swales or appropriate upland vegetated areas or ~~constructed sediment basins, or confined by an appropriate enclosure such as turbidity barriers when other methods are not considered appropriate practical. Do not discharge to any surface waters, wetlands, groundwater, or beyond the project limits, water that is turbid, contaminated, water that does not meet State water quality standards, or water that does not meet the criteria specified in any applicable permit to any surface waters, wetlands, groundwater, or property beyond the project limits.~~

EC Earp, Catherine
How does contractor determine this?
↓
If this refers to turbidity (NTUs) then we should specify. Or have the Contractor refer to the permit standards.

→ Remove sediment deposited during construction from all existing or newly constructed stormwater facilities prior to Final Acceptance. Ensure that all stormwater conveyances and stormwater facilities meet final grade requirements at Final Acceptance. Remove silt or regrade as necessary to comply with the lines and grades shown in the Plans.

→ Do not disturb enter onto lands or waters outside the limits of construction as staked, except as authorized by the Engineer. ~~Do not allow water that does not meet state water quality standards or does not meet the permitted criteria to exit the project limits.~~

EC Earp, Catherine
How does Contractor determine this?
↓
If this refers to turbidity (NTUs) then we should specify. Or have the Contractor refer to the permit standards.

→ 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 probability of detrimental siltation or water pollution.

Response: These comments were addressed prior to final industry review version. No Change.

104.5 Preconstruction Requirements.

→ Prior to the Preconstruction Conference, submit ~~to the Department~~ an Erosion and Sediment 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's Erosion and Sediment Control Plan will be governed by 7-1.1, 7-2.2, 7-8.1, 7-8.2, and Section 104.

EC Earp, Catherine
"in accordance with" 2.
How do the contractor's Erosion and Sediment Control Plan compare to the Dept. SWPPP? Should they be similar, different? Does it matter?
Is the purpose of this sentence to say that the ESC plan should match the SWPPP that was part of the NPDES permit?

→ When a DEP generic permit for Stormwater Discharge from Large and Small Construction Activities (NPDES?) permit is issued, the Contractor's Erosion and Sediment Control Plan (E&SC Plan) shall be prepared to accompany the Department's Stormwater Pollution Prevention Plan (SWPPP) ~~that is part of the issues NPDES permit (?).~~ Ensure the E&SC Plan Erosion and Sediment 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 before receiving the Engineer's written approval~~ Department

Response: This comment was addressed prior to final industry review version. No Change.

approval of the Contractor's E&SC Plan Erosion and Sediment Control Plan, including the required signed certification statements ~~have been submitted to the Department.~~

→ Failure to sign and submit 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 is~~ considered a violation of the DEP Generic Permit for Stormwater Discharge from Large and Small Construction Activities.

EC Earp, Catherine
Can we just call this the NPDES permit?

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

EC Earp, Catherine
Should this section be moved above where we introduce the SWPPP in the previous paragraph?
Also for brevity, consider removing the numbered list and referring to the ESC Manual, since it's also listed there.

→ → 1. For each phase of construction operations or activities, supply the following information:

Response: These comments were addressed prior to final industry review version. No Change.

104-6 Construction Requirements.

→ 104-6.1 Limitation of Exposure of Erodible Earth: The Engineer may limit the surface areas of unprotected erodible earth exposed by the construction operation and may direct the Contractor to provide additional erosion or pollution control measures to prevent contamination of any surface waters, wetlands, or groundwater river, stream, lake, tidal waters, reservoir, canal, or other water impoundments or to prevent detrimental effects on property outside the project right-of-way limits or damage to the project. Limit the area in which excavation and filling operations are being performed so that it does not exceed the capacity to keep the finish grading, turf, sod, and other such permanent erosion control measures current in accordance with the accepted schedule.

→ Do not allow the surface area of erodible earth that clearing and grubbing operations, or excavation and filling operations, or other earth disturbing activities expose to exceed 750,000 square feet without specific prior written approval by the Engineer. This limitation applies separately to clearing and grubbing operations and excavation and filling operations.

→ The Engineer may further limit the surface areas of unprotected erodible earth exposed by the construction operation and may direct the Contractor to provide additional erosion or pollution control measures to prevent contamination of any surface waters, wetlands, or groundwater or to prevent detrimental effects on property outside the project limits or damage to the project, increase or decrease the amount of surface area the Contractor may expose at any one time.

Response: These comments were addressed prior to final industry review version. No Change.

Incorporate permanent erosion and sediment control devices/features into the project at the earliest practical time and prior to the commencement of any earthwork. Use temporary erosion and sediment control devices/features found in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (E&SC Manual) to control or correct conditions that develop during construction which were not foreseen at the time of design, to control erosion and sediment generated by construction operations, prior to the time it is practical to correct unforeseen conditions. Instruct permanent control features, or to provide immediate temporary control of erosion and sediment that develops during normal construction operations, and to which are not associated with permanent erosion control erosion and sediment control devices/features on the project. An electronic version of the E&SC Manual can be found at the following URL:

→ <http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/FLEROSIONSEDIMENTManual.shtm>

→ Install all erosion and sediment control devices in a timely manner to ensure the control of sediment and the protection of surface lakes, streams, gulf or ocean waters, or any wetlands, groundwater, or property beyond the project limits, associated therewith and to any adjacent property outside the right-of-way as required.

EC Earp, Catherine
These two sentences say almost the same thing as the beginning of section 104-6.2. Recommend deleting.
"earliest practical time" vs "timely manner"

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→ Complete the installation of temporary erosion and sediment control devices prior to the commencement of any earthwork.

→ After installation of sediment control devices, repair portions of any devices damaged at no expense to the Department. The Engineer may authorize temporary erosion and sediment control features when finished soil layer is specified in the Contract and the limited availability of that material from the grading operations will prevent scheduled progress of the

EC Earp, Catherine
Incorporated this language into the first sentence.

Earp, Catherine
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Response: These comments were addressed prior to final industry review version. No Change.

104-6.4 Details for Temporary Erosion and Sediment Control Devices/Features:

→ 104-6.4.1 General: Use temporary erosion, sediment and water pollution control devices/features found in the E&SC Manual. These devices/features consist of, but are not limited to, temporary sod/turf, rolled erosion control products, sediment containment systems, runoff control structures, sediment barriers, inlet protection systems, silt fences, turbidity barriers, and chemical treatment. For design details for some of these devices/items, refer to the Standard Plans and E&SC Manual. Perform installation, inspection, maintenance, and removal of all temporary erosion and sediment control devices in accordance with applicable permits, manufacturer's directions, and the Contract Documents.

EC Earp, Catherine
I don't see these design details in the standard plans.

Response: This comment was addressed prior to final industry review version. No Change.

areas where the floating barriers are installed.¶
→ → 104-6.4.8 Inlet Protection System: Furnish and install inlet protection systems as shown in the Contract Documents Plans, the Standard Plans and the E&SC Manual.¶
→ → 104-6.4.9 Rolled Erosion Control Products (RECPs):¶

EC Earp, Catherine
Are these defined in 985 or in the ESC Manual? Why does this section not refer to the Contract documents like the others?¶

Response: This comment was addressed prior to final industry review version. No Change.

104-7 Maintenance of Erosion and Sediment Control Devices Features.¶
→ 104-7.1 General: Provide routine maintenance of permanent and temporary erosion and sediment control devices features, at no expense to the Department, until the project is complete and accepted. If reconstruction or replacement of such erosion and sediment control devices features is necessary due to the Contractor's negligence or carelessness or, in the case of temporary erosion and sediment control devices features, improper installation, lack of maintenance, excessive wear, design-life exceedance or failure by the Contractor to install permanent erosion control devices features as scheduled, the Contractor shall repair or replace such erosion control devices features at no expense to the Department. If reconstruction of permanent or temporary erosion and sediment control devices 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 and sediment control devices features at least once every seven calendar days and within 24 hours of the end of a storm event of that is 0.50 inches or greater. Maintain all erosion and sediment control devices features as required in the Stormwater Pollution Prevention Plan, the Contractor's Erosion and Sediment Control Plan E&SC Plan and

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if applicable, as specified in the State of Florida Department of Environmental Protection Generic Permit for Stormwater Discharge from Large and Small Construction Activities.¶

EC Earp, Catherine
NPDES Permit?¶

Response: This comment was addressed prior to final industry review version. No Change.

Margaret Rushmore
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Comments: (12-11-18, Industry)

Page 5 first sentence: Change from: The Engineer will review and approve the Contractor's and Sediment Erosion Control Plan. Change to: The Engineer will review and approve the Contractor's Erosion and Sediment Control Plan.

Response: Correction made.

Ananth Prasad
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Comments: (11-29-18, Industry)

After quick review, my biggest concern is this clause being deleted in 104-2. I was unable to find where they inserted it, or something similar in another location:

~~Due to unanticipated conditions, the Engineer may direct the use of control features or methods other than those included in the original Contract. In such event, the Department will pay for this additional work as unforeseeable work.~~

At some point on every project and erosion control method not included in the contract is required; without this language a CEI may hesitate to direct something outside the box, and only think to use the devices included in the contract.

Response: Unanticipated conditions are addressed in Division 1 of the specifications.

CEIs are not responsible for determining erosion and sediment control BMPs or methodology. The contractor is responsible for ensuring permit (ERP and NPDES) and Section 104 compliance. The use of additional BMPs must be approved by the Engineer.
