7.40 WATER POLLUTION CONTROL (SOIL EROSION)

While this section addresses soil erosion on all projects, *Construction Manual 10.30* addresses the additional requirements of a storm water discharge permit. Coverage under the Iowa Department of Natural Resources permit is required for all projects which disturb more than 0.4 hectares (1 acre) and are administered by the Iowa Department of Transportation.

The primary objective is to control soil erosion and sedimentation caused by soil erosion during construction with reasonable and economical construction practices.

While the contract documents indicate locations of sediment control devices (silt fence, ditch checks, and silt basins), their actual location should be verified in the field by the contractor and project engineer in order to fit existing conditions.

The erosion control devices should not be limited to those which are included in the contract documents. The project engineer should authorize adding any device that will be most effective in controlling erosion.

The primary method for temporary erosion control is stabilizing crop seeding and fertilizing. The application of stabilizing crop seeding does not require inoculation, application of sticking agent or fungicide, except for hairy vetch and other legumes which require inoculation. After the fall seeding period, areas which are not seeded should be roughened and mulched.

Stabilizing crop seeding requires seedbed preparation as described in *Specification 2601.03, B, 4, a* and covering and compacting as described in *Specification 2601.03, C, 3.*

Where possible, the installation of silt fence as perimeter control and for ditch checks should be installed prior to any soil disturbing activities occurring on the project.

7.41 CONTRACTOR REQUIREMENTS

The contractor's responsibility is to insure that soil erosion is minimized and to prevent eroded soil from leaving the construction project onto adjacent property. Timely installation of sediment control devices, such as silt fence and ditch checks, will help to prevent this damage from occurring. The most effective erosion control practice is stabilized crop seeding which shall be done as the grading progresses. This may require the erosion control contractor to mobilize and seed more than once.

The contractor's Erosion Control Implementation Plan (ECIP) is the contractor's schedule (sequence and timing of operations) and proposed method for accomplishing the required erosion control. The ECIP must be submitted to the project engineer prior to the Preconstruction Conference and be accepted before commencing work.

The contractor's ECIP should include information such as that shown in the ECIP Worksheet (Appendix 7-1). Updates to the ECIP may be included on the ECIP Worksheet or the ECIP Update Checklist (Appendix 7-2). Copies of both documents are available at http://www.iowadot.gov/construction/earthwork_erosion_control.html.

If the temporary erosion control is to be performed by a subcontractor, the subcontractor should be involved in developing the work plan but the plan should be submitted by the contractor.

Damage due to siltation on private property shall be corrected by the contractor with no expense to the contracting authority.

7.42 MOBILIZATION FOR EROSION CONTROL

For projects that have the Supplemental Specifications for Mobilization for Erosion Control, payment for mobilization would apply to any contract items from Standard Specification Sections 2601 or 2602 (excluding mowing, debris pick-up, monitoring well, or removal items). Payment for Mobilization for Erosion Control also does not apply to watering since Section 2601 already provides for payment for Mobilization for Watering.

Mobilizations for emergency erosion control should be ordered when there is a serious and urgent nature which is beyond normal maintenance of controls.

To determine if a situation warrants an emergency versus regular mobilization, review the location and the weather forecast. For example, the Engineer should order an emergency erosion control mobilization if a site has experienced a major rain event that has shown installed controls at a box culvert outlet are not adequate or have failed and there is another rain event in the immediate forecast.