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Mapping Symbols and Nomenclature for Erosion and Sediment Control Plans for Land Disturbing Activities

American Society of Agricultural and Biological Engineers

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Developed by the ASAE Pollution by Sediment Committee; approved by the Soil and Water Division Standards Committee; adopted by ASAE September 1993; approved as an American National Standard March 1995; reaffirmed December 1998; reaffirmed by ASAE December 1999; reaffirmed by ANSI June 2000; reaffirmed by ASAE December 2001, February 2005; reaffirmed by ANSI March 2005; reaffirmed by ASABE October 2009; reaffirmed by ANSI December 2009; reaffirmation extended two years November 2014; revised and approved by ANSI December 2015.

Keywords: Erosion, Sediment, Symbols

1 Purpose and Scope

1.1 The purpose of this Standard is to establish a list of standard descriptive elements for use in erosion- and sediment-control plan development. These elements consist of mapping symbols, keys, modifiers, and corresponding nomenclature. By improving consistency across plans, this Standard should facilitate the use and review of such plans by contractors and other professionals.

1.2 This Standard will not restrict creation of additional descriptive elements as required for practices not included here.

1.3 This Standard does not imply that these practices are suitable for erosion or sediment control in any or all applications. The descriptive elements are intended only to facilitate communications.

1.4 All descriptive elements must be legible. The sizes of the elements are at the discretion of the user.

1.5 Information within this Standard is not intended to be used in lieu of other construction information and details. Symbols should be used to indicate spatial placement of a practice (as presently done). A legend should always be used in conjunction with the symbols. Keys may be used in documents, as a textual alternative to the mapping symbol. Modifiers may be used on both symbols and keys to clarify their intended mitigating functions for each usage.

2 General

2.1 Overview. Each erosion and sediment control activity is defined in Section 3 and then associated with a key, a symbol, and a list of modifiers in Section 4. On erosion and sediment control plans, practices may be represented by a combination of keys, symbols, and modifiers. Erosion and sediment control practices may be continuous linear treatments, point treatments, or area treatments. The use of both keys and/or symbols is intended to provide the user the greatest degree of flexibility in representing the practices on construction plan maps.

2.2 Keys. Keys are represented as alphabetic abbreviations of each practice, enclosed in a circle, and may be useful where the practice is a more general area-treatment, such as temporary seeding.

2.3 Symbols. Symbols are graphic representations of the practice that may be more useful in representing linear erosion and sediment control practices, such as silt fences.

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2.4 Modifiers. Modifiers are a series of seven erosion and sediment control categories, denoted by an alphabetic subscript to the key, to allow the planner to fully communicate the intended purpose of each practice. For example, the modified key for rip-rap used for slope protection would be RR_B. The categories that normally apply to each practice are noted in the table in Section 4. The categories are:

A. Perimeter control. Perimeter controls are the last protection before sediment enters the roadway, storm drains, or adjacent properties.
B. Slope protection. Slopes must be protected from erosion by safely conveying runoff from the tops of slopes to the bottom or outlet device. Of primary importance is re-establishing vegetation to control erosion.
C. Sedimentation. Practices that encourage deposition of entrained sediment.
D. Sediment filtration. Practices that filter sediment from stormwater runoff.
E. Drainageway and stream protection. Practices that prevent damage to channels from increased runoff during construction, stabilize banks, and protect in-stream habitat.
F. Temporary stabilization. Erosion control practices that are intended to degrade over time after vegetation is established.
G. Permanent stabilization. Erosion control practices that are intended to remain in place and functioning over some specified design life.

2.5 Drawing legend. The drawing legend shall identify all symbols used and provide necessary information in a concise manner.

3 Nomenclature (Definitions)

3.1 Site preparation (Erosion control)

3.1.1 land grading: Shaping the land surface to predetermined grades so all surfaces slope to a drainage

3.1.2 surface roughening: Roughening a bare soil surface with horizontal grooves running across the slope, stair stepping, or tracking with treads of construction equipment

3.1.3 topsoiling: Preserving and using topsoil to provide good soil for vegetation

3.1.4 tree preservation and protection: Practices to protect desirable trees from damage during project development

3.1.5 temporary gravel construction entrance/exit: A graveled area or pad located to stabilize points where vehicles enter or leave a construction site

3.1.6 construction-road stabilization: Stabilization of temporary construction access routes, onsite vehicle transportation routes, and construction parking areas

3.1.7 dust control: Control of dust resulting from construction activities and/or wind on unstable land areas

3.2 Surface stabilization (Erosion control)

3.2.1 temporary seeding: Planting rapid-growing annual grasses, small grains, or legumes to provide temporary cover on disturbed areas

3.2.2 permanent seeding: Providing permanent cover on disturbed areas by establishing perennial vegetation

3.2.3 sodding: Planting continuous strips of sod to stabilize critical areas

3.2.4 vegetative stabilization (ground cover): Permanently stabilizing disturbed areas by establishing a vegetative cover of trees, shrubs, vines, or other ground covers

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