



Excel Erosion Education Circular, Volume - 4 Sediment Control Logs - Versatile Value

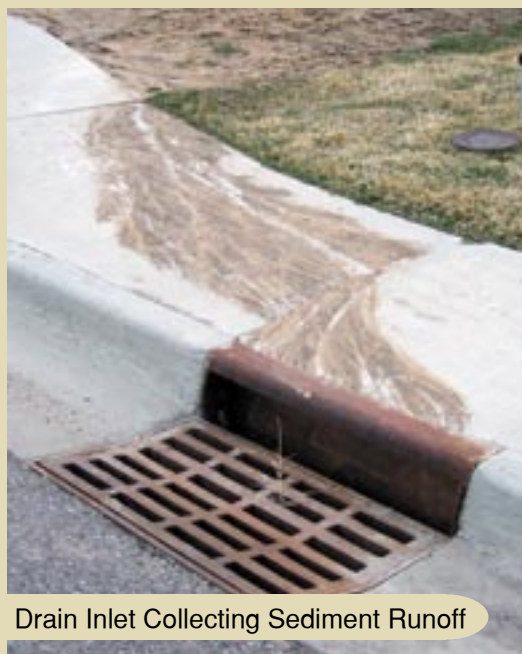
Excel Erosion Education Circular (E³C) is produced by Western Excelsior to furnish education pertinent and specific to the erosion control industry. E³C is intended to offer erosion control professionals an educational resource to serve as a foundation for performance focused solutions. Volume 4 of E³C has been developed to provide an introduction to sediment control technology, specifically sediment control logs.

Sediment control, as a practice, fundamentally differs from erosion control. While the focus of erosion control practices is to maintain soil in place, sediment control practices are aimed at reducing the migration of soil off-site by filtration of polluted flow. Sediment control practices provide particular benefit to applications where erosion control measures are not practical or possible. In typical construction activities, project soil is disturbed and must remain exposed to wind and water for a prolonged period as equipment and facilities operate. Sediment control practices and products provide a means to develop boundaries and control points to monitor and affect the flow of sediment from the construction site.

control industry for many years. Known by several names (i.e. wattles and sediment tubes), sediment control logs are a simple, adaptable and effective technology. Consisting of a fiber matrix encapsulated by durable, synthetic netting, the most common embodiments of sediment control logs are deployed to protect tens of millions of linear feet annually. Further, engineered materials consisting of completely biodegradable, chemically treated and high-performance drainage varieties tackle specialty applications.



Sediment Control Log Behind Curb



Drain Inlet Collecting Sediment Runoff

Versatility and value are trademark assets of sediment control logs. Available in a variety of lengths, diameters and configurations, sediment control logs suit a full spectrum of applications. Further, sediment control logs are flexible and can be altered in the field to fit specific conditions. Finally, as sediment pollution costs tally in the billions of dollars annually for the United States, the benefits realized from sediment control logs are extraordinary in comparison to the costs of implementation.

Sediment control logs are produced with two principle fiber matrix components: straw and excelsior. Coconut fiber is included in blended matrices or as a singular material for some products. Straw fibers are generally harvested from rice or wheat crops and yield a dense matrix. Excelsior fibers, manufactured from

Excel Erosion
Education Circular

E³C

Volume 4



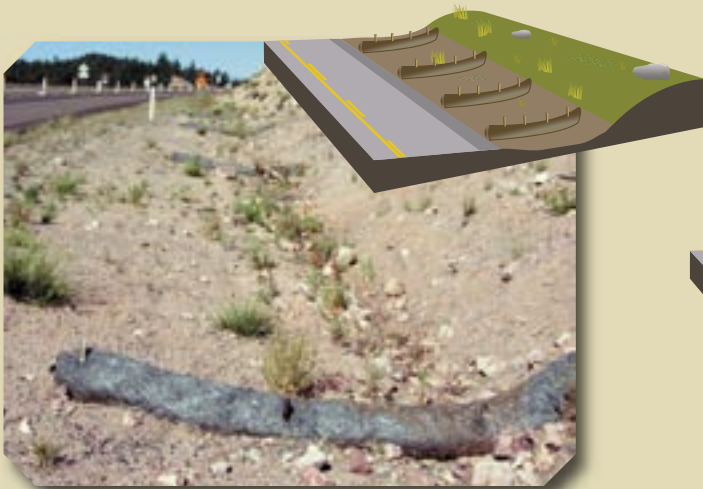
"Blanketing Nature with Nature"

1-866-540-9810
www.westernexcelsior.com

aspen or poplar trees, provide a consistent component yielding a flexible and less restrictive matrix. Further, excelsior fibers provide extended longevity, compared to straw fibers. While both materials filter sediment laden flow, the contrasting properties allow for capitalization of the unique features of each material.

Straw filled sediment control logs provide basic performance and are typical for many applications. Straw fibers yield a dense matrix which produces a semi-rigid final product well suited for applications where filtration is accomplished by the product and ponding of flow. In contrast, excelsior sediment control logs provide filtration while permitting greater flow through the product.

The utility of sediment control logs is evident in the diversity of applications. Resourceful professionals have deployed sediment control logs to solve a variety of field issues including sediment control scenarios and extending to other situations. Typical applications include: Perimeter Guard, Slope Interruption, Ditch Checks, Drain/Inlet Protection, and Runoff Control.

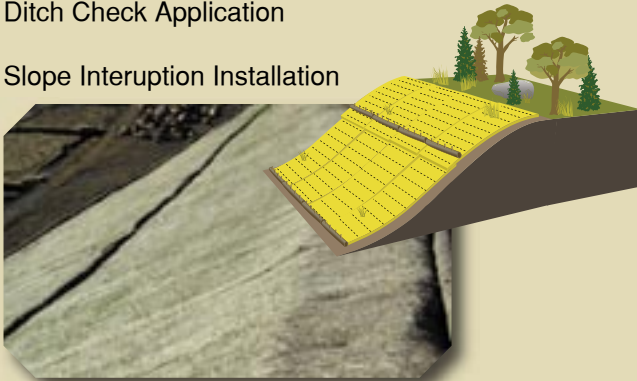


Ditch Check Application



Drain Inlet Protection

Slope Interruption Installation



Roadside Installation

Selection of the proper sediment control log depends on a series of job-site and material specific parameters. The required degree and rate of filtration must first be considered. Many sediment control logs are produced similarly and may be difficult to identify. Further, transport, storage, and installation of logs tend to distort the original manufactured dimensions.

As such, it is important to specify the installed height and sediment log type. Further, the installation of logs should comply with the manufacturer's details on installation. For placement on sloped ground or intercepting flowing water, installation of an approach apron (typically provided by an erosion control blanket) or trenching should be required. Proper staking methods and spacing should also be specified.

Sediment control logs provide erosion control professionals with a versatile and valuable tool to reduce suspended sediment in polluted flow, minimize transport of project soil or enhance erosion control applications. Consistent application of sediment control technology and practices is a primary initiative in the protection of our natural waters.



"Blanketing Nature with Nature"

