

PDHonline Course C548 (4 PDH)

Stormwater Control Measures-Post Construction

Instructor: John Huang, Ph.D., PE and John Poullain, PE 2020

PDH Online | PDH Center

5272 Meadow Estates Drive Fairfax, VA 22030-6658 Phone: 703-988-0088 www.PDHonline.com

An Approved Continuing Education Provider

SCM - Post Construction

Terms and Definitions

Acidic A material with a pH of less than 7.0. Soil nutrients are generally less soluble and less available to

plants in moderately or strongly acid soils.

Alkaline A material with a pH greater than 7.0.

Anchor Trench A long, narrow ditch in which the edges of a material (silt fence, erosion control blanket or

geotextile etc.) are buried in place

Apron Protective material laid on a streambed or ground surface to prevent scour at a culvert outlet,

abutment, and toe of a structure or slope.

BMP (Best Management Practice) The preferred methods and/or products that will correct or control

erosion, sedimentation or water quality degradation on a specific site.

Berm A ridge of earth constructed to direct the flow of water. The embankment at a basin or pond that

may be wide enough for vehicles.

Cellular Systems Synthetic grid with open spaces filled with soil, sand, gravel or concrete. Used for erosion control.

Check Dam Temporary barriers of rock constructed across a swale or drainage ditch.

Coir Organic fiber from the outer shell of the coconut, used as mulch and in the manufacture of erosion

control blankets, geotextiles and coir tubes for scour protection.

Ditch Check Sediment fence, straw bales, compost socks

Energy Dissipator A structure installed at the outlet of a channel, drop structure or conduit to absorb the force of

high-velocity flow. It may consist of riprap, linings, baffles, staggered blocks, etc.

Erosion The process by which soil particles are transported and deposited by wind, water, and ice. Types

of erosion:

Accelerated Erosion: Erosion much more rapid than natural erosion as a result of human

activities.

Gully Erosion: The erosion process whereby runoff water accumulates in narrow channels, and,

over relatively short time periods, removes the soil to considerable depths.

Sheet Erosion: The gradual removal of a fairly uniform layer of soil by runoff water.

Erosion Control The prevention and/or reduction of soil particle movement.

Erosion Control Blanket Rolled materials of coir (coconut fiber), jute, straw, wood fiber, or synthetic materials used to

protect against erosion, trap sediment, protect seed and promote the growth of vegetation.

Filter Strip

Geotextile A woven or nonwoven water permeable material either natural or synthetic used to filter liquids

and to prevent the movement of sediment.

pH A measure of acidity or alkalinity of a substance.

Piping Movement of soil particles by seepage leading to the development of subsurface voids, tunnels,

etc.

Inflow The water discharged into a point of concern.

Outfall Point where drainage discharges from a conduit to receiving stream.

Overfall A sudden drop in grade, sometimes into a gully.

Sheet Flow Water flowing across a wide, uniform area such as a highway or parking lot.

Silt Fence A temporary barrier consisting of a geotextile which is attached to supporting posts and trenched

into the ground at the base.

Staple A fastening device typically of 8 to 11 gauge wire, "U" shaped with 4" to 10" legs used to secure

erosion control blankets, geotextiles etc. to the ground.

SCM Stormwater Control Measure. A permanent measure for stabilizing a site after construction is

completed.

Subsurface Drain A perforated pipe used for subsurface drainage surrounded by aggregate or wrapped in a geotextile

filter fabric.

Transition Mat Semi-rigid polymer mat anchored with staples.

Vegetative Buffer Strip Low maintenance, no mowing grasses, intercepts sediments