

Acronyms

Following is a list of acronyms used in this Manual:

APEN	Air Pollutant Emission Notice
ASTM	American Society of Testing Materials
BMP	Best Management Practice
CB	Compost Blanket
CD	Check Dam
CDPHE	Colorado Department of Public Health and Environment
CDPS	Colorado Discharge Permit System
CF	Construction Fence
CFB	Compost Filter Berm
CFR	Code of Federal Regulations
CFS	Cubic Feet Per Second
CIF	Culvert Inlet Filter
CL	Crest Length
CLOMR	Conditional Letter of Map Revision
CM	Construction Markers
CO	Certificate of Occupancy
CS	Curb Sock
CWA	Concrete Washout Area
D	Depth, Diameter
D50	Riprap Mean-Diameter
DESC	Drainage, Erosion, and Sediment Control
DD	Diversion Ditch
DW	Dewatering
ECB	Erosion Control Blanket
FEMA	Federal Emergency Management Agency
GESC	Grading, Erosion and Sediment Control
HD	Hole Diameter
ILOC	Irrevocable Letter of Credit
IP	Inlet Protection
L	Length
LOC	Limits of Construction
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
MUTCD	Manual of Uniform Traffic Control Devices
N	Number of Columns
NPDES	National Pollutant Discharge Elimination System
PE	Professional Engineer
R	Radius
RCD	Reinforced Check
RRB	Reinforced Rock Berm
RRC	Reinforced Rock Berm for Culvert Protection
SB	Sediment Basin
SCL	Sediment Control Log
SDA	Stabilized Driveway Access
SF	Silt Fence
SIA	Subdivision Improvements Agreement
SM	Seeding and Mulching
SR	Surface Roughening
SSA	Stabilized Staging Area

*Acronyms,
continued*

ST	Sediment Trap
TCO	Temporary Certificate of Occupancy
TER	Terracing
TSC	Temporary Stream Crossing
TSD	Temporary Slope Drain
UDFCD	Urban Drainage and Flood Control District
VTC	Vehicle Tracking Control
W	Width
WW	Vehicle Tracking Control with Wheel Wash
Z	Slope

*Glossary of
Terms*

Following is a glossary of some of the terms used in this Manual:

Administrative Variance refers to variances that are considered by Department of Public Works Engineering to be complicated and which will require a more extensive review. These administrative variances shall be reviewed by the Public Works Engineering Director.

Aggradation refers to the deposition of sediment in a stream in a manner and extent that the bed elevation of the stream rises.

Applicant(s) refers to the Owner and Contractor whom complete and sign the Grading, Erosion and Sediment Control (GESC) Permit Application.

Alternate Grading, Erosion and Sediment Control (GESC) Manager refers to an onsite representative who serves, in the absence of the GESC Manger, as the Permittee(s) contact person with the County and who is responsible for ongoing compliance with the GESC Permit.

Best Management Practice (BMP) refers in the *GESC Manual* to a measure implemented by a Contractor to control construction site erosion, sediment, or pollutant sources associated with construction activities.

Check Dam (CD) is a small rock dam, designed to withstand overtopping, that is placed in a small stream or drainageway. The purpose of the check dam is to trap water-borne sediment in the backwater zone upstream of the check and to reduce flow velocities in a channel.

Compost Blanket (CB) consists of a layer of Class I Compost spread over prepared, seeded topsoil to protect exposed soil against raindrop and wind erosion and to provide an organic soil amendment to promote the establishment of vegetation.

Compost Filter Berms (CFB) are used on slopes in conjunction with compost blanket to reduce flow length and control rill and gully erosion.

Curb Sock (CS) A Curb Sock consists of a small reinforced rock berm placed in the curb and gutter flowline in order to filter stormwater runoff,

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Terms,
continued***

and reduce sediment from entering the storm sewer system.

Concrete Washout Area (CWA) is a shallow excavation with a small perimeter berm to isolate concrete truck washout operations.

Construction refers to the implementation of a proposed plan of improvements by a Contractor that may include excavating, site grading, utility work, paving, building, and other activities that may contribute to the disturbance of land and elevated levels of erosion and sediment.

Construction Fence (CF) consists of orange plastic fencing, or other approved material, attached to support posts and used to control access to the construction site and delineate limits of construction.

Construction Markers (CM) consists of wooden lath or other markers, with tops painted orange, spaced at 100 foot centers to delineate limits of construction. Construction markers may be used as an alternative to construction fence if approved by the County.

Culvert Inlet Filter (CIF) consists of a reinforced rock berm placed in front of a culvert to reduce sediment in runoff approaching the culvert.

Degradation refers to erosion of bed material from the bottom of a stream leading to a lowering of the channel invert.

DESC Permit refers to a Drainage, Erosion, and Sediment Control (DESC) Permit administered by the Douglas County Building Division for detached single-family home construction. The DESC Permit follows the grading and infrastructure work undertaken under a GESC Permit.

Design Engineer refers to the Professional Engineer responsible for the development of the GESC Plan.

Development refers to the process of creating new residential, commercial, office, or other land uses through the process of construction.

Dewatering (DW) consists of a gravel filter provided on the suction end of a pump to reduce the pumping of sediment and a rip rap pad at the discharge end of the pump to provide erosion protection. Dewatering includes settling the discharge water in a small basin or sediment pond before releasing to receiving waters.

Diversion Ditch (DD) is a small earth channel used to divert and convey runoff to a sediment basin, check dam, or drainageway. Depending on slope, the diversion swale may need to be lined with erosion control matting, plastic (for temporary installations only), or riprap.

Drainageway is any natural or artificial watercourse, including but not limited to streams, rivers, creeks, ditches, channels. Canals, waterways, gullies, ravines, or washes in which water flows in a definite direction or

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continued**

course, either continuously or intermittently, including any area adjacent to it that is subject to inundation by reason of overflow or floodwater and meets any of the following conditions:

- Provides for conveyance of stormwater runoff from an upstream property or development,
- Defined as “waters of the United States” by the Army Corps of Engineers,
- Supports riparian area or sensitive habitat,
- Tributary area equal to or greater than 20-acres,
- Alteration or filling will change the manner in which runoff is discharged onto a downstream property and potentially results in a negative impact to that downstream property,
- Subject to the requirements of the Douglas County Riparian Conservation Zone (RCZ).

Erosion is the process by which the land surface is worn away by the action of wind, water, ice and gravity.

Erosion Control Blanket (ECB) is a fibrous blanket of straw, jute, excelsior or coconut material trenched in and staked down over prepared, seeded soil. The matting reduces both wind and water erosion.

Export means transporting material from a construction site to another location.

Eutrophication refers to the degradation in water quality of a lake or reservoir due to accelerated algal productivity, often a result of increased nutrient loading.

Fiscal Security refers to a cashier’s check or an irrevocable letter of credit that an owner submits to Douglas County to be held as security during the construction process and to be drawn upon in the case of nonperformance on the part of the Permittee(s).

Governmental Agency refers to entities that may do business with the County in their governmental capacities. Agencies that may be included in this list are cities, counties, districts, utilities, and other political subdivisions of the state.

Grading, Erosion and Sediment Control (GESC) Drawings refers to the illustrative portion of the GESC Plan which shows the location and extent of all grading, erosion and sediment control BMPs as well as other associated information required by the GESC Manual.

Grading, Erosion and Sediment Control (GESC) Inspector refers to the County representative or Erosion Control Inspector who visits construction sites to check for compliance with the GESC Permit.

Grading, Erosion and Sediment Control (GESC) Manager refers to an on-site representative who serves as the Permittee(s) contact person with

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the County and who is responsible for ongoing compliance with the GESC Permit.

Grading, Erosion, and Sediment Control (GESC) Permit refers to the permit obtained from Department of Public Works Engineering prior to commencement of land disturbing activities as defined in the Douglas County Grading, Erosion and Sediment Control Manual.

Grading, Erosion and Sediment Control (GESC) Permit Process refers to the process applicants proceed through to obtain a permit to commence land disturbing activities within the unincorporated limits of Douglas County.

Grading, Erosion and Sediment Control (GESC) Permit Program refers to the program developed and administered by Douglas County to regulate land disturbing activities within the unincorporated limits of Douglas County.

Grading, Erosion and Sediment Control (GESC) Plan refers to the complete package of required information submitted to the Department of Public Works Engineering for review and acceptance which include GESC Drawings, GESC Report, GESC Drawing and Report Checklist, and Option of Probable Cost Example Worksheet.

Grading, Erosion and Sediment Control (GESC) Report refers to the report required to be submitted with the GESC Plan that details all aspects of the GESC Plan such as Soils, Areas and Volumes, etc.

Illicit Discharge means any prohibited direct or indirect non-stormwater discharge into the MS4.

Import means transporting material from an off-site area to the project site to be used as fill.

Inlet Protection (IP) consists of a reinforced rock berm placed in front of (but not blocking) a curb-opening inlet or around an area inlet to reduce sediment in runoff entering the inlet.

Larger Common Plan of Development means a contiguous area where multiple separate and distinct construction activities are occurring under one plan. A plan is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, plat, site improvement plan, construction drawing set, etc) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur on a specific plot.

A common plan of development can be considered to have been completed when the original plan, including modifications has been substantially completed; there has been a clearly identifiable period of time with no on-going construction, and criteria for final stabilization has

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been met. Future projects within or adjacent to the original plan will be evaluated as separate common plans of development or sale.

Level I Violations are viewed by Douglas County to pose an immediate serious risk to the health safety or welfare of people and or the environment and result in an immediate issuance of a stop work order.

Level II Violations are view by Douglas County to pose a moderate immediate risk to the health safety or welfare of people and or the environment, however if not immediately corrected will pose a serious risk. Remediation for Level II Violations shall commence immediately after the Permittees are notified of the violation(s).

Level III Violations are viewed by Douglas County to pose a low immediate risk to the health safety or welfare of people and or the environment, however if not corrected quickly will pose a more serious risk. Level III Violations shall be corrected with 48-hours of inspection unless otherwise specified in writing by the Erosion Control Inspector.

Limits of Construction refers to the area shown on the GESC Plan that delineates areas in which construction activities can take place including staging, storage, and stockpiling.

Maintenance GESC Permit refers to the permit issued for multiple routine maintenance projects on an annual basis. See Section 3.20.4 for more information.

Oil and Gas Well Facilities refers to temporary drilling facilities for oil and gas production. See Section 3.20.5 for more information.

Permittee(s) refers to the Owner and Contractor whom obtain a GESC Permit.

Professional Engineer refers to an individual currently registered with the Colorado State Board of Registration as a Professional Engineer, practicing engineering in accordance with State law (Title 12, Article 25, Part 1).

Reinforced Check Dam (RCD) consists of rock placed within wire-reinforced gabions to provide additional resistance to the forces of water. It serves the same purpose as a check dam, and, due to its greater strength, may be used on larger drainageways than a check dam.

Reinforced Rock Berm (RRB) consists of a linear mass of gravel enclosed in wire mesh to form a porous filter, able to withstand overtopping. The berm is heavy and stable and promotes sediment deposition on its upstream side as well as reducing flow velocities.

Rivulet refers to the onset of flow concentrations in small depressions or creases in the soil surface as flow transitions from sheet flow to rill flow.

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Terms,
continued*

Sediment Basin (SB) refers to an impoundment that captures sediment-laden runoff and releases it slowly, providing prolonged settling times to capture coarse and fine-grained soil particles.

Sediment Control Log (SCL) refers to a cylindrical bundle of excelsior, straw, or coconut designed to form a semi-porous filter, able to withstand overtopping, and promote sediment deposition on the upstream side and reducing flow velocities.

Sediment Trap (ST) consists of a riprap berm with a small upstream basin that acts to trap coarse sediment particles.

Sedimentation means the deposition of soil particles dislodged by erosion.

Seeding and Mulching (SM) consists of drill seeding disturbed areas with permanent grasses and mechanical crimping of straw mulch to provide immediate protection against raindrop and wind erosion and, as the grass cover becomes established, to provide long-term stabilization of exposed soils.

Silt Fence (SF) is a temporary sediment barrier constructed of woven fabric stretched across supporting posts. The bottom edge of the fabric is placed in an anchor trench that is backfilled with compacted soil.

Small Utility Construction Projects refers to multiple, less than 1 acre projects performed by utilities to provide service to individual customers. See Section 8 for more information.

Stabilized Staging Area (SSA) refers to stripping topsoil and spreading a layer of granular material in the area to be used for a trailer, parking, storage, unloading, and loading. A stabilized staging area reduces the likelihood that the vehicles most frequently entering a site are going to come in contact with mud.

Stage of Construction refers to the Initial, Interim, or the Final Stage of construction; BMPs are to be shown on the GESC Plan as being installed at one of these three stages.

Standard BMPs refers to any one of a number of BMPs that have been approved for use in the County and for which standard notes and details have been prepared.

Staff Variance refers to a variance that is considered by the Department of Public Works Engineering to be minor in nature; these staff variances may be considered by the Department of Public Works' Development Review Engineer and Development Review Manager.

Stop Work Order refers to a written notice provided by County's Erosion Control Inspector that suspends a GESC Permit as a result of a priority violation; Contractors receiving a Stop Work Order shall cease

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Terms,
continued*

construction operations until the problem is addressed and a signed Stop Work Order Release Form is obtained.

Stormwater means runoff generated as a result of a precipitation event.

Subdivision Improvement Plan refers to the plans and supplemental material, including a Grading, Erosion and Sediment Control (GESD) plan and other detailed information drawn and submitted in accordance with the Douglas County Zoning Resolution

Surface Roughening (SR) consists of creating a series of grooves or furrows on the contour in all disturbed, graded areas to trap rainfall and reduce the formation of rill and gully erosion.

Temporary Slope Drain (TSD) refers to a small culvert or plastic lined channel to convey runoff down a slope or channel bank to reduce the occurrence of rill and gully erosion.

Temporary Stream Crossing (TSC) refers to a rock layer placed temporarily in a stream to allow construction equipment to cross. A stream crossing may include culverts or provide a low-water crossing, or ford. In either case, excavation of the existing channel banks is to be avoided and, in general, disturbance is to be kept to a minimum.

Terracing (TER) consists of creating one or more flat benches in high, steep cut or fill slopes to interrupt runoff and reduce the formation of rill and gully erosion.

Vehicle Tracking Control (VTC) consists of a pad of 3" to 6" rock at all entrance/exit points for a site that is intended to help strip mud from tires prior to vehicles leaving the construction site.

Vehicle Tracking Control with Wheel Wash (WW) consists of a gravel and riprap pad at the main entrance/exit point for the site with an adjacent washwater/sediment trap. If Douglas County requires a Permittee(s) to implement this BMP, each wheel of all vehicles coming in contact with dirt or mud shall be cleaned using a high-pressure washer prior to the vehicle leaving the site.

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