

Instructions for developing a Stormwater Management Plan

Site Location: _____

- Total area of land disturbance _____
(include stock pile, staging and storage areas)

Estimated total cubic yards excavation and/or fill _____

Time line: Estimated start/stop/duration dates

Grubbing and clearing _____

Excavating/fill/compaction _____

Foundation work _____

Backfill/slope stabilization _____

Installation of permanent BMPs _____
(If applicable)

Planting/seeding _____

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Introduction: Most all land disturbing construction activities within the jurisdiction of Manitou Springs require at a minimum, a Stormwater Management Plan, (SWMP). Sites that are greater than one half acre may require a **Grading and Erosion Control Plan, a GECP**. Sites greater than one acre will require the GECP and a permit issued by the Colorado Department of Public Health and Environment.

Although construction sites less than one half acre may not require the above mentioned permits, all construction sites are subject to the City's Stormwater Code. The Stormwater Manager retains the right to order a site operator to install Erosion and/or Sediment controls or other regulatory measures regardless of the size of the project.

A Stormwater Management plan or an SWMP is necessary to identify the appropriate control measures required to prevent erosion and the transport of sediment and potential pollutants to the stormwater conveyance systems and waterways and to ensure the inspection and maintenance of the installed control measures.

A Stormwater Management plan is required to obtain a Grading Permit

Municipal Zone Code 18.68.040 Grading permits--When required.

No person shall commence or proceed with any modification of the natural terrain without seeking and obtaining a grading permit from the Planning Director, if such modification will result in any of the following:

- A. An excavation, fill or combination thereof in excess of one hundred cubic yards;
- B. An excavation which, at its greatest depth, will be three or more feet below the ground surface, over an area of five hundred square feet or more;
- C. A fill which, at its greatest depth, will be three or more feet above the ground surface, over an area of five hundred square feet or more;
- D. An excavation or fill which falls within a public sewer, water main, storm drainage, power line, public right-of-way, or any other public utility easement. This includes the preparation of roads, sidewalk, etc.;
- E. Vegetation removal over an area five hundred square feet or more;
- F. Mining, quarrying, or gravel operations;
- G. Any major excavation by the City of Manitou Springs.

Developing the Stormwater Management Plan (SWMP)

- Contact the Planning department to see if your project requires a SWMP. Contact numbers are provided on the website in the **Stormwater Management** page
- Download the Stormwater management Plan form from the Construction website page
- Follow the directions given in each field box
- A variety of stormwater controls (BMPs) can be found on page 4 of the Manitou Springs Stormwater web page. Choose the most appropriate controls for the different areas of the site
- Obtain a copy of the site plan. 11X17" is preferred but a PDF of the plan is ultimate. Page 3 of the Stormwater website contains a link to an example of a site plan which will be helpful in choosing and documenting the stormwater controls chosen.

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- Indicate on the site plan the locations of the required items to be shown on the map (hand drawn is acceptable)
- Use the example site map provided for further instruction

For clarification purposes, the following definitions from the Municipal Code are provided:

14.01.030 Definitions

"Best management practices (BMP)" means erosion and sediment control and water quality management practices that are the most effective and practicable means of controlling, preventing, and minimizing the length of time soil areas are exposed, prohibitions, and other management practices published by federal, state, or designated area-wide planning agencies.

BMPs are measures designed to: (1) prevent pollutants from leaving a specific area; (2) reduce/eliminate the introduction of pollutants; (3) protect sensitive areas; or (4) prevent the interaction between precipitation and pollutants.

"Erosion control" means methods employed to prevent erosion. Examples include soil stabilization practices, horizontal slope grading, temporary or permanent cover, and construction phasing.

"Sediment control" means the methods employed to prevent sediment from leaving the development site. Examples of sediment control practices include, but are not limited to silt fences, sediment traps, earth dikes, drainage swales, check dams, subsurface drains, pipe slope drains, storm drain inlet protection, and temporary sediment control devices such as straw bales, straw wattles and rock socks.

Tips about erosion and sediment controls: An extreme effort must be made to concentrate on erosion controls rather than sediment controls. Once a slope erodes, the damage is done and the sediment is on the loose. Sediment controls are primarily a fix for poor erosion control but are necessary as 100% erosion control is not always possible. Staging the grubbing and clearing of a building site will increase the ability to control erosion. Leave vegetated areas intact as long as progression of the project will allow.