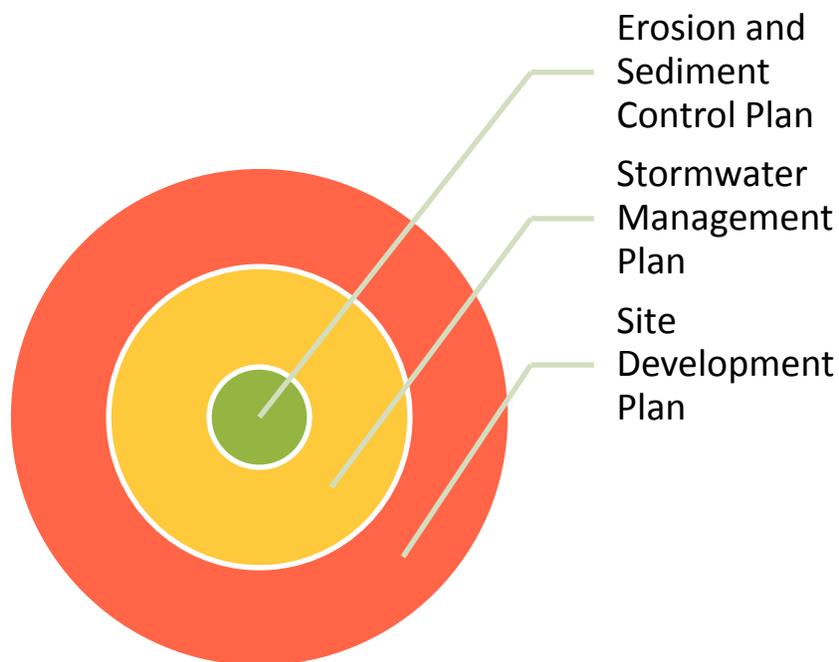


Module 5: Erosion and Sediment Control Plan Elements

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5. Erosion and sediment control plan elements

Erosion and sediment control planning should be an integral part of site planning and not an afterthought. An ESC plan should be part of an entire development plan and may include: detailed drawings, architectural details, framing details, traffic studies, and stormwater considerations. (Note: this is not a detailed list containing all submittals; however, the ESC plan should be a standalone plan for use in the field.)



An erosion and sediment control plan should be stand-alone component of the entire site development plan

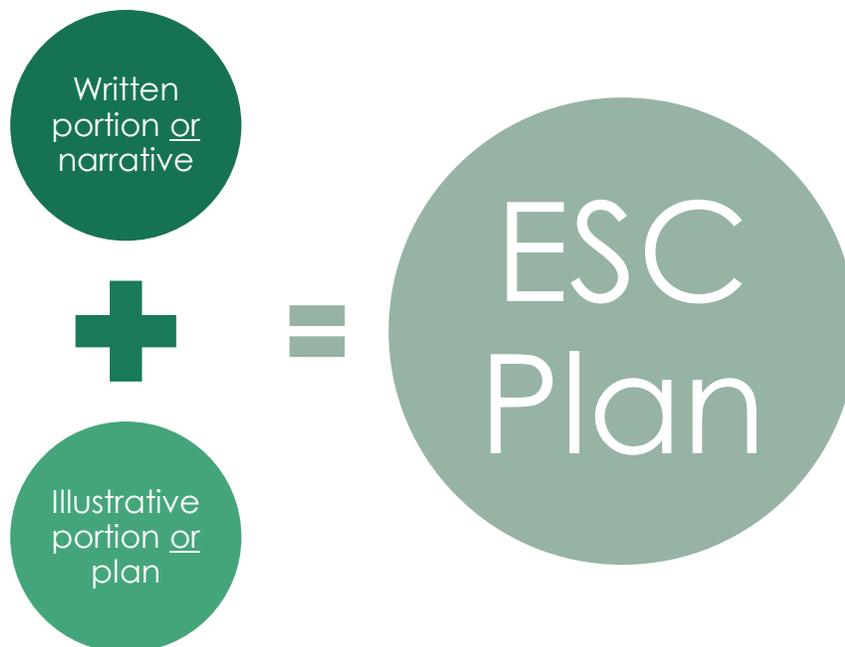
The plan preparer needs to understand that an ESC plan should be a stand-alone document for the entire site development plan. Plans such as the building construction drawings, building details and structural drawings should not be incorporated with ESC plans. The plan reviewer, inspector, site supervisor and/or RLD should be able to use the ESC plan to determine how the site is being developed without needing to consult the more detailed working or construction

drawings. The ESC plan should illustrate how the site is being developed, what is being proposed for the site and the sequencing or phasing of the construction. The ESC plan should not be bogged down with details that might not be relevant to erosion and sediment control.

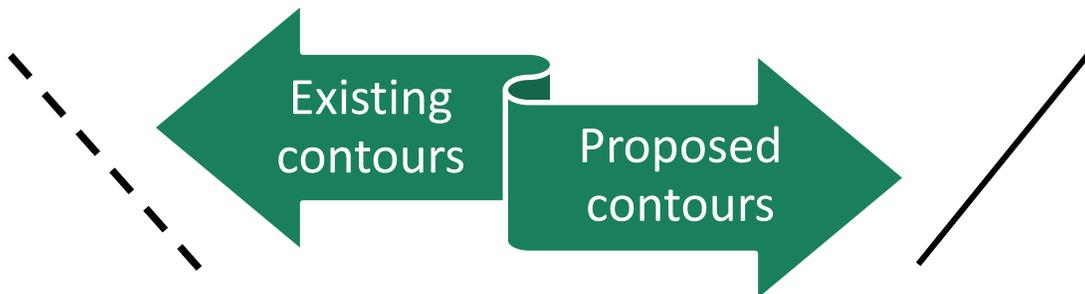
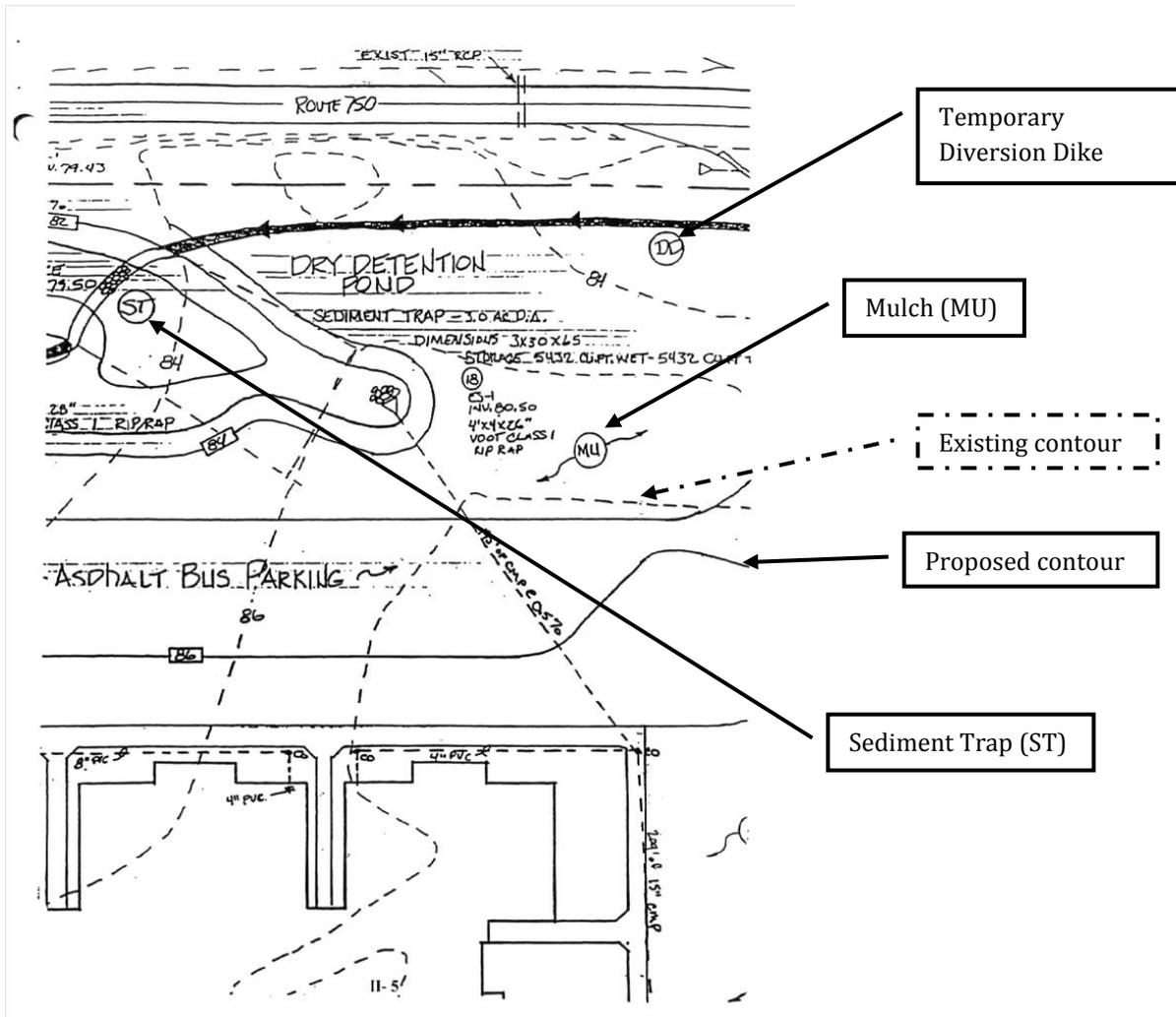
The Erosion and Sediment Control Plan consists of two parts:

- Written portion or narrative
- Illustrative portion or the plan

Components of the erosion and sediment control plan

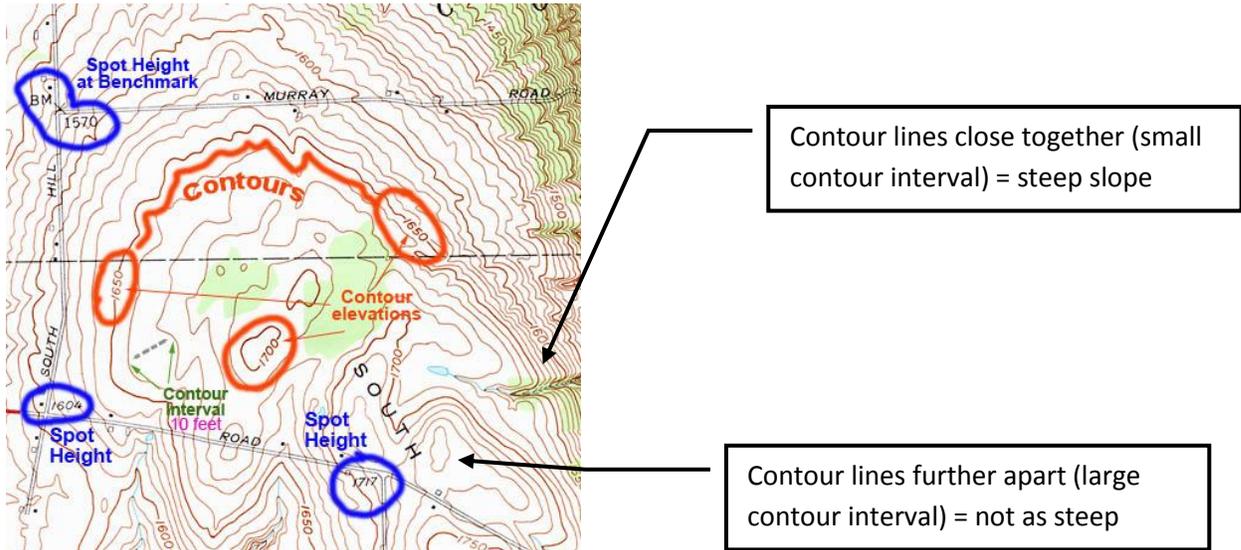


In order to be able to review the illustrative portion (or Plan) we need understand some of the common elements of the plan and develop our plan reading skills.

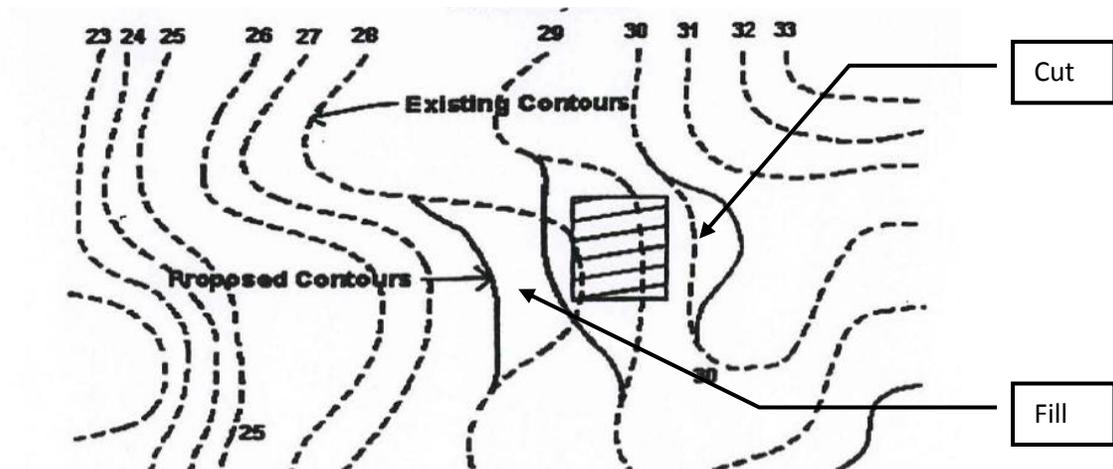


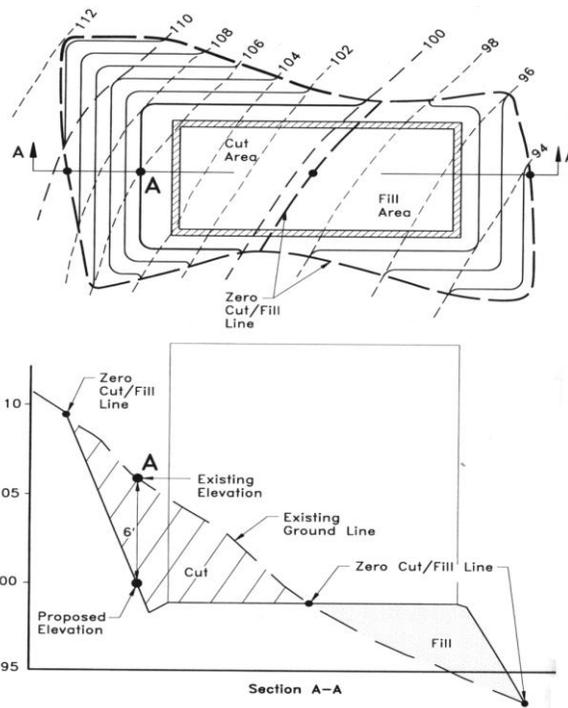
Contour line: a line on a map connecting points on a land surface that are the same elevation above sea level.

Contour interval: the interval between contour lines on a map, or the altitude the interval represents



Cut and fill: the excavating of material in one place and the depositing of it nearby

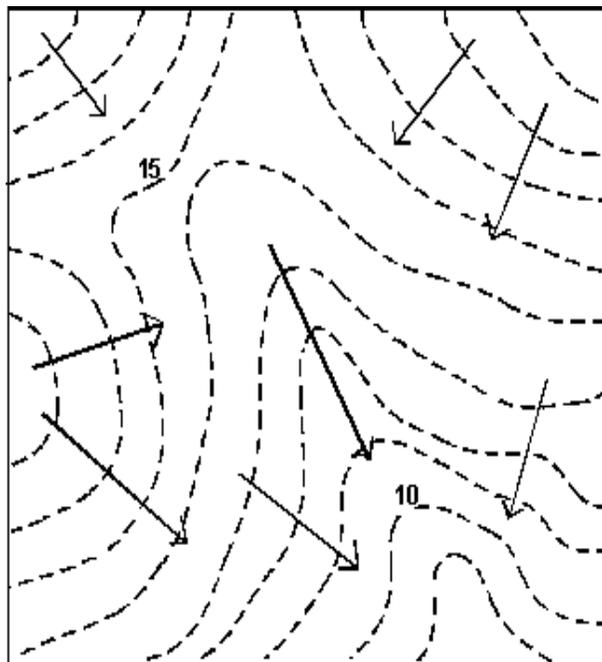




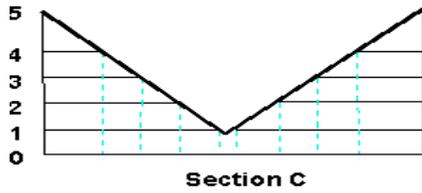
Cut and fill

Drainage:

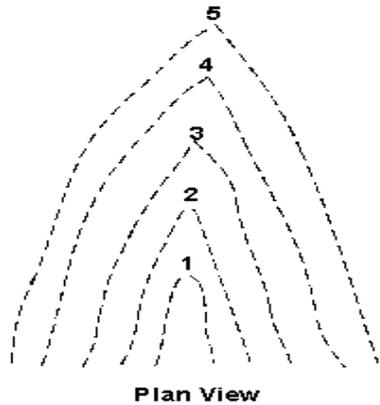
always flows perpendicular (at a right angle) to the contour



Valleys and Swales: a long low area of land, often with a drainage way, river or stream running through it, which is surrounded by higher ground

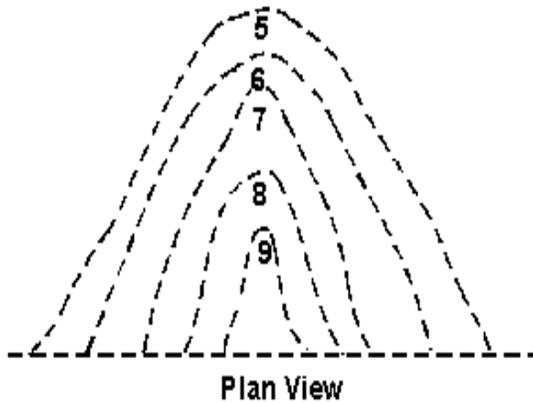
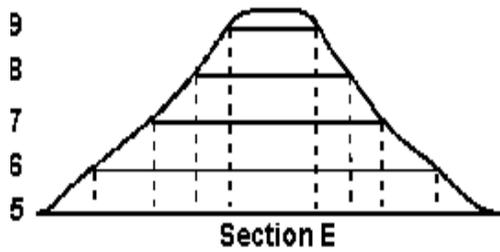


Stormwater runoff and therefore sediment leaves our site through drainage ways in swales or valleys



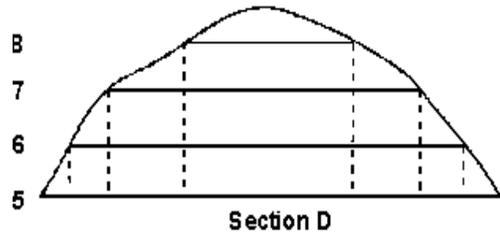
A valley or a swale is represented by contours that point towards the higher numbers.

Ridge: a long narrow hilltop or range of hills

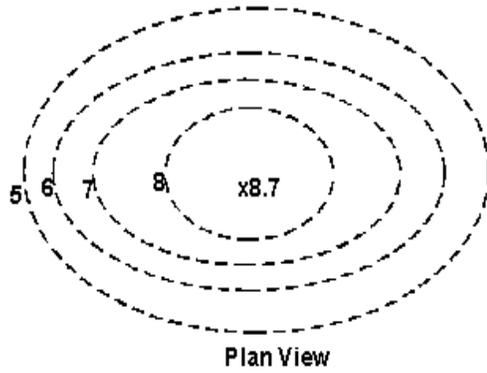


A ridge is represented by contours that point towards the lower numbers.

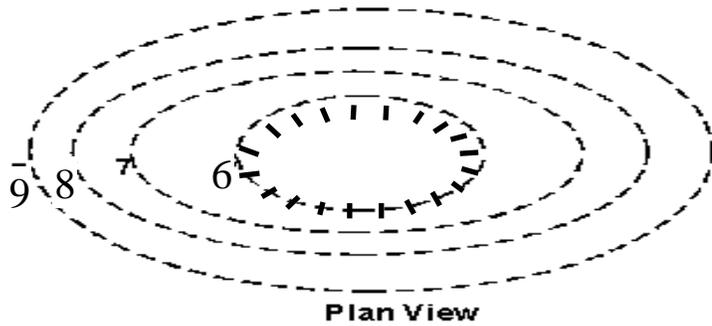
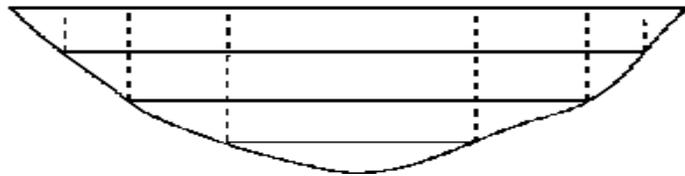
Summit: the highest point or top of something, especially a mountain



Summits usually have a spot elevation for the highest point; depressions may not have a spot elevation



Depression/Sinkhole: a low area in a landscape without a clear drainage way, sinkholes may drain through an underground system (karst system)

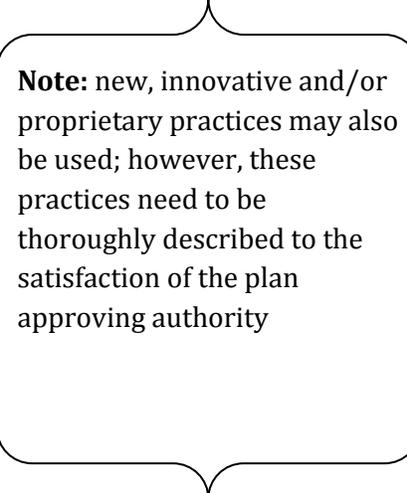


What is an “Adequate” Plan?

A plan must contain enough information to satisfy the plan approving authority that the problems of erosion and sediment control have been adequately addressed.

An adequate plan will meet the following criteria:

- The requirements of the Virginia Erosion and Sediment Control Regulations in particular the minimum standards, unless a variance has been applied for and has been granted
- Any more stringent standards applicable to the locality;
- The standards and specifications published in the Erosion and Sediment Control Handbook (ESCH)(Chapter 3)
- It contains sufficient information to ensure the plan approving authority potential problems of erosion and sedimentation have been adequately addressed



Note: new, innovative and/or proprietary practices may also be used; however, these practices need to be thoroughly described to the satisfaction of the plan approving authority

Whatever practices are used they need to be titled, numbered and drawn as shown in the ESCH.