

CONSTRUCTION DETAILS: Applying Mulch Material

When designing and installing stormwater facilities, the grade of the imported topsoil should be left 3 inches below the desired finish grade to allow for a layer of mulch. If the finish grade of the stormwater facility is built without taking into account a mulch layer, the stormwater facilities will be graded too high and water cannot get into the stormwater facility/curb cut.

Mulch material can be made of organic material (e.g., bark mulch) or it can consist of rocks. For organic mulches, care should be taken to use a weed-free source. Bark mulch does have a tendency to float during a stormwater facility's initial storm events, however, this tends to decrease over time as the mulch material settles and the plant material matures. Rock mulch is a good choice for stormwater facilities that experience high velocities of runoff and have a higher potential for erosion.

For rock mulch used in green street and parking lot projects, care should be taken to select rock that is sized appropriately based on the expected sediment load of the runoff. The type of rocks chosen depends on where the runoff is coming from and its pollutant/sediment load. It can be a maintenance headache to clean out sediment in the voids between larger rocks. For green street and parking lot projects, the best type of rock mulch is pea gravel because it allows for easier removal of sediment accumulation. Rock mulch should only be applied to the flat-bottom portion of stormwater facilities.

When removing sediment from a pea gravel mulch, it is easy to tell where the sediment load ends and the pea gravel layer begins. If necessary, the entire sediment and pea gravel layer can be removed as a whole, and a new pea gravel layer can be applied. This allows for the original finish grade of the stormwater facility to always be maintained.



SOURCE: KEVIN ROBERT PERRY - CITY OF PORTLAND

Figure 5-57: A 2 inch layer of pea gravel mulch is applied within a stormwater planter.



SOURCE: NEVUE NIGAN ASSOCIATES

Figure 5-58: Standard bark mulch is applied to a green street project.