

NC Association of County Commissioners 12-11-13

What do we mean when we say “gravel”?

Gravel is a type of “ground cover”.

When we discuss gravel in regards to stormwater management, we mean gravel used in urban development as those described below:

1. driveways;
2. parking lots;
3. streets;
4. sidewalks; and
5. landscaping.

Things to consider?

1. If gravel is used on a driveway/roadway, vehicular traffic could compact the gravel into a very dense material keeping the stormwater from infiltrating.
2. Different sizes of gravel have different infiltration rates?
3. When a civil engineer calculates the volume of stormwater runoff from a proposed development, he or she would use the numbers in the table below.

Curve Numbers for Hydrologic Soil Group	Hydrologic Soil Group			
	A	B	C	D
Type of Material				
Asphalt	98	98	98	98
Gravel	76	85	89	91
Grass	30	58	71	78

Note: The higher the curve number the less stormwater infiltration the site will create.

Consequences of choice?

1. Ground cover at any proposed construction site greatly affects the volume of stormwater runoff that would affect the adjoining properties.
2. Western North Carolina Topography greatly differs from Piedmont, which greatly differs from the coastal plains. Hydrologic soils groups are different across North Carolina; Wake County is a D, whereas Mecklenburg County is a C, and Buncombe County an A. This could cause some areas to have an advantage since the curve number is 76 for A versus 91 for D in regards to gravel.