## **DOWNHILL DRIVEWAYS**

Think of them as little roads. The same principles apply: minimize the flow of water that connects to main access road.

There are various ways to do this. Each of the three current driveways can employ different methods.

## From the top down:

**1.Estate Prospect Hill Drive** is not a private driveway. It is an access road that leads to 4 lots within the subdivision. (includes 26c new construction).

26c can grade site to drain water away from it's own driveway. This is common practice and is usually done after construction is complete. This reduces water before it even gets to the downhill drive.

Consider creating an infiltration field near the crest to disperse water that percolates into the ground.

The downhill drive has a slight out-slope pitch.

Two solutions to consider: excavate a ditch on the south side of drive that leads to a culvert/swale with outlet to drain water away. OR create a 'broad based dip' that diverts water.

(diagram from H-W Guide - have to look closely to notice the difference)



Interesting fact- This drive has been there for decades without adding water to the main access road. It's new construction that excavates vegetation and re cuts the drive, causing the runoff. In time vegetation returns, the drive gets a mature grass root system and the flow of water is reduced.

This is what happened on the following site...

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**2. 26f.** When this driveway was excavated to begin construction, it delivered an excessive volume of water onto the road. The erosion ruts were severe. Over time, annual road grading smoothed out the ruts and a grass root system developed. This drive has a slight in-slope pitch that flattens out near the bottom creating a broad spread apron that disperses water thinly instead of in concentrated ruts.

Along the in-slope edge silt and crumble rock from the hill is removed annually to allow water to get to the edge and stop ruts from forming. (The owner is mindful to use the whole driveway so tire tracks do not form ruts).

No further work is required on this site.

3. 26g. Here, as with 26c, the site has the house at a higher elevation than the driveway. The owner has already done the onsite drainage work. This includes a system of earthen rock filled swales that direct water into the bush before it reaches the driveway. From there, outlets were excavated to drain water off the driveway. Gravel was spread on the driveway and in a short time grasses grew there. This combination of grass and gravel effectively slows down water and disperses it evenly so ruts don't form. (As long as cars don't follow the same tire tracks). Lastly, a water path was created to make a tight hairpin turn into the hillside ditch. (The one that doesn't exist yet)

No further work is required on this site.

All costs of on site work are the responsibility of individual property owners.