Pods at the Vineyard Stormwater Management Notes

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Site & Soil Evaluation

- In February 2018 during the wet season, soils were evaluated in 13 soil evaluation holes excavated throughout the project area to depths ranging from 46 to 84 inches below grade
- Soil logs were dominated by non-hydric medium-grained sandy soils with varying gravel content
- No groundwater was encountered in any holes
- Sporadic mottling, a secondary indicator of prolonged historical saturation, was observed in only three of 13 holes, at depths of 30, 42 and 66 inches below grade
- Most holes showed no secondary indicators of repeated seasonal saturation to depths ranging from 46 to 84 inches below grade

Proposed Roadside Stormwater Swales

- Moderately high stormwater infiltration rates are expected based on the dominance of relatively coarse non-hydric soils
- Rain garden design guidance recommends providing rain garden surface areas at operating depth equating to 6 to 9 percent of the contributing area
- With 16 to 25 ft wide road surfaces, the proposed roadside swales should be about 1.3 to 2.3 ft wide at operating levels, respectively

Proposed Residential Stormwater Management

- Moderate to high expected stormwater infiltration rates support direct dispersion of roof downspout flow onto vegetated surfaces wherever 50 ft long vegetated downhill flow paths within respective parcels can be provided
- Wherever 50 ft vegetated downhill flow paths cannot be provided, rain gardens, dry wells or infiltration beds should effectively infiltrate stormwater on the respective parcels
- Rain gardens should be sized to provide surface areas at normal operating levels equating to 6 to 9 percent of the respective contributing roof areas
- Dry wells or infiltration beds should be sized to provide approximately 80 cubic ft of drain rock for every 1,000 SF of contributing area. Examples for 1,500 SF of contributing area:

    (a) One 2 ft wide x 2 ft deep x 30 ft long infiltration trench (120 cubic ft), or

    (b) One 5 ft x 5 ft x 5 ft dry well (125 cubic ft).