



Infiltration Practice Construction Guidance

Construction of stormwater practices that rely on infiltration to properly function (e.g. bioretention, infiltration basins) require extra care and oversight. Improper construction will result in failures and costly rebuilds. Recommended techniques for construction and sequencing are provided below, which should be followed to help ensure proper function of these sensitive practices.

1. Construct infiltration practices only after the site has been vegetated.

- 1. Multiple mobilizations may be necessary.
- 2. If a practice needs to be constructed before vegetation establishment, prevent construction runoff from entering the practice, ideally through temporary diversion.
- 3. If a sediment trap **must** be placed in the location of the practice, only excavate as deep as necessary and maintain two (2) feet of cover over final excavation depth.

2. Prevent and alleviate compaction of native soils and backfilled material.

- 1. Limit construction traffic in excavation and use only tracked vehicles.
- 2. Excavate to final depth during dry weather and have all materials on site to complete construction prior to forecasted rain.
- 3. Scarify native subgrade with ripper or bucket teeth on the last pass of excavation.

3. Work with project engineer to certify materials and construction of practice.

- 1. Verify native soil meets design specification and take representative sample.
- 2. Provide load tickets for all materials used.
- 3. Photograph each step of construction.

Communicate with your crew and the owner that while following these recommendations may increase the time and/or cost for construction, the chances of failure will be dramatically reduced and will ultimately be cheaper than building the facility again.

Additional information and guidance on how to prevent failure of infiltration practices can be found in the Dane County Erosion Control and Stormwater Management (ECSM) Manual.

https://ecsmmanual.countyofdane.com/