

Targeted Constituents

Significant Benefit
 Partial Benefit
 Low or Unknown Benefit

<input checked="" type="radio"/> Sediment	<input type="radio"/> Heavy Metals	<input type="radio"/> Floatable Materials	<input type="radio"/> Oxygen Demanding Substances
<input type="radio"/> Nutrients	<input type="radio"/> Toxic Materials	<input checked="" type="radio"/> Oil & Grease	<input type="radio"/> Bacteria & Viruses
<input type="radio"/> Construction Wastes			

Description

A stabilized construction entrance involves a pad of aggregate underlain with filter cloth located at any point where traffic will be entering or leaving a construction site. Stabilizing the construction entrance significantly reduces the amount of sediment (dust, mud) tracked offsite, especially if a washrack is incorporated for removing caked sediment. See ES-02, Tire Washrack, if soil and stormwater runoff conditions warrant additional removal of mud from construction vehicles. This management practice is likely to create a significant reduction in sediment and a partial reduction in oil and grease.

Suitable Applications

- All points of construction ingress and egress, especially from dirt or soil conditions to a paved public roadway.

Approach

Stabilized construction entrances shall be constructed early in the process of setting up erosion and sediment controls, prior to the movement onsite of large vehicles and equipment.

Stabilized construction entrances are moderately effective in removing sediment from equipment leaving a construction site. Efficiency is greatly increased when a tire washrack is included as part of a stabilized construction entrance (see ES-02).

The entrance must be properly graded to prevent runoff from leaving the construction site. When washracks are provided, washing is done on a reinforced concrete pad that drains to a properly constructed sediment trap or sediment basin. Other erosion and sediment controls should be in place to prevent sediments from entering into the stormwater drainage system, ditch, or waterway.

- Construct on level ground where possible, at a location suitable for traffic safety and sight distance.
- Length is typically 50 feet and width is typically 20 feet. Busy entrances will need the capability of handling a lane of traffic each way, typically 30 feet wide. It is more important for trucks exiting the site to be cleaned on the way out.

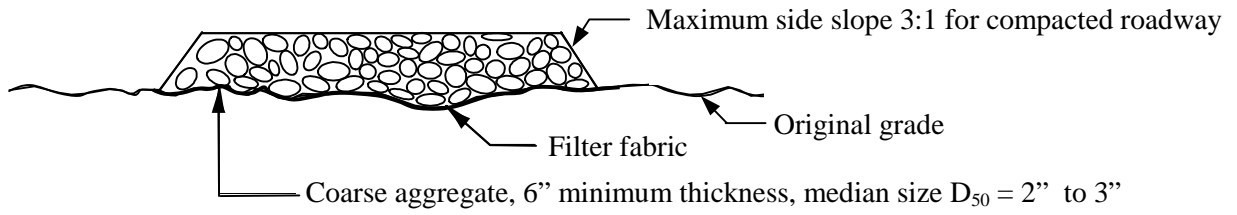
- Aggregate should generally be crushed, washed, and well-graded rock, with 2” to 3” median size (D_{50}), for a depth of at least 6 inches. Smaller size aggregate, such as washed #57 stone, do not remove mud and clay soils. Smaller size aggregate is easily pushed into the street by trucks, or can be washed away by heavy rains.
- Place aggregate on top of a medium to heavy geotextile (typically 12 ounces per square yard) suitable for material separation applications. Do not drop aggregate from a large height.
- Inspect and clean construction entrance and adjacent pavement at the end of each shift or workday, do not wash sediment and mud into the stormwater system or into natural creeks or streams. Street sweeping or street vacuuming may be needed depending on the level of mud deposited on the roadway. Mud on public streets and roads is a traffic hazard and is a violation of the City of Knoxville Stormwater and Street Ordinance.
- Provide ample turning radius as part of stabilized construction entrance, taking into account the speed of traffic on the intersecting roads.
- It is strongly suggested that perimeter fencing be installed adjacent to the stabilized construction entrance in order to limit egress. Use chain-link fencing or silt fence in accordance with the level of security needed.

Maintenance

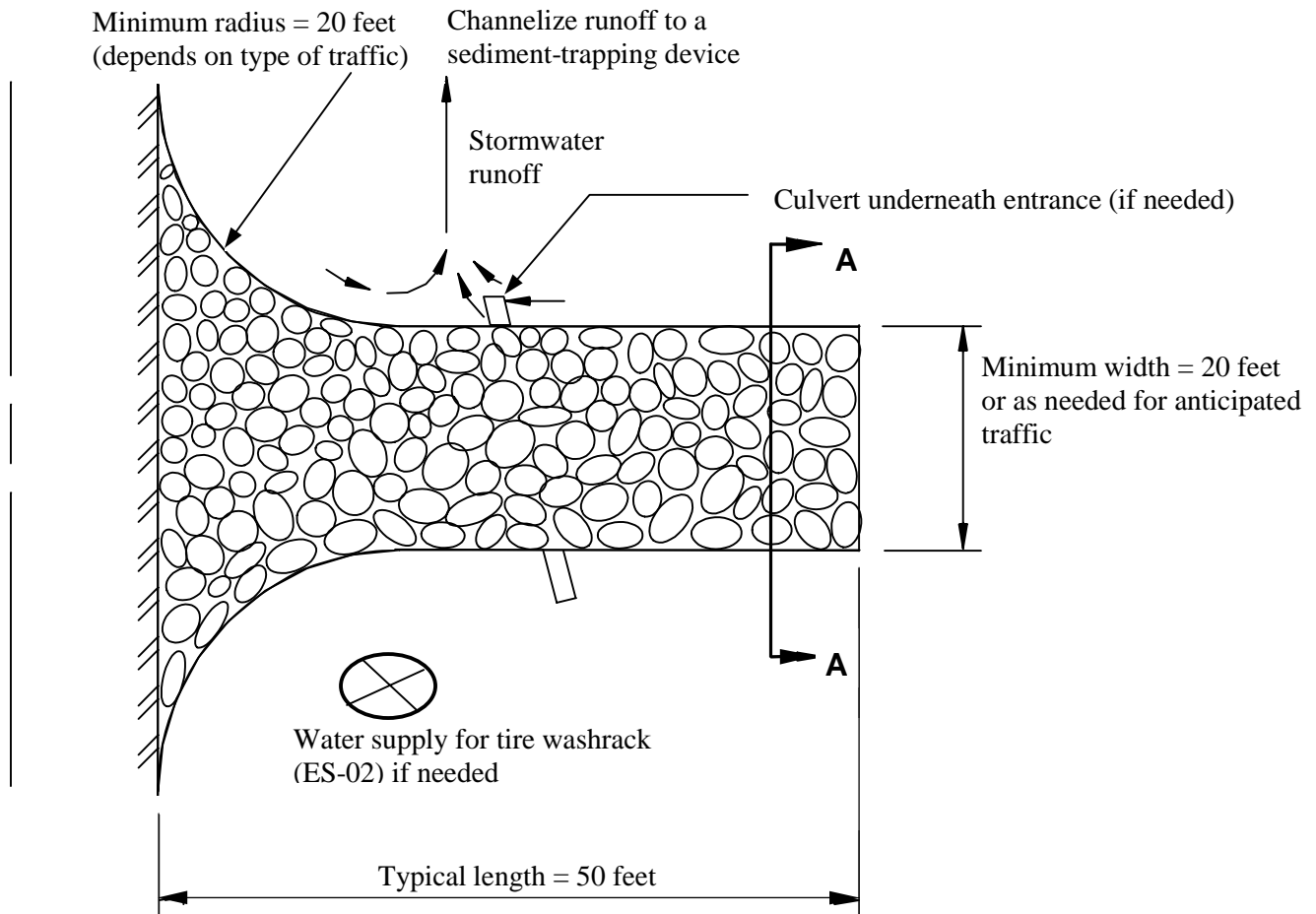
- Inspect daily to ensure that mud and dirt are not tracked onto roadways. Remove all sediment deposited on paved roadways at the end of each workday, do not wash the sediment and mud into the stormwater system or into natural creeks or streams.
- Requires periodic top dressing with additional gravel material, especially if the subgrade is soft or becomes saturated.
- Remove gravel material and filter fabric at completion of construction, or as paved surfaces are finished.
- Restrict employees and subcontractors from using unauthorized construction ingress and egress points.

References

8, 30, 31, 32, 33, 34, 35, 43, 114, 115, 141, 144 (see BMP Manual Chapter 10 for list)



SECTION A-A



NOT TO SCALE

**Figure ES-01-1
Stabilized Construction Entrance**