3.3.4 Construction Exit

Source: TDEC

Definition and Purpose

Construction exits often consist of stone pads on a geotextile fabric that are located at any point where traffic will be moving from a construction site onto a public roadway or other paved area. Construction exits may also consist of rumble strips or HDPE material that can be used to reduce track out. The intentions of this measure are to reduce or eliminate the transport of sediment off-site.

Appropriate Applications

This practice is applicable where construction traffic leaves a construction site and enters a public right-of-way.

Reusable HDPE construction exits may be a more economical choice for areas of Tennessee where rock is harder to find and more expensive. Maintenance is required to clean off the construction exit. Manufacturer recommendations should be followed.

Limitations and Maintenance

The exit must be maintained in a condition that will prevent tracking or flow of material onto public rights-of-way or into storm drain systems. This may require periodic top dressing with fresh stone or full replacement of stone and underlying geotextiles as conditions show clogging. All materials spilled, dropped, washed, or tracked from vehicles or site onto roadways or into storm drains must be removed as soon as possible. Additionally, dislodged stones spilling into the adjacent roadway must be cleared as soon as possible.

Planning and Design Criteria

Construction exits are to be installed at any point where construction traffic exits the project. Avoid areas with hydric or saturated soils as well as steep gradients.

A layer of geotextile fabric is used to stabilize and support the aggregate. Extend the geotextile fabric the full length and width of the construction exit and ensure the fabric meets the requirements of the standard specifications for geotextiles, AASHTO designated M-288, erosion control. Construct the stone pad from clean, washed stone. The gradation, width of the stone pad, and length of the pad must be sized appropriately such that tracking onto public roadways is eliminated. There may be specific requirements from local or state requirements for larger projects (e.g., TDOT projects). While no specific dimensions, gradation, or depth of aggregate are required per the CGP, neighboring states recommend minimum lengths of 50 to 70 feet, minimum widths of 12 to 20 feet, minimum depths of six to eight inches, and one to two inch diameter aggregates (TDOT Class A-3 Machined Riprap) (ALSWCC, 2018; GSWCC, 2016; NCDEQ, 2013; VDEQ, 2024). Install, at minimum, a turning radius of 20 feet on each side of the pad where it intersects with the public roadway (TDOT).

Stormwater management around the construction exit must also be considered, such that stormwater cannot flow across the stone pad and into the right-of-way. On sites where the grade toward the public roadway is greater than two percent, a waterbar diversion six to eight inches in depth with 3H:1V side slopes can be constructed at the upper end of the construction exit to prevent stormwater from washing sediment off the construction exit and into the public roadway or storm drain system (GSWCC, 2016).

Example Application

No formal design or quantities are required for this measure and therefore are not presented here.

References

ALSWCC. (2018). *Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas*.
GSWCC. (2016). *Manual for Erosion and Sediment Control in Georgia*.
NCDEQ. (2013). *Erosion and Sediment Control Planning and Design Manual.*
TDOT*. Drainage Manual Ch10.*
VDEQ (2024). *Virginia Stormwater Management Handbook.*