

HERE'S THE DIRT

2023
Issue

STORMWATER COMPLIANCE DEPARTMENT - ENGINEERING SERVICES DIVISION

BEST MANAGEMENT PRACTICE REVIEW:

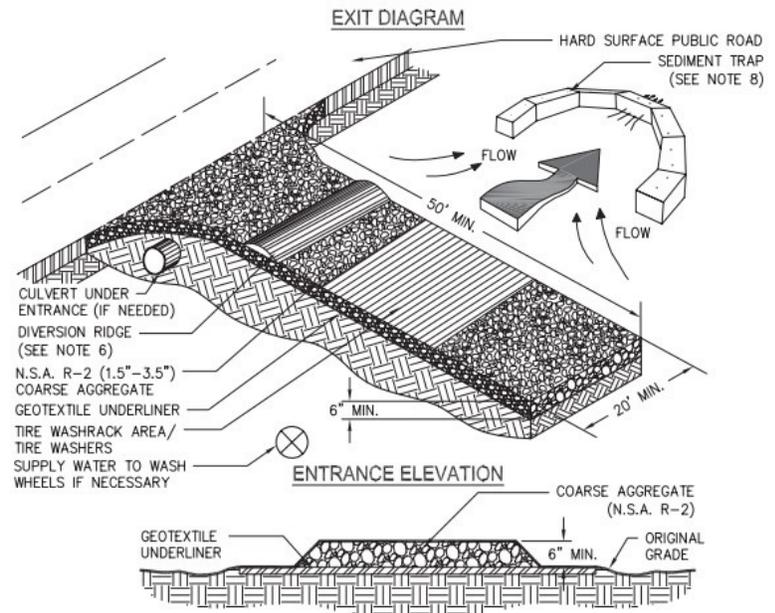
Construction Exit

By Christian Moore

Preventing the transport of sediment offsite is the main purpose of most Best Management Practices (BMPs). The Construction Exit, or Co, is responsible for removing sediment from tires before vehicles enter public roads. Success of the Co depends on proper installations and maintenance. Per the Georgia Soil And Water Conservation Commission (GSWCC) Green book, contractors are to use R-2 stone (1.5-3.5 inches stone) laid out with 20 feet in width, 50 feet in length, and 6 inches in depth with a geotextile liner underneath the stone.



CRUSHED STONE CONSTRUCTION EXIT



The Co shall be maintained to prevent tracking or flow of mud onto the public right-of-way. This may require periodic top dressing with 1.5-3.5 inch stone as conditions demand. All materials spilled, dropped, washed, or tracked from vehicles or site onto roadways or into storm drains must be removed immediately.

The Co is the first line of defense in preventing the tracking of mud and sediment from tires onto public roads. Proper installation and maintenance can save time and money by keeping larger portions of mud and sediment out of our streets.



Land Disturbance Permit 2023 in Review

Permits Issued: 843

Inspections Performed: 20,295

Equivalent BMPs

By Hunter Martenn

The National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharge related to construction activities requires that only GSWCC approved BMPs be used. These BMPs are outlined in the Manual for Erosion and Sediment Control in Georgia, also known as the Green Book. However, what you may not know is that there is an equivalent BMP list published by GSWCC. This equivalent list provides specific companies and products that differ from those in the Green Manual but provide equal or greater performance. Many of these equivalent BMPs are new products that have received approvals for use in Georgia since the last revision of the Green Manual in 2016. In Columbia County we encourage sustainability and the ability to reduce, reuse, and recycle. All BMPs mentioned in this article are products that can be at least partially reused.



An equivalent BMP that has recently gained significant traction in Columbia County is the Silt-Saver, Inc. Frame and Filter inlet protection. These domes fit over an inlet and provide protection from sedimentation into a storm system. It works at 96% efficiency and provides a system to accommodate low and high flows during rain events. As an added bonus, its high visibility aids in locating inlets on your project for workers and equipment operators.

A second product which has not seen use in the county but offers a solution to a common problem of tracking mud into roadways is the FODS, LLC Reusable Construction Entrance. This construction exit is modular and can be expanded to fit the width and length requirements of your job site. Each of the pyramids are designed to remove dirt from tires and some tracked vehicles. These pyramids are designed to support 20,000 pounds per pyramid. It is UV stable and can be easily maintained with a shovel, street sweeper, skid steer attachment, or pressure washer.



Lastly, Silt-Saver, Inc. kindly demonstrated a newly approved product, the High Velocity Ditch Check. This check dam reduces water velocity, filters stormwater, and helps to prevent erosion in ditch sections. Its combination of a pine chip filled compression tube in front of a velocity restrictor sheet and a rear scour guard allows for vegetation to be established behind the check dam unlike traditional check dams. Thank you to Silt Saver, Inc. for the installation demonstration and the continued maintenance updates on the Horizon South Parkway widening project.

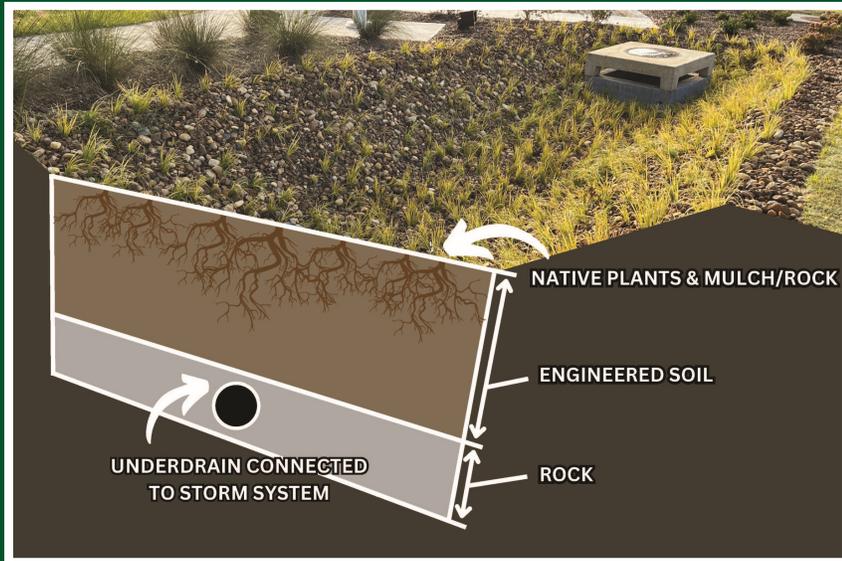


COLUMBIA COUNTY DESIGN RECOGNITION 2023

INNOVATIVE STORMWATER SOLUTIONS

Thank you to these entities for protecting water quality in our community by designing, installing, and maintaining 2 bioretention basins at the Columbia County Sheriff's Administrative Building!

- Facility Owner: Columbia County Sheriff's Department
- Engineer: James G. Swift & Associates
- GI Installation: SiteMaster Augusta
- Landscaping: Grateful Designs Landscaping



To The Building Community,

Green infrastructure is vital in making a significant change in our environment by improving water quality, air quality, and reducing the heat island affect which dominates urbanized areas tremendously. These past few years Columbia County and you all have been working together to perfect green infrastructure as a whole; experimenting with different ideas and watching this program grow. Everyone from Stormwater Compliance is grateful for your work.

The most common issue with green infrastructure is maintenance. This problem is not just a local issue but all around the country. Regular maintenance such as pulling weeds, routine watering, pruning bushes, successful survival of plants after NOT inspection, and erosion control are vital aspects to ensure proper function of green infrastructure.

You are building these structures and improving all these things that help our community breathe and drink a little cleaner than the day before. Let us recognize the significance of green infrastructure, and actively work towards its preservation to create a brighter future for us and the generations to come.

Please know that Fred and I open to sharing any knowledge we have to help you install and maintain any green infrastructure practices. Give one of us a call if you need any guidance or have any questions.

Sincerely,

Cale Phillips & Fred Ingram
Green Infrastructure Inspectors

CONSTRUCTION DEBRIS

By Hunter Martenn

All construction sites will inevitably produce trash and other waste items. The primary trash on construction sites will be from unboxing construction materials, used items such as sandpaper, and empty containers such as paint cans. However, there are other items that you may not think about. Every worker on the site will have a bottle or can of their favorite beverage and packaged foods to keep them hydrated and fueled for the day. Some vehicles may have trash in their door compartment that blows away in the wind. All of this trash has the possibility to litter your construction site if it is not disposed of properly.



So why is it important to dispose of your trash?

- Trash and other waste materials can end up in storm drains. Our storm drains ultimately end up in the Savannah River and are not treated at a wastewater treatment plant. This results in reduced water quality in the same river that we receive our drinking water and use for recreation.
- It is a violation of the NPDES permit and Columbia County's ordinance to discard of trash and other waste materials improperly or allow it to enter into waterways and therefore can result in enforcement actions such as stop work orders or fines.

How to prevent waste materials affecting our water quality:

- Ensure that you have waste collection bins on site that are located away from waterways and storm drains.
- If you are disposing of liquids, make sure the waste collection bins are lined or use an absorbent material to solidify the liquid so it can be thrown in the unlined collection bin.
- Cover up any construction materials that can be moved by rain or wind.
- Take time to thoroughly inspect your site and dispose of any waste, even if it isn't yours.

MEET THE STORMWATER COMPLIANCE TEAM



GOT QUESTIONS?

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