

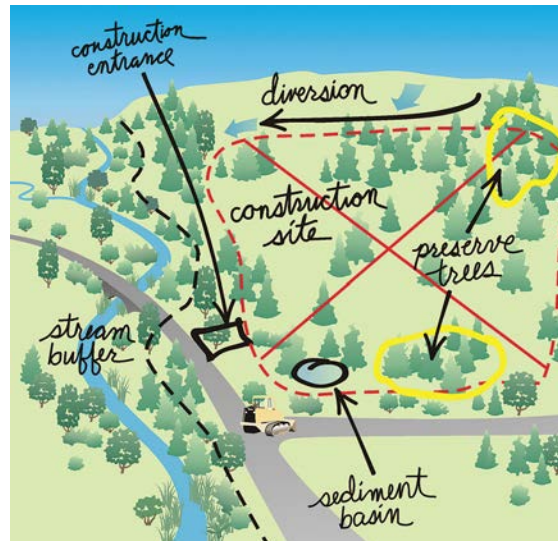
Kentucky Erosion Prevention and Sediment Control Guide

A guide to preventing erosion and controlling sediment from construction activities in Kentucky

Construction Phase Operations

Divide your construction site into natural drainage areas, so you can deal with each one individually. You will be controlling erosion on bare soil areas by applying seed, mulch, or sediment filters, and minimizing the time bare soil is exposed to the weather. Control point for sediment in runoff will be at the curb inlets or in the ditches, channels or sediment traps/basins installed where concentrated flow leaves the site.

Install clean water diversions, sediment traps/basins and stabilize drainage channels with grass, liners, and silt check dams *before* excavation, fill or grading work begins. Install silt fences and other sediment barriers downhill from bare soil areas before clearing or excavation work begins.



Identify drainage areas and drainage ditches and channels. Install diversions, grassed channels, sediment traps/basins, downslope sediment barriers, and rock construction entrance before beginning work.

Phase your construction work to minimize exposed soil areas

Excavate or place fill material at the site in stages, to avoid exposing large areas of bare soil to the elements. Establish final grade quickly, then seed, mulch, or cover bare soil. Require utilities and subcontractors to grade their work sites and seed, mulch, or cover excavated

areas promptly. You should meet with subcontractors to assure compliance with your erosion and sediment control plan if their work is covered under your permit.

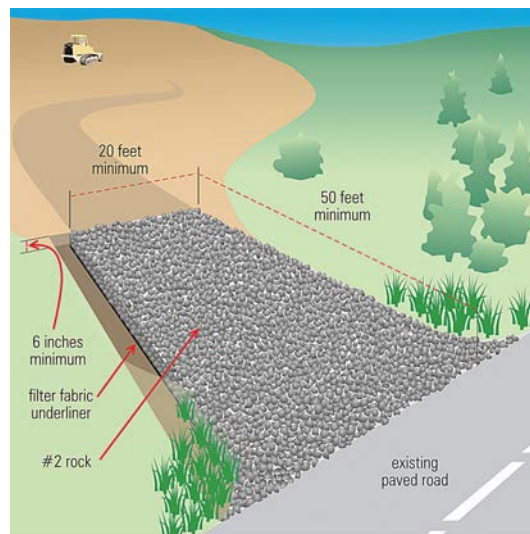
If work will process over several weeks or months, apply temporary seeding or mulch until final grade work is completed. The KYR10 General Permit requires seeding or mulching all bare soil areas that are not being worked within 14 days of the date of activity cessation.

Excavation and grading work should be done during dry weather if possible. Prepare for rainy weather forecasts by making sure sediment controls are in place and that mulch or grass is on base areas that are at final grade.

Install construction entrances and control dust

Mud tracked onto paved roads is the number one complaint from citizens regarding construction site operations. Use #2 (4- to 8-inch) rock – not 57s or 410 “traffic bound” – for entrance/exit pads leading to paved roads. Pads should be 20 feet wide, 50 feet long, and 6” thick. Install filter fabric under the rock to keep it from sinking into the soil below. Rake rock with a grubbing attachment or add new rock if the pad fills with sediment.

Control dust during hot, dry weather by seeding or mulching bare areas promptly, wetting haul roads as needed, or applying approved chemical soil binders.



Construction entrance detail. Entrance/exit pad must keep mud from tracking onto paved roads.



Construction entrance not properly installed

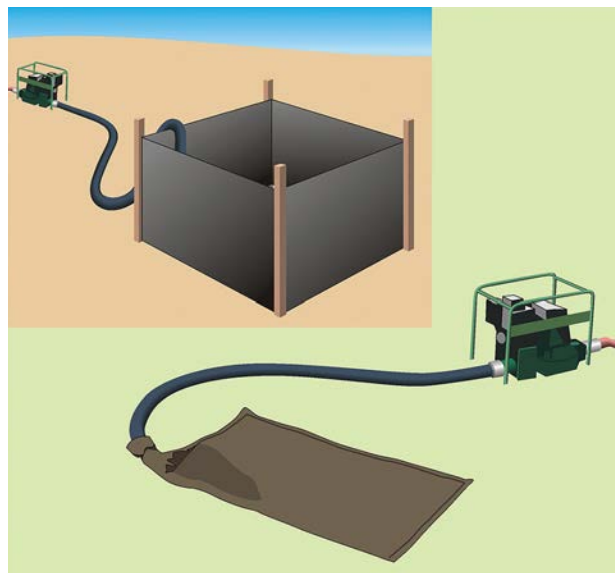


Entrance lacking large rock

Dewatering operations and discharges

Muddy water pumped from collection basins or other areas following appropriate controls as covered by the [KYR10 permit](#).

Use sock filters or sediment filter bags on discharge pipes, discharge muddy water into silt fence enclosures installed in vegetated areas away from waterways, or discharge muddy water into a de-silting basin. Remove accumulated sediment after water has dispersed and stabilize or seed the discharge area. Dispose of sediment in areas where it won't wash into waterways, then grade the area and seed.



Pump muddy water from dewatering operations away from waterways into a silt fence enclosure or use a bag filter or other device to remove sediment. Allow discharge to soak into the ground if possible. Do not pump discharger from dewatering operations into curb inlets, storm sewers, creeks, lakes, or rivers without a KPDES permit from the Division of Water.

Inspection and maintenance of erosion and sediment controls

For sites one acre or larger, state and federal regulations require that you inspect and repair/replace silt fences, vegetated buffers, berms, silt check dams, channels, and other erosion and sediment controls every 7 days, or every 14 days and after each rainfall of 0.5 inch or more (KYTC projects should follow weekly and after events of 0.5 inch or more). Remove accumulated sediment from behind silt fences before it reaches $\frac{1}{2}$ the silt fence height. Remove sediment from pipe or curb inlet ponding dams or filters as it accumulates. Clean mud off paved roads immediately. Your inspection reports must be in writing and readily available at the site.

Silt check dams in ditches and sediment traps/basins also require periodic sediment removal. Remove sediment from traps and basins before that are halfway full as measured with a visual marker. Dispose of removed sediment in areas where it will not wash into waterways. Seed or mulch bare soil areas as soon as possible.

Keep written records of these inspections, including dates, observations, and corrective actions taken, with your erosion and sediment control plan and Storm Water Pollution Prevention Plan or BMP Plan. See [KYR10](#) part 2.2.7.6. for inspection report requirements for KYR10 permittees. See [Using Silt Fence and Other Sediment Barriers](#) for more information on installing and maintaining overland sheet flow sediment filters. See [Protecting Culvert and Ditch Inlets](#) and [Protecting Culvert and Ditch Outlets](#), [Stabilizing Drainage Ditches](#) and [Installing Sediment Traps and Basins](#) for information on handling concentrated flows in ditches, channels, and other areas.



Entrance appropriately sized, but lacking large rock.



Rock pad is poorly constructed; rock is too small. Use filter fabric under rock and larger sized rock, such as #2. No mud should be tracked onto paved roads open for traffic.



Rock sizing and placement look OK for a residential site, and very little mud appears on the pavement. The pad is a little thin, however, and it looks like some drivers are not using it—note track marks near curb. Entire area needs seed and mulch.



Well developed entrance with appropriate sized gravel. Note lack of tracking on the road.

Resources

[EPA Construction Track-out Controls](#)

[EPA Construction Sequencing](#)

[New Hampshire Stormwater Manual Construction Phase](#)