

CHAPTER 3 - SITE ACCESS

This chapter addresses site access during actual construction of a proposed project. It should be noted that site access for site preparation work (e.g. surveying, exploration drilling, etc.) should follow the same general principals. When it becomes necessary to remove vegetative cover or cross surface waters to conduct a survey, or complete required exploration drilling and sampling, appropriate BMPs must be provided to protect the surface waters. BMPs not addressed in this chapter may be reviewed by the Department on a case-by-case basis and approved if they are found to be equal to, or better than, the following BMPs.

ROCK CONSTRUCTION ENTRANCE - Sediment Removal Efficiency: LOW. This device is not an ABACT for special protection watersheds. A rock construction entrance should be installed wherever it is anticipated that construction traffic will exit the project site onto any roadway, public or private. Access to the site should be limited to the stabilized construction entrance(s).



Lake County Stormwater Management Department, Ohio

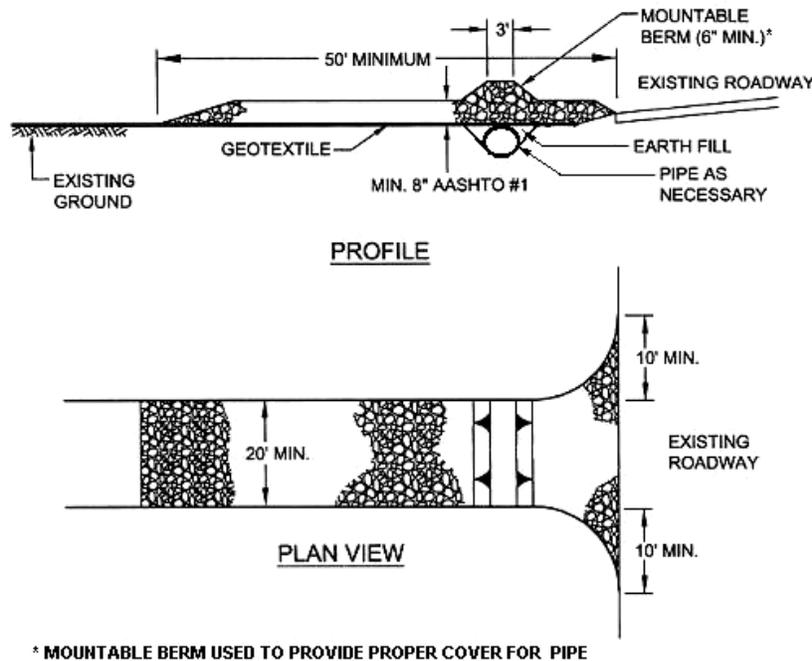
A geotextile underlayment should be placed over the existing ground prior to placing the stone. At a minimum, rock construction entrances should be constructed to the dimensions shown on Standard Construction Detail #3-1. Where site conditions warrant, it may be necessary to extend the length or width of the rock to ensure the effectiveness of the entrance. Wherever access to the site is across a roadside ditch, stream channel, natural drainage course, etc., a suitable means of conveying the flow past the entrance (e.g. a properly sized culvert pipe) should be provided. For such installations, a mountable berm is recommended to prevent crushing the pipe.

Rock construction entrances should be maintained to the specified dimensions and the capacity to remove sediment from the tires by adding rock when necessary. For some sites this could occur several times a day. A stockpile of rock material should be maintained on site for this purpose. It should be noted that occasionally the rock construction entrance can become too clogged and might have to be removed and replaced.

Sediment deposited on public roadways should be removed and returned to the construction site immediately. **Note: Washing the roadway or sweeping the deposits into roadway ditches, sewers, culverts, or other drainage courses is not acceptable.**

Rock construction entrances are not effective sediment removal devices for runoff coming off the roadway above the entrance. Surface runoff should be directed off the roadway by means of appropriate drainage devices described later in this chapter. Where these devices do not discharge to a suitable vegetative filter strip, an appropriately sized sediment trap should be provided. For locations not having sufficient room for a conventional sediment trap, consideration should be given to use of a compost sock sediment trap. Compost sock traps may also be used instead of conventional sediment traps at other points of discharge. Where used, care should be taken to provide continuous contact between the sock and the underlying soil in order to prevent undermining. It is also important to properly anchor the sock (Standard Construction Detail #3-1).

STANDARD CONSTRUCTION DETAIL # 3-1 Rock Construction Entrance



Modified from Maryland DOE

Remove topsoil prior to installation of rock construction entrance. Extend rock over full width of entrance.

Runoff shall be diverted from roadway to a suitable sediment removal BMP prior to entering rock construction entrance.

Mountable berm shall be installed wherever optional culvert pipe is used and proper pipe cover as specified by manufacturer is not otherwise provided. Pipe shall be sized appropriately for size of ditch being crossed.

MAINTENANCE: Rock construction entrance thickness shall be constantly maintained to the specified dimensions by adding rock. A stockpile shall be maintained on site for this purpose. All sediment deposited on paved roadways shall be removed and returned to the construction site immediately. If excessive amounts of sediment are being deposited on roadway, extend length of rock construction entrance by 50 foot increments until condition is alleviated or install wash rack. Washing the roadway or sweeping the deposits into roadway ditches, sewers, culverts, or other drainage courses is not acceptable.

ROCK CONSTRUCTION ENTRANCE WITH WASH RACK - Sediment Removal Efficiency: HIGH. **This device is an ABACT for HQ and EV watersheds.** Rock construction entrances with wash racks should be considered wherever soil and/or traffic conditions require washing the construction vehicle wheels prior to exiting the site to avoid excessive tracking of mud onto a highway. Access to the site should be limited to the stabilized entrance(s). NOTE: Wash racks in construction entrances are for washing of tires only. Where it is necessary to wash an entire vehicle prior to leaving the site, this should be done at a site designed to prevent untreated nutrient-enriched wastewater or hazardous wastes from being discharged to surface or ground waters.



EPA

At a minimum, rock construction entrances with wash racks should be constructed to the length, width, and thickness dimensions shown on Standard Construction Detail #3-2. A metal wash rack (like the one illustrated above) is an acceptable alternative to the reinforced concrete one shown in the standard detail.

Approaches to the wash rack should be lined with AASHTO #1 at a minimum of 25' on both sides.

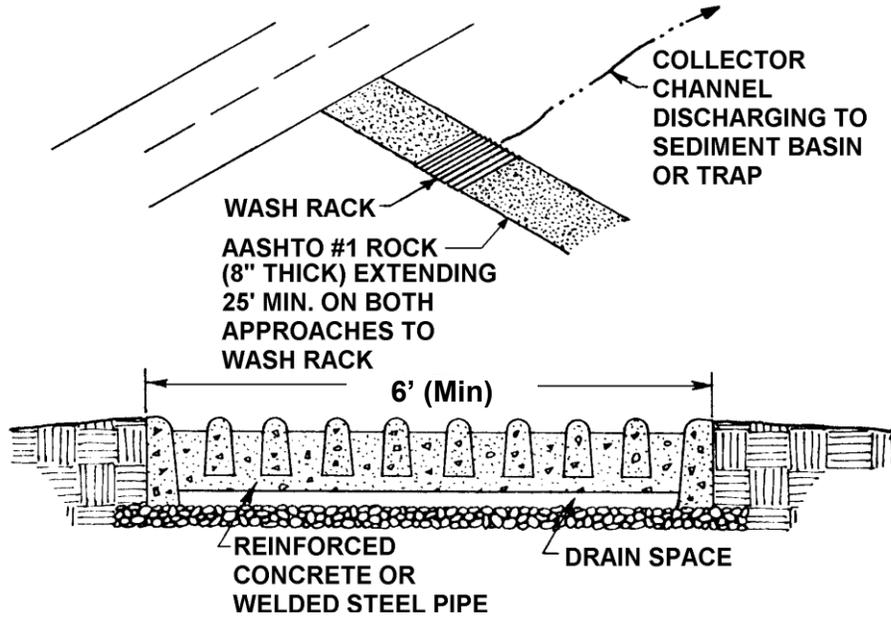
The wash rack should discharge to a sediment removal facility, such as a vegetated filter strip or into a channel leading to a sediment removal device (e.g. a sediment trap or sediment basin).

Rock construction entrances with wash racks should be maintained to the specified dimensions by adding rock when necessary at the end of each workday. A stockpile of rock material should be maintained on site for this purpose.

Sediment deposited on paved roadways should be removed and returned to the construction site. **NOTE: Washing the roadway or sweeping the deposits into roadway ditches, sewers, culverts, or other drainage courses is not acceptable.**

Damaged wash racks should be repaired as necessary to maintain their effectiveness.

**STANDARD CONSTRUCTION DETAIL # 3-2
Rock Construction Entrance with Wash Rack**



Modified from Smith Cattleguard Company

Wash rack shall be 20 feet (min.) wide or total width of access.

Wash rack shall be designed and constructed to accommodate anticipated construction vehicular traffic.

A water supply shall be made available to wash the wheels of all vehicles exiting the site.

MAINTENANCE: Rock construction entrance thickness shall be constantly maintained to the specified dimensions by adding rock. A stockpile of rock material shall be maintained on site for this purpose. Drain space under wash rack shall be kept open at all times. Damage to the wash rack shall be repaired prior to further use of the rack. All sediment deposited on roadways shall be removed and returned to the construction site immediately. Washing the roadway or sweeping the deposits into roadway ditches, sewers, culverts, or other drainage courses is not acceptable.

RUMBLE PAD

Pre-constructed rumble pads may be used instead of rock construction entrances provided they are installed according to manufacturer's recommendations and a sufficient number of pads are installed to provide for a minimum of four tire revolutions while on the pad. More pads may be needed depending on site conditions. Accumulated materials should be cleaned from the pads daily (more often if necessary) and disposed in the manner specified by the plan. Rumble pads are not ABACT.



All World Equipment

WHEEL WASH

Manufactured wheel washes may be used as ABACT in special protection watersheds or where special traffic safety issues exist. All such wheel washes should be installed and operated according to the manufacturer's specifications. Waste water from the wheel washes should either be recycled or run through an approved sediment removal device prior to discharge to a surface water.



NW Equipment Sales