Run-on Diversion



Description

Devices that intercept, divert, and convey off-site surface run-on around or through the project site to prevent site erosion. Run-on (storm water entering the site) diversion devices include dikes, swales, compost filter berms, sandbags, check dams and slope drains.

Applications

- Along paved surfaces to intercept runoff.
- Upslope from project site to prevent erosion of disturbed areas located on-site.
- Downslope of project site to convey runoff to a sediment control device such as a sediment trap or sediment basin.
- Around material storage areas, maintenance and fueling areas, or areas with runoff containing contaminants or pollutants.
- Below steep grades to intercept concentrated runoff.
- Diversion devices can provide protection from storm water runoff when located around adjacent property and buildings.
- Devices can be used to divert run-on storm water through the construction site without eroding disturbed areas.



Devices can be used to divert run-on storm water through the construction site without eroding disturbed areas.

Run-on Diversion

Installation and Implementation Requirements

- A designer should provide flow rate calculations to the Engineer for approval before installation to ensure the size of the diversion device is effective.
- Use a layered approach to divert storm water run-on and minimize sediment from leaving the site.
- Select flow velocity based on evaluation of potential risks due to erosion, overtopping, flow backup, washout, and drainage flow patterns of the project.
- Immediately stabilize earth dikes and swales. *See* section EC-5 Earth Dikes, Swales, and Ditches for more information.
- *See* section EC-7 Slope Drains and Subsurface Drains for more information.



A layered BMP approach can be used to divert storm water run-on and minimize sediment from leaving the site.

Considerations

- Run-on diversion devices do not remove sediment from runoff.
- If run-on cannot be diverted around the construction site it will need to be directed through the project without causing erosion.
- Ditches and swales may require check dams or lining to prevent erosion.
- All diversions shall have stabilized outlets that will convey concentrated runoff without erosion.
- Once storm water run-on enters a construction site, it becomes the contractor's responsibility to effectively manage.
- Not all devices are effective individually. A layered approach is more appropriate.

What to Inspect

- Is there evidence of sediment buildup at inlets?
- Is there erosion at channel embankments, washouts, or ditch beds?
- Is there evidence of erosion or scour at outlets and/or perimeter of site?
- Are there signs of storm water run-on entering the construction site?
- Is sediment accumulating at perimeter control devices?
- Are additional BMPs needed to prevent run-on?

Run-on Diversion

Maintenance

- Remove accumulated sediment and debris and repair damages as necessary.
- Temporary diversions shall be completely removed and area stabilized at the completion of construction.
- Repair/replace BMP devices that are not properly performing.