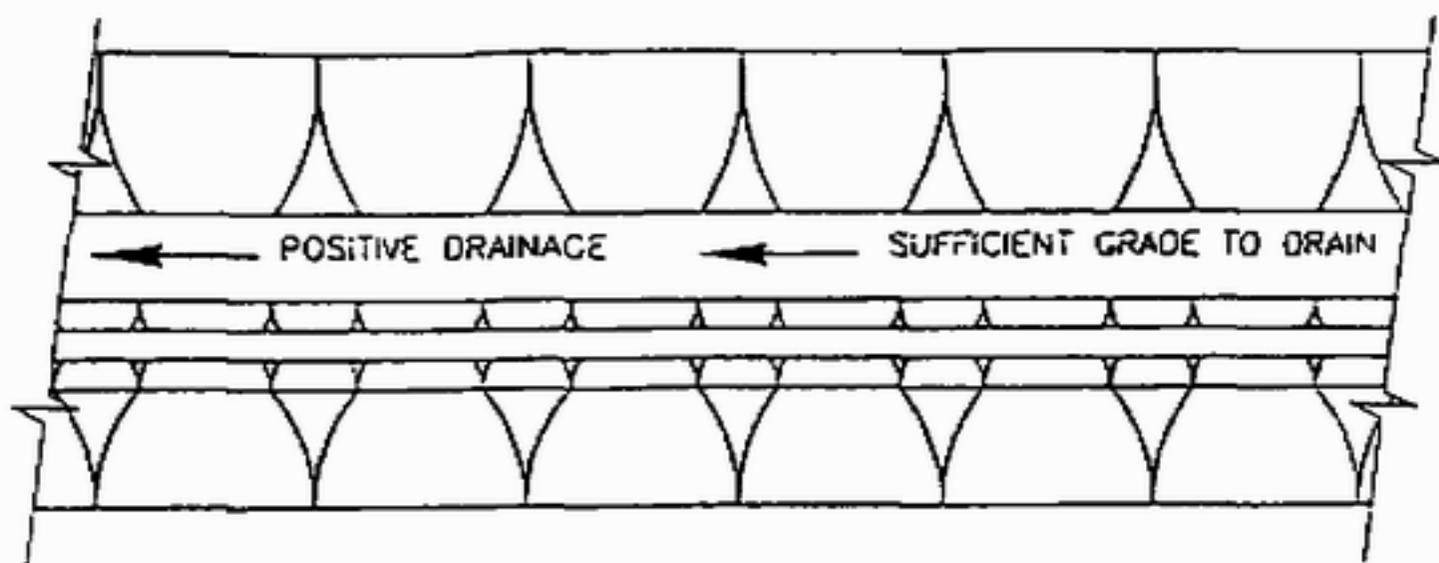


Description	A perimeter dike/swale is a temporary ridge of soil excavated from an adjoining swale located along the perimeter of the site or disturbed area. The purpose of a perimeter dike/swale is to prevent off-site storm runoff from entering a disturbed area and to prevent sediment laden storm runoff from leaving the construction site or disturbed area.	
Applications	<ul style="list-style-type: none"> ▪ A perimeter dike/swale is constructed to divert flows from entering a disturbed area, along top of slopes to prevent flows from eroding the slope, or along base of slopes to direct sediment laden flows to a trapping device. ▪ The perimeter dike/swale should remain in place until the disturbed areas are permanently stabilized. 	
Limitations	Drainage area – 2 ac. Minimum bedrock depth – 5 ft NRCS soil type – ABC Drainage/flood control – yes	Maximum slope – 10% Minimum water table – 5 ft Freeze/thaw – fair
Targeted Pollutants	Sediment Trace metals	
Design Parameters	The perimeter dike/swale should not be constructed outside the property lines without obtaining legal easements from effected adjacent property owners. A detailed design is not required for the perimeter dike/swale. However, the following criteria should be used: <ul style="list-style-type: none"> ▪ Drainage area: Less than 2 acres (for drainage areas larger than 2 acres, but less than 10 acres, see BMP 41-Earth Dike; for drainage areas larger than 10 acres, see BMP 44-Storm Drain Diversion) ▪ Height: 18 in. minimum from bottom of swale to top of dike evenly divided between dike height and swale depth ▪ Bottom width of dike: 2 ft minimum ▪ Width of swale: 2 ft minimum ▪ Grade: Dependent upon topography, but should have positive drainage (sufficient grade to drain) to an adequate outlet. Maximum allowable grade not to exceed 20%. <p>Outlet</p> <ul style="list-style-type: none"> ▪ The perimeter dike/swale should have an outlet that function with a minimum of erosion. ▪ Diverted runoff from a protected or stabilized upland area should outlet directly onto an undisturbed stabilized area. ▪ Diverted runoff from a disturbed or exposed upland area should be conveyed to a sediment-trapping device such as a sediment trap (BMP 38), or to an area protected by any of these practices. <p>▪ The on-site location may need to be adjusted to meet field conditions in</p>	

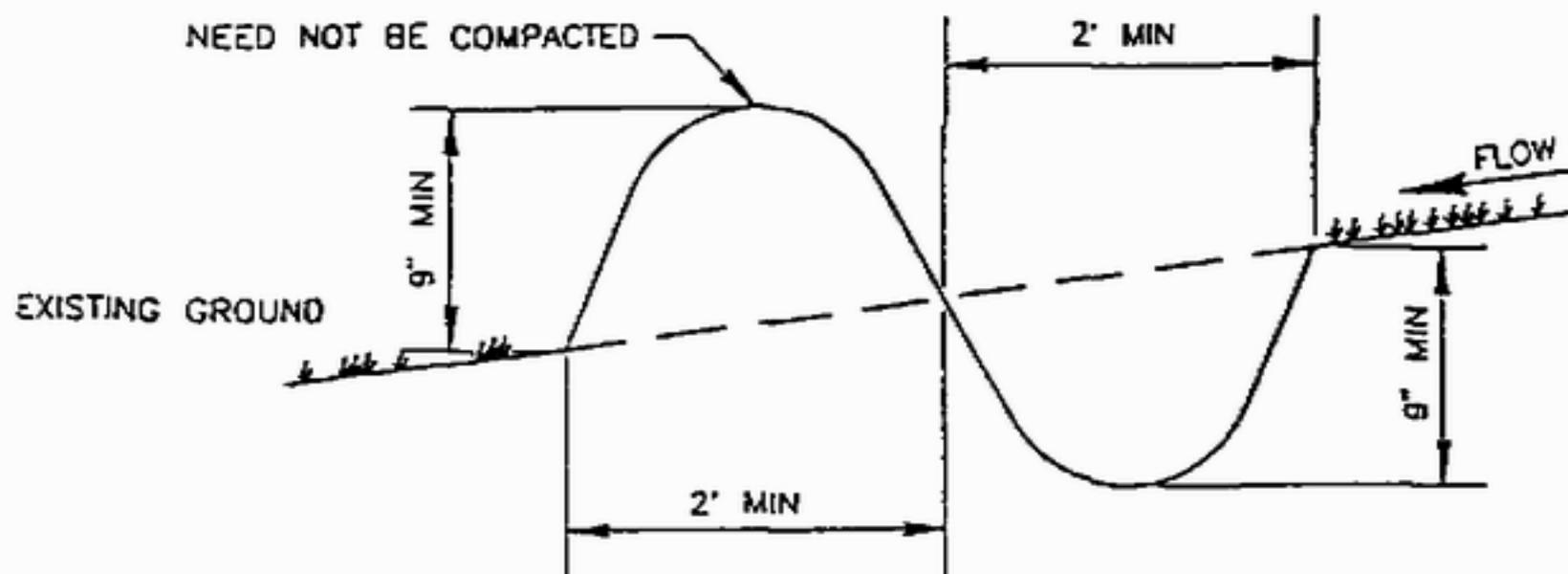
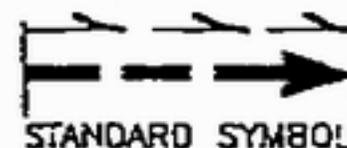
order to utilize the most suitable outlet.

Construction Guidelines The disturbed area of the dike and swale should be stabilized within 10 days of installation, in accordance with the guidelines seed and straw mulch or straw mulch only if not in the seeding season.

Maintenance See BMP 41 - Earth Dike



PLAN VIEW



CROSS SECTION

CONSTRUCTION SPECIFICATIONS

- 1 ALL PERIMETER DIKE/SWALE SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- 2 DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- 3 DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSION VELOCITY.
- 4 THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE STANDARD.
- 5 STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SWALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SEED AND STRAW MULCH, AND SHALL BE DONE WITHIN 10 DAYS.
- 6 PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

MAXIMUM DRAINAGE AREA LIMIT: 2 ACRES

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

TOOTHMAN-ORTON ENGINEERING COMPANY
BOISE, IDAHO McCALL, IDAHO

PERIMETER DIKE/SWALE

STANDARD
DRAWING

PDS-1