

Design Criteria

Drainage Area:		5 acres or less	
<u>Dike Design</u>		<u>Channel Design</u>	
Side Slope:	2:1 or flatter	Shape:	Parabolic, Trapezoidal, or V-Shaped
	3:1 or flatter where vehicles must cross	Side Slope:	2:1 or flatter
Width:	2.0 ft minimum		3:1 or flatter where vehicles must cross
Height:	1.5 ft minimum	Stabilization:	Based on velocity of reaches
Freeboard:	0.5 ft minimum		
Settlement:	10% of total fill height minimum		

NOTES:

1. Remove and properly dispose of all trees, brush, stumps, and other objectionable material. Fill and compact all ditches and gullies that will be crossed by machinery to natural ground level or above.
2. Disk the base of the dike before placing fill.
3. Ensure that the constructed cross section meets all design requirements.
4. Compact the dike by tracking with construction equipment.
5. Divert all sediment laden water into a temporary sediment trap or sediment basin. Runoff from undisturbed areas should empty into an outlet protection device such as a level spreader or riprap outlet structure unless well stabilized natural outlets exist.
6. Ensure that the top of the dike is not lower at any point than the design elevation plus the specified settlement after it has been compacted.
7. Leave sufficient area along the dike to permit machine re-grading and cleanout.
8. Immediately seed and mulch the dike after its construction, and stabilize the flow portion in accordance with design requirements.

Maintenance:

1. Inspect diversion dikes at least weekly and after each rainfall of 1.0 inch or greater.
2. Immediately remove sediment from the flow area and repair the dike.
3. Check outlets, and make timely repairs as needed to avoid gully formation.
4. when area above the temporary diversion dike is permanently stabilized, remove the dike, and fill and stabilize the channel to blend with the natural surface.