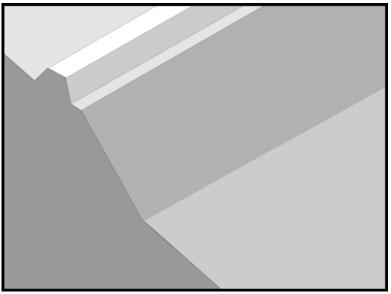
## Top and Toe of Slope Diversion Ditches/Berms

**SC-12** 



Source: Modified from Caltrans Construction Site Best Management Practices Manual, 2003.

### **Description**

Devices used to minimize sheet flow over slopes and reduce erosion by intercepting and conveying runoff to sediment removing structures or a protected drainage system.

#### **Applications**

- Areas which must be protected from runoff flowing down slopes.
- Areas where runoff must be intercepted at bottom of slope.

### Installation and Implementation Requirements

- Design flows and safety factors shall be determined by an evaluation of risks associated with erosion and overtopping, flow backups, or structure washouts. Consult with the HWY-OM Engineer or Hydraulic Section to determine these values.
- Line or stabilize ditches with high flow velocities.
- Direct flows at top of slopes to slope drains. Refer to SC-11 (Slope Drains and Subsurface Drains) in this manual for more information.
- Protect outlets from erosion.

#### Limitations

 Additional sediment trapping BMP devices may be necessary for sediment-laden runoff.

### Inspections and Maintenance

- Inspect weekly during dry periods as well as within 24 hours of any rainfall of 0.5 inch or greater which occurs in a 24-hour period and daily during periods of prolonged rainfall.
- Inspect ditches/berms for washouts. Repair requirements shall be reported and include replacement of rip-rap, damaged lining, or soil stabilizers and compaction and revegetation of fill berms and ditches.

# **Top and Toe of Slope Diversion Ditches/Berms**

**SC-12** 

Inspections and Maintenance (Continued)

 Inspect structures for accumulated sediment and debris and remove as necessary.