5.3 TEMPORARY DIVERSIONS

1. DESCRIPTION - A ridge, excavated channel, or combination ridge and channel which redirects on-site or off-site runoff to a desired location, during the construction or land disturbing activity.

2. PURPOSE - To protect disturbed ground areas from up-slope runoff and to divert sediment laden on-site runoff to installed BMPs for sediment removal.

3. APPLICATIONS - Typical applications include:

- **A.** Installation above cut or fill slopes to intercept runoff before it flows down a steep slope.
- **B.** Installations to intercept runoff from undisturbed areas to divert the flow around the construction site.
- **C.** Across unprotected slopes, as a slope break, to reduce the slope length.
- **D.** Around the perimeter of the site to prevent sediment laden runoff from leaving the site and to direct the runoff to an appropriate BMP.
- **E.** Within the construction site to divert runoff to the appropriate BMP or to isolate an area from sedimentation damage.

4. LIMITATIONS - Diversions must not be constructed at a steep grade. They must be sized to be able to convey the flow from the drainage area entering the diversion. The locations of diversions should be carefully planned since they may limit the movement of construction vehicles across the site.

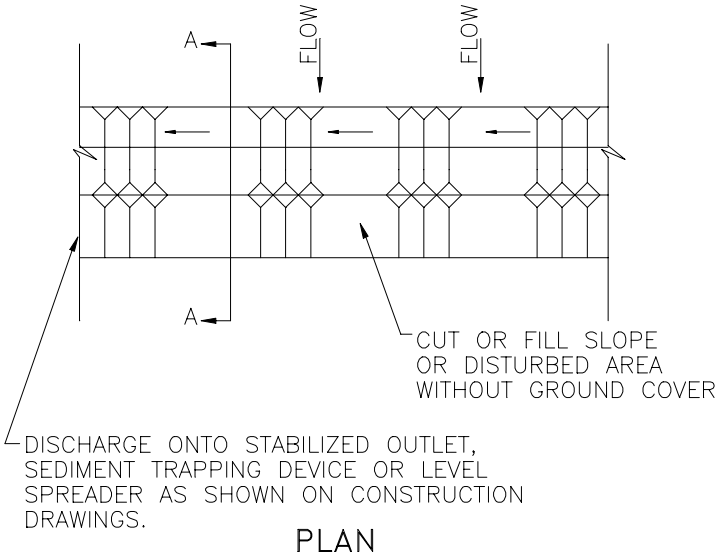
5. DESIGN CRITERIA -

- **A.** Drainage Area - 5 acres or less.
- **B.** Design Capacity - Peak runoff from a 10 year storm.
- **C.** Design Velocity - 6 feet per second or less at design capacity.
- **D.** Side Slopes - 2H:1V or flatter.
- **E.** Freeboard - 0.5 feet between top of ridge and water surface at design flow.

6. MATERIAL SPECIFICATIONS -

A. Erosion Control Matting - TxDOT approved Specification Item 169, Class 2.

7. MAINTENANCE REQUIREMENTS - Inspect diversions weekly or immediately after rainfall events. Particular attention must be paid to areas where sediment builds up in the channel, areas where vehicles have crossed or caused damage, areas where the ridge begins to erode, and any areas where flow overtops the ridge. Sediment in the channel shall be promptly removed and damaged areas of the ridge shall be stabilized by appropriate methods. Methods of stabilization may include the following or any combination of the following; netting, mulching, temporary seeding, or the flattening of the side slopes. Diversions to be left in place for more than 30 days should be stabilized by establishing temporary ground cover.



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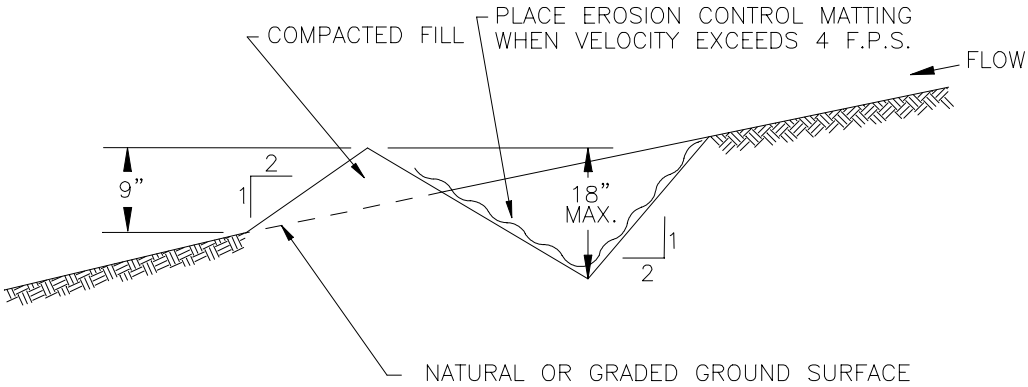

SECTION A–A

TEMPORARY DIVERSION

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