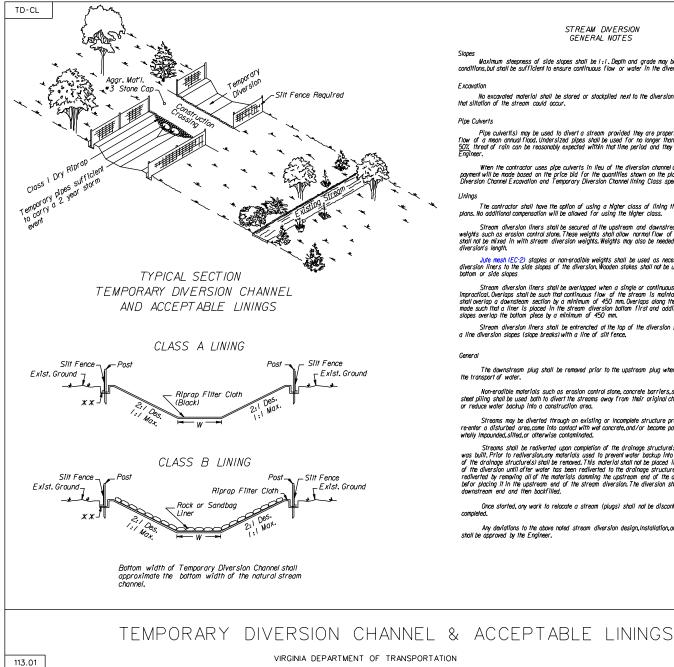
# **REVISED ON 8/00**



## STREAM DIVERSION GENERAL NOTES

Slopes

Maximum steepness of side slopes shall be I: I. Depth and grade may be variable dependent on site conditions, but shall be sufficient to ensure continuous flow or water in the diversion.

## Excavation

No excavated material shall be stored or stockpiled next to the diversion or in such a manner that siltation of the stream could occur.

#### Pine Culverts

Pipe culverifs) may be used to divert a stream provided they are properly sized to safely carry the flow of a mean annual flood. Undersized pipes shall be used for no longer than 72 hours provided less than 50% (threat of rain can be reasonably expected within that time period and they are approved by the Engineer.

When the contractor uses pipe cuiverts in lieu of the diversion channel or a portion of the channel, payment will be made based on the price bid for the quantities shown on the plans for Temporary Diversion Channel Excavation and Temporary Diversion Channel lining Class specified.

# Linings

The contractor shall have the option of using a higher class of lining than that specified on the plans. No additional compensation will be allowed for using the higher class.

Stream diversion liners shall be secured at the upstream and downstream sides with non-erodible weights such as erosion control store. These weights shall allow normal flow of the stream. Solt spall not be mixed in with stream diversion weights. Weights may also be needed along the stream diversion's length.

Jute mesh (EC-2) staples or non-erodible weights shall be used as necessary to anchor stream diversion liners to the side slopes of the diversion. Wooden stakes shall not be used on the diverson's bottom or side slopes

Stream diversion liners shall be overlapped when a single or continuous liner is not available or is impractical. Overlaps shall be such that continuous flaw of the stream is maintained, an upstream section shall overlap a downsteam section by a minimum of 450 mm. Overlaps along the cross-section shall be made such that a liner is ploced in the stream diversion buttom first and additional plees of liner on the slopes overlap the bottom piece by a minimum of 450 mm.

Stream diversion liners shall be entrenched at the top of the diversion slopes (slope breaks) with a line diversion slopes (slope breaks) with a line of silt fence.

#### General

The downstream plug shall be removed prior to the upstream plug when a stream diversion for the transport of water.

Non-erodible materials such as erosion control stone, concrete barriers, sandbags, plywood, or sheet piling shall be used both to divert the streams away from their original channels and to prevent or reduce water backup into a construction area.

Streams may be diverted through an existing or incomplete structure provided they will not re-enter a disturbed area, come into contact with wet concrete, and/or become partially or wholly Impounded, silted, or otherwise contaminated.

Streams shall be rediverted upon completion of the drainage structure(s) for which the diversion was built. Prior to rediversion, any materials used to prevent water backup into the downstream end of the drainage structure(s) shall be removed. This material shall not be placed in the downstream end of the diversion until after water has been rediverted to the drainage structure(s). A stream shall be rediverted by removing all of the materials damming the upstream end of the drainage structure(s) befor placing it in the upstream end of the stream diversion. The diversion shall be sealed off at the downstream end and then backfilled.

Once started, any work to relocate a stream (plugs) shall not be discontinued until it is completed.

Any deviations to the above noted stream diversion design, Installation, or maintainance shall be approved by the Engineer.

> SPECIFICATION REFERENCE

VIRGINIA DEPARTMENT OF TRANSPORTATION