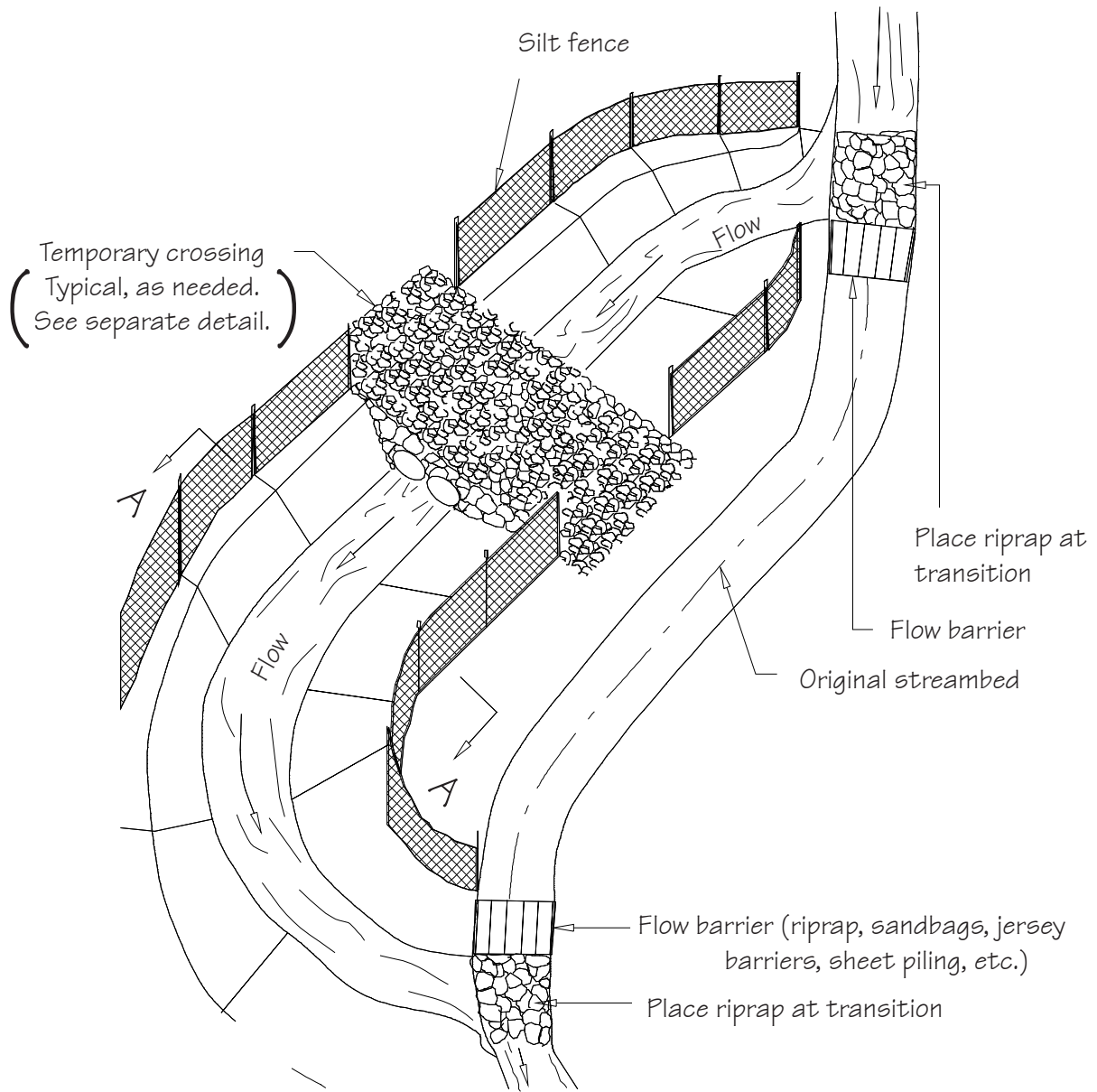


Standard Detail & Specifications

Stream Diversion Channel



Perspective

Source:

Adapted from
VA ESC Handbook

Symbol:



Detail No.

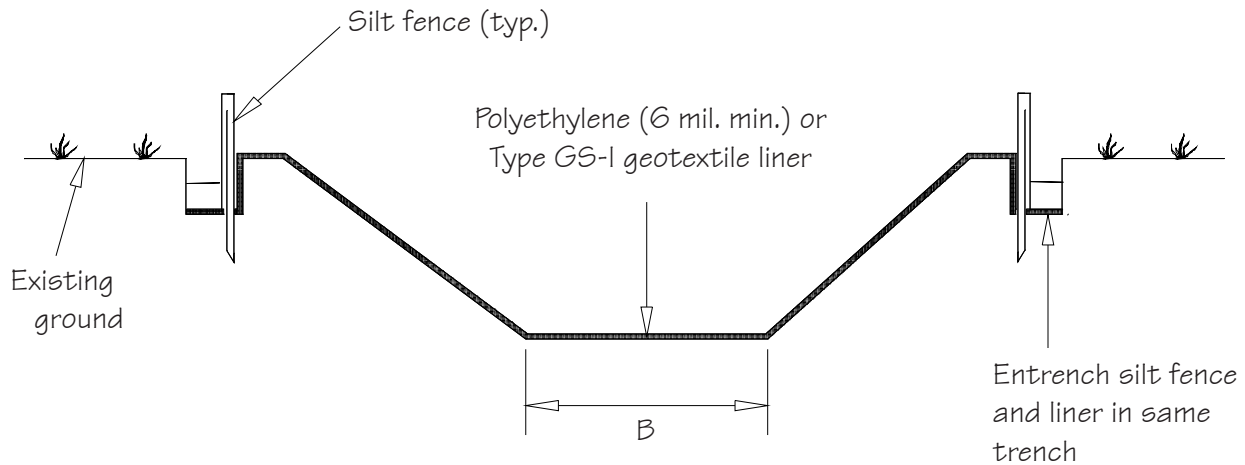
DE-ESC-3.5.2.3

Sheet 1 of 3

Effective July 2023

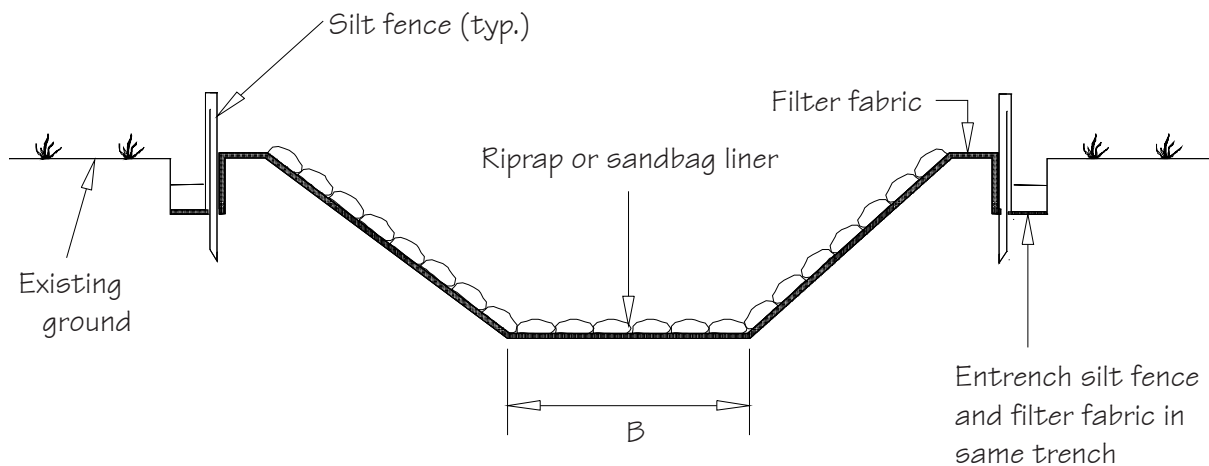
Standard Detail & Specifications

Stream Diversion Channel



Section A-A (Low velocity lining)

NOTE: Channel bottom width (B) to be 6' min. or width of exist. stream, which ever is less.



Section A-A (High velocity lining)

DATA

Channel bottom width (B)
Lining specification

<p>Source:</p> <p style="text-align: center;">Adapted from VA ESC Handbook</p>	<p>Symbol:</p> <div style="text-align: center; border: 2px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center; font-weight: bold; font-size: 1.2em;">SD</div>	<p>Detail No.</p> <p style="text-align: center;">DE-ESC-3.5.2.3 Sheet 2 of 3 Effective July 2023</p>
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Standard Detail & Specifications

Stream Diversion Channel

Construction Notes:

1. Diversion channel shall be operational prior to any in-stream construction.
2. Minimum width of bottom shall be 6' or equal to the bottom width of the existing streambed, whichever is less.
3. Maximum steepness of sideslopes shall be 2:1. Depth and grade may be variable, depending on site conditions, but shall be sufficient to ensure continuous flow of water in the diversion.
4. Channel lining shall be as specified and installed in accordance with the appropriate detail. Liners shall be secured at the upstream and downstream ends with riprap or other non-erodible material which will allow normal flow of the stream. This material shall not have soil mixed in. Additional material may be placed along the length of the diversion, as needed, to secure the liner.
5. If a single or continuous liner is not available or is impractical, upstream sections shall overlap downstream sections by a min. of 18".
6. Liner shall be entrenched at the top of the slope or slope break as shown in the detail. Silt fence or other perimeter control shall be provided unless the liner is extended far enough to prevent sediment from reaching the stream.
7. Liners shall be secured to the side slopes of the diversion channel using staples and patterns similar to those used for erosion control matting; wooden stakes shall not be used for this purpose.
8. Stream flow shall be diverted away from the work area in the original streambed using non-erodible, impervious materials such as riprap with geotextile, jersey barriers, sandbags, wood planking, sheet pile, etc. These materials shall be placed so as to prevent or reduce water backing up into the construction area.
9. Water in the construction area shall be pumped to an approved dewatering practice.
10. Once in-stream construction has been completed and all disturbed areas stabilized, the downstream flow barrier in the original stream shall be removed first. The upstream flow barrier shall then be removed and the material placed in the upstream end of the diversion, thus redirecting flow back to the original stream channel. The diversion shall then be sealed at the downstream end.
11. Once the diversion has been sealed at both ends, backfilling of the diversion channel may begin. Liner material, if used, shall be buried or removed and properly disposed of in accordance with the job specifications.
12. All disturbed areas shall be stabilized in accordance with the approved plan.

Source:

Adapted from
VA ESC Handbook

Symbol:



Detail No.

DE-ESC-3.5.2.3

Sheet 3 of 3

Effective July 2023