

# Notes to the Designer

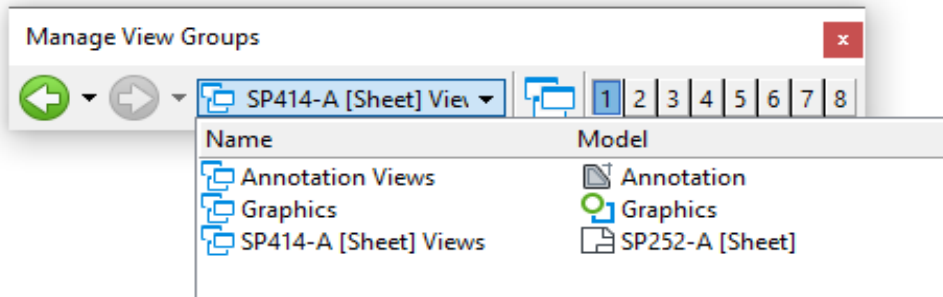
Updated June 2024

## Slope Drain

**NOTE: DO NOT USE THIS DRAWING IF PAYING BY THE LPSM.** This drawing should only be included in the plan set if items are being paid for separately.

### General Information

- Printing should be done from the **[Sheet]** View model



### - Appropriate Applications

A temporary slope drain is a flexible conduit for stormwater that extends the length of a disturbed slope to divert the flow and serve as a temporary outlet. Temporary slope drains are used on disturbed slopes until permanent drainage structures (i.e. riprap rundowns and outlets to paved waterways) are installed and until slopes are permanently stabilized.

### - Limitations

- Area drained by a temporary slope drain is 5 acres or less
- If larger culvert is required to accommodate higher flows, need to revise Detail to fit project-specific conditions

### - Layout Guidance.

Show locations of slope drains in the erosion and sediment control drawings

### Applicable SCRs

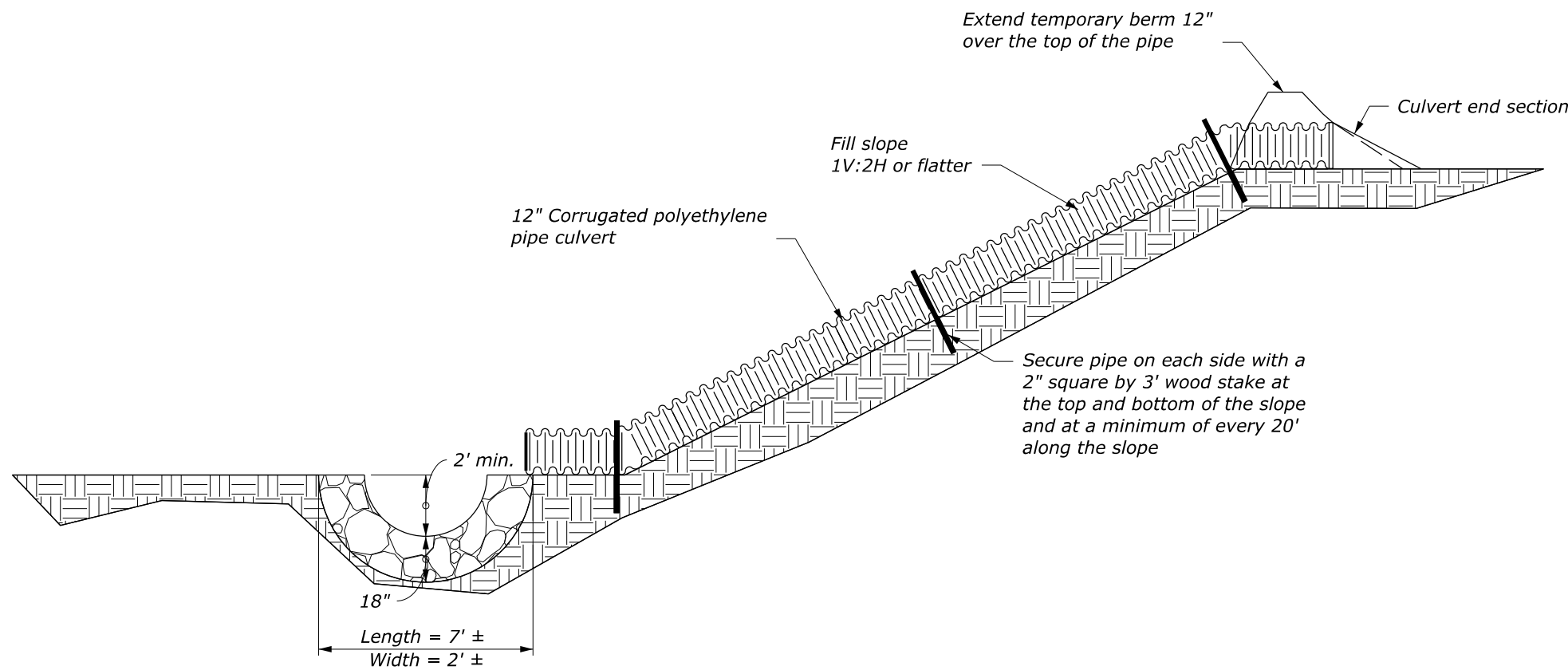
- None

### Typical Pay Item Used

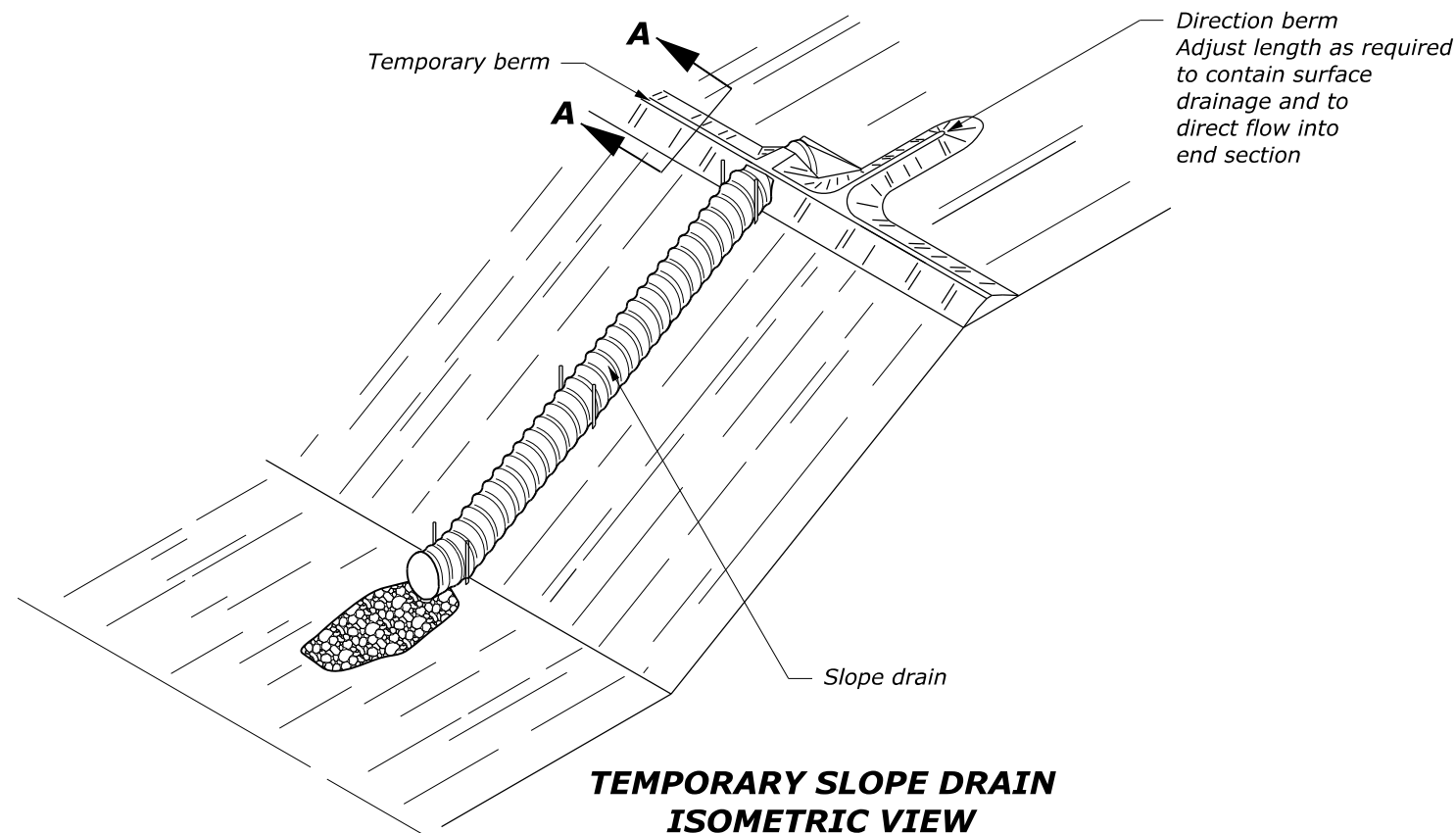
- 15705-0300 Soil erosion control, slope drains [LNFT]

### Updates

- **October 2020**
  - Updated for OpenRoads Designer
- **June 2024**
  - Updated for FP24



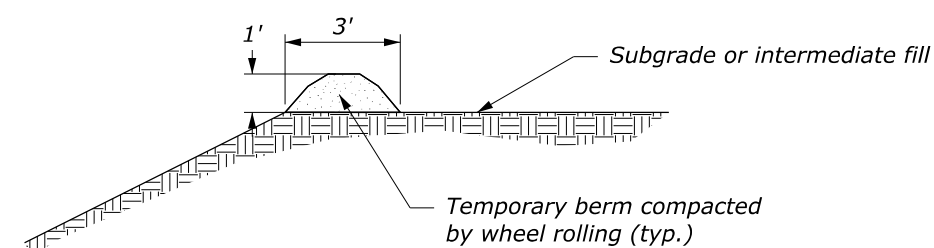
**TEMPORARY SLOPE DRAIN**



**TEMPORARY SLOPE DRAIN ISOMETRIC VIEW**

**NOTE:**

1. Use temporary slope drains as the embankment is constructed. Use slope drains until the slopes are permanently stabilized.
2. Compact the ridge of existing soil to provide a berm that diverts storm runoff from recently constructed slopes. Repair all erosion of the berm immediately.
3. Compact the soil surface and berms around the entrance to the pipe end section to prevent water from undermining the pipe and eroding the slope. Repair all erosion around the inlet, outlet, and slope immediately.
4. Secure the pipe to the ground every 20 feet to prevent pipe movement and subsequent failures during storm events.
5. Extend the slope drain as required to coincide with the height of the embankment.
6. Extend the drain a minimum of 3 feet beyond the toe of the slope and provide outlet protection.
7. Maintain slope drains until slopes have been permanently stabilized.
8. Alternate pipe materials installed according to the manufacturer's recommendations may be approved.



Section A-A

**TEMPORARY BERM**

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	CFLHD DETAIL C157-57
<b>SLOPE DRAIN</b>	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE
	DRAFT: 06/2024