PURE WATER PARTNERS

Holiday Farm Fire Erosion Protection

Sediment Fences

What are they?

Sediment fences are made of 4' woven geotextile fabric with wooden or metal stakes. They are available commercially as a pre-assembled product or can be made with materials from hardware stores. Sediment fences effectively trap sediment by ponding water to settle sediment when installed correctly (**see back - Figure 1**).

Where should they be used?

Sediment fences are not intended to be installed in areas with concentrated surface flow like creek beds or ditches. Instead, they should be implemented in areas where runoff is more dispersed over a broad, flat area. Sediment fences should be used in areas with low to moderate slopes. Sediment fences should be installed parallel to the contour of the slope and anchored into the soil **(Photo 1).**

Sediment fences come in two basic types:

• Non-pocketed sediment fence can be installed without trenching, by laying the bottom 6" of fabric flat on the soil, uphill, and piling soil/rock on the flap of fabric to create the "dam" effect. This is can be done on rocky soils and steep slopes.

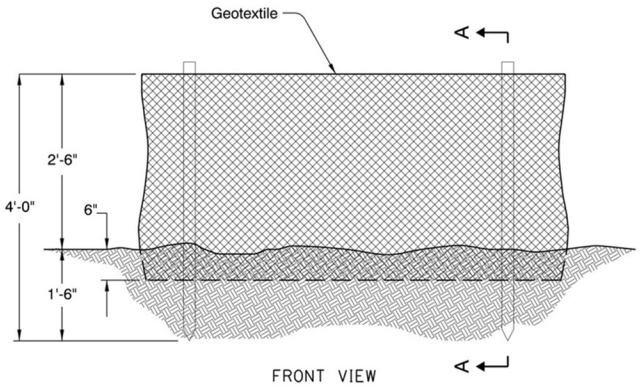
• Pocketed sediment fences have sewn-in pockets for the wood stakes, and require that the bottom 6" of the fence be buried in the soil to prevent surface flow from running under them - typically by trenching. This can be a challenge on steep slopes, or in rocky soils.

Photo 1. Sediment fence installation

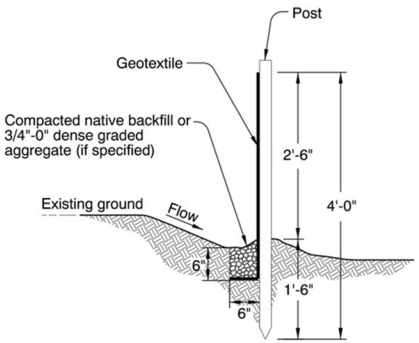
Resources:

The Pure Water Partners (PWP) program is working to place sediment fences on select sites as part of an integrated approached to erosion management on private properties impacted by the Holiday Farm Fire. If you are interested in assistance with erosion control and riparian restoration, please sign up for a PWP site assessment by visiting ***www.purewaterpartners.org.***

Figure 1. Sediment Fence Installation Specs

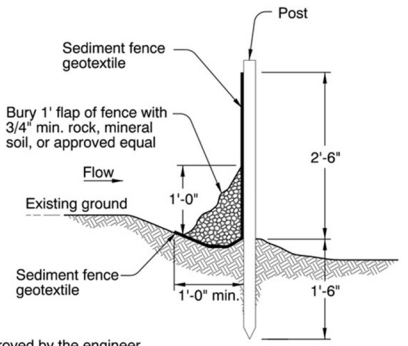


FRONT VIEW



SECTION A-A

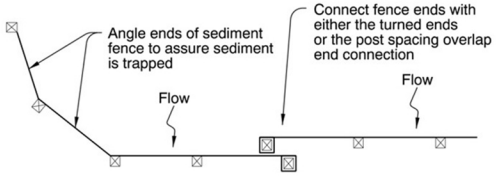
SEDIMENT FENCE AND GEOTEXTILE BURY DETAIL - TYPE 1



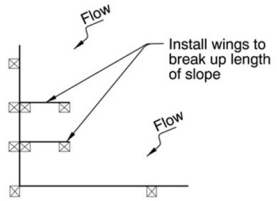
NOTES:

1. Use must be approved by the engineer.
2. Not approved for use with sediment fencing with sewn-in post pockets.

SEDIMENT ALTERNATE FENCE W/O TRENCHING - TYPE 2



PLAN VIEW



TERMINATION AT CORNER OR PROPERTY LINE

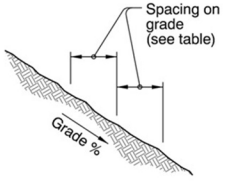


TABLE 1

FENCE SPACING FOR GENERAL APPLICATION

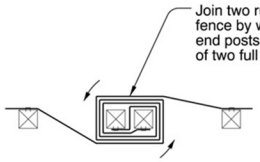
INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS	
GRADE	MAXIMUM SPACING ON GRADE
Grade < 10%	300'
10% ≤ Grade < 15%	150'
15% ≤ Grade < 20%	100'
20% ≤ Grade < 30%	50'
30% ≤ Grade	25'

TABLE 2

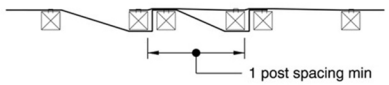
POST SPACING	
6'	Sediment Fence with Geotextile elongation less than 50%
4'	Sediment Fence with Geotextile elongation 50% or more

NOTES:

1. Use 2" X 2" wood fence posts.
2. Posts to be installed on downhill side of sediment fence. Position posts to prevent separation from geotextile.
3. Compact filter fabric trench backfill and soil on uphill side of fence.
4. Locate fence no closer than three feet to the toe of a slope.
5. Wing spacing shall comply with table 1.



TURNED ENDS CONNECTION



POST SPACING OVERLAP CONNECTION

GEOTEXTILE END CONNECTIONS

CALC. BOOK NO. N/A

BASELINE REPORT DATE 01-JAN-2013

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS

SEDIMENT FENCE

2015

DATE	REVISION DESCRIPTION

RD1040

RD1040