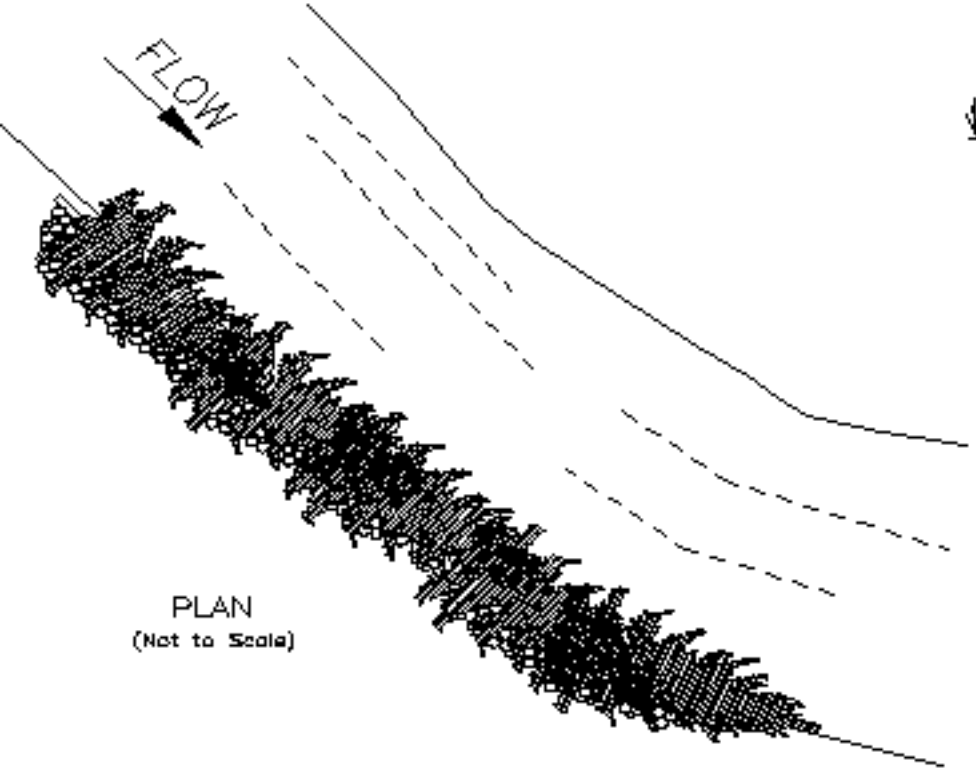
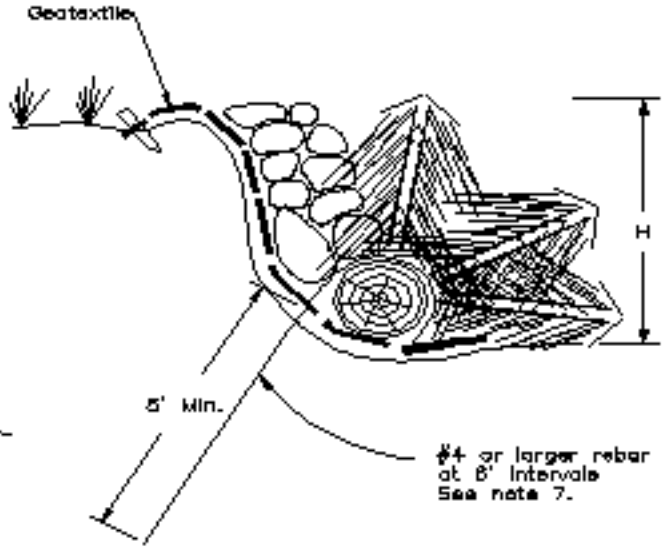


PLAN
(Not to Scale)



TYPICAL SECTION
(Not to Scale)

Notes:

1. Spruce trees can be used to protect streambanks and provide fish habitat.
2. Place geotextile on bank face. Secure top to upper bank.
3. Place rock and gravel fill as necessary to support trunk.
4. Use fresh, brushy, spruce trees.
5. Trim branches from one side of spruce tree to provide for snug fit along bank.
6. Install trees parallel to stream bank and overlap 1/3 to 1/2 of length in shingle fashion.
7. Anchor spruce tree firmly with iron bars driven into bank and bent over trunk. Each anchor bar should provide a minimum pull out resistance of 150 lbs or install bars at proportionately closer spacing.

STREAMBANK PROTECTION	
SPRUCE TREE REVETMENT	
3'–4' Bank	
NATURAL RESOURCES CONSERVATION SERVICE WNTC, PORTLAND, OREGON	