3.18 STREAMBANK PROTECTION

Figure 3.31. Streambank protection (Source: International Erosion Control Association)

Overview

Description: A permanent structural control measure to stabilize an eroding streambank.

Problem identification: Special erosion control measures are needed where stream velocities exceed six fps.

Design purpose: To stabilize eroding streambanks permanently.

Associated practices: Streambank protection is often necessary when flow velocities are more than six fps or where vegetative protection is not appropriate. Excessive runoff or construction activities may cause an erosion problem to develop.

Installation: See the Iowa DNR Streambank Erosion Control Manual for details on installing bioengineering or structural methods of control.

Maintenance/inspection: Inspect the stabilized streambank sections after every high-water event. Make any needed repairs immediately to prevent any further damage to the streambank.

Design life: Permanent.

Estimated cost: Costs will vary with method used (from bioengineering to structural sections).
Figure 3.32. Streambank protection measures (Source: Department of Civil, Construction, and Environmental Engineering, Iowa State University)