Iowa Department of Natural Resources
Flood Plain Management Program

Stream Bank Protection Supplemental Information

To obtain a DNR Flood Plain Permit for your project, you must submit a Joint Application and this form to the DNR.

Check each box to confirm use of each guideline.

☐ The stream bank is prepared by sloping or terracing prior to the placement of gravel bedding and/or fabric and revetment.

Describe how you plan to establish slope and the method of installation:

☐ The disposal of the spoil material or placement of revetment directly on top of the stream bank in the form of a levee or dike is prohibited. Any spoil material resulting from stream bank shaping is disposed outside the flood plain. In some instances you may be allowed to spread the spoil less than six inches thick across the flood plan and away from the top of bank. The spoil must not be placed in a floodway area as delineated in a flood insurance study.

☐ Generally accepted revetment material includes field stone, quarry rock and broken concrete. When using broken concrete, all exposed reinforcing steel is removed or cut flush with the surface of the concrete prior to placement. Any concrete slabs larger than three feet across are broken into smaller pieces prior to placement. The use of asphalt or other solid waste is prohibited. The thickness of a revetment blanket does not exceed 3 feet.

☐ The revetment material consists of a mixture of sizes so as to form a dense, interlocking blanket.

What is the thickness of your revetment blanket? _____ ft.

☐ The revetment material is placed on the existing or prepared stream bank with a finished slope of no steeper than 2.0 feet horizontal to 1 foot vertical (2.0H:1.0V).

What is the finished slope of your stream bank? _____ ft. Horizontal _____ ft. Vertical

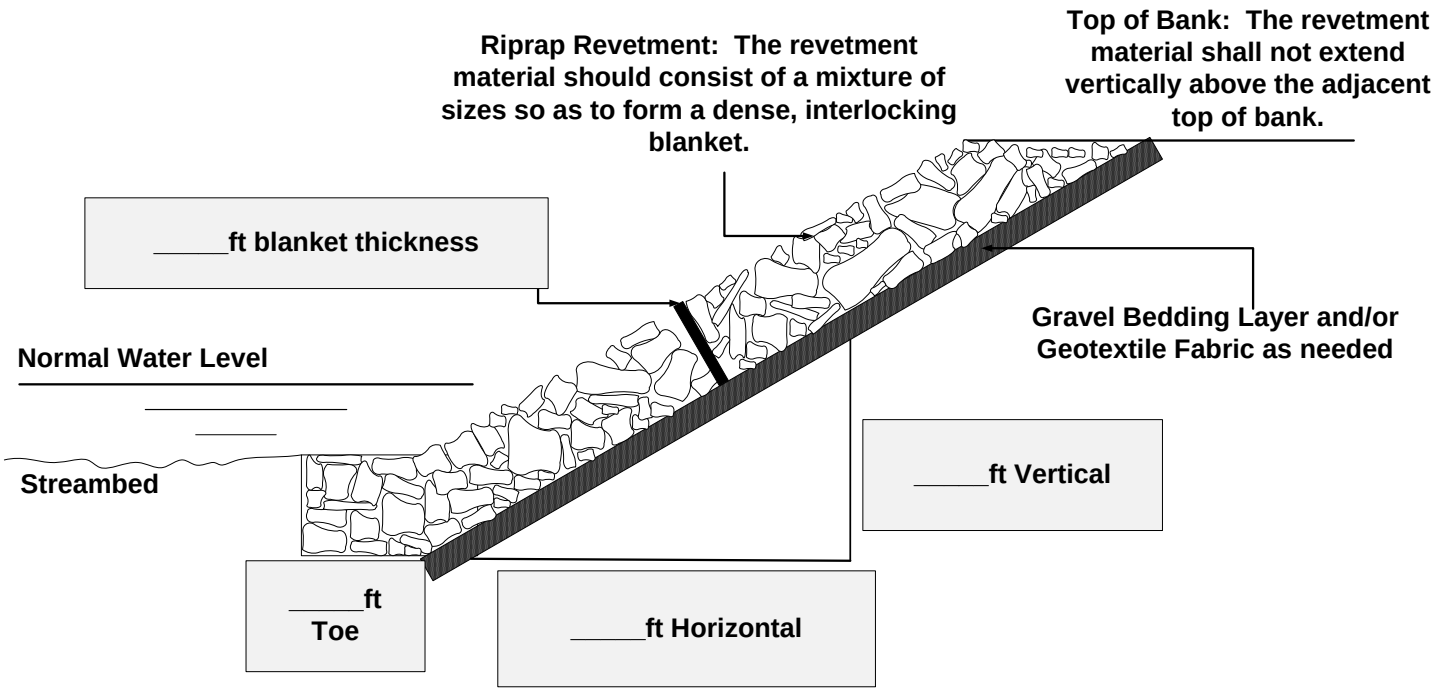
How wide is the toe of your project? _____ ft.

☐ The revetment material shall be placed so that the resulting channel cross section is not more restrictive than the adjacent natural upstream and downstream channel cross section.

☐ The revetment material shall not extend vertically above the adjacent top of bank.

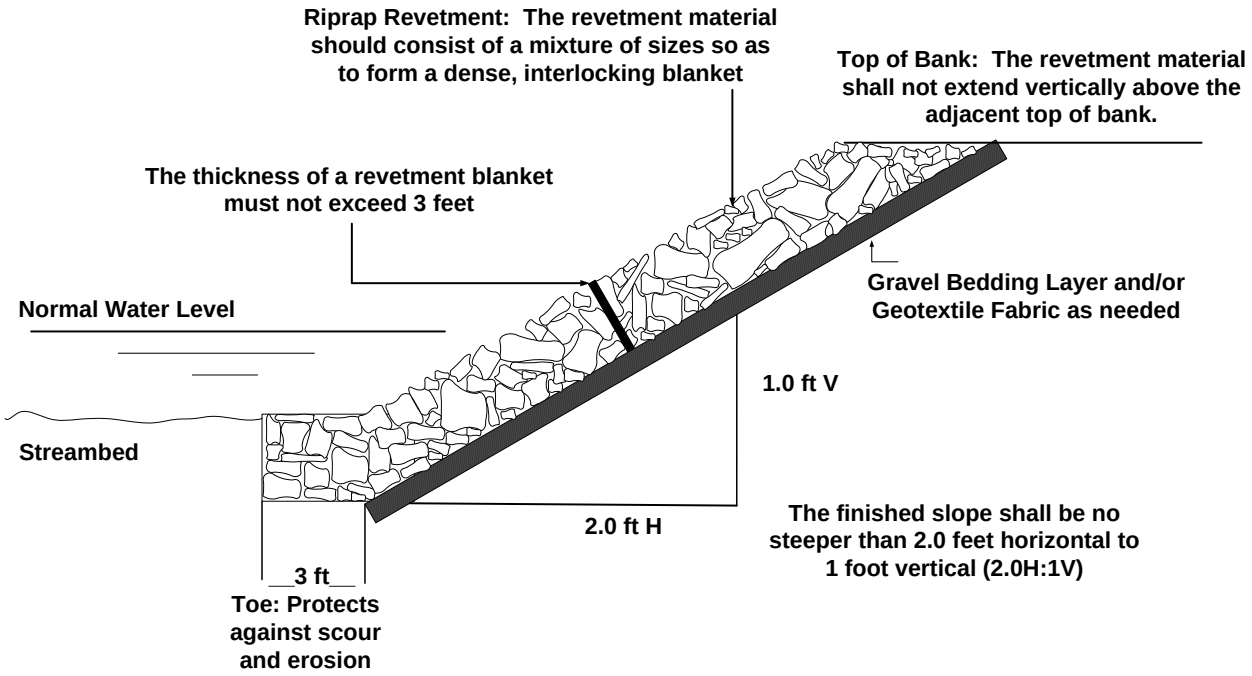
Aerial Photos can be found at https://www.google.com/maps http://ortho.gis.iastate.edu/ http://iowaassessors.com/

MY Stream Bank Stabilization Project



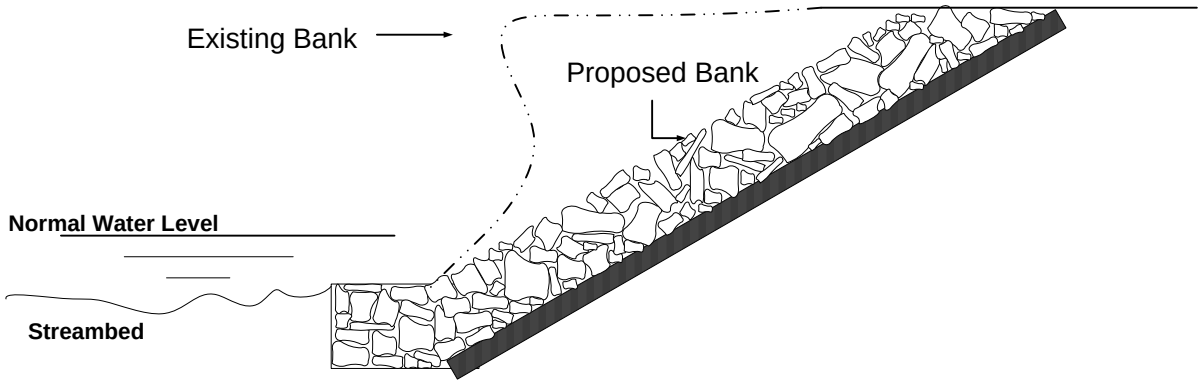
Provide a sketch of your proposed project that shows the existing bank and the proposed bank. Riprap beyond the line of the existing bank requires additional calculations and/or hydraulic modeling. See example drawings on the next page.

Example Stream Bank Stabilization Project

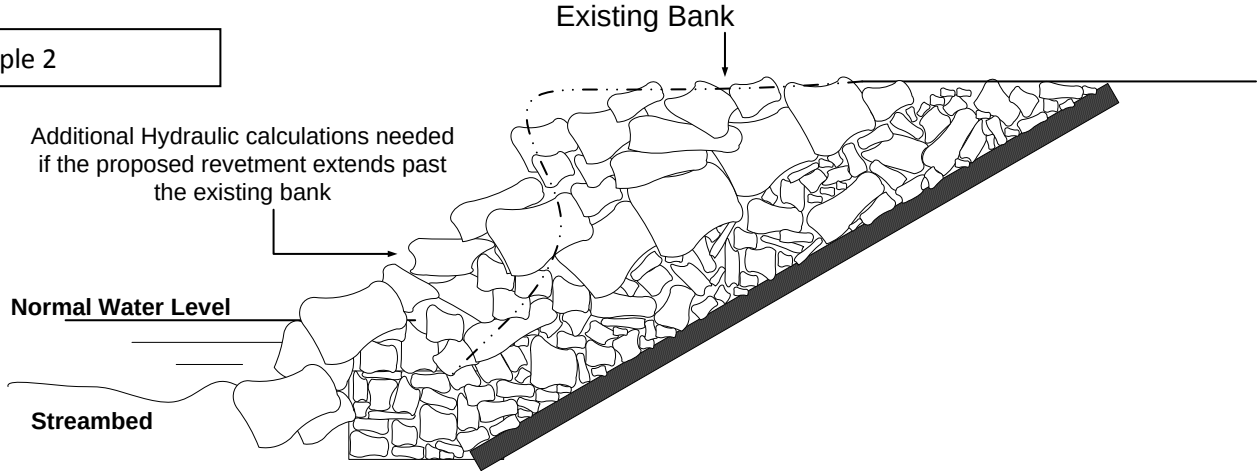


Sketch of proposed project that shows existing bank and proposed bank.

Example 1



Example 2



Example Aerial Photo Showing Location and Project Scope

Example Aerial using https://www.google.com/maps/ (Right click on map to measure distance)