

Area 1 required minimal restoration which involved relocating a mid-channel bar to the left bank. A bar is an area of sediment deposition. The banks on this part of the stream had been destabilized by erosion. Several dead/dying trees were removed and their stumps and roots were used to stabilize the stream bank.

After Construction & Stabilization, June 2020



At the beginning of construction, March 2020



Area 2 included regrading of a severely eroded stream bank and placement of a natural fiber roll reinforcement at the bottom of the bank slope. Heavily eroded stream banks with vertical faces will continue to erode, while properly graded stream banks are more resistant to erosion.

After Construction & Stabilization, June 2020



At the beginning of construction and just after tree removal, March 2020



WSSI N. Royston

Tusico Branch
16 Mar 2020 14:30:00

WSSI N. Royston

Tusico Branch
16 Mar 2020 14:06:23

Area 2 – During Construction

Initial regrading of the bank



Placement of natural fiber roll



Placement of natural fiber stabilization blanket



Restoration of the surrounding area.



Stream levels following heavy rains.
Erosion is being controlled.



Area 3 included regrading and stabilizing a second area where streambanks had become severely eroded.

After Construction & Stabilization, June 2020



Initial conditions, April 2020



Area 3 – During Construction

Initial grading



Initial Grading



Placement of natural fiber roll and grading.



Placement of stabilization matting



Grading and stabilization matting installed, restoration of surrounding work areas complete.



Area 4, the most upstream end of this phase, involved construction of a stacked boulder wall with five log drops and stabilization of areas where storm sewers outfall to the stream. The boulder wall is a non-erodible surface and will help to prevent future erosion of the stream into private properties.

After Construction, Stabilization In-Progress, June 2020

Stacked boulder wall is non-erodible. Cobble stream bed provides for aquatic habitats and additional erosion protection.



One of five log drops, which create areas of pooling and slow flowing water, which provide improved aquatic habitats.



Stabilization of an existing storm outfall



Overall view of Area 4



Area 4 – Initial Conditions, April/May 2020

Failing storm outfall and eroding streambanks.



Removal of invasive bamboo to access work area.



Following invasive bamboo removal. Access established.



Area 4 – During Construction, May/June 2020

Stacked boulder wall construction was started on the west/upstream end of Area 4



Each piece needs to be shaped to fit closely with adjacent sections. A skilled operator is necessary to place these boulders.

One of five log drops being installed. The logs are reused trees that were removed to allow for construction.



Area 4 – During Construction, May/June 2020, continued

Construction of stone wall proceeding downstream



Installation of a log drop with construction of the boulder wall



Completed sections of the wall can be seen in the background, with areas to be constructed in the foreground.



After construction of the wall and stabilization of the work area.

