

**CONSTRUCTION REPORT - URGIEL UPSTREAM
FERC PROJECT # 1889/2485
TURNERS FALLS / NORTHFIELD MOUNTAIN PROJECTS
BIOENGINEERING BANK AND SLOPE STABILIZATION
CONNECTICUT RIVER, MASSACHUSETTS**

DECEMBER 12, 2001

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Progress of Work:

Since the last report submitted submitted on November 15, 2001, considerable progress in bank stabilization work has taken place, in part due to the very favorable late fall weather conditions. All grading on the banks has been completed and the stone rip-rap toe of slope has been set in place. Loam topsoil has been placed on the slopes, and the slopes have been seeded, fertilized and covered with an erosion control blanket. At the present time, all work has been completed with the exception of several additional rolls of blanket to be placed on the slopes (back-ordered item), and the continued clean-up/site de-mobilization.

Status of Construction

The temporary access road to the site has been removed, and the areas and staging sites are presently being restored. There remain several stockpiles of loam which will be spread as soon as weather conditions allow (these soil stockpiles are presently covered with a layer of snow).

All machine work on the river bank has been completed as of this date. Only hand work (seeding/fertilizing/erosion control work) needs to be completed.

No trees or shrubs are proposed to be planted until the Spring of 2002.

Construction Difficulties

There have been no significant construction difficulties experienced to date.

Contract Status

The construction contractor who has performed the riverbank erosion control work at the Urgiel Upstream site is Davenport Trucking of Greenfield, Massachusetts. No other subcontractors other than material suppliers have been used as of this date.

Project supervision is being conducted by the NGS project engineer Mr. Patrick Moriarty, and by Michael Marcus, of New England Environmental, Inc., as the project designer.

The major pieces of construction equipment used by the contractor for this project have included:

- Small Trackhoe Excavator, John Deere, 690 ELC
- Large Trackhoe Excavator, Cat 330BL
- Articulated 14 cubic yard dump truck, Volvo A30C
- Front end bucket loader, Komatsu WA320

Reservoir Filling

Not applicable to this project.

Foundation

Not applicable to this project.

Sources of Major Construction Materials

Angular Field Stone: Lane Construction, Northfield, Massachusetts (local quarry)

Filter Fabric: Redhead Supplies, Hatfield, MA, A.H. Harris, Portsmouth, NH

North American Green Erosion Control Blanket 70% straw, 30% coconut in biodegradable netting. (BN 150)

No other materials have been used to date.

Materials Testing and Results

No material testing was required during this reporting period.

Instrumentation

Not Applicable to this project

Erosion Control and Other Environmental Measures

The turbidity curtain installed during bank construction has been removed from the River and from the site. All exposed bank (except for one small area) have been covered with the erosion control blanket to prevent erosion during the winter months. The remaining area will be covered within the next several days when back-ordered materials arrive. A low berm has been constructed at the top of the bank to prevent overland runoff and gullyng of the banks. The

contractor has done an excellent job of controlling sediment on the site. There have been no erosion breaches and no off-site sedimentation problems during construction.

Schedule

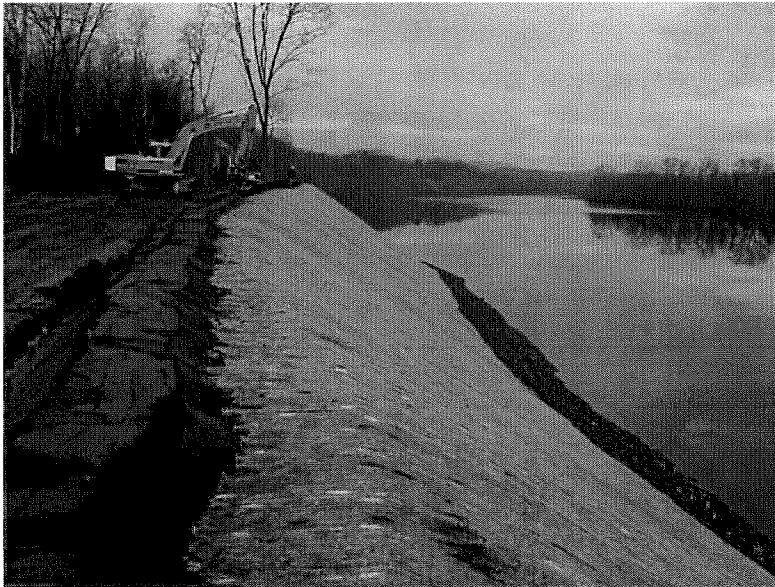
As of this date, all machine work on the river bank is completed. Several hours of hand work will be required to install the last rolls of erosion control blanket. At the present time the banks are covered with snow (see attached photographs), and therefore are stable and not erosion prone. No additional work on the banks will take place until Spring, 2002 to install trees and shrubs. Installation of the specified plant materials will be conducted in May and June, 2002.

At present, the contractors are de-mobilizing, removing materials and equipment from the site, and restoring the access roads.

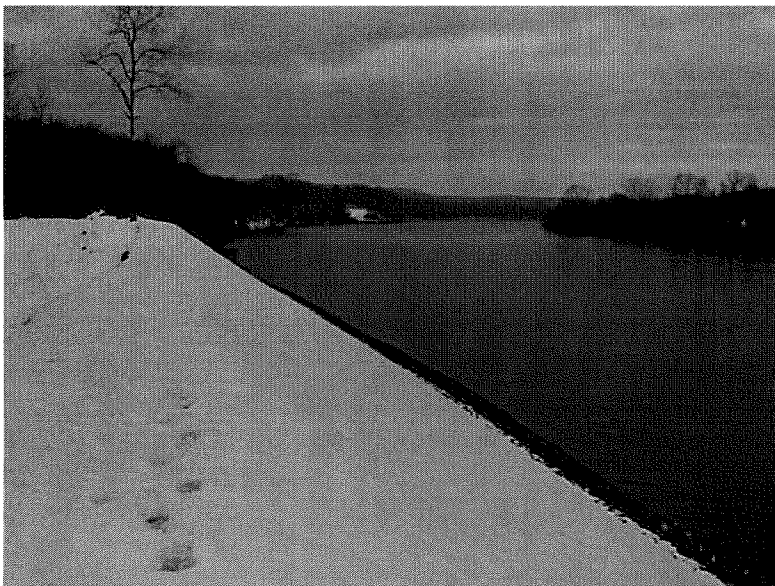
Then next construction report will be submitted in the Spring, 2002 once the site work resumes.

PROJECT PHOTOGRAPHS

**Urgiel Upstream, Connecticut River
December 12, 2001**



December 5, 2001. After the placement of the stone toe of slope, the banks were graded to 1.5:1, covered with 6 inches of clean loam, fertilized, seeded with a native seed mix, and covered with a biodegradable erosion control blanket.



December 12, 2001. The site is stable after a recent snow storm. All machine work on the river banks has been completed. Several hours of hand work remains to install additional erosion control blankets. No additional work will take place until the Spring of 2002 when trees and shrubs are installed.