

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

DAVID A. COLE
COMMISSIONER

October 28, 2010 Subject: **Norway** 

Federal Project No: STP-A002(000)X

State Pin No: 010020.00 Amendment No. 1

Dear Sir/Ms:

Make the following change to the bid Document:

In the Bid Book (pages 85 and 86), **REMOVE** the "SPECIAL PROVISION 610, Stream Channel Reconstruction", 2 pages undated and **REPLACE** with the attached new "SPECIAL PROVISION 610, Stream Channel Reconstruction", 2 pages undated.

Consider this change and information prior to submitting your bid on November 3, 2010.

Sincerely,

FOL Scott Bickford

Contracts & Specifications Engineer

## SPECIAL PROVISION 610 Stream Channel Reconstruction

<u>610.01 Description</u> This work shall consist of placing rocks and gravel within a excavated channel to reproduce the function of natural streambed substrate and morphology and sinuosity, including riffles, pools, step pools, and cascades, at the direction of the Resident or his/her designee.

### 610.02 Materials

Materials shall conform to the following requirements. For environmental permit compliance issues, any deviation shall be pre-approved through qualified MaineDOT Environmental staff prior to construction.

Stream Channel Rocks shall consist of sound durable rock which will not disintegrate by exposure to water or weather. Either field stone or bank run may be used, similar to native material in existing stream, but source shall be preapproved by the Resident or his/her designee. No un-hewn quarry stone or round boulders or cobbles will be allowed; on-site sources are preferred. Angular (blasted ledge) is not acceptable. The gradation shall conform to the following table:

Sieve Designation		
Metric	US Customary	Percent by Weight Passing Square Mesh Sieves
600 mm	24 in	100
450 mm	18 in	40 - 50
300 mm	12 in	30 - 40
150 mm	6 in	5 - 10

Stream Channel Gravel shall consist of hard, durable rock, shall be sub-angular in shape (bank run gravel is preferred) and shall conform to the following table:

Sieve Designation		
Metric	US Customary	Percent by Weight Passing Square Mesh Sieves
63 mm	2 1/2 in.	100
25 mm	1 in.	40 - 50
9.5 mm	3/8 in.	10 - 20
2.00 mm	No. 10	0 - 5

#### 610.31 Construction

- 1) All activities shall be done in compliance with Standard Specification 656, Temporary Soil Erosion and Water Pollution Control and described in the Contractors plan.
- 2) Beginning on the downstream end of the construction, the channel shall be excavated and shaped to a depth and width at below and beyond final grade as designated by the Resident or his/her designee.
- 3) Stream Channel Rock and Stream Channel gravel shall be machine placed as directed. Minimal hand placement of stone may be required. Materials shall be compacted to the approximate density of the surrounding undisturbed material.
- 4) No material shall be dropped from a distance greater than one meter in order to minimize segregation.
- 5) Stream Channel Gravel shall be placed throughout the length of the excavated channel with Stream Channel Rocks placed at designated locations to simulate riffle/pool and step pool channel structure. The Stream Channel Gravel shall also be interspersed within the Stream Channel Rocks to minimize piping of channel water. Woody debris, if readily available, may be added to replicate natural stream processes at the direction of the Resident or his/her designee.

#### 610.41 Method of Measurement

Stream Channel Rock and Stream Channel Gravel will be measured in place by the cubic meter.

#### 610.51 Basis of Payment

The accepted quantities of Stream Channel Rock and Stream Channel Gravel will be paid for at the contract unit price per cubic meter before placement. Costs of all required excavation shall be incidental to 610 items.

Pay Item	Pay Unit
610.210 Stream Channel Rock 610.211 Stream Channel Gravel	cubic meter (cubic yard) cubic meter (cubic yard)