

ITEM 09616.14 M - ROOTWAD REVETMENT

DESCRIPTION

Rootwad revetment shall consist of a footer log, rootwad (tree stump) and boulders placed in and on streambanks to stabilize streambanks and create instream structures for improved fish rearing and spawning habitats. Under this item the Contractor shall furnish and install rootwad revetments in accordance with the contract documents.

MATERIALS

Footer logs and rootwads shall be structurally sound conifers or other species approved by the Engineer prior to installation on the site.

The root wad shall have 1.5 to 2 m of trunk length, a minimum of 130 mm in diameter and a root bundle with numerous root protrusions attached. Logs that are crooked and with irregular shape are preferred. Loose soil shall be removed to expose as many roots as possible.

Footer logs shall be the same diameter as the rootwad and a length of 500 to 750 mm.

Anchoring system shall be light stone a minimum of 1 to 1.5 times the size of the revetment log diameter, approximately 130 to 200 mm in the greatest dimension weighing 50 kg and with an irregular surface. Alternative anchoring systems shall be approved by the Engineer prior to installation.

CONSTRUCTION DETAILS

Excavate the footer log at the slope or stream base to a depth of one half the footer log diameter. Install the footer log at a slight angle upstream into the direction of the stream flow. Each end of the footer log shall be anchored with at least three boulders. Trench and place rootwads into the stream bank so that the roots are flush with the stream bed and at a slight angle facing upstream and the trunk perpendicular to the footer log. The rootwad shall be placed in between the anchors. Backfill shall be placed around the rootwad, boulders, and to match the existing slope. The backfill shall be tamped sufficiently to secure the rootwad to the stream bank.

METHOD OF MEASUREMENT

The quantity of rootwads will be measured as the number of rootwads revetments satisfactorily installed and accepted.

BASIS OF PAYMENT

The unit price per rootwad revetment shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work including excavation.

Backfill material used shall be paid for under Item "Select Clean Fill".