

SECTION 611 - HAND-LAID RIPRAP

611.01 Description. This work includes constructing hand-laid riprap for slope protection according to the contract. *

611.02 Materials. The stone for riprap shall be sound, durable, one-man stone. The stone shall be not less than three (3) inches thick in its least dimension nor containing less than half (1/2) cubic foot in volume. The Contractor shall not use stones that do not extend through the revetment. *

611.03 Construction Requirements. The slopes protected shall not be steeper than the angle of repose of the material. The Contractor shall make sufficient excavation to expose a foundation bed. The Contractor shall place the stones with their beds at right angles to the slope. The Contractor shall use the larger stones on the bottom course and the smaller stones at the top. The Contractor shall lay the stones in close contact to break joints. The Contractor shall fill the spaces between the larger stones with spalls securely rammed into place. The finished work shall present an even, tight and plain surface varying not more than three (3) inches from the required cross section. *

611.04 Method of Measurement. The Engineer will measure hand-laid riraprs by the cubic yard or square yard as specified in the proposal. *

611.05 Basis of Payment. The Engineer will pay for the accepted quantities of hand-laid riprap at the contract unit price per cubic yard or square yard as specified in the proposal. *

The price shall be full compensation excavating, backfilling, placing the stones, filling the spaces with spalls, furnishing labors, materials, equipment, tools, and other incidentals necessary to complete the work. *

The Engineer will make payment under: *

Pay Item	Pay Unit
Hand-Laid Riprap	Cubic Yard
Hand-Laid Riprap	Square Yard