

PART 1 - GENERAL

1.1 DESCRIPTION

- .1 This section specifies requirements for supply and placing rock scour protection for erosion protection at locations and to dimensions indicated on drawings or designated by Departmental Representative.

1.2 RELATED SECTIONS

- .1 Section 31 36 19 – Rock Mattress.
- .2 Section 31 32 21 - Geotextiles.

1.3 MEASUREMENT FOR PAYMENT

- .1 **Rock Scour Protection:** Supply and placement of rock scour protection, including the cost of all plant, labour, equipment, and materials required to complete the work as specified, will be measured by the cubic meter (CMPM). The volume of material will be determined in place from measurements taken prior to and at completion of the work.

PART 2 - PRODUCTS

2.1 ROCK SCOUR PROTECTION

- .1 Hard, dense with relative density (specific gravity) not less than 2.65, durable quarry stone, free from seams, cracks or other structural defects.
- .2 Stones to be used as rock scour protection will weigh 200kg as shown on the drawings.
- .3 Stones to be used as slope protection near Crib #1 will weigh 100 kg as shown on the drawings.
- .4 Field stones of appropriate sizes are acceptable.
- .5 Absorption, 1.5 to 2.0% maximum as determined by ASTM C127 test procedure.
- .6 Durability, less than 35% abrasion Wear, ASTM C535 test procedure.
- .7 Sulphate Soundness Determination maximum 12% by ASTM C88.

PART 3 - EXECUTION

3.1 PLACING

- .1 Place rock scour protection as directed to thickness and details indicated on drawings or as designated by Departmental Representative.
- .2 Where stones are to be placed on slopes, ensure that fill is placed to the slopes as indicated on the drawings.
- .3 Fine grade area to be protected to uniform even surface. Fill depressions with suitable material and compact to provide firm bed.
- .4 Place stones in manner approved by Departmental Representative to secure surface and a stable mass. Place larger stones at bottom of slopes.

3.2 TESTING

- .1 Submit rock materials samples for testing to testing laboratory approved by the Departmental Representative prior to commencement of quarry production. Allow sufficient lead time to perform and report tests before start of production.
- .2 Contractor will be responsible for procurement of samples for testing and arrange and pay for shipment of samples to testing laboratory.
- .3 Departmental Representative will pay for costs associated with laboratory testing of proposed rock materials.
- .4 Only materials satisfactorily tested and approved by the Departmental Representative will be quarried and placed in the work.