

PART 1 - GENERAL

- 1.1 DESCRIPTION .1 This section specifies requirements for repairs to the rubblemound breakwater.
- .2 Repairs to the Approach will consist of, but not necessary be limited to, the following:
- .1 Supply and installation of new armour stone as required to repair the structure to the slopes, lines and grades indicated on the drawings.
- 1.2 RELATED SECTIONS .1 Section 01 33 00 - Submittal Procedures.
- 1.3 REFERENCES .1 American Society for Testing and Materials (ASTM)
- .2 Canadian General Standards Board (CGSB)
- 1.4 SUBMITTALS .1 Samples
- .1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Inform Departmental Representative of proposed source of materials and provide access for sampling at least two (2) weeks prior to commencing Work.
- .3 Submit 20 to 70 kg samples representative of quarry, minimum two (2) weeks prior to beginning Work.
- .4 Ship samples prepaid to Testing Facility as designated by Departmental Representative for approval.
- 1.5 INTERFERENCE TO NAVIGATION .1 Be familiar with vessel movements and fishery activities in area affected by construction operations.
- .2 Plan and execute work, in a manner that will not impede navigation, including movement of vessels at the facility.
- .3 Plan and execute work, in a manner that will not unnecessarily interfere with fishing

1.5 INTERFERENCE TO.3 (Cont'd)
NAVIGATION
(Cont'd)

- .4 Departmental Representative will not be responsible for loss of time, equipment, material or any other charges related to Contractor's operations.

1.6 REGULATORY
REQUIREMENTS

- .1 Comply with municipal, provincial and national codes and regulations relating to project. Refer to the attachments.
- .2 Mark floating equipment with sound and light signals in accordance with Collision Regulations made pursuant to the Canada Shipping Act and Notice to Mariners.

1.7 MEASUREMENT
FOR PAYMENT

- .1 Armour Stone (2-4 tonne): Measured in cubic metres place measurement (CMPM) of material supplied and placed in the work within the limits specified on the drawings.
- .2 There will be no payment made for any material or stone placed beyond limits indicated on the drawings. The final contract grade must be within 200 mm of the specific elevation. Quantities will be based on a as-built survey. Any material placed outside the lines and grades as shown on the drawings will be not be measured for payment.
- .3 There will be no additional payment for delays resulting from fishing operations.
- .4 There will be no additional payment for delays caused by vessel traffic.
- .5 There will be no additional payment for downtime.
- .6 There will be no payment for replacement of any rock fill core, filter stone or armour stone that is washed out, removed, missing or deteriorated by weather or wave action during the course of the contract.
- .7 Contractor is to provide cross-sections to the Departmental Representative at five (5) metre stations to show that lines and grades

- 1.7 MEASUREMENT FOR PAYMENT (Cont'd)
- .7 (Cont'd)
have been achieved as shown on the drawings over each type of material. Measurement for payment for this will be considered incidental in the cost of the supply and installation of the materials. There will be no separate payment.
- .8 Mobilization/demobilization of equipment to be included in Lump Sum Amount of the contract and will not be measured for payment.
- .9 Construction and maintenance of access roads will not be measured for payment.

PART 2 - PRODUCTS

- 2.1 ARMOUR STONE
- .1 Material for armour stone to be blasted rock or field stones.
- .2 Stone sizes to be in either the range of 4 tonnes to 8 tonnes, or 8 tonnes to 10 tonnes well graded.
- .3 Greatest dimension of each stone not to exceed two (2) times least dimension.

PART 3 - EXECUTION

- 3.1 GENERAL
- .1 Contractors will only be permitted to work on the existing site as approved by the Departmental Representative.
- 3.2 PREPARATION
- .1 Construct and maintain access roads as required.
- 3.3 ARMOUR STONE
- .1 Place armour stone to lines, grades, dimensions, profiles and cross-sectional elements, indicated on the drawings.
- .2 Dumping of armour stone will not be permitted. Each stone will be lifted and individually placed.

3.3 ARMOUR STONE
(Cont'd)

- .3 Side slopes to be either 1.0 vertical to 1.5 horizontal unless otherwise indicated on the drawings.
- .4 Place armour stone to a total layer thickness as indicated on the drawings.
- .5 Choose stones and place them in such a way that the whole structure will be bonded and consolidated to as great an extent as nature or rock will allow. Rocks should vary in size so they don't create steep slopes when placing to the grade lines as indicated on the drawings.
- .6 Do not transport different categories of material in the same truckload. If rocks of markedly different sizes are present in the same load, Departmental Representative reserves the right to have each rock measured separately and sorted prior to installing in structure.
- .7 Contractor to provide cross-sections to the Departmental Representative at five (5) metre stations to show that lines and grades have been achieved as shown on the drawings. Measurement for payment for this work will be included in the cost of the supply and installing the above item.

3.4 ROCK MATERIAL
WASHED OUT OF WORK

- .1 Any material washed out of the Work or displaced beyond the contract limits will be replaced by the Contractor at no cost to Canada.
- .2 Should, during the progress of the Work, any rock material placed in the Work become located for any reason anywhere in the water within the harbour or channel so as to interfere, in the opinion of the Departmental Representative, with actual depths of water and/or impede navigation, it will be removed by the Contractor at no cost to Canada.

3.5 TOLERANCES

- .1 These tolerances are not to be considered pay limits but are specified to ensure contractor keeps within acceptable lines and grades.

- 3.5 TOLERANCES
(Cont'd)
- .2 Completed component layers to be within the following tolerances of lines and grades indicated:
- .1 Armour stone +/-300 mm.