

PART 1 - GENERAL

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| <u>1.1 DESCRIPTION</u> | .1 | This section specifies requirements for supply and placing stone rip-rap for erosion protection at locations and to dimensions indicated. |
| <u>1.2 RELATED SECTIONS</u> | .1 | Section 31 23 26 - Rock Fill, Class "A", and Class "B". |
| <u>1.3 MEASUREMENT FOR PAYMENT</u> | .1 | <u>Rip-Rap</u> : Supply and placement of stone rip-rap, including the cost of all plant, labour, equipment, geotextile, and materials required to complete the work as specified, will be measured by the cubic metre (m ³). |

PART 2 - PRODUCTS

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| <u>2.1 RIP-RAP</u> | .1 | Hard, dense with relative density (formally specific gravity) not less than 2.65, durable quarry stone, free from seams, cracks or other structural defects, to meet following size distribution for use intended. |
| | .2 | Rip-rap stone to be well graded with maximum sizes not exceeding 800 mm on any side and minimum size of not less than 600 mm on any side. |
| | .3 | Supply rock spalls to fill open joints. |
| | .4 | Field stones of appropriate sizes are acceptable for hand placed rip-rap. |

PART 3 - EXECUTION

3.1 PLACING

- .1 Place rip-rap as directed to thickness and details indicated or as designated by Departmental Representative.
- .2 Where rip-rap is to be placed on slopes, excavate trench at toe of slope to dimensions as indicated.
- .3 All side slopes to be 1 vertical to one and 1.5 horizontal.
- .4 Fine grade area to be rip-rapped to uniform, even surface. Fill depressions with suitable material and compact to provide firm bed.
- .5 Place stones in manner approved by Departmental Representative to secure surface and create a stable mass. Place larger stones at bottom of slopes.
- .6 Hand placing:
 - .1 Use larger stones for lower courses and as headers for subsequent courses.
 - .2 Stagger vertical joints and fill voids with rock spalls or cobbles.
 - .3 Finish surface evenly, free of large openings and neat in appearance.