

PART 1 - GENERAL

1.1 DESCRIPTIONS .1 This section specifies requirements for rock excavation to permit construction of the new work.

1.2 QUALIFICATIONS .1 Retain licensed explosives expert to supervise and program work, and to determine precautions, preparation and blasting techniques.  
.2 Conform with blasting requirements of Canadian Construction Safety Code, 1977, and local and provincial codes, including restrictions on blasting near fish bearing waterways.  
.3 A blast design shall be submitted to the Departmental Representative for approval in accordance with Section 01 33 00 - Submittals. Refer to sub-section 3.1.2 of this section for execution requirements.

1.3 PROTECTION .1 Prevent damage to surroundings and injury to persons. Post guards and sound warnings when blasting is to take place.  
.2 The project is to be carried out in a sensitive fish habitat area. All blasting or rock removal to be carried out in full conformance with all applicable fish habitat regulations, codes and approvals respecting such activities.  
.3 All rock excavation to be carried out in the dry unless otherwise approved by environmental and fisheries regulatory authorities having jurisdiction.

1.4 MEASUREMENT FOR PAYMENT .1 No separate payment shall be made for Rock Removal. Include all costs in the unit price item for which Rock Removal is required. If no unit price item exists then include all costs in the lump sum portion of the bid and acceptance form.

PART 2 - PRODUCTS

2.1 NOT USED .1 Not Used.

PART 3 - EXECUTION

3.1 ROCK EXCAVATION

- .1 The approximate area of rock excavation is indicated on the drawings. The Contractor shall confirm exact limits in the field and obtain approval from the Departmental Representative prior to removing the rock.
- .2 Removal of rock using blasting agents is acceptable, provided blasting techniques are used that will not adversely affect the surrounding rock mass and fishway (i.e. controlled blasting). Controlled blasting shall limit the effects of blasting to within the required removal limits, and ensure the surrounding rock mass, fishway, or adjacent structures are not adversely impacted or destabilized.
- .3 Where rock removal operations result in over blasting the contractor will, at no additional cost:
  - .1 Clean out all materials down to a solid rock surface, and bring the grade back up with concrete as per Section 03 30 07 - Concrete Repairs (Cast-in-Place, New Structures).
- .4 Notify the Departmental Representative for inspection and approval of finished and cleaned rock surface. Approval by the Departmental Representative will be given in writing and if the Contractor leaves a work area without such written approval, the Departmental Representative may, at his discretion, request that the Contractor return to the work area at no extra cost and do further work as directed.