



2250 - SPECIFICATION FOR ROCK EXCAVATION

2250 - 1 DESCRIPTION

- 1.01 The work shall consist of excavating rock materials, from the roadway, borrow pits, side ditches, sub-cuts, drainage ditches, channel improvements, intersections, approaches, and parking areas. The work shall include excavating rock materials from dugouts, disposal pits, roads, and pavements and for culvert removals and installations. The work shall be completed to the lines, grades, and dimensions shown on the plans or as designated by the Engineer.
- 1.02 Rock materials shall include solid masses of rock which can not be excavated without drilling and blasting.

2250 - 2 MATERIALS

2250 - 3 CONSTRUCTION

- 3.01 Earth materials shall be removed from areas where rock lies in a solid mass, in accordance with the requirements for Earth Excavation (Specification 2200).
- 3.02 Excavated rock materials shall be placed in embankments, except that surplus material shall be disposed of as directed by the Engineer. Surplus rock materials shall be disposed of in accordance with the requirements for Disposal of Surplus Rock (Specification 2320).
- 3.03 The Contractor shall set aside detached rocks and boulders for the purpose of measurement.
- 3.04 The spacing of the drill holes shall not exceed the depth of the cut at the point of drilling.
- 3.05 Rock masses encountered in roadway cuts shall be shattered thirty (30) centimetres below the rock subgrade for the full width of the cut section including the grade of the ditch bottom. To obtain uniform shattering, drilling shall extend to a plane parallel to profile and cross section at least sixty (60) centimetres below grade.
- 3.06 Drill hole locations shall be indicated by the Contractor sufficiently in advance of the drilling so that the Engineer may stake the exact depth from the rock surface to grade elevation at each drill hole. Holes deeper than the specified depths may be drilled if approved by the Engineer. Holes shall be drilled to the same depth below grade except at grade points, where drilling shall be continued beyond the lower end of the cut on non-level gradients and beyond each end of the cuts on level gradients in order to provide positive drainage of the shattered layer.
- 3.07 The exposed rock surface shall be chocked with small rock fragments and granular material to form a uniform tight surface.
- 3.08 Rock slopes shall be scaled down to remove boulders and rock fragments which may slide or roll down the slopes. No rock shall be left projecting within the true slope line.

2250 - 4 MEASUREMENT

- 4.01 Detached rocks and boulders will be measured before they are incorporated into the embankment. Rock material that is not measured and is incorporated into the embankment will be considered as Earth Excavation.
- 4.02 The volume of rock materials in solid masses will be measured, in cubic metres in its original position, by the cross section method.
- 4.03 Shattered rock material below grade in roadway cuts will be considered as rock excavation. The volume in cubic metres will be determined by multiplying the area actually shattered by a depth of thirty (30) centimetres.
- 4.04 The measurement of rock excavation in solid masses, where blasting has taken place, may also include unavoidable over-breakage beyond the lines established by the Engineer to an amount not exceeding ten (10) percent of the volume staked, excluding the thirty (30) centimetre depth of shattered rock material below grade in roadway cuts. Overbreakage in excess of ten (10) percent of the volume staked, excluding the thirty (30) centimetre depth of shattered rock material below grade in roadway cuts, which is incorporated into the embankment will be considered as Earth Excavation.

2250 - 5 PAYMENT

- 5.01 Payment for ROCK EXCAVATION will be at the contract unit price per cubic metre. The unit price will be full compensation for material, equipment, and work required for drilling and blasting; excavation, loading, dumping, and spreading rock material; forming embankments; and shaping and trimming slopes and surfaces.
- 5.02 Payment for shattering rock material below grade in roadway cuts will be at the contract unit price per cubic metre for ROCK EXCAVATION.
- 5.03 Payment for HAUL ON ROCK MATERIAL will be at the contract unit price per cubic metre hectometre in accordance with the requirements for Haul (Specification 2400), except for rock material paid for at a unit price for Rock Excavation Including Hauling.
- 5.04 Payment for ROCK EXCAVATION INCLUDING HAULING will be at the contract unit price per cubic metre. The unit price will be full compensation for material, equipment, and work required for drilling and blasting; excavating, loading, hauling, dumping, spreading rock material; forming embankments; and shaping and trimming slopes and surfaces.
- 5.05 Payment for disposal of surplus rock will be in accordance with the requirements for Disposal of Surplus Rock (Specification 2320).
- 5.06 Payment for over-breakage in excess of ten (10) percent of the volume incorporated into the embankment will be in accordance with the requirements for Earth Excavation (Specification 2200).