



5010 - SPECIFICATION FOR INSTALLING FRAMED TIMBER CULVERTS

5010 - 1 DESCRIPTION

- 1.01 The work shall consist of framed timber culverts installed at locations and in conformity with the lines and grades shown on the plans or designated by the Engineer.
- 1.02 The work shall include all types and sizes of framed timber culverts, but will not include wood stave pipe culverts and laminated structures.

5010 - 2 MATERIALS

- 2.01 The Department will supply and pay for culvert material including any wood preservative required.

5010 - 3 CONSTRUCTION

- 3.01 The location, elevation, and excavation for the culvert will be staked by the Engineer.
- 3.02 The excavation for the culvert and the culvert bed, including sub-cut if required, shall be in accordance with the requirements for Earth Excavation (Specification 2300) and/ or Rock Excavation (Specification 2250).
- 3.03 If the foundation is unsuitable, the bottom of the bed shall be sub-cut to the dimensions staked by the Engineer. The sub-cut shall be backfilled in accordance with the requirements for Granular Backfill (Specification 6600) and/or Embankments (Specification 2300) as designated by the Engineer.
- 3.04 The earth backfill shall be placed, simultaneously and uniformly, in lifts on each side of the culvert. In sub-cut, the lift shall extend to the limits of the sub-cut; otherwise, the lifts shall extend not less than fifteen metres (15 m) from each side of the culvert.
- 3.05 The earth backfill adjacent to the culvert shall be compacted, as shown on the plans, until no further settlement occurs. The remainder of the embankment shall be constructed in accordance with the requirements for Embankments (Specification 2300).
- 3.06 No topsoil or other objectionable material shall be used in that portion of the embankment that is within eight metres (8 m) of the culvert.
- 3.07 The embankment, within three metres (3 m) of the culvert, shall be free from rocks having a diameter of eight centimetres (8 cm) or greater when measured in any direction.
- 3.08 If permitted by the Engineer, treated timbers may be cut and additional bore holes may be drilled. These cuts and bore holes shall be treated with two (2) separate applications of wood preservative.
- 3.09 The Contractor shall repair or replace, at no direct expense to the Department, any culvert material damaged by his operation.

5010 - 4 MEASUREMENT

- 4.01 The unit of measurement for framed timber culverts will be the cubic metre. Measurement will comply with design quantities specified on the plans.

5010 - 5 PAYMENT

- 5.01 Payment for INSTALLING FRAMED TIMBER CULVERTS will be at the contract unit price per cubic metre. The unit price will be full compensation for unloading, storing, handling, and hauling culvert materials; preparing the bed; assembling the culvert; installing anchors; and compacting the earth backfill. The unit price will also be full compensation for cutting treated timber, drilling additional bore holes, and treating such cuts and bore holes with wood preservative.
- 5.02 Payment for excavated material will be in accordance with the requirements for Earth Excavation (Specification 2200) and/or Rock Excavation (Specification 2250) and/or Disposal of Surplus Rock (Specification 2320).
- 5.03 Payment for granular backfill will be in accordance with the requirements for Granular Backfill (Specification 6600).