



3000 - SPECIFICATION FOR SUBGRADE PREPARATION AND COMPACTION

3000 - 1 DESCRIPTION

- 1.01 The work shall consist of shaping and compacting the subgrade to the required grade, cross section, and density.

3000 - 2 MATERIALS

- 2.01 Only those materials present in the subgrade are required for subgrade preparation. No materials are required to be loaded and hauled as part of the shaping of the subgrade, unless indicated in the special provisions or plans.
- 2.02 The Contractor may be required to use sub-base or other materials, subject to the approval of the Engineer, as backfill for subgrade failures. The specification for the materials used will apply.

3000 - 3 CONSTRUCTION

- 3.01 The crests of subgrade undulations not greater than fifteen centimetres (15 cm) above the designated grade shall be moved crossways or longitudinally to raise subgrade depressions to the designated grade. The subgrade shall be scarified if necessary.
- 3.02 If the crests of undulations are greater than fifteen centimetres (15 cm) above the designated grade line, work required to move the material will be considered as Extra Work.
- 3.03 Surplus material shall be bladed to the side slope and spread and trimmed as directed by the Engineer.
- 3.04 The final top fifteen centimetres (15 cm) layer of the subgrade shall be compacted to not less than one hundred percent (100%) of the maximum density, as determined by Test 9200, for the material comprising the layer.
- 3.05 The Engineer will determine, from the test results, the section of the road to be considered for evaluation. The density on this section will be considered satisfactory when:
- (a) Test results average not less than one hundred (100) percent of maximum density, and
 - (b) All individual test results are greater than ninety-eight (98) percent of maximum density.
- 3.06 If the moisture existing in the soil is insufficient for compacting to the specified density and for finishing, the Contractor may elect to add water. The water shall be added in accordance with the requirements for Watering (Specification 2500).
- 3.07 If excess moisture exists in the soil, the final top fifteen centimetres (15 cm) of the subgrade shall be dried, to the optimum moisture content as determined by Test 9200, at no direct expense to the Department.
- 3.08 Final compaction of the subgrade surface shall be done with pneumatic-tire rollers. Rolling shall be continued until all loose soil is properly compacted true to grade and cross section.
- 3.09 The subgrade surface shall be true to grade and cross section and the top fifteen centimetres (15 cm) shall be compacted as specified before the surfacing material is placed.

- 3.10 The Contractor will receive full co-operation in the repair of subgrade failures before depositing aggregate or mix on the road.
- 3.11 For the purpose of this specification, a failure is defined as a section of the existing subgrade that is unable to support normal traffic because of a condition that requires repair more than fifteen centimetres (15 cm) below the designated grade line. This definition will apply only to a section of subgrade before aggregate or mix is placed on it.
- 3.12 The repairing of subgrade failures which occur before aggregate or mix has been deposited on the road will be considered as Extra Work. Failures which develop in the subgrade, sub-base course, base course, or surface course, after aggregate or mix has been deposited, on any portion of the roadway, shall be repaired at no direct expense to the Department.

3000 - 4 MEASUREMENT

- 4.01 Subgrade Preparation and Compaction will be measured in square metres. The finished trimmed top surface of the subgrade, as staked by the Engineer, will be the basis of measurement.

3000 - 5 PAYMENT

- 5.01 Payment for SUBGRADE PREPARATION AND COMPACTION will be at the contract unit price per square metre. The unit price will be full compensation for scarifying, blading, spreading, shaping, trimming, compacting, drying, final rolling, and finishing the subgrade to the required grade, cross section, and density.
- 5.02 Payment for watering on the road will be in accordance with the requirements for Watering (Specification 2500).
- 5.03 Payment for sub-base or other approved material used for backfill of subgrade failures will be at the contract unit price for the particular material used. Payment for spreading and compacting the material will be on an Extra Work basis.