

SPECIFICATIONS FOR RECLAIMING BITUMINOUS PAVEMENT

815. 1 SCOPE

These Specifications govern all operations necessary for and pertaining to reclaiming bituminous pavement for the purpose of recycling.

815. 5 EQUIPMENT

When reclaiming a partial depth of pavement, the equipment shall be designed for cold milling.

When the quantity of bituminous pavement to be reclaimed is 5 000 t or greater, the milling equipment shall have a:

- Minimum power rating of 300 kilowatts
- Minimum gross weight of 22 000 kg
- Minimum width of cutting head 1.85 m
- Self-loading capabilities

When the quantity of bituminous pavement to be reclaimed is less than 5 000 t, the milling equipment shall have a:

- Minimum power rating of 160 kilowatts
- Minimum gross weight of 16 000 kg
- Minimum width of cutting head 1.4 m

Milling equipment shall be equipped with automatic grade and slope controls and a slope meter. The equipment shall be capable of maintaining an accurate depth of cut, profile and cross slope. The automatic control of profile shall be accomplished by reference to a floating beam, skid or sonic sensor. The beam or skid shall have a minimum length of 9 m.

815. 7 CONSTRUCTION METHODS

7.1 Reclaimed Bituminous Pavement (Partial Depth)

The Contractor shall remove the bituminous pavement to the depth and width specified by the Engineer.

The milling equipment shall be operated in such a manner that tearing and breaking of the underlying and adjacent pavement is minimized.

The milled material shall be processed until 97-100% passes a 37.5 mm sieve.

Unless otherwise permitted by the Engineer, milling operations shall be carried out in the same direction as the flow of traffic. The pavement shall be milled across the full width of the roadway in any given working day. At the end of each day's operations, abrupt changes in roadway surface profile shall be avoided. The vertical transition shall be not more than 10 mm in 1 m.

815. 7.1 Reclaimed Bituminous Pavement (Partial Depth) (Cont'd)

The roadway surface shall be swept clean immediately after milling and in no case should the sweeping operation be more than 100 m behind the milling operation. Any distress of the planed surface caused by the milling operations, which may constitute a driving hazard, shall be promptly repaired by the Contractor to the satisfaction of the Engineer.

The milled surface should be paved within 10 working days from the date it was milled. The Contractor will be compensated for repairs to the milled surface during this period. The unit price for recycled bituminous pavement will be the total compensation paid for labour, materials (excluding asphalt cement) and all other costs relating to the repairs to the milled surface. All maintenance costs (including the cost of asphalt cement) required on the milled surface after 10 working days shall be at the Contractor's expense. The Engineer may suspend further milling operations, if paving has not commenced within 10 working days from the start of the milling operation.

The reclaimed material shall be hauled to the location of the Contractor's bituminous mixing plant, weighed and stockpiled. The Contractor shall haul within legal load limits. Material in excess of legal load limits will be deducted from the quantity of reclaimed asphalt pavement.

7.2 Reclaimed Bituminous Pavement (Full Depth)

The Contractor shall remove the bituminous pavement to its full depth and width in such a manner as to avoid contaminating the pavement with granular material, subgrade soil or deleterious material.

Removal shall be done to the same termination point across the entire roadway width including paved shoulder in any given working day.

For divided highways, the interpretation of entire roadway width shall be that portion of the roadway associated with the movement of traffic in one direction. At the point of daily termination, abrupt changes in roadway surface profile are to be avoided. This may be accomplished by the construction of temporary ramps using granular base course aggregate, or other material acceptable to the Engineer. The vertical transition of the ramp shall not be more than 10 mm in 1 m.

The bituminous pavement shall be loaded into trucks and hauled to a crushing site and processed until 97-100% passes a 37.5 mm sieve.

The crushed material shall be weighed and stockpiled at the site of the Contractor's mixing plant.

7.3 Surface Restoration

The exposed granular surface resulting from the removal of the asphalt pavement shall be immediately restored to a safe driving condition. Surface preparation in accordance with Spec. 700 shall be performed prior to the placement of a subsequent lift of base.

7.4 Stockpile Site

The stockpile site for the reclaimed pavement shall be level, well-drained and have adequate bearing capacity to support the weight of equipment and the material which is to be placed thereon.

815. 7.4 Stockpile Site (Cont'd)

The area upon which the stockpile is to be constructed shall be stripped of all topsoil, and other deleterious material as directed by the Engineer. The stripped material shall be neatly stockpiled for final rehabilitation purposes. The topsoil shall be stockpiled separately.

7.5 Base for Stockpiles

Granular Base Course Class "A" shall be used to construct a minimum 150 mm compacted stockpile base. The stockpile base area shall be of such dimensions as to accommodate the maximum volume of R.A.P. which will exist in the stockpile at any given time.

The unit price for Granular Base Course "A" used for the construction of the stockpile base will be payment in full for the preparation of the stockpile site, supplying, placing, levelling, compacting of the "A" base and, following the removal of the reclaimed materials, consolidating the "A" base into a stockpile, rehabilitating the stockpile site with the stockpiled topsoil and for performing all operations necessary or incidental thereto.

The "A" base stockpile shall be the property of the Department. The relocation or utilization of this stockpile will be paid for as Extra Work.

7.6 Stockpiling Operations

- Equipment shall not be allowed on the reclaimed bituminous stockpile.
- The pile shall be shaped to promote the shedding of precipitation.
- The pile shall occupy the smallest area possible.

815. 9 METHOD OF MEASUREMENT

Reclaiming bituminous pavement will be measured by weight in tonnes of reclaimed pavement placed in the stockpile.

815. 11 BASIS OF PAYMENT

The unit price per tonne for "Reclamation of Existing Bituminous Pavement", will be payment in full for removing the bituminous pavement, loading, hauling, crushing (where required) weighing, stockpiling the reclaimed material and for performing all operations necessary or incidental thereto.