

FORM 301



GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Transportation and Works
Highway Design Division

SECTION 301 SCARIFYING AND RESHAPING

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301.01 SCOPE

This specification covers the requirements for the scarifying and reshaping of a road surface prior to the application of Selected Granular Base Course or Asphaltic Pavement.

301.02 OPERATIONS

Where directed by the Engineer, the Contractor shall scarify and reshape a road surface prior to the application of Selected Granular Base Course or Asphaltic Pavement. The scarifying and reshaping shall be carried out within the lengths designated by the Engineer, and within the width to be covered by the proposed pavement plus 0.3m on each side, or to such other width as the Engineer may designate.

Where the road surface consists of Selected Granular Base Course of a particular type, then the scarifying shall be to the full depth of the base course of that type or to a depth of 300 mm, whichever is less.

Where the subgrade consists of subgrade consisting of Other Material, then the scarifying shall be to a depth of not less than 300 mm.

Where the road surface consists of subgrade consisting of rock, then scarifying as such will not be required, and scarifying and reshaping operations shall simply consist of just reshaping the road surface.

Unsuitable roadbed materials, as determined by the Engineer, which are encountered during the scarifying operation shall be excavated to the lateral limits and depth directed by the Engineer and shall be disposed of as directed. Such work shall be carried out in accordance with Section 206 "Grading of Cuts".

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No boulders greater than 150 mm in diameter shall be left within 300 mm of the top of subgrade composed of Other Material. Such boulders over 150 mm in diameter which cannot be removed by the scarifying operation shall be removed by hand excavation, blasting or any other suitable method. All excavated boulders shall be removed from the subgrade and ditches and then disposed of.

Excavations resulting from the removal of boulders or Unsuitable Material shall be backfilled with approved material to the specified grades, in accordance with Section 204 "Grading of Fill".

Whenever the materials incorporated in the existing subgrade are insufficient to provide the required profile and cross section, the Contractor shall add additional approved material as directed by the Engineer. Such work to be carried out in accordance with Section 204 "Grading of Fill".

The maximum variation from the specified profile and cross section of the compacted, scarified and reshaped road surface shall be 30 mm, except in those instances where paving is to take place directly on top of the scarified and reshaped material, in which case the finished surface shall not deviate at any place on a 3m straight edge by more than 10 mm.

Where due to traffic use, or for whatever other reason, the scarified and reshaped road surface no longer lies within the required tolerance, then before placing the next materials, the Contractor shall scarify and reshape the affected area again, at his own expense.

301.03 COMPACTION

Road materials disturbed by the scarifying and reshaping shall be compacted.

Where subgrade is scarified and reshaped, the disturbed materials shall be compacted to not less than 95% of the maximum Standard Proctor Dry Density (ASTM D698-78).

Where select granular base course is scarified and reshaped, the disturbed materials shall be compacted to not less than 100% of the maximum Standard Proctor Dry Density.

301.04 MEASUREMENT FOR PAYMENT

301.04.01 Measurement for Payment where subgrade and Select Granular Base Course are in the same contract.

Where subgrade was constructed under the same contract which also calls for the placing of selected granular base course, then any required scarifying and reshaping of the subgrade prior to placing granulars will not be measured for payment and no payment for the scarifying and reshaping will be made.

Boulders removed from the top 300 mm of Other Material fill subgrade, on a grading and placing selected granular base course job, will not be measured for payment. However, boulders removed from the top 300 mm of subgrade in Other Material cuts will be measured for payment in accordance with Section 206 "Grading of Cuts".

Additional fill material shall be measured for payment in accordance with the provisions of Section 206 "Grading of Cuts" or Section 207 "Borrow", as appropriate.

301.04.02 Measurement for Payment where road surface was constructed under a previous contract.

Where subgrade was constructed, or some selected granulars were placed under a previous contract, then such scarifying and reshaping of the road surface as the Engineer requires shall be carried out and measured for payment. This measurement for payment shall be of the horizontal area actually scarified and reshaped from within the limits of length and width as designated by the Engineer, and will be measured in square metres, rounded to the nearest whole number.

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Boulders removed from the top 300 mm of Other Material subgrade, on a job where subgrade was constructed on a previous contract will be measured for payment in accordance with Section 206 "Grading of Cuts". The measurement for payment will be done in this case regardless of whether the boulders were from a cut or a fill.

The excavation of Unsuitable Material in the roadbed shall be measured for payment in accordance with the provisions of Section 206 "Grading of Cuts".

Additional fill material shall be measured for payment in accordance with the provisions of Section 206 "Grading of Cuts" or Section 207 "Borrow", as appropriate.

301.05 BASIS OF PAYMENT

The basis of payment for any excavation of Unsuitable Material in the roadbed, and any additional fill material shall be in accordance with the provisions of Section 206 "Grading of Cuts" or Section 207 "Borrow", as appropriate.

301.05.01 Basis of Payment where subgrade and Select Granular Base Course are in the same contract.

Where subgrade was constructed under the same contract which also calls for the placing of selected granular base course, then no payment will be made for either the scarifying and reshaping or for the required compaction of the materials disturbed in the scarifying and reshaping operations.

For those boulders, removed from the subgrade in Other Material cuts, and which conform to the definition of Solid Rock as stated in Section 205 "Classification of Excavated Materials" the basis of payment will be the contract unit price per cubic metre for Solid Rock hauled 1 km or under. Such payment shall be full compensation for all labour, materials and equipment-use to excavate, handle, haul up to 1 km and dispose of the boulders of individual size equal to or exceeding zero decimal five cubic metres in measurement.

Where the Engineer requires that "Solid Rock" boulders from Other Material Cuts, be hauled in excess of 1 km, additional payment for overhaul will be made in accordance with Section 215 "Overhaul on Excavation".

The cost of excavating and disposing of the other boulders greater than 150 mm in diameter and of carrying out the scarifying and reshaping and the compaction is considered compensated as part of Section 204 "Grading of Cuts" and Section 207 "Borrow", as appropriate.

301.05.02 Basis of Payment where road surface was constructed under a previous contract.

Where subgrade was constructed, or some selected granulars were placed under a previous contract, then payment for scarifying and reshaping shall be on the basis of the contract price for scarifying and reshaping, and such payment shall be full compensation for all labour, materials and equipment-use to: scarify and reshape the roadbed, excavate, haul and dispose of all boulders greater than 150 mm in diameter but less than 0.5 cubic metres in volume which occur within the required depth of scarifying in Other Material roadbed, and to compact the area disturbed by the scarifying and reshaping.

However, for those boulders removed from the required depth of scarifying, and which conform to the definition of Solid rock as stated in Section 205 "Classification of Excavated Materials" the basis of payment will be the contract unit price per cubic metre for Solid Rock hauled 1 km or under. Such payment shall be in full compensation for all labour, materials and equipment-use to excavate, handle, haul up to 1 km and dispose of the "Solid Rock" boulders.

Where the Engineer requires that "Solid Rock" boulders be hauled in excess of 1 km, additional payment for overhaul will be made in accordance with Section 215 "Overhaul on Excavation".

No separate or additional payment will be made for second and subsequent scarifying or reshaping made necessary from any cause whatsoever.