

DIVISION 5**SUBGRADE**5.01 Description:

The subgrade is that portion of the roadbed upon which the surfacing material, including curb and gutter, sidewalks and topsoil, are to be placed. Under the base course, and curb and gutter, it is the top twelve (12") inches of soil.

5.02 Shaping the Subgrade:

5.02.01 General - After the work of laying underground utilities has been completed, the subgrade for the pavement and curb and gutter shall be scarified to a uniform depth below and for the full width of the pavement and curb and gutter sufficient to eliminate all depressions and irregularities and to permit uniform reshaping. If additional earth or approved material is necessary to bring the subgrade to the desired elevation, this must be done before scarifying. After scarifying, the subgrade shall be shaped correctly to conform to the plans and be brought to a firm, unyielding surface by rolling the entire area with a pneumatic roller. Any portion of the subgrade which is not accessible to a roller shall be compacted thoroughly with hand tampers weighing not less than fifty (50) pounds, the face of which shall not exceed one hundred (100) square inches, or approved mechanical means. The subgrade for a depth of twelve (12") inches shall be compacted to a minimum of 95% of maximum unit weight conforming to current Michigan Department of Transportation Specification.

All soft and yielding material which will not compact readily when rolled or tamped, or any material which does not meet the requirements of Class III material will be classified as unsuitable by the Engineer, shall be removed and replaced with suitable subbase material as directed by the Engineer, and compacted as above specified.

A material which is unstable because of high water content may not be deemed unsuitable by the Engineer, and will be the responsibility of the Contractor.

5.02.02 Subgrade Tolerances - The surface of the subgrade shall be trimmed to the specified cross section within a tolerance of three-quarter (3/4") of an inch in ten (10') feet, and the average longitudinal tolerance within any fifty (50') feet shall be a maximum of three-eighths (3/8") of an inch.

5.03 Maintenance of Subgrade:

The finished subgrade shall be maintained in a smooth and compacted condition until the pavement has been deposited thereon. No storage piles of paving material shall be placed

directly upon the finished subgrade. The compacted subgrade shall be capable of carrying all trucks and construction equipment without any rutting. If rutting occurs, the subgrade shall be reshaped.

5.04

Basis of Payment:

The work of shaping and maintaining the subgrade shall be incidental to street grading, and no additional payment will be made therefor.

Removal of unsuitable material (to a depth of twelve (12") inches) shall be measured and paid for in square yards as determined by the Engineer. Replacement will be measured and paid for as subbase material.

Removal and replacement (compacted in place) of unsuitable material (twelve (12") inches and greater in depth) will be measured and paid for as subgrade undercutting in cubic yards as determined by the Engineer.