SECTION 303
ROCK BASE

303.1 Description. This work shall consist of furnishing and placing select rock material in the top 12 or 18 inches of the subgrade for use as a base to provide pavement support and drainage as shown on the plans or as directed by the engineer.

303.2 Material. The material source for rock base shall be in accordance with approval from the engineer. Geologic conditions may vary from available subsurface information. Approval from the engineer of a source for the inherent stone will not constitute approval of the final rock base product.

303.2.1 Material for rock base shall be durable stone or broken concrete containing a combined total of no more than 10 percent, by weight, of earth, sand, shale and non-durable rock. Material from geologic-filled sink deposits or stone indicating evidence of solution activity shall not be used.

303.2.2 The material shall be as large as can be conveniently handled within the limits of this specification. No particle dimension shall exceed approximately 12 inches, for 18 inch rock base or 9 inches for 12 inch rock base. There shall be some material with particle dimensions exceeding approximately 9 inches for 18 inch rock base or 6 inches for 12 inch rock base. The material shall be uniformly graded from coarse to fine.

303.2.3 Broken, sound concrete pavement and composite pavements may be used provided the ratio of the longest dimension measurement to thickness does not exceed 2:1 and provided there is no excessive exterior steel mesh that would affect compaction. Milled, crushed or chunked forms of bituminous pavement shall not be used. Small, thin amounts adhering to broken concrete pavement will be permitted.

303.2.4 Acceptance of quality and size of material will be made by visual inspection at the job site.

303.3 Construction Requirements.

303.3.1 Except as noted herein, all applicable provisions in Sec 203 for the handling and placement of roadway excavation material shall apply.

303.3.2 The material shall not be dumped in place, but shall be distributed by blading or dozing in a manner to ensure proper placement in final position in the subgrade.

303.3.3 Material for either 12 inch or 18 inch rock base may be placed in one lift. Rock base material may be placed thicker, with approval from the engineer, in maximum 24-inch lifts, provided a uniform drainage plane under the rock base is provided. No particle dimension shall exceed approximately 6 inches less than the placed lift thickness. There shall be some material with particle dimensions exceeding approximately 50 percent of the lift thickness. No additional payment will be made for the thicker rock base material. Class C Excavation in rock cuts shall be performed to allow placement of the specified lift thickness.

303.3.4 Material shall be compacted in accordance with Sec 203.5.5.

303.3.5 The final surface shall be of a uniform texture and grade suitable for paving. The top 2 inches of rock base shall consist of either 2 inch maximum rock fragments, spalls, reclaimed asphalt, or concrete. The 2 inch maximum size granular material shall have a plasticity index not to exceed 10 and a gradation such that at least 50 percent of the material will be retained on the No. 4 sieve or have a gradation meeting Type 5 or 7 aggregate as specified in Sec. 1007. There
shall be no exposed rock exceeding the inch size in the final surface that would interfere with final preparation of the base for paving.

303.3.6 A roughly compensating maximum deviation of ± 1/2 inch from the required elevation will be permitted on the surface of the finished rock base.

303.3.7 When the contract includes paving over existing rock base, the paving contractor shall adjust the rock base grade as needed to that required using approved backfill material as specified herein. No additional payment will be made for this adjustment.

303.4 Method of Measurement. Final measurement of the completed rock base will not be made except for authorized changes during construction, or where appreciable errors are found in the contract quantity. Where required, measurement of rock base, complete in place, will be made to the nearest square yard. The revision or correction will be computed and added to or deducted from the contract quantity.

303.5 Basis of Payment.

303.5.1 If the contract documents provide that the material for rock base shall be obtained from the right of way or other source furnished by the Commission, the excavating, breaking, processing, loading and hauling, regardless of distance to the site, of the rock base will be paid for and considered completely covered under Class A Excavation, Class C Excavation, Unclassified Excavation, Excavation for Structures, or other applicable items. Separate payment for furnishing rock base will not be made.

303.5.1.1 If the contract documents provide that the material for rock base shall be obtained from the right of way or other source furnished by the Commission, and the material is made unsuitable or unattainable by the contractor's operations, the contractor shall provide suitable material and dispose of any surplus material at the contractor's expense.

303.5.1.2 If the contract documents provide for obtaining material from the right of way or other source furnished by the Commission, but all or part of the required quantity of acceptable material is not available, unless the shortage is due to the contractor’s operations, payment for such additional rock base material that the contractor will be required to furnish and haul will be made per square yard at the fixed contract unit price in Sec 109 and will be measured in accordance with Sec 109.1.

303.5.2 If the contract documents do not provide for a source of material, the contractor shall provide the material. All costs of securing the source, quarrying, excavating, breaking, processing and hauling the material to the site will be paid for at the contract unit price per square yard for furnishing rock base.

303.5.3 Payment for placing rock base will be made at the contract unit price per square yard complete in place, based entirely on the surface area of the design thickness. No additional payment will be made for material needed to maintain the required edge slopes.