

**304 – CRUSHED STONE SUBGRADE**

**SECTION 304**

**CRUSHED STONE SUBGRADE**

**304.1 DESCRIPTION**

Construct a uniform crushed stone subgrade as backfill in cut sections or as topping of fill sections as shown in the Contract Documents.

**BID ITEMS**

Crushed Stone Subgrade (\*)  
Water (Crushed Stone Subgrade) (Set Price)  
\*Thickness

**UNITS**

Square Yard  
M Gallon

**304.2 MATERIALS**

Provide materials that comply with the applicable requirements.

Aggregates for Backfill ..... **DIVISION 1100**  
Water for Crushed Stone Subgrade ..... **DIVISION 2400**

**304.3 CONSTRUCTION REQUIREMENTS**

Prepare the cut or fill section for the crushed stone subgrade by scarifying, watering, blading and compacting to the specified lines and grades. Do not place crushed stone subgrade on frozen subgrade.

The Engineer will obtain a sample of the crushed stone for backfill from materials stockpiled at the project site, and submit to MRC where the relative density will be determined using KT-69. Allow 48 hours for testing by the MRC.

Uniformly mix the crushed stone with a sufficient quantity of water to provide satisfactory compaction. The mixing methods are:

- Central Plant Method. Use a stationary mechanical mixing plant to mix the water and aggregate.
- Road Mix Method. After the aggregate is placed in a uniform windrow, use a motor grader, or other equipment approved by the Engineer, to mix the water and the aggregate.

Spread and compact the crushed stone subgrade as specified in the Contract Documents. If the thickness is greater than 6 inches, spread and compact the crushed stone subgrade in multiple lifts of equal thickness with a maximum lift thickness of 6 inches. Compact the crushed stone subgrade to a uniform density, a minimum of 70% of the relative density. The Engineer will verify the relative density using a nuclear gauge (KT-41).

If during production, the gradation changes  $\pm 10\%$  from the single point designation on any single sieve, cease spreading and compaction operations. The Engineer will obtain a new sample for relative density, submit sample to the MRC and a new relative density value will be established.

**304.4 MEASUREMENT AND PAYMENT**

The Engineer will measure crushed stone subgrade by the square yard.

The Engineer will measure water used for crushed stone subgrade by the M Gallon using calibrated tanks or water meters. The Engineer will measure water used for subgrade preparation, mixing and compacting the crushed stone subgrade. The Engineer will not measure water used for dust control, water wasted through the Contractor's negligence or water in excess of the quantity required for mixing and compacting the crushed stone subgrade.

Payment for "Crushed Stone Subgrade" at the contract unit price and "Water (Crushed Stone Subgrade) (Set Price)" at the contract set unit price is full compensation for the specified work.