844 - SLURRY GROUT

SECTION 844

SLURRY GROUT

844.1 DESCRIPTION
Fill cavities of existing structures, mines or voids under pavements and slabs on grade with a slurry grout as shown in the Contract Documents.

<table>
<thead>
<tr>
<th>BID ITEM</th>
<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>Slurry Grout (*)</td>
<td>Cubic Yard</td>
</tr>
<tr>
<td>* Low Strength, High Strength or Underseal</td>
<td></td>
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</tbody>
</table>

844.2 MATERIALS

a. Materials. Provide materials that comply with the applicable requirements.

Fine Aggregate .................................................................DIVISION 1100
Cement and Fly Ash (approved for stabilization & cold recycle) ..................DIVISION 2000
Water ..............................................................................DIVISION 2400

The Engineer will approve the use of admixtures to achieve flowability and acceptable set time, based on performance. Provide foaming agents approved by the Engineer.

b. Approval of Mix Design. Design a slurry grout that complies with TABLE 844-1.

<table>
<thead>
<tr>
<th>TABLE 844-1: REQUIREMENTS FOR SLURRY GROUT MIXTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Day Compressive Strength (minimum)</td>
</tr>
<tr>
<td>20 psi</td>
</tr>
<tr>
<td>7 Day Compressive Strength (minimum)</td>
</tr>
<tr>
<td>28 Day Compressive Strength</td>
</tr>
<tr>
<td>Unit Weight (minimum)</td>
</tr>
<tr>
<td>Flow, seconds (ASTM C939)</td>
</tr>
</tbody>
</table>

Submit the slurry grout mix design and results of the required compressive strength testing (conducted by a testing laboratory) to the DME for approval. The DME will approve or reject the mix design within 2 weeks of the submittal.

c. KDOT Assurance and Acceptance. The Engineer will make a set of test cylinders for each 100 cubic yards of slurry grout placed on the project, and when the mix design or source of fly ash is changed. The Engineer will make and test the cylinders according to DIVISION 2500. The Engineer will make a set of 3 cylinders for each 100 cubic yards produced.
- For underseal mixture, test the 1st cylinder on the 3rd day
- For low strength, test the 1st cylinder on the 3rd day
- For high-strength mixture, test the 1st cylinder on the 7th day
- The Engineer will laboratory cure the remaining 2 cylinders.
- For underseal mixture, test the 2nd cylinder on the 7th day
- For low and high strength mixture, test the 2nd cylinder on the 28th day
- The Engineer will hold the 3rd cylinder in reserve to verify any questionable cylinder breaks.

The Engineer will test the unit weight a minimum of every 50 cubic yards of slurry grout placed on the project.
The Engineer will test the flow of the underseal slurry grout 2 times per day. The ratio of the water to cementitious material will be adjusted to comply with the requirements.
The Engineer will accept the slurry grout based on the results of the compressive strength, unit weight tests, and visual inspection of the mixture placed on the project.

844.3 CONSTRUCTION REQUIREMENTS

Pump the slurry grout into the structures to fill all the voids.
Bulkhead each end of the structure to be filled. Provide a minimum of 2 vent pipes to monitor the pumping.
If necessary to fill the structure, pump additional grout through the vent pipes.
If filling voids under pavements and slabs on grade, place the slurry grout as shown on the Contract Documents.
Observe the weather limitations specified in DIVISION 400 when placing the slurry grout.

844.4 MEASUREMENT AND PAYMENT

The Engineer will measure slurry grout by the cubic yard.
Payment for "Slurry Grout" at the contract unit price is full compensation for the specified work.