

SECTION 681—SLABJACKING

681.1 DESCRIPTION—This work is filling voids beneath existing rigid base courses or pavements and pressure-jacking the pavement or base course to grade with cement grout.

681.2 MATERIALS—[Section 679.2](#), modified as follows:

(f) Mix Design.

One part cement (by volume)

Three parts pozzolan (by volume)

Admixtures—if required and accepted

Water—an amount such that the time of efflux is within 16 seconds to 26 seconds ([ASTM C 939](#)). A more fluid mix with an efflux time of 10 seconds to 15 seconds may be used for the initial injection in each hole.

Use a stiffer mix, if the above mix fails to raise the pavement slab.

681.3 CONSTRUCTION—

(a) General. [Section 679.3\(a\)](#)

(b) Equipment.

1. **Grout Plant.** [Section 679.3\(c\)1](#)

2. **Water Tanker.** [Section 679.3\(c\)2](#)

3. **Drill.** [Section 679.3\(c\)3](#)

4. **Miscellaneous.** [Section 679.3\(c\)5](#)

(c) Slabjacking.

1. **Drilling Holes.** [Section 679.3\(d\)1](#), except penetration of the stabilized base may not be necessary.

2. **Mixing.** [Section 679.3\(d\)2](#)

3. **Jacking.** Connect an expanding rubber packer to the discharge hose on the grout pump and lower into the holes. Do not extend the discharge end of the packer below the lower surface of the concrete pavement. If jacking continuously reinforced concrete pavement, pump in a pattern and in the amount required to raise the pavement to within 6 mm (0.02 foot), plus or minus, from a string line grade, or as directed. If jacking jointed slabs of concrete pavement and bridge end slabs, pump in a pattern and in the amount required to raise the pavement to within 9 mm (0.03 foot), plus or minus, from a string line grade, or as directed.

Continuous pressures to 1.4 MPa (200 pounds per square inch) will be allowed. Pressure to 2.0 MPa (300 pounds per square inch) will be allowed only for short periods, except in the event the pavement is bonded to the subgrade, brief pressure rises to 4.0 MPa (600 pounds per square inch) will be allowed.

4. **Overjacking.** Bring pavement, raised above the tolerances listed above, to grade by grinding. If the overjacking is greater than 30 mm (0.10 foot), satisfactorily remove and replace the pavement in as specified in [Section 501](#) at no cost to the Department.

5. **Radial Cracks.** [Section 679.3\(d\)5](#)

6. **Transverse Cracks.** [Section 679.3\(d\)6](#)

7. Hole Patching. [Section 679.3\(d\)7](#)

681.4 MEASUREMENT AND PAYMENT—

- (a) Holes Drilled. [Section 679.4\(b\)](#)
- (b) Grout Material. [Section 679.4\(c\)](#)