

ITEM 16

CEMENTITIOUS STABILIZATION / LIFTING OF PAVEMENTS

16.1	DESCRIPTION	2
16.2	MATERIAL REQUIREMENTS	2
16.3	EQUIPMENT REQUIREMENTS	2
16.4	CONSTRUCTION REQUIREMENTS	2
16.5	BASIS OF PAYMENT	3

ITEM 16

CEMENTITIOUS STABILIZATION / LIFTING OF PAVEMENTS

16.1 DESCRIPTION

This work shall consist of lifting concrete slabs by furnishing and injecting a cementitious grout mixture beneath the pavement at locations shown on the plans or as directed by the **AGENCY**. The work includes all materials, equipment, supplies, tools, labor and services, and all incidentals necessary to complete the concrete slab raising and / or void filling under the concrete slab in a neat manner.

16.2 MATERIAL REQUIREMENTS

- The grout material shall consist of a cementitious slurry mixture.
- The mixture shall exhibit a minimum 600 psi compressive strength after 7 days and have no expansive or shrinkage qualities.

16.3 EQUIPMENT REQUIREMENTS

The **CONTRACTOR** shall provide at a minimum, the following equipment:

- Mixing equipment shall include a self-contained continuous mixer capable of producing the mix design.
- Equipment shall include a pump capable of obtaining uniform flow during injection.
- Drill capable of making 1" to 2" diameter injection holes.
- Monitoring equipment capable of measuring pavement slab movement to verify that the injected area has been properly raised.
- All other equipment necessary to execute the work including but not limited to light plants, electric generators, compressors, heaters, hoses, containers, valves and gauges.

16.4 CONSTRUCTION REQUIREMENTS

- Grout shall be injected when the pavement surface temperature is above 40° F.
- The **CONTRACTOR** shall submit a work plan to mitigate frozen subgrade or base course.
- Pre-injection, target, and post-injection pavement profiles shall be provided by the **CONTRACTOR** to the satisfaction of the Agency
- The **CONTRACTOR** shall be responsible for the location and spacing of drilled holes.
- Existing joints shall be evaluated and, if needed, saw cut to facilitate slab movement.
- Each lifting location shall consist of the entire slab of concrete, up to an existing expansion joint or end of slab.
- The grout mixture shall be pumped at a continuous pressure and material distributed uniformly.

- The **CONTRACTOR** shall be responsible for continuous monitoring during injection to assure that the desired profile is attained.
- Following lifting, drilled holes shall be patched to full depth with a non-shrink commercial grout, troweled to match the existing slab level.
- **CONTRACTOR** shall remove and properly dispose of all residues from the operation.ny pavement blowouts, excessive lifting, or pavement damage as a result of the **CONTRACTOR's** work shall be replaced or repaired by the **CONTRACTOR** at the Contractor's expense, to the satisfaction of the **AGENCY**. The **CONTRACTOR** shall repair any movement greater than 1/4" vertically in injected areas within two years at no additional cost to the **AGENCY**.

16.5 BASIS OF PAYMENT

Sawing necessary shall not be paid for separately, but shall be included in the work.

Traffic control shall not be paid separately, but shall be included with the work.

Payment will be made for the square feet adjusted, to include the entire section of concrete up to the expansion joint, as accepted by the **AGENCY**.

<u>Item</u>	<u>Description</u>	<u>Payment</u>
16.5-1	Area adjusted using Cementitious Grout	\$ / square ft.