

## SECTION 00670 - CONCRETE PAVEMENT UNDERSEALING

*(Follow all instructions and make all edits with "Track Changes" turned on. This Section is not published in the Oregon Standard. If there are no instructions [purple text] above a subsection, paragraph, sentence, or bullet, then include it in the Project, unless the item(s) that are included in the subsection, paragraph, sentence, or bullet are not required on the Project and then they should be deleted. In general do not re-number or re-letter subsections when item(s) are deleted. Delete all purple text before preparing the final document. All other modifications to this Section will require ODOT Technical Resource and State Specifications Engineer approval.)*

Section 00670 is not a Standard Specification and is included in this Project by Special Provision.

### Description

**00670.00 Scope** - This Work consists of undersealing and filling cavities, of portions of existing portland cement concrete (PCC) Pavement by pumping portland cement grout under the Pavement slabs.

### Materials

**00670.10 Materials** - Furnish Materials meeting the following requirements:

Portland Cement Grout .....	02080.40
Water Reducer (Type A and Type G).....	02040.10
Fly Ash .....	02030.10
Wooden Plugs .....	Commercial quality

### Equipment

**00670.20 Pump** - Provide a pump of sufficient size and capacity to inject grout, fill voids, and stabilize existing concrete Pavement but not cause slabs to change in elevation. Provide an acceptable means of measuring the quantity of grout placed for review and approval by the Engineer. Do not exceed an injection pressure of 250 psi.

**00670.21 Drill** - Provide a drill capable of cutting holes of the appropriate size for the pump.

**00670.22 Movement Detector** - Provide Equipment capable of measuring slab lift to the nearest 0.001 inch and that is capable of detecting simultaneous movement of slabs at joints.

### Construction

**00670.40 Weather Limitations** - Do not perform grout undersealing in periods of rain or when water is present on the Pavement surface.

**00670.41 Cutting and Cleaning Holes** - Drill holes of the size required for the Equipment used at the locations, as shown or directed. Do not drill more holes than can be filled or temporarily plugged the same Day, unless otherwise approved.

Immediately prior to pumping grout into the holes, clean out all drilled holes with compressed air at a minimum pressure of 90 psi. Remove all mud and water from the holes before pumping grout.

**00670.42 Pumping Grout and Plugging Holes** - Pump grout through holes until all voids are filled, or until one of the following occurs:

- A Pavement slab or portion of a slab begins to rise. Do not raise the slab above the existing grade or 0.08 inch.
- Grouting injection pressure exceeds 250 psi.
- Grout extrudes from adjacent holes, transverse or longitudinal joints, or cracks.
- The Engineer stops undersealing procedure.

Use grout material within 90 minutes of mixing. Grout material held longer than 90 minutes is rejected.

Temporarily plug the hole until all undersealing in the area has been completed.

Fill and tamp core holes with grout at the completion of undersealing operations.

**00670.43 Opening to Traffic** - Finish grouting operations and plugging all drill holes at least three hours prior to opening to traffic.

### Measurement

**00670.80 Measurement** -

*(Use the following paragraph when Pay Item (a) is included in the Pay Item list below.)*

The quantities of drilled holes will be measured on the unit basis.

*(Use the following paragraph when Pay Item (b) is included in the Pay Item list below.)*

The quantities of grout incorporated in the undersealing work will be measured on the volume basis.

### Payment

*(Delete the "(s)" or parentheses from the word "item(s)" as appropriate.)*

**00670.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following item(s):

*(Delete Pay Item (s) from the list that are not included in the Schedule of Items, but do not change the alpha characters next to the Pay Item s.)*

**Pay Item**

**Unit of Measurement**

- (a) Drilled Holes.....Each
- (b) Concrete Undersealing Grout .....Cubic Yard

Payment will be payment in full for furnishing and placing all Materials, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.