# SDD 13C10 Retrofit Dowel Bars



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## Standard Detail Drawing 13C10

Retrofit Dowel Bars

#### **References:**

NONE

#### Bid items associated with this drawing:

| ITEM NUMBER | DESCRIPTION  | <u>UNIT</u> |
|-------------|--|-------------|
| 416.0623.S  | Pavement Dowel Bars Retrofit Warranted                       | EACH        |
| 416.0750.S  | Concrete Pavement Partial Depth Repair Joint Repair          | LF          |
| 416.0752.S  | Concrete Pavement Partial Depth Repair Crack Repair          | LF          |
| 416.0754.S  | Concrete Pavement Partial Depth Repair Surface Repair        | SF          |
| 416.0756.S  | Concrete Pavement Partial Depth Repair Edge Repair           | LF          |
| 416.0758.S  | Concrete Pavement Partial Depth Repair Full Depth Adjustment | SF          |
| 420.1000    | Continuous Diamond Grinding Concrete Pavement                | SY          |

#### Standardized Special Provisions associated with this drawing:

| <u>STSP NUMBER</u> | TITLE   |
|--------------------|---|
| 416-010            | Pavement Dowel Bars Retrofit Warranted              |
| 416-015            | Concrete Pavement Partial Depth Repair Joint Repair |

### Other SDDs associated with this drawing:

| <u>SDD 13C8</u> | Concrete Pavement Partial Depth Repair   |
|-----------------|--|
| <u>SDD 13C9</u> | Concrete Pavement Repair and Replacement |

#### **Design Notes:**

Use this SDD on jointed plain concrete pavements with or without dowels. Retrofit dowel bars are recommended to restore load transfer at joints and cracks in concrete pavement that are otherwise in good condition.

Use retrofit dowel bars on faulted joints and on cracks that are longer than 4 feet and at least 4 feet from an adjacent transverse joint. Spalled joints should be repaired with partial depth repair (see SDD 13C8 and STSP 416-015). Severely deteriorated joints and cracks should be replaced with full depth repairs; slabs broken into three or more pieces should be replaced (see SDD 13C9). Projects with an excessive amount of additional work are probably not good or cost-effective candidates for retrofit dowel bars.

When faulting is greater than 1/4-inch, continuous diamond grinding under <u>Standard Spec 420</u> is necessary to restore the ride after retrofitting with dowels.

#### **Contact Person:**

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