

**JOB SPECIFIC  
BELLEVUE AVENUE  
NEWPORT, RHODE ISLAND**

**PORTLAND CEMENT CONCRETE PAVEMENT**

**DESCRIPTION**

This Specification consists of furnishing and placing full-panel replacement of Portland Cement Concrete Pavement on Bellevue Avenue.

**MATERIALS**

Portland Cement Concrete Pavement shall be a 5,000 PSI High Early Strength Concrete Mix with a 0.37 water to cement ratio using pure cement (no fly ash), as per the specifications below:

Cement, Type II (lbs)	752
Fine Aggregate (lbs)	1,044
Coarse Aggregate (lbs)	1750
Water (lbs/gal)	280/33.5
Total Air, %	6.0 +/- 1.5
Adva-190 (oz)	22.56
Daratard 17 Retarder (oz)	15.04
Darex II AEA (oz)	2.3
Water/cement ratio (lbs/lb)	0.37
Slump (in)	4.00
Concrete Unit Weight (PCF)	141.7

Installation shall conform to Rhode Island Department of Transportation (RIDOT), Standard Specifications for Road and Bridge Construction, 2004 Edition, including updates.

All joint materials, i.e., filler and sealant, shall conform to the requirements of Section 500 and Section M.02 of the above RIDOT specification.

**CONSTRUCTION**

Portland cement concrete pavement shall be placed in accordance with the aforementioned specifications. Careful attention shall be given to the proper saw cutting of joints and curing after placement.

**Traffic shall not be allowed on the concrete pavement until it reaches 3,000 PSI, a minimum of 24 hours.**

**METHOD OF MEASUREMENT**

Portland Cement Concrete Pavement will be measured per square yard per eight inch (8") depth of concrete.

**BASIS OF PAYMENT**

Portland Cement Concrete Pavement will be paid for at the contract unit bid per square yard in place. These payments shall constitute full compensation for furnishing all labor, materials, equipment, tools and incidentals necessary to produce, place and protect the concrete as herein specified, in addition to any requirements in the specifications for the particular use.

**JOB SPECIFIC  
BELLEVUE AVENUE  
NEWPORT, RHODE ISLAND  
807.1695**

**SILICONE HIGHWAY JOINT SEALANT**

**DESCRIPTION**

The work under this item shall consist of furnishing and installing silicone joint sealant in highway and bridge expansion and contraction joints to the configuration shown on the plans or as directed by the Engineer.

**MATERIALS**

The silicone joint sealant shall be a one-part silicone material that readily extrudes over a wide temperature range and cures to produce a durable, flexible, low modulus silicone rubber joint seal. It shall have an extension recovery of 100% and a compression recovery of 50% of the original joint width.

The silicone sealant shall meet the requirements of Federal Specifications TT-S-01543 A Class A (one-part silicone sealants) and TT-S-00230 C Class A (one component sealants).

**LIMITATIONS**

Silicone sealant is not intended for continuous water immersion, and it should not be applied in totally confined spaces where the sealant is not exposed to atmospheric moisture. The sealant should never be applied to wet or damp surfaces nor should it be installed during inclement weather. It shall be applied no thicker than 1/2 inch and no thinner than 1/4 inch an approximate width to depth ratio of 2:1.

**CONSTRUCTION METHODS**

All joints shall be cleaned of contaminants and impurities to the depth at which the sealant (and backer rod if detailed) is to be installed. Cleaning shall be by grinding, saw cutting, blast cleaning (sand or water), mechanical abrading or a combination of these methods. This will provide a sound, clean and frost-free surface for sealant application.

All dust, loose particulates, and other debris shall be blown out with oil free compressed air.

An expanded closed cell polyethylene foam road back-up material shall be installed in joints, or an approved bond breaker tape shall be installed if so detailed on the plan.

A primer shall be applied to the surfaces of steel expansion joints. The primer shall be as per the recommendation of the sealant manufacturer.

Silicone highway joint sealant shall be applied in a continuous operation to properly fill and seal the joint width. For maximum performance the sealant should be applied above 40°F. The sealant shall be pumped directly from the original drum or pail into the joint by use of an air-powered pump, pushing the sealant ahead to form a uniform bead. The sealant shall fill the joint from the bottom to slightly below the pavement surface.

The joint shall be tooled using a blunt instrument, so that it is slightly concave and approximately ¼ inch below the adjacent surface. Tooling should be done within 10 minutes of application before a "skin" forms. No soap or oil shall be used as a tooling aid.

Traffic shall be kept off the sealed lane for at least 30 minutes after sealant application.

### **METHOD OF MEASUREMENT**

The quantity of "Silicone Highway Joint Sealant" to be paid for will be measured by the linear foot; in accordance with the Rhode Island Standard Specifications and these special provisions.

### **BASIS OF PAYMENT**

The quantity determined under the "measurement" section will be paid for by either the contract unit price or included in the contract Lump Sum items, as designated in the Proposal. This payment will constitute full compensation for all silicone sealant, back rods, bond breaker tape, primer, surface preparation, other materials, labor, tools, equipment, and other incidentals necessary to properly complete this work

**JOB SPECIFIC  
BELLEVUE AVENUE  
NEWPORT, RHODE ISLAND**

**EXPANSION JOINT FILLER**

**DESCRIPTION**

The Work under this item shall consist of furnishing and installing expansion joint filler in expansion and isolation joints to the configuration shown on the plans or as directed by the Engineer.

**MATERIALS**

The expansion joint filler shall meet the requirements of AASHTO M33 or AASHTO 213 and shall be punched to admit dowels where called for on the plans. The filler for each joint shall be furnished in a single piece for the full depth and width required for the joint unless otherwise authorized by the Engineer. When the use of more than one piece is required for a joint, the abutting ends shall be fastened securely and held accurately to shape by stapling or other positive fastening satisfactory to the Engineer.

**CONSTRUCTION METHODS**

Transverse expansion joints shall consist of a vertical expansion joint filler placed in a butt-type joint with or without dowel bars as shown in the plans. The expansion joint filler shall be continuous from form to form and shaped to the sub grade. Preformed joint filler shall be furnished in lengths equal to the pavement width or equal to the width of one lane. Damaged or repaired joint filler shall not be used.

The expansion joint filler shall be held in a vertical position. An approved installing bar or other device shall be used if necessary to ensure proper grade and alignment during placing and finishing of the concrete. Finished joints shall not deviate in horizontal alignment more than 1/4 in. from a straight line. If joint fillers are assembled in sections, there shall be no offsets between adjacent units. No plugs of concrete shall be permitted anywhere within the expansion space. '

**METHOD OF MEASUREMENT**

The quantity of "Expansion Filler" to be paid for will be measured by the linear foot; in accordance with the Rhode Island Standard Specifications and these Special Provisions.

**BASIS OF PAYMENT**

The quantity determined under the "measurement" section will be paid for by the Contract unit price for Portland Cement Concrete Pavements as designated in the Proposal. This payment will constitute full compensation for all filler surface preparation, other materials, labor, tools, equipment, and other incidentals necessary to properly complete this work.