



#### **PROJECT PROFILE**

Owner: City of Victoria Engineer: MMM Group

# **Johnson Street Bridge**

Contractor: PCL Constructors Westcoast

**Distributor:** Brock White Construction Materials

### **Johnson Street Bridge Project**

The third and current version of Johnson Street Bridge was built at its present location in Victoria, British Columbia in 1924. A 2009 assessment of the existing Johnson Street Bridge identified extensive corrosion to structural steel beams and obsolete mechanical and electrical systems as well as seismic vulnerability. An important transportation connection into Victoria's central business, entertainment and tourism districts with over 30,000 crossing per day a new modern solution was required.

The City of Victoria retained MMM Group, a Canadian engineering firm with expertise in moveable bridges to provide the engineering services for design and project management for a replacement option of the existing structure.

MMM Group's solution was the largest single lift bascule bridge in Canada to replace the existing Johnson Street Bridge. The new bridges piers and foundations are designed to serve Victoria for the next 100 years. The City of Victoria approved the design and construction began in May of 2013.

### Cementec's Con-Fume™ Silica Fume

A key ingredient to high performance concrete required for bridge structures is silica fume. A pozzolanic material used in concrete mix designs to produce high performance concrete for increased strength, impermeability and durability.

Cementec Industries is the only Western North American producer of silica fume. In partnership with Brock White Victoria, Cementec supplied over 12 tonnes of high quality CSA / ASTM approved silica fume for approximately 525 cubic meters of high performance concrete supplied by Ocean Concrete for Johnson Street Bridge.

Manufactured in Calgary, Canada, Con-Fume™ Silica Fume was the perfect choice for Ocean Concrete. Cementec and Brock White provided price assurance and availability of supply for Oceans high performance concrete in a demanding, budget conscience project like Johnson Street Bridge. Engineered for enhanced flowability in pneumatic and storage equipment a high quality silica fume product was supplied.

#### Silica Fume

Silica Fume is a pozzolanic material used to produce high performance concrete for increased strength, impermeability and durability. Silica fume reacts with the hydration products of Portland cement forming calcium silicate hydrate gel, which enhances strength and durability by consuming weaker calcium hydroxide.

#### **Cementec Industries**

Cementec is an award winning engineering, materials manufacturer with expertise and experience. Established in 1987, Cementec Industries is a Calgary based company and the only producer of silica fume in Western North America. Cementec is a member of ACI, APEGA and Provincial and State ready mix associations.

#### Contact Us

For more information contact Cementec Industries Inc. 1-844-E-CEMENT | 1-844-323-6368 or info@cementec.ca Toll-free 24 hour order desk: 1-866-256-1367 www.cementec.ca

## Victoria, BC





