



Project Profile: Edmonton High Level Bridge

Edmonton's High Level Bridge is a Canadian Pacific Railway bridge that spans the North Saskatchewan River in the city's core. Constructed between 1910 and 1913, it was the first major transportation link to cross the river and was the first bridge in Canada to carry four modes of transportation: rail, streetcar, automobile and pedestrian. This historic structure is 0.75 km (close to half a mile) long and stands approximately 50 m (over 160 ft) above mean river level. It is constructed with over 8,000 tons of steel studded together by 1.4 million rivets. The bridge has been designated as a national historic site by the Canadian Society for Civil Engineering.

Executed in 1995, the rehabilitation of the bridge was budgeted at \$19.9 Million and was the largest bridge project in Western Canada at the time. As an industry leader, **Park Derochie Coatings Ltd.** was chosen for the removal and 100% containment of the existing lead-based paint and the subsequent application of a modern high-performance coating system. All of this was carried out with operating public parks and waterways under and around the structure at all times. This portion of the project was valued at over \$10 Million.



Park Derochie was the first Alberta contractor to hold certification from the Society for Protective Coatings (SSPC) for the field application of coating complex structures (QP1) and is currently in the process of obtaining QP2 and QP3 certifications.

Project Highlights:

- Over 150,000 hours expended with zero recordable injuries
 - Containment structures for 0% emissions with environmental monitoring
 - Decontamination units for work force and monitoring blood lead levels
 - 1.4 million rivets cleaned and stripe coated
 - Crews of up to 16 abrasive blasters per shift
 - 3,750 tones of abrasive used over the duration of the job
 - Over 175,000 CFM negative air dust collector systems
 - Over 900 lineal feet of vacuum system piping
 - Over 7,000 CFM of air power
 - Approximately 5 tons of old lead paint removed
 - Over 1 Million square feet of surface area coated
 - 80,000 litres of coatings applied
 - 5 year warranty on coating and application – all warranty conditions met with no repairs required
- Completed on time and on budget in spite of being rained out 42 of 45 days at start

