

# Association of Professional Engineers

of the

Province of Manitoba

## Certificate of Engineering Achievement

presented to

**DBF Ltd. and The City of Winnipeg**

for the

### **Charleswood Bridge Project**

*The Certificate of Engineering Achievement is awarded to DBF Ltd. and The City of Winnipeg for the concept, design and implementation of the Charleswood Bridge Project, the first true Build, Own, Operate and Transfer (BOOT) project at the municipal level in Canada. The project consists of two kilometers of roadwork and a 152 meter river crossing connecting Charleswood and St. James in Winnipeg.*

*DBF Ltd. designed, built and financed the project, involving twin two-lane bridge structures with integral architectural features; noise walls; new roadway pavement; aesthetic landscaping; and ancillary works. DBF Ltd. owns the bridge structures and part of the roadworks, and will permit The City of Winnipeg exclusive use of the facility as a public thoroughfare; The City of Winnipeg has created a leasehold title in favour of DBF Ltd. for the term of ownership.*

*The City of Winnipeg's leadership in adopting the Public/Private Partnership process for the Charleswood Bridge Project and its rapid decisions throughout the process were instrumental in the success and timely delivery of the project. After a three-step procurement process, consisting of Qualifications, Value Engineering and Proposal submissions, The City awarded the project to DBF Ltd. on September 20, 1994. Detailed engineering, performed by Wardrop Engineering Inc. as a part of the DBF team, commenced immediately after contract award and was carried out sequentially on a design-to-construct basis. Construction began on November 14, 1994, with completion on October 24, 1995 - a year shorter than conventional project delivery.*

*The process on the Charleswood Bridge Project required a close contractor/engineering consultant relationship. This relationship was critical to the delivery of the Project throughout the proposal, design and construction stages. It fostered the technical innovations which achieved the very short design and construction schedule and provided a facility with reduced capital and maintenance costs. The technical innovation included:*

- *steel jacketed caissons for the bridge pier substructure;*
- *flexible asphalt pavement;*
- *40 meter long precast, prestressed concrete girders (longest span in Manitoba); and*
- *fibre reinforced silica fume concrete decking.*

*The Charleswood Bridge Project provides many advancements in the fields of engineering project delivery and bridge engineering, resulting in significant cost savings to the citizens of Winnipeg and Manitoba and also establishing an exportable technology for Manitoba-based firms.*

March 5, 1996