

Bridges and Structures



The specialists at Morrison Hershfield have designed bridges and tunnels for roads, railways, bicycles, pedestrians and utilities. Our engineers have successfully applied many types of materials and technologies in the repair and restoration of structures. Our portfolio of new bridge and rehabilitation projects ranges from single span structures to major landmark bridges. Types of structures include highway bridges, railway bridges, grade separation structures, drainage structures, earth retaining structures, elevated commuter and transit structures, falsework and temporary structures, foundations, sign support structures, special structures (such as moveable bridges), transportation terminals, tunnels and underground infrastructure for vehicles, pedestrians and utilities, and underground and above-ground storage facilities. Bridges and structures services for infrastructure expansion and rehabilitation include:

- **Planning and detailed design**
- **Feasibility studies**
- **Asset management and condition assessment**
- **Bridge deck and asset condition surveys**
- **Leak remediation**
- **Corridor assessment**
- **Investment analysis**
- **Cost/benefit analyses and constructability analyses**
- **Project and program management**
- **Resident inspections / construction administration**
- **Application of advanced materials and repair technologies in rehabilitation schemes**



Aesthetic Guidelines for Bridges



Road Railway Overpass



Heritage Bridge Restoration



Pedestrian Bicycle Overpass



Niagara Tunnel Intake Works



Kicking Horse Canyon Phase 2

We were the Independent Certifier to the Concession Agreement Parties for the technical review, audit and progress certification of this multi-million dollar project with significant construction, maintenance and operation challenges. We provided highly experienced structural and transportation engineers and managers with expertise in design, construction, procurement and regulatory compliance in AFP/P3 projects. Our expertise in public private partnerships, design and construction administration of major heavy civil infrastructure, quality management and intergovernmental negotiations ensured that the objectives of the agreement parties were met.



New International Border Crossing

We were retained by Transport Canada as technical advisors and lead engineers in the ongoing development of a new international crossing of the Detroit River at Windsor ON. With participation by Canadian and U.S. federal, provincial, state and local authorities, this multi-million dollar project, known as the Windsor Gateway Initiative, involves the construction of a new bridge crossing south of the Ambassador Bridge, construction of a new Canadian Customs Plaza and a new multi-lane controlled access highway linking the new plaza to Highway 401.