

Project Case Studies

Project Profile

Date: 2009 -2010
Name: MTO2009-2031
Hwy401/410 Interchange
West of Hurontario St.
Owner: Ministry of Transportation
Engineer: MMM Group
Contractor: Duffurin Construction Co.
Size: 5,500m² face area



Background and Challenges

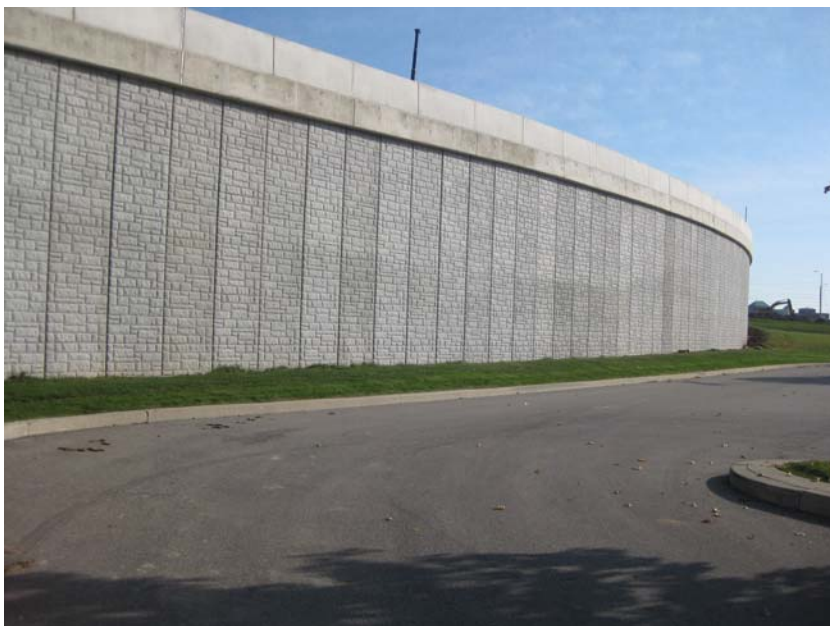
In 2009, MTO decided to create a new collector of Hwy 401 between Hwy 410 and Hurontario St. to relieve and mitigate the traffic gridlock in the area where increasingly demand of traffic volume was experienced.

Due to the existing local road interchange systems in this commercial and business concentrated busy area of city of Mississauga, numerous overpass, underpass, tunnels and bridges were proposed to form new ramps/exits and interchanges for the new collector.

A total of 17 high performance RSS retaining walls up to 7m high with architecture face were required to provide the grade separation needed in supporting above mentioned structures. Complex geometry (e.g. curved alignment, tiered structure and sloping ground ..etc.), congested site constraints and intricate construction sequence had presented many challenges to the design and installation of these retaining walls.

Solution

Working closely with the project Engineer and the Contractor, Terrafix had successfully met all the challenges throughout the project with provision of TerraFort RSS wall system, a high performance, full height panel retaining wall.



Advantages

The project customised pre-cast full height panels have enabled a fast-tracked installation process particularly for long walls with

- streamlined construction activities
- flexible installation sequence
- simple installation method
- flexible for accommodating utility structures encountered

All the RSS walls were completed within a tight schedule and facilitated the subsequent construction of other highway interchange structures.