



Rapid Bridge Replacement in Ontario Reduces Construction Inconvenience

Eight day superstructure build avoided need for protracted detour

Tay Valley Township lies in a remote region 56 miles (90 km) southwest of Ottawa. Access to a neighboring community had been across the Bolingbroke Bridge, an aging structure which had been repaired or rehabilitated numerous times. After an inspection in 2018 found severely deteriorated components, a weight restriction was imposed on the bridge and a full replacement recommended.

Tenders were invited for a permanent solution to meet Class D highway requirements, but it was critical the new bridge be installed quickly, as the detour route is lengthy and would impact emergency vehicle response times.

Ainley Graham & Associates Limited recommended a panel bridge solution, following consultations with the Township, for several reasons. Firstly concrete work would be minimal (foundations only). Furthermore, the ease and speed of assembly on-site using prefabricated components ensured a quick build. Transporting the bridge materials (comprising

compact modular components) to the remote site through the narrow rural roads would be much easier than large steel or concrete beam sections. Finally, a modular steel solution offered an overall estimated cost reduction compared with conventional reinforced concrete slab on steel or concrete girder systems.

The 140 foot (42.67m) bridge installation was a crane-assisted launch, delivered in partnership with General Contractor Ross & Anglin and Installation Subcontractor Les Aciers Auger, with technical support provided by one of Acrow's Site Technicians. Total construction time was eight working days using a five-man crew. The bridge opened in November 2020, enabling direct access for the neighboring communities, with reduced journey times for residents and essential emergency services.

