

BULLETIN #16:

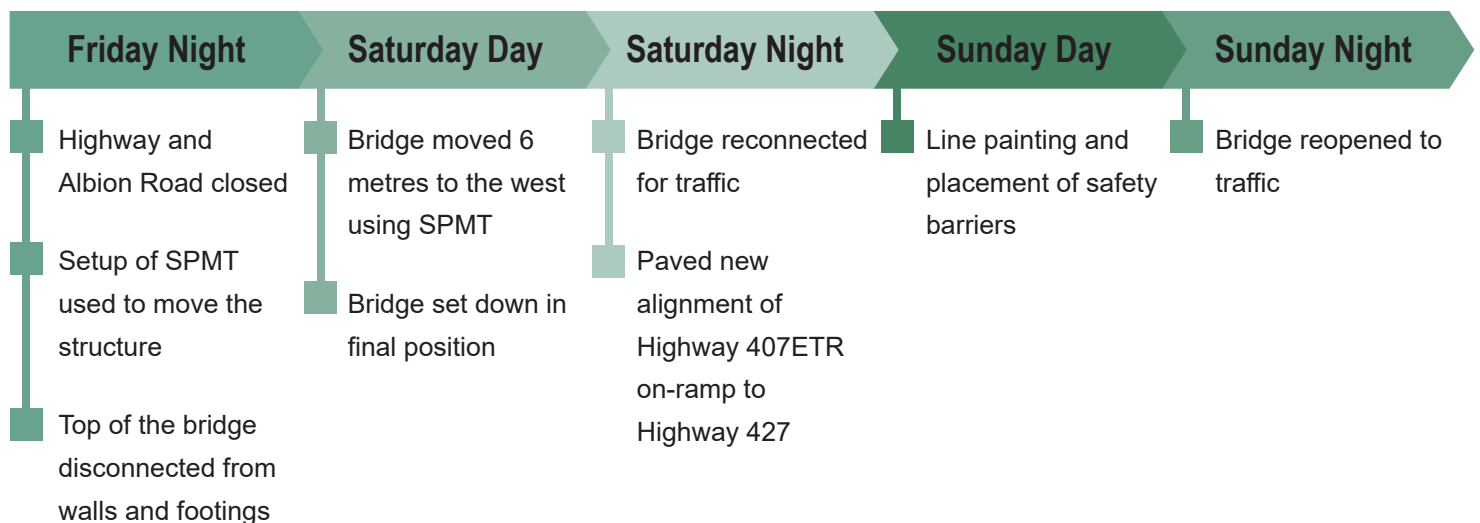
Albion Bridge Relocation



What happened?

During the weekend of June 16, 2019, the existing Highway 427 bridge at Albion Road was moved 6 metres to the west using a Self-Propelled Modular Transporter (SPMT) machine (see photos below). These works are part of the construction to complete the widening of the structure. This relocation benefits both drivers and constructors as it repurposes existing infrastructure and can be done quickly with minimal disruptions to traffic.

A video of the bridge relocation works was recorded and will be available to be viewed at:
<http://427expansion.ca/about-link-427/videos/>



View from Hwy 427 of Self-Propelled Modular Transporter machine set up below Albion Bridge on Saturday June 16 prepared for the bridge move.



View from Albion Road of Self-Propelled Modular Transporter machine set up below Albion Bridge on Saturday June 16 prepared for the bridge move.

Why was this approach taken?

The previous location of this bridge conflicted with the overall Highway 427 widening work. Moving the bridge was necessary so that the new 8-lane highway could be built. The original concept for this structure was to demolish the portion of the bridge that conflicted with the highway widening, and build a new portion of bridge on the other side to compensate. LINK427 decided to use a value-engineering approach instead.

Since the existing bridge was in good condition, LINK427 determined this approach would be the most effective method to move the structure. This approach also minimizes the duration of impacts to users of the roadway, promotes the reuse of infrastructure and reduces waste.



Close up view from Hwy 427 of Self-Propelled Modular Transporter machine set up below Albion Bridge on Saturday June 16 prepared for the bridge move.

What is value-engineering?

Design-build projects promote value-engineering opportunities through collaboration between construction contractors, designers, and the Ministry of Transportation. Value Engineering is a methodology by which we try to find substitutes for an operation. The concept of value engineering originated during the Second World War. This bridge move is a good example of value engineering. LINK427 is dedicated to finding innovative construction solutions that simultaneously reduce the impact on the public.

Performing this work over a weekend closure provides the most socio-economic value for users, as it minimizes overall construction impacts in this area. Instead of working with lane reductions and closures for multiple months, the work is performed in its entirety during an accelerated timeframe over one weekend.



View of Albion Road bridge move near completion.

What is the Highway 427 Expansion Project?

The Highway 427 Expansion project will extend the highway 6.6 km, from Highway 7 to Major Mackenzie Drive and widen the existing highway to 8 lanes between Finch Avenue and Highway 7.

Who is LINK427?

LINK427 is the consortium selected by the Ministry of Transportation (MTO) and Infrastructure Ontario (IO) to design, build, finance, and maintain the Highway 427 widening and extension.