

**Ministry of Transportation**

Planning and Design Section  
1355 John Counter Boulevard  
Postal Bag 4000  
Kingston, Ontario K7L 5A3  
Tel.: 613 547-1799  
1-800-267-0295  
Fax: 613-540-5106

**Ministère des Transports**

Section de la planification et de la  
conception  
1355, boulevard John Counter  
CP/Service de sacs 4000  
Kingston (Ontario) K7L 5A3  
Tél.: 613 547-1799  
1-800-267-0295  
Télééc. 613 540-5106



April 25, 2019

His Worship, Mayor Normand Riopel  
Township of Champlain  
948 Pleasant Corner Road East  
Vankleek Hill, ON  
K0B 1R0

Her Worship, Mayor Paula Assaly  
Town of Hawkesbury  
600 Higginson Street  
Hawkesbury, ON  
K6A 1H1

Your Worships,

As a follow up to the April 15, 2019 meeting with representatives from the Ministry of Transportation (MTO), Town of Hawkesbury, Township of Champlain and United Counties of Prescott and Russell (UCPR) in attendance, the MTO was requested to explain the rationale behind eliminating the Westbound on-ramp (N/S-W ramp) alternatives that were presented to staff on November 30, 2017 during the second Municipal Technical Advisory Committee (MTAC) meeting and to revisit these ramp options with the agreement that the posted speed limit would be reduced to 70km/h in the vicinity of the bridges. The posted speed limit changes that were presented and agreed to at the April 15, 2019 meeting are shown in Figure 1.

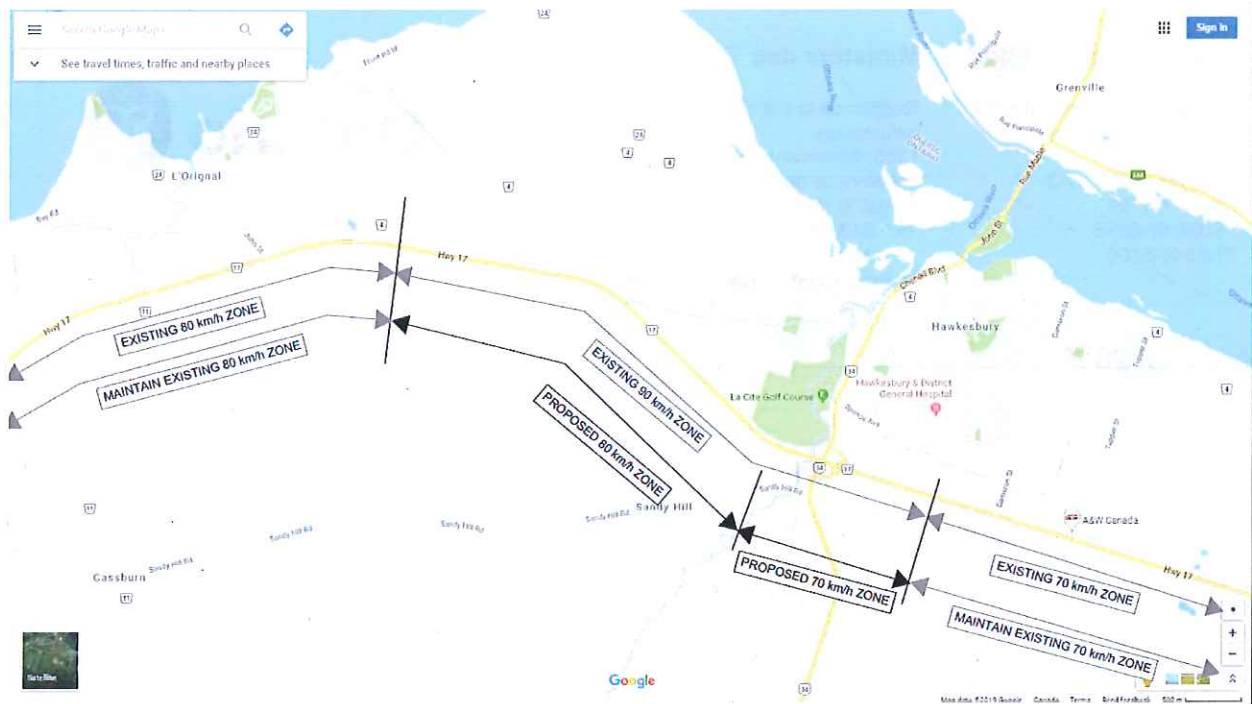


Figure 1: Current and Proposed Speed Limits on County Rd. 17

Figures 2 and 3 below are the alternatives that were presented at MTAC #2:



Figure 1: Channelized Right Turn with Acceleration Lane ("Option A")





Figure 2: Ramp Loop with Acceleration Lane ("Option B")

The feasibility of Option A, right turn channel, and Option B, ramp loop, were reviewed by MTO and Jacobs subsequent to MTAC#2. The information presented herein summarizes the findings of the analyses of the various alternatives.

A detailed geometric review of Option B was completed which determined that a 30 m ramp radius at that skew angle is not desirable. For interchange ramps, the minimum radius for an inner loop is 45m per Section F.5.2 of the **Geometric Design Standards for Ontario Highways (GDSOH)**.



For channelized right turns at an intersection, Option A, the minimum radius can be 25 m per Section E.8.4 of the GDSOH, but the skew angle makes this very tight for trucks and may surprise drivers with such a tight curve. **Also, this option still did not provide the recommended acceleration lane length to provide free flow movements.**



For these reasons, both these alternatives were abandoned.

The following options will be included in a comparative analysis table for the Online PIC update on April 29, 2019. High level commentary for each is provided below:

### 1. **Free Flow Interchange**

This option was abandoned because of the tight radius, skew angle, increased costs (due to a wider bridge) and impacts property/the environment.

## 2. Channelized right turn

Jacobs looked at another version of a channelized right turn and an acceleration lane after the April 15, 2019 meeting. This option does not meet the minimum required acceleration lane length for free flow conditions (per GDSOH Section E.8.4) without widening the bridge. However, *sub-standard* acceleration lane lengths may be permitted, so long as they are controlled by signage (merge signs or yield signs per Ontario Traffic Manual (OTM) Book 5 and 6). This is shown in Figure 4 below. This is a feasible option, however, due to the sub-standard acceleration lane, vehicles and trucks will not have adequate space to get up to speed prior to the merge. Please note that Figure 4 will be the channelized right turn version that will be presented to the public, not Option A.

## 3. Stop Control

The current proposed design is a T-intersection with a stop condition, shown in Figure 5. Traffic operates at acceptable levels of service, trucks can navigate the movement without crossing the centre line and there are adequate sight lines with this option. This is still the preferred alternative.

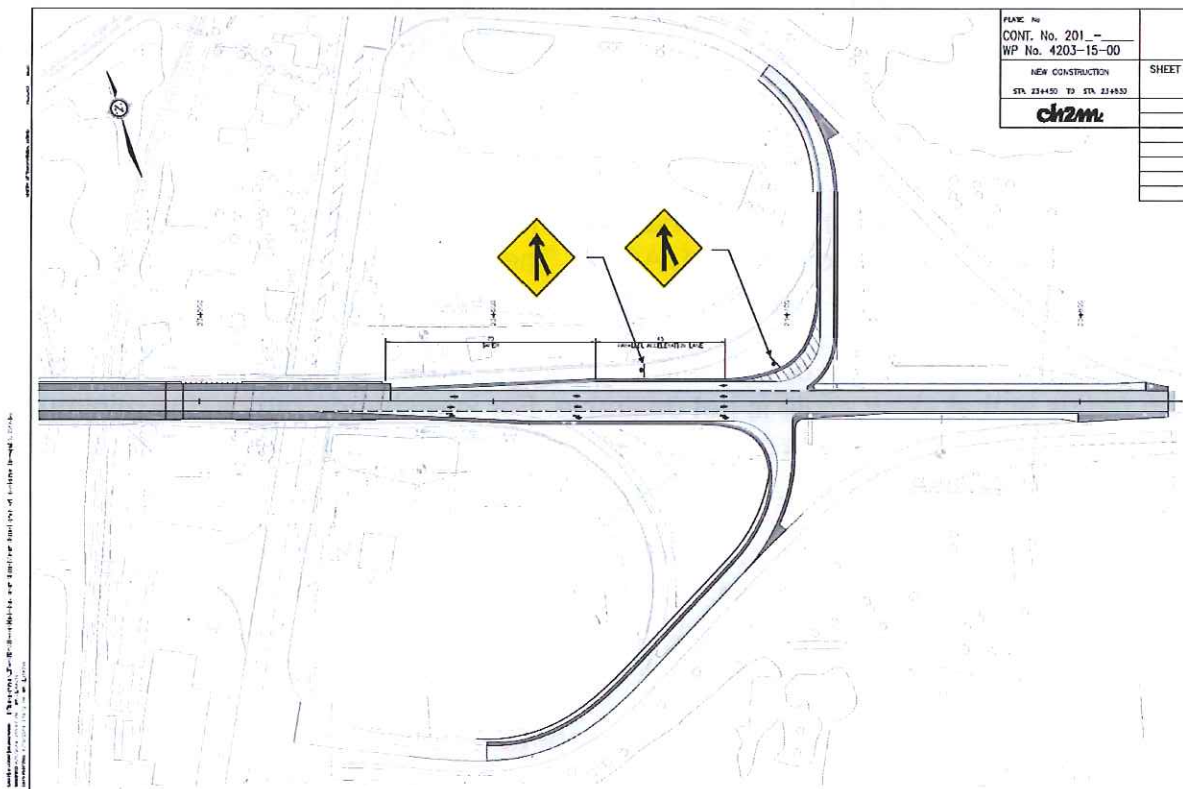


Figure 4: Channelized Right Turn with Sub-Standard Acceleration Lane and Merge Signs





Figure 5: T-intersection with Stop Condition (Preferred Alternative)

I trust that this information is useful to you and your staff and has addressed your requested follow up. Please note that a separate letter will be sent to address your concerns with the traffic signals at the Northbound ramp terminal at Highway 34. If you have any further questions, please feel free to contact me at any time.

Sincerely,

*Gizelle Cotton*

Gizelle Cotton, P. Eng.

Project Engineer

Ministry of Transportation

Planning and Design Section – Eastern Region

1355 John Counter Boulevard, Postal Bag 4000

Kingston, Ontario, K7L 5A3

Tel: 613.547.1799 | Toll Free: 1.800.267.0295 | Fax: 613.540.5106 | Cell: 613.217.7365

[Gizelle.Cotton@ontario.ca](mailto:Gizelle.Cotton@ontario.ca)

Cc: Guillaume Boudrias, Town of Hawkesbury  
 Daniel Gatién, Town of Hawkesbury  
 Marc Clermont, United Counties of Prescott & Russell  
 James McMahon, Township of Champlain  
 Frank Vanderlaan, MTO  
 Doug Raby, Jacobs  
 Matthew McFadden, Jacobs