

**Title: Hwy 1:06/08 at Hwy 22:14/16 Interchange**

Memorandum (or Acceptance) Date: March 14, 2018

Design Exception Request Date: March 7, 2018

Region: Southern

Acceptance Status: Accepted

Project Location					
Highway	Control Section	At km	From km	To km	Existing AADT
1 & 22	06/08 & 14/16				

Project Type (Mark all that apply with an X)			
Functional Planning:	New Construction:	Reconstruction:	Paving/Surfacing:
Bridge:	Operations:	Geotechnical:	Environmental:
Shoulder Widening:	Detailed Design: <b>X</b>	Other:	

Summary
<p>The interchange at Hwy 1 and Hwy 22 is proposed to be converted from a Full Cloverleaf configuration to a Parclo AB-4 configuration with loop ramps for WBL and SBL movements. The converted interchange is to improve traffic safety and operational efficiency while optimizing existing infrastructure. This is intended to be an interim solution to address the existing safety and capacity issues until a full interchange reconstruction with a twinned Hwy 22 alignment can be completed. The NW quadrant includes a service station and a mobile inspection station which is accessed via the Hwy 22 SB right entrance ramp.</p>

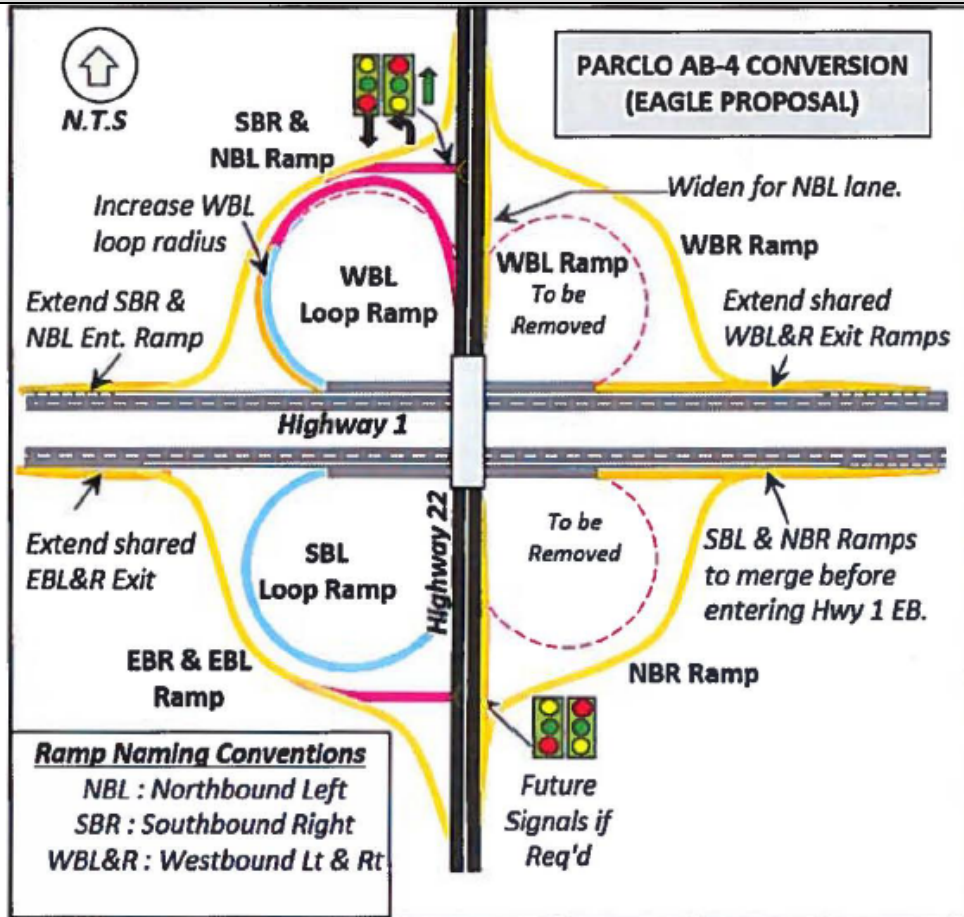
Rationale for Acceptance/Rejection
<p>To minimize weaving movements, two loop ramps (NB-WB and EB-NB) will be removed. The directional ramps located in the NW and SW corners will include left turning movements with traffic signals introduced. The WBL loop radius will also be increased. In addition, signage to be posted on the SBR-NBL Ramp to watch for traffic merging from left for vehicles going to the service station. Pavement markings to delineate the free-flow through lane from the weaving lane and to separate the weaving movement directions into designated sections are to be installed.</p> <p>The capacity analysis performed for this improvement shows acceptable functionality and is expected to perform well during design project life of 10 years.</p>

Additional Mitigation Required
<p>This location should be actively monitored to ensure the improvements to the interchange are operating safely and acceptably.</p>

Key Words

Interchange; parclo; operation; safety; ramps; retrofit

Photograph/Diagram



**HIGHWAY 1 WB & HIGHWAY 22 INTERCHANGE  
Signage & Pavement Marking Suggestion**

Include Solid Wide white line to discourage ramp traffic from entering through lane until beyond the PetroCanada entrance to restrict weave movements to one direction (through lane to right lane) and to allow ramp traffic to accelerate to highway speeds.

WEIGH SCALE / M.I.S SITE

PETROCANADA COMMERCIAL SITE



Sb-Right & Nbl-Left Ramp

WB-Left Ramp

Install signage instructing Westbound Through drivers to Keep Left shall be installed if weaving-related safety concerns arise.



← HIGHWAY 1 WESTBOUND

HIGHWAY 22 OVERPASS