Watermain Replacement from Highway 50 to Hardwick Road

Town of Caledon

Municipal Class Environmental Assessment - Schedule B

Online Public Information Centre

October 7, 2024 to October 21, 2024

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Land Acknowledgement

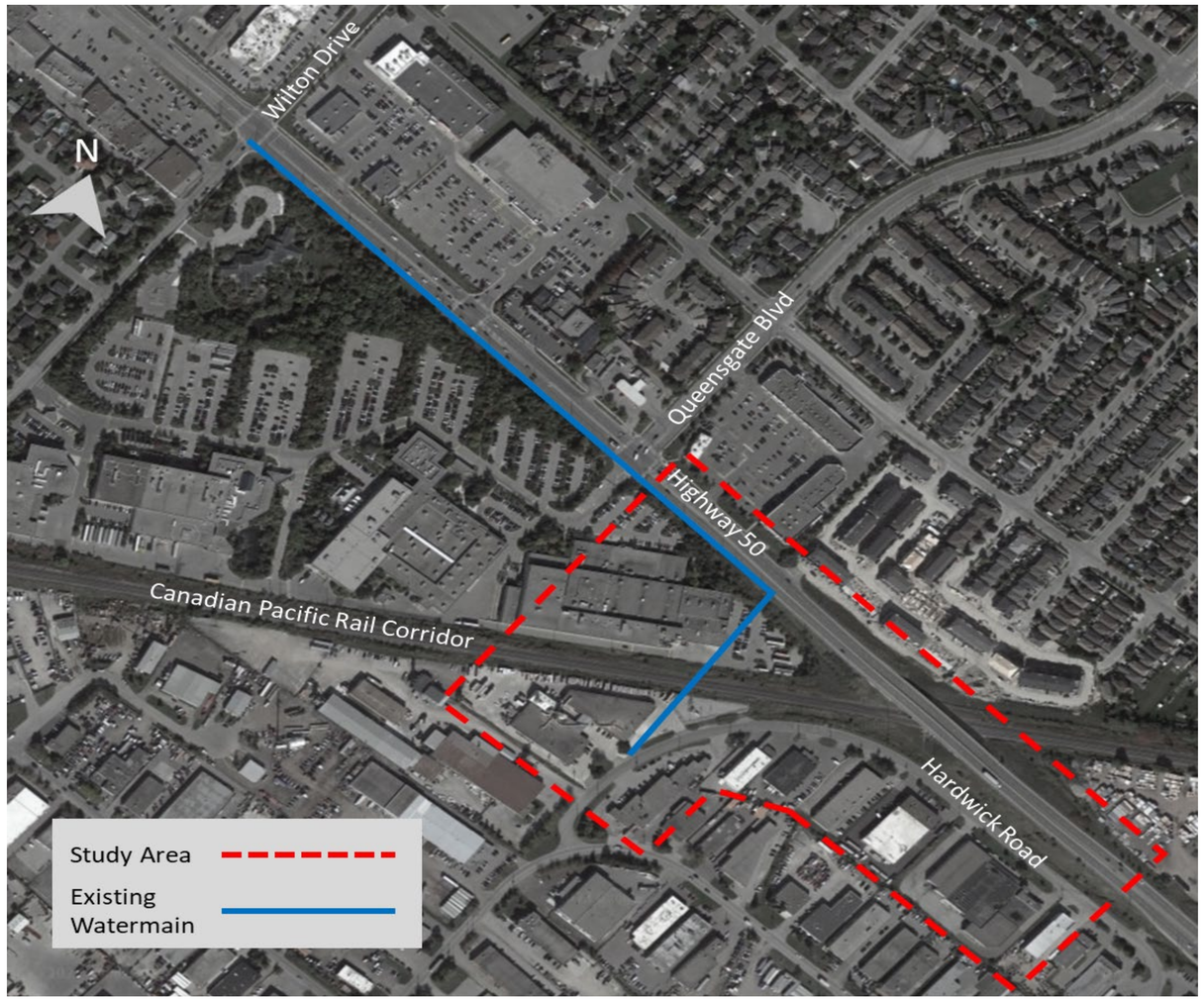
We would like to acknowledge that the land on which we gather, and on which Peel Region operates, is part of the Treaty Lands and Territory of the Mississaugas of the Credit. For thousands of years, Indigenous peoples inhabited and cared for this land, and continue to do so today.

In particular, we acknowledge the territory of the Anishinabek, Huron-Wendat, Haudenosaunee and Ojibway/Chippewa peoples; the land that is home of the Metis; and most recently, the territory of the Mississaugas of the Credit First Nation who are direct descendants of the Mississaugas of the Credit.

We are grateful to have the opportunity to work on this land, and by doing so, give our respect to its first inhabitants.

Project Purpose

- Peel Region's 2023 Water Linear State of Good Repair program includes a watermain replacement in the Town of Caledon along Highway 50 from Wilton Drive to Queensgate Boulevard and along the Highway 50/Hardwick Road easement.
- The existing easement carries the 300mm diameter watermain across private property (Husky Injection Molding Plant) and Canadian Pacific (CP) Rail corridor to Hardwick Road.
- The new 300mm diameter watermain will upgrade the aging infrastructure, enhance water quality and overall reliability of the system.
- The new watermain installation will require easement(s) from CP Rail and possibly private property owner(s) and hence has triggered the need to complete a Schedule B MCEA (Municipal Class Environmental Assessment) Study to determine the preferred watermain alignment and support property negotiations.



Purpose of Public Consultation

The purpose of this public consultation is to provide information on several key aspects of the Study such as:

- Project purpose and background;
- MCEA Study process;
- Description of alternative solutions;
- Evaluation criteria and process;
- Recommended preferred solution; and
- Next steps in the Study process.

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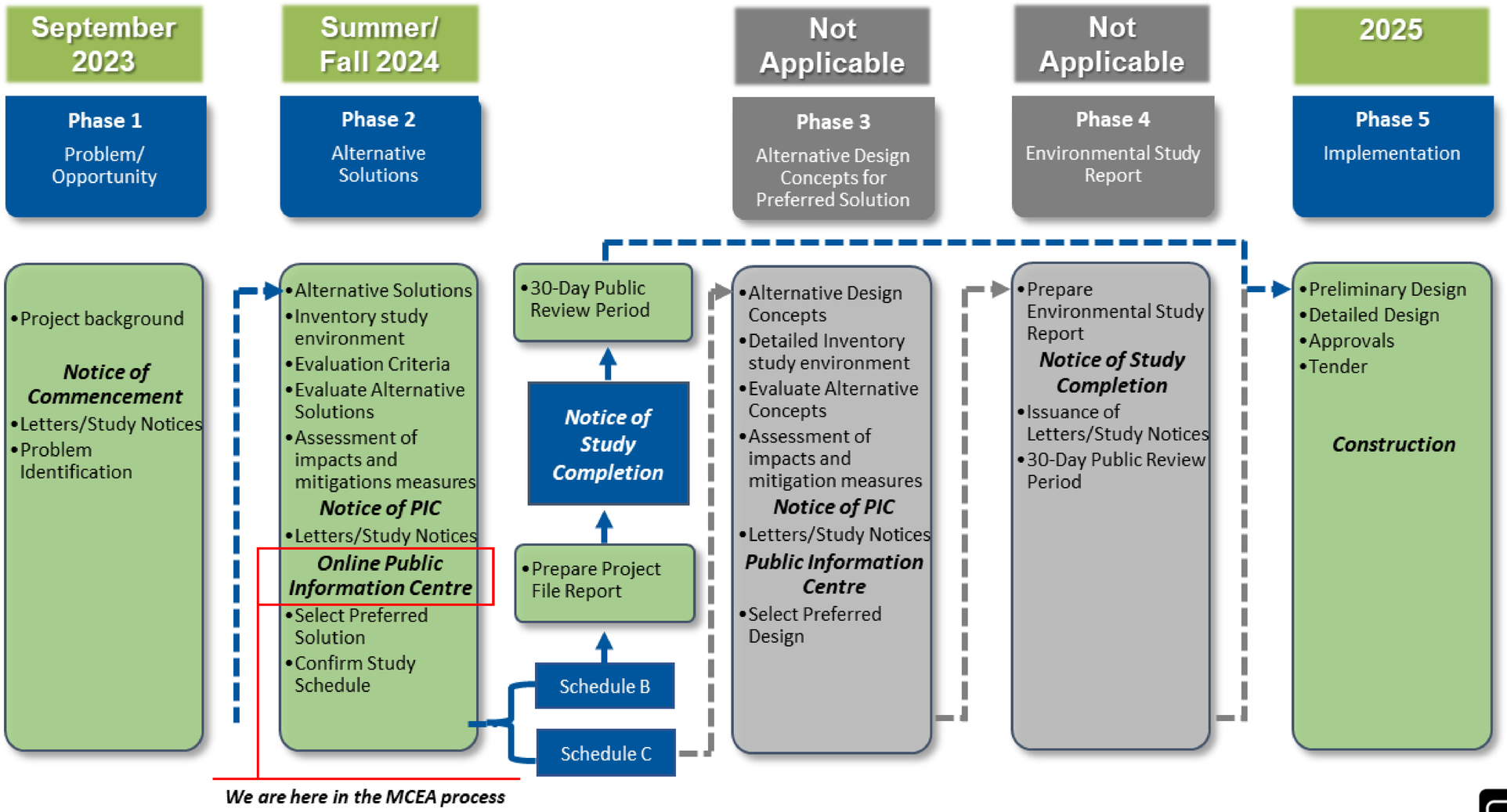
Timeline and Process

The Municipal Class Environmental Assessment (MCEA) Planning and Design Process is used by municipalities to ensure that the requirements of the *Environmental Assessment Act* are met when undertaking capital works projects.

The **Watermain Replacement from Highway 50 to Hardwick Road MCEA** is being carried out as a Schedule B undertaking (Phases 1, 2 and 5) as presented in the flow chart below.



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Problem Statement

Based on background information and the purpose of the Study, a Problem Statement was prepared to govern the Study and guide the development and evaluation of the alternatives proposed.

The existing 300mm diameter ductile iron watermain along Highway 50 from Wilton Drive to 150m south of Queensgate Boulevard and along the Highway 50/Hardwick Road easement requires replacement due to age and to improve water quality and reliability of the system. The easement carries the existing watermain across private property and the Canadian Pacific (CP) Rail corridor. The watermain replacement is anticipated to be installed via trenchless technologies and will require new property easement(s) for the crossing of private property and/or the CP Rail corridor to connect to Hardwick Road. Through the completion of this Municipal Class Environmental Assessment, watermain alignment alternatives will be developed and evaluated taking into consideration accessibility needs, impact on the natural environment, property requirements, coordination with ongoing and future projects and financial implications.

Existing Conditions

Several background studies have been completed to help characterize the Study Area and evaluate the proposed Study alternatives, including an Archaeological Assessment, Cultural Heritage Assessment and Geotechnical Investigation and Excess Soil Planning.

Archaeological & Cultural Heritage:

- The entirety of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance or previously being assessed.
- No further archaeological assessment is required.
- A review of federal, provincial and municipal registers, inventories and databases revealed there are no known cultural heritage landscapes or built heritage resources in the Study Area.

Geotechnical & Excess Soil Planning:

- The proposed watermain installation via jack and bore (at rail crossing) will traverse through till materials and native clay, while the open-cut and/or HDD (horizontal directional drilling) installation will traverse through moist cohesive soil including clay, silty clay, sandy clay and clay with sand.
- Extensive dewatering techniques will not be required during construction.
- Excess soil assessment concluded all estimated excess soil (2400m^3) found on-site should be suitable for reuse based on Ontario Regulation 406/19.

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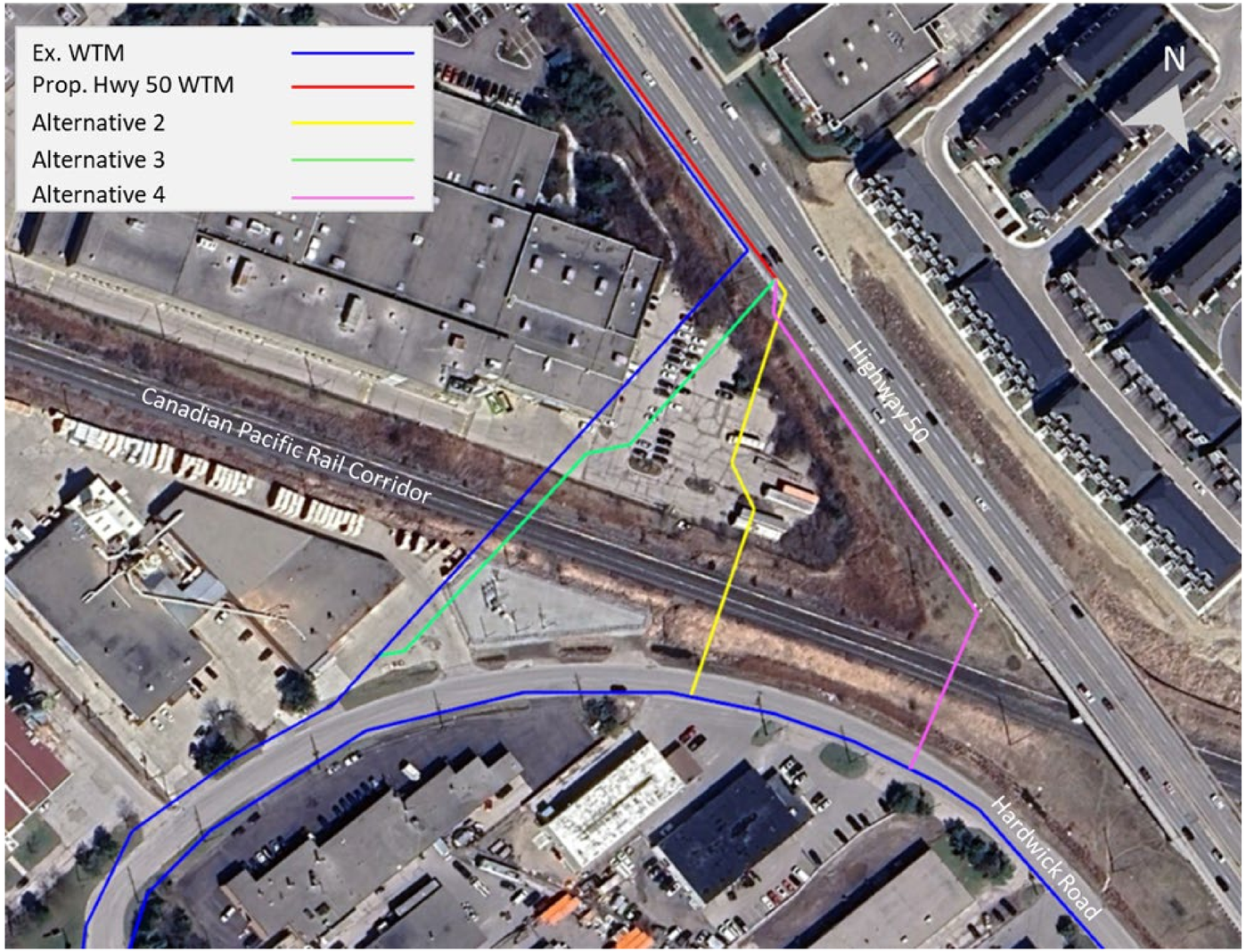
Alternative Solutions

Three (3) watermain alignments have been identified and evaluated for this Study. The alternatives include:

1. **Do Nothing**
2. **New Alignment Through Husky Property:** Along Highway 50, further east within Husky property, through parking lot, to Hardwick Road
3. **Maintain Similar Watermain Alignment:** Along Highway 50, close to existing watermain within Husky property, through parking lot, to Hardwick Road
4. **Alignment Crossing CP Rail Prior to Highway 50 Bridge:** Along Highway 50, further east outside of Husky property, to Hardwick Road



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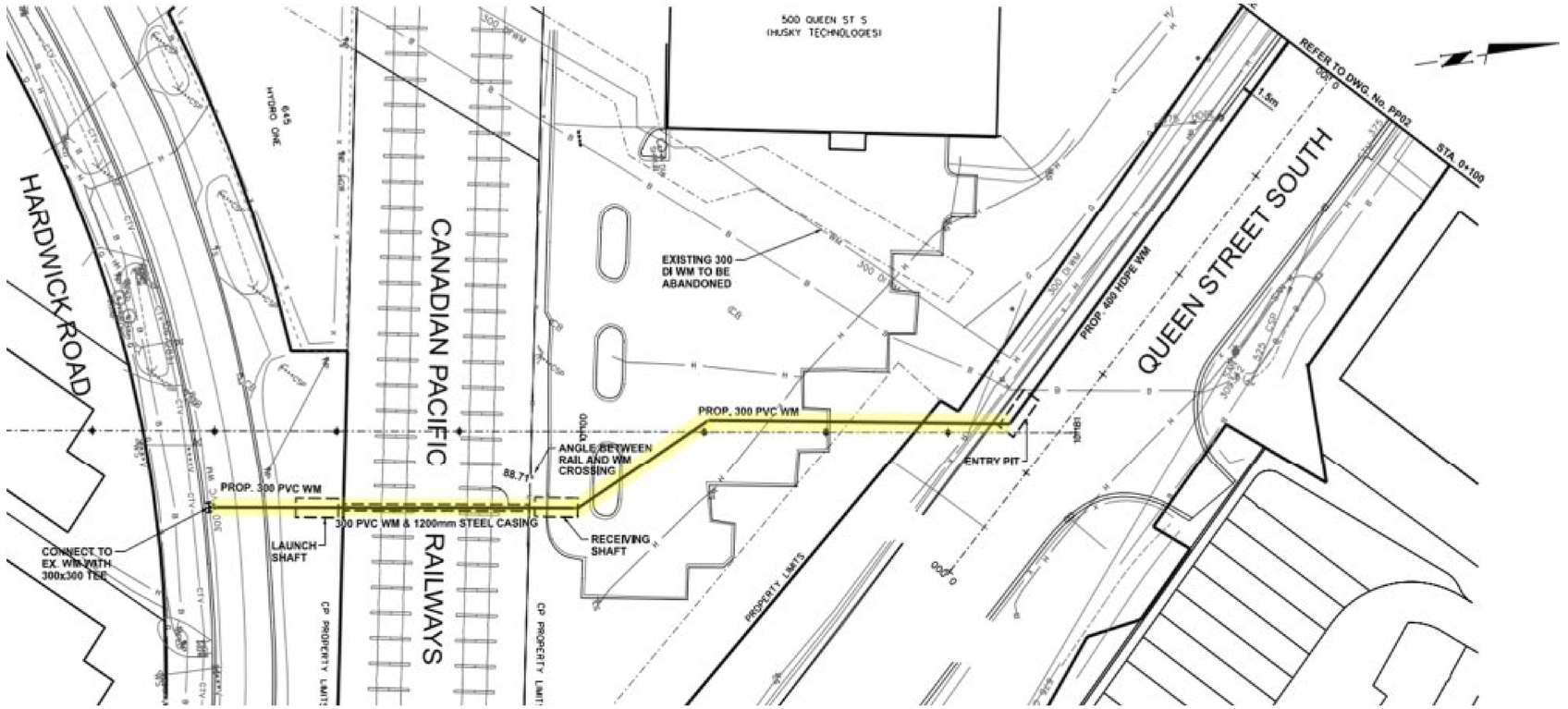
Alternative 1: Do Nothing

- The *Environmental Assessment Act* (EAA) requires the consideration of the “Do Nothing” alternative to provide a baseline scenario in which to compare all other alternatives and consider what will happen if no action is taken and no watermain replacement is completed.
- This consideration assumes that the existing watermain alignment will remain in place and be maintained. No improvements are planned to address the existing watermain’s material, supply integrity, or reliability deficiencies.
- The existing easement for the watermain is not officially recorded, therefore a new easement would be required to ensure legal and operational compliance regardless of whether or not the watermain is replaced.

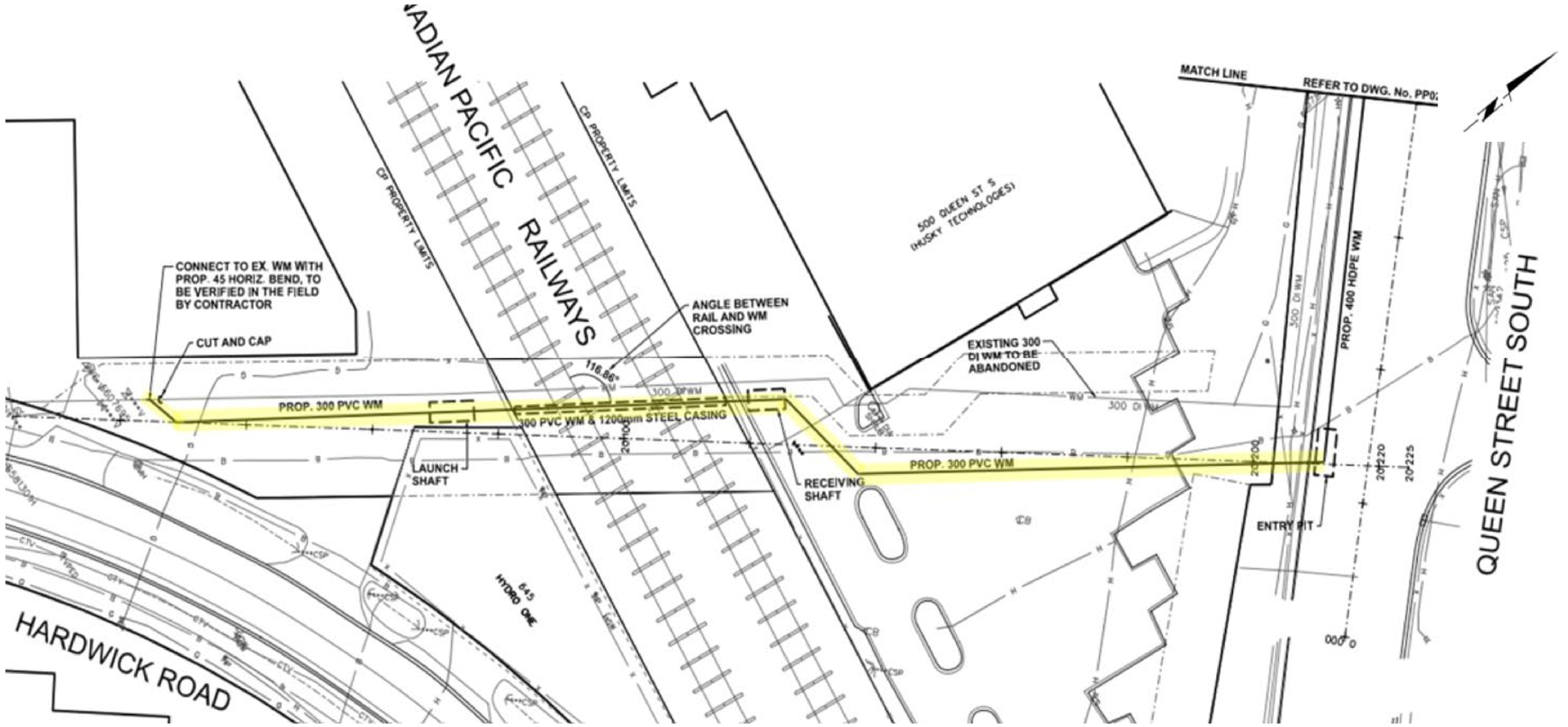
Alternative 2: New Alignment Through Husky Property

- Alternative 2 provides a new alignment for the 300mm diameter watermain further east within the Husky property.
- This alignment will connect with the new 400mm diameter watermain on Highway 50 (Queen Street South), through the Husky parking lot to the north side of the CP Rail corridor, cross under the rail corridor, and connect with the existing watermain on Hardwick Road.
- This alignment will avoid structural concerns near the Husky building and minimize traffic disruption by avoiding high-traffic areas through temporary lot closures, while also having minimal impact on adjacent vegetation and the Highway 50 bridge structure.
- This installation will require both permanent and temporary easements from Husky and CP Rail.



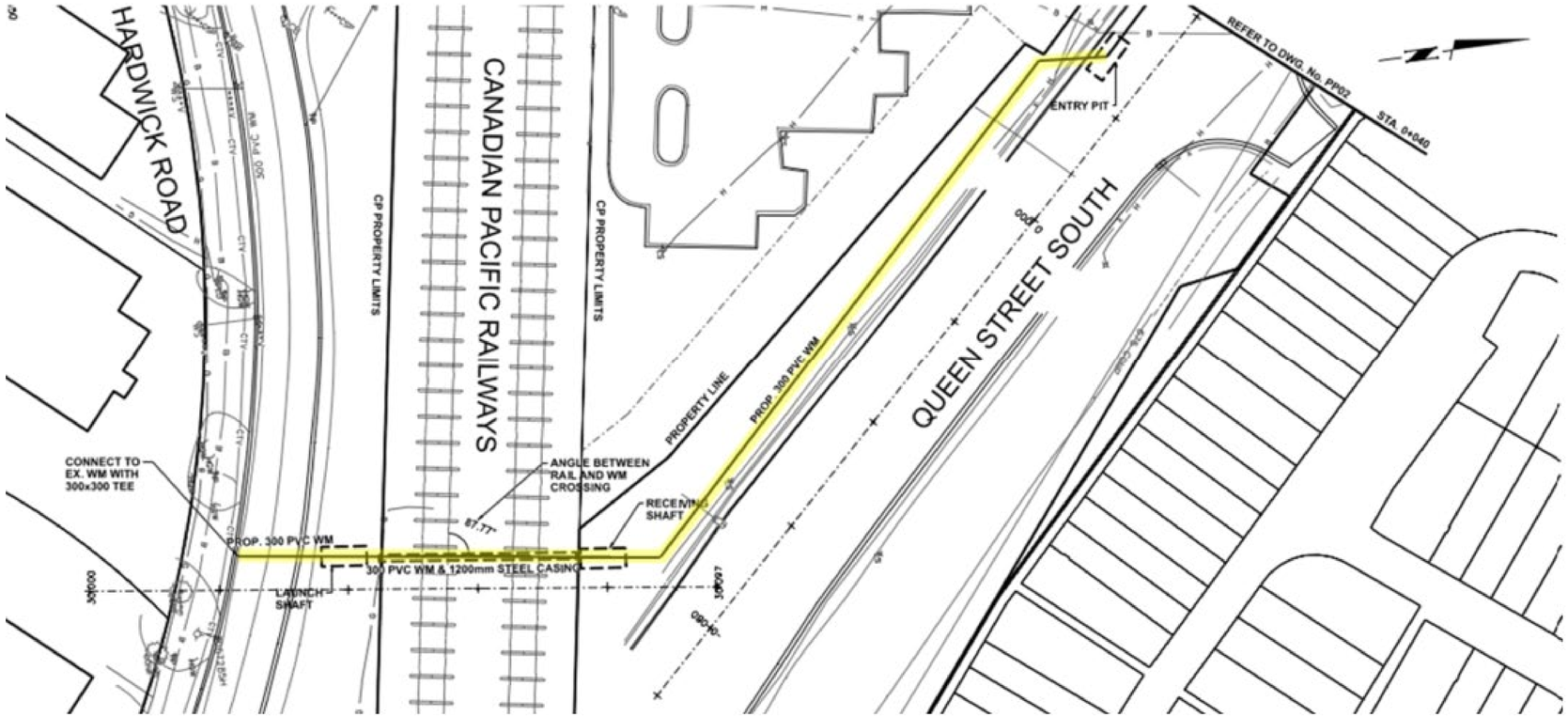
Alternative 3: Maintain Similar Watermain Alignment

- Alternative 3 provides a new alignment for the 300mm diameter watermain in close proximity to the existing watermain that is within the Husky property.
- Similar to Alternative 2, this alignment will connect with the new 400mm diameter watermain on Highway 50 (Queen Street South), through the Husky parking lot to the north side of the CP Rail corridor, cross under the rail corridor, and connect with the existing watermain on Hardwick Road.
- The proximity of the watermain alignment to existing structures will necessitate thorough assessments, including additional settlement monitoring and specialized geotechnical investigations for foundation stability.
- Construction will impact vehicular traffic and operations within Husky property, requiring complete closure of the parking lot and affecting high-traffic areas.
- This alignment will have minimal impact on nearby vegetation and the Highway 50 bridge structure but will require new permanent and temporary easements from Husky and CP Rail.



Alternative 4: Alignment Crossing CP Rail Prior to Highway 50 Bridge

- Alternative 4 provides a new alignment outside of private property.
- The new alignment will connect with the new 400mm diameter watermain on Highway 50, travel east along Highway 50 to south of the bridge structure within the bridge embankments, cross under the rail corridor, and connect with the existing watermain on Hardwick Road.
- This alternative eliminates property requirements within Husky, except for the abandonment of the existing watermain and easement. However, it introduces significant challenges in construction due to the sloped area of the bridge structure, the necessity to work alongside hydro lines, and the difficulties associated with construction vehicle access.
- The proximity of this alignment to the Highway 50 bridge structure raises concerns with potential impacts to the structure and conflict with the ongoing bridge rehabilitation project being carried out by Peel.



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Evaluation Criteria and Process

As part of the MCEA process, the developed alternatives were evaluated against five (5) categories and respective criteria to comparatively assess the alternatives in a qualitative manner to select the best alternative.

Evaluation Criteria

Evaluation Categories	Criteria
Technical Environment	• Constructability and complexity of implementation • Future operation and maintenance • Impact on existing utilities and infrastructure • Impact to ongoing bridge rehabilitation project • Addresses Study Problem
Natural Environment	• Impacts on significant wildlife and their habitat, including Species at Risk (SAR) • Impacts on vegetation communities • Surface water impacts • Groundwater impacts
Social Environment	• Impacts to private properties • Impacts of construction on the public • Nuisance impacts (vibration, dust and noise issues during construction)
Cultural Environment	• Disruption of built and cultural heritage features • Impact on areas of archeological potential
Economic Environment	• Construction Capital Costs • Land acquisition and/or easement requirements

The selection of the preferred alternative is based on the relative advantages and disadvantages of each alternative within the natural, social, cultural, technical and economic environments' evaluation criteria and includes consideration of mitigation measures. The ranking of each alternative relative to the specific evaluation criterion was conducted using a colour-coded system as shown below.

Rating	Colour Code
Preferred	Green
Less Preferred	Yellow
Least Preferred	Red

The alternative which demonstrated the greatest number of "most" preferred boxes and/or the fewest "least" preferred boxes relative to their potential environmental effects would likely be the preferred alternative.

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Evaluating the Alternatives

Criteria	Alternative 1: Do Nothing	Alternative 2: New Alignment Through Husky Property	Alternative 3: Maintain Similar Watermain Alignment	Alternative 4: Alignment Crossing CP Rail Prior to Highway 50 Bridge
Technical Environment	• Does not address Study problem	• Addresses Study problem with impacts to Husky property which can be mitigated	• Addresses Study problem with significant constructability concerns related to proximity of watermain to building and impact to high-traffic areas	• Addresses Study problem with significant constructability concerns related to accessibility and proximity to bridge structure and utilities
Natural Environment	• No construction impacts	• Construction impacts with some vegetation removal	• Construction impacts with some vegetation removal	• Construction impacts with significant removal of vegetation
Social Environment	• Due to lack of reliability of existing watermain could impact private properties' water supply	• Minor impact on traffic flow within Husky site and along Hardwick Road for watermain installation	• Significant impact on traffic flow and parking lot within Husky site as well as within 643 Hardwick Road	• Impact on Husky property for abandonment work only • Minor impact along Hardwick Road
Cultural Environment	• No impact	• No impact	• No impact	• No impact
Economic Environment	• No capital cost; will have higher maintenance costs due to age of watermain	• High capital cost	• Higher capital cost	• Higher capital cost
OVERALL RANKING	**NOT RECOMMENDED**	**RECOMMENDED**	**NOT RECOMMENDED**	**NOT RECOMMENDED**

The full detailed evaluation matrix will be included in the final Project File Report, which will be filed publicly.

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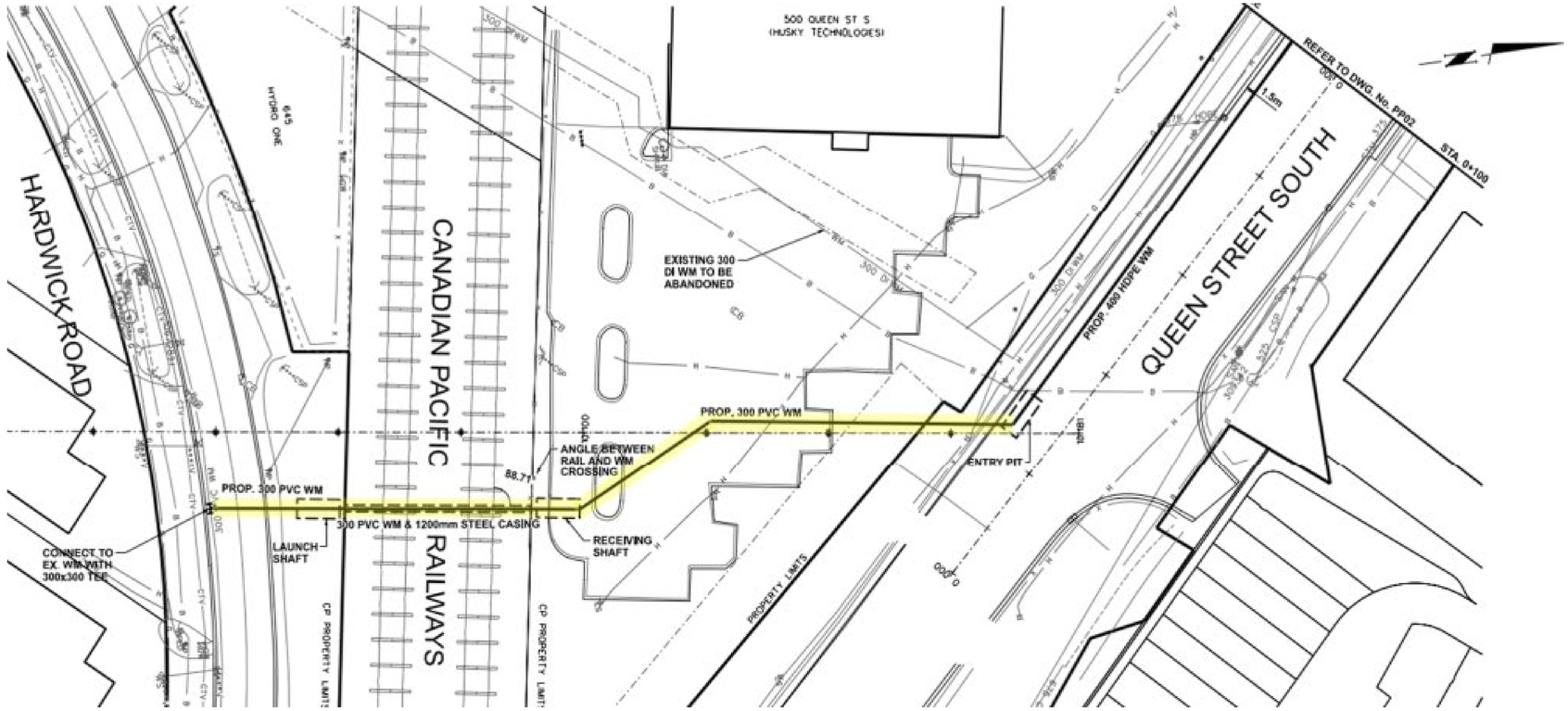
Recommended Preferred Solution & Mitigation Measures

- Based on the evaluation, **Alternative 2: New Alignment Through Husky Property,** is recommended as the preferred solution.
- This alignment will maintain a safe distance from the Husky building and the Highway 50 bridge structure and minimizes the overall impacts to high-traffic areas within the Husky site.

Mitigation Measures

- Develop Traffic Management and Staging Plans to minimize disruption to high-traffic areas within Husky property and maintain safe site access.
- Develop and implement Erosion and Sediment Control Plan to minimize risk of sediment transport during construction.
- Protect existing utilities throughout the project area to ensure functionality during and after construction.
- Additional mitigation measures will continue to be developed throughout design and prior to construction.



Next Steps

Thank you for Participating!

- Comments, questions and feedback are welcomed. Please provide feedback by **October 21, 2024** by contacting the Project Team.

Questions and comments submitted to:
leo.chen@peelregion.ca

Web page:
https://www.peelregion.ca/public-works/environmental-assessments/caledon/Hwy50.asp)

Next Steps

- The project team will respond to any questions received and will further refine the preferred solution to minimize impacts and disruption during construction.
- Upon completion of the Study, a Project File Report will be prepared and filed for a 30-day comment period. Notification will be advertised on the project website and circulated to stakeholders within the Study Area.

Accessibility

Peel Region is committed to meet the requirements outlined in the *Accessibility for Ontarians with Disabilities Act*, 2005 (AODA). Please contact the project manager if you require an alternative format of this document and/or if you need support and accommodations to provide feedback for this study.

Please note that information related to this study will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. All comments received will become part of the public record and may be included in the study documentation prepared for public review.

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