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Welcome

Public Information Centre #2

Thirty Road (Regional Road 14) at Young Street
Class Environmental Assessment

November 22, 2023 at 6:00pm



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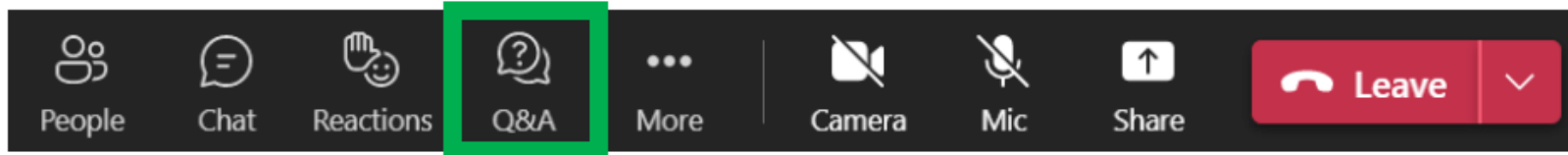
Niagara  Region

Land acknowledgement

This land is steeped in the rich history of the First Nations such as the Hatiwendaronk, the Haudenosaunee, and the Anishinaabe, including the Mississaugas of the Credit First Nation. There are many First Nations, Métis and Inuit peoples from across Turtle Island that live and work in Niagara today. The Regional Municipality of Niagara stands with all Indigenous peoples, past and present, in promoting the wise stewardship of the lands on which we live.

Housekeeping Items

- When joining the online meeting, attendees will be muted and will not be able to use their microphones or camera.
- At the end of the presentation, there will be an opportunity to ask questions or submit comments. Please use the Q&A function to ask questions for the presenters to answer. Click the Q&A icon **[in green]** to ask your question.



- To submit your feedback following the PIC, the presentation materials and an online comment form are available on the project webpage:

<https://www.niagararegion.ca/projects/regional-road-14/default.aspx>

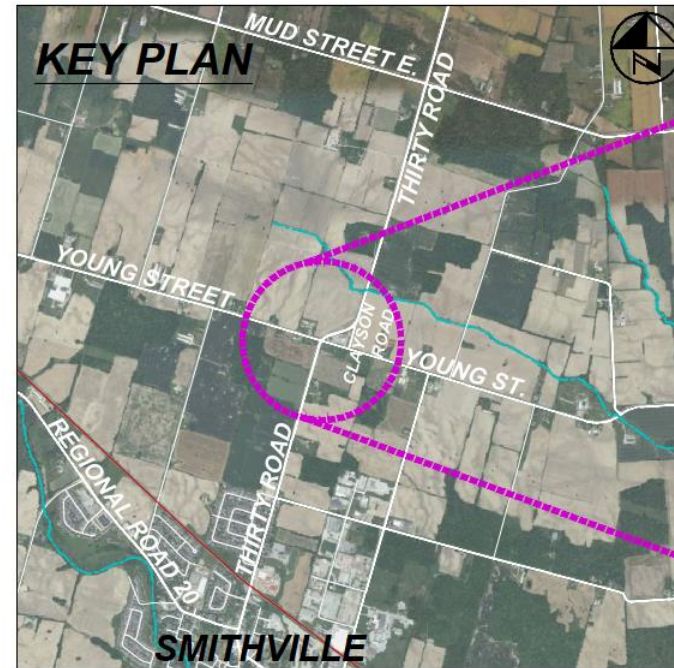
Presentation Outline

- Study Area and Objectives
- Municipal Class Environmental Assessment (EA) Process
- Policy and Planning Background
- Work Completed to Date
- Problem / Opportunity Statement
- Key Studies
- Existing Conditions
- Alternative Design Concepts and Preliminary Recommended Design
- Next Steps in the Project

Study Area and Objectives

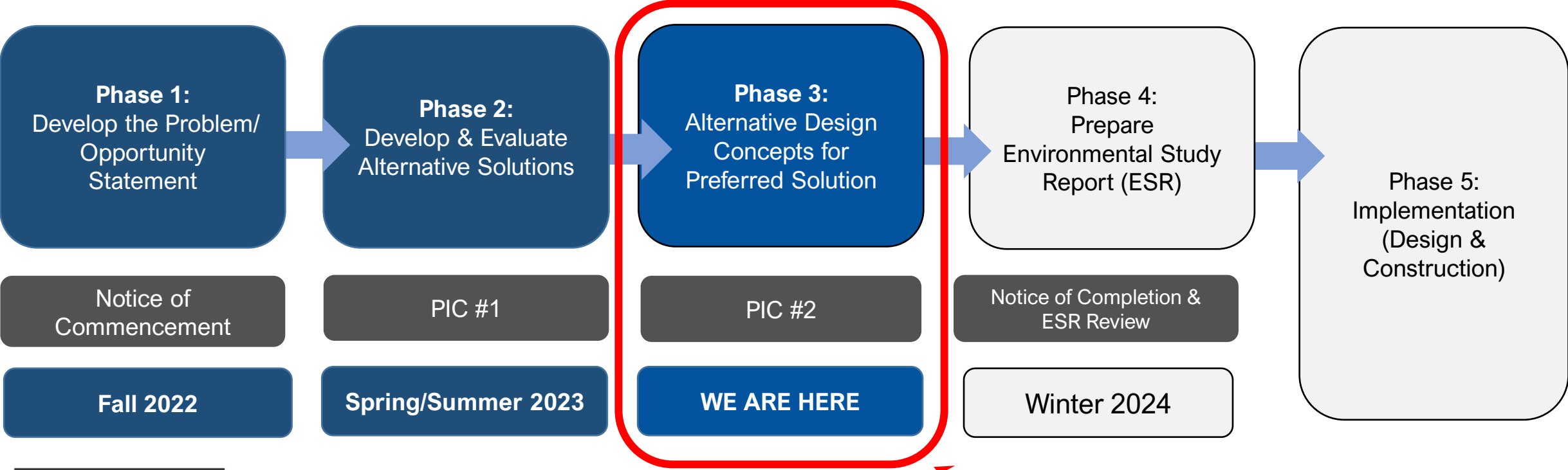
Thirty Road (Regional Road 14) at Young Street, in the Township of West Lincoln

- Schedule 'C' Municipal Class Environmental Assessment & Transportation Assessment
- Study objective is to improve multi-modal traffic operations and road user safety



Municipal Class EA Process

This project is classified as a **Schedule 'C' Municipal Class EA** and is subject to **Phases 1 through 4** of Municipal Class EA.



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Policy and Planning Background

- **Provincial Planning Documents**

- A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020)
- Provincial Policy Statement (2020)
- Greenbelt Plan (2017)

- **Regional Planning Documents**

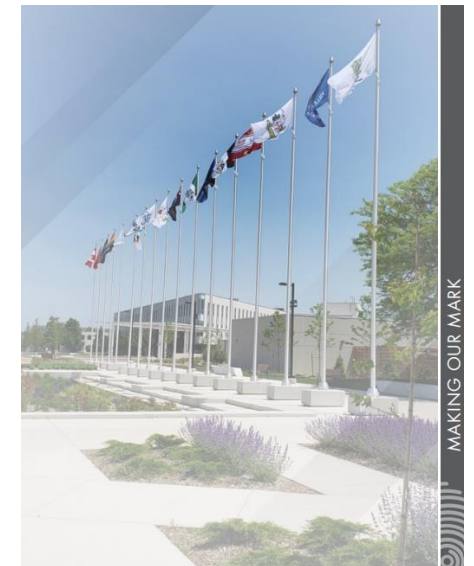
- Regional Official Plan (2022)
- Regional Transportation Master Plan (2017)

- **Local Planning Documents Policies**

- Official Plan of the Township of West Lincoln (Consolidated 2021)
- Smithville Master Community Plan (Ongoing)



A Place to Grow (2020)



Niagara Region Official Plan (2022)

Work Completed to Date

- **EA Phase 1**
 - Identify the Problem or Opportunity
- **EA Phase 2**
 - Developed alternative and recommended solutions
 - Technical Advisory Committee Meeting #1
 - Public Information Centre #1
 - Coordination with Hydro One, Windfarm, Township of West Lincoln
- **EA Phase 3**
 - Developed design alternatives
 - Initiated a detailed inventory of surrounding environment
 - Preliminary evaluation of design alternatives

Problem / Opportunity Statement

The area of Thirty Road at Young Street and Thirty Road at Clayson Road requires geometric improvements to address safety issues for all users due to:

- Reverse curve alignment of Thirty Road causing insufficient stopping sightline distance at Young Street and maneuverability issues for larger farm vehicles and commercial trucks;
- Right-of-way conflict at Thirty Road and Clayson Road;
- Westbound traffic utilizing Clayson Road as a cut-through to avoid Thirty Road at Young Street intersection
- Lack of pedestrian and cyclist facilities

The Niagara Region is committed to creating a safe, integrated, and environmentally sustainable transportation system. The Region is taking this opportunity to address the identified road safety and issues through geometric design and traffic operation improvements.

Key Studies

- Transportation & Safety Assessment (completed)
- Stage 1 Archeological Assessment (completed)
- Cultural Heritage Study (ongoing)
- Natural Environment Impact Assessment (ongoing)
- Geotechnical/Hydrogeological Study (pending)
- Topographical Survey (pending)
- Noise Impact Assessment (pending)

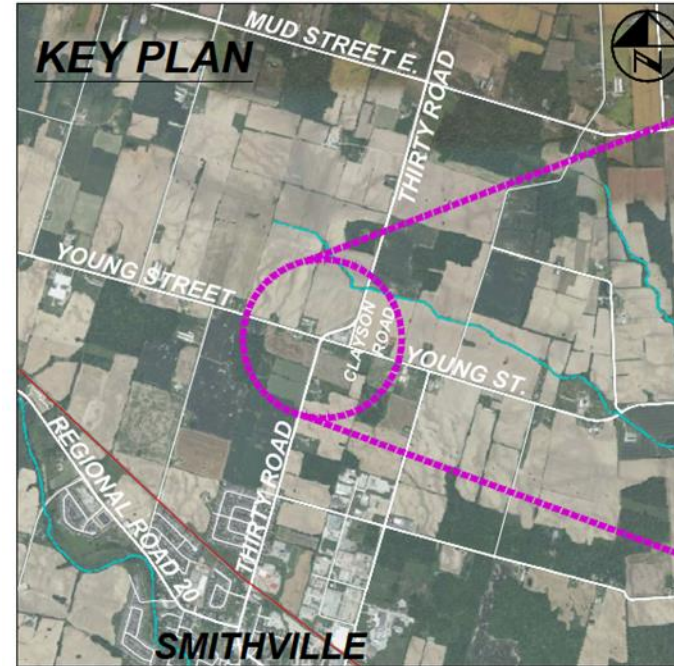
Existing Conditions - Transportation

- **Thirty Road**

- Regional Arterial Corridor
- Rural two-lane cross-section
- 26.2m right-of-way
- Posted speeds of 80 km/h (north of Young) and 60 km/h (south of Young)

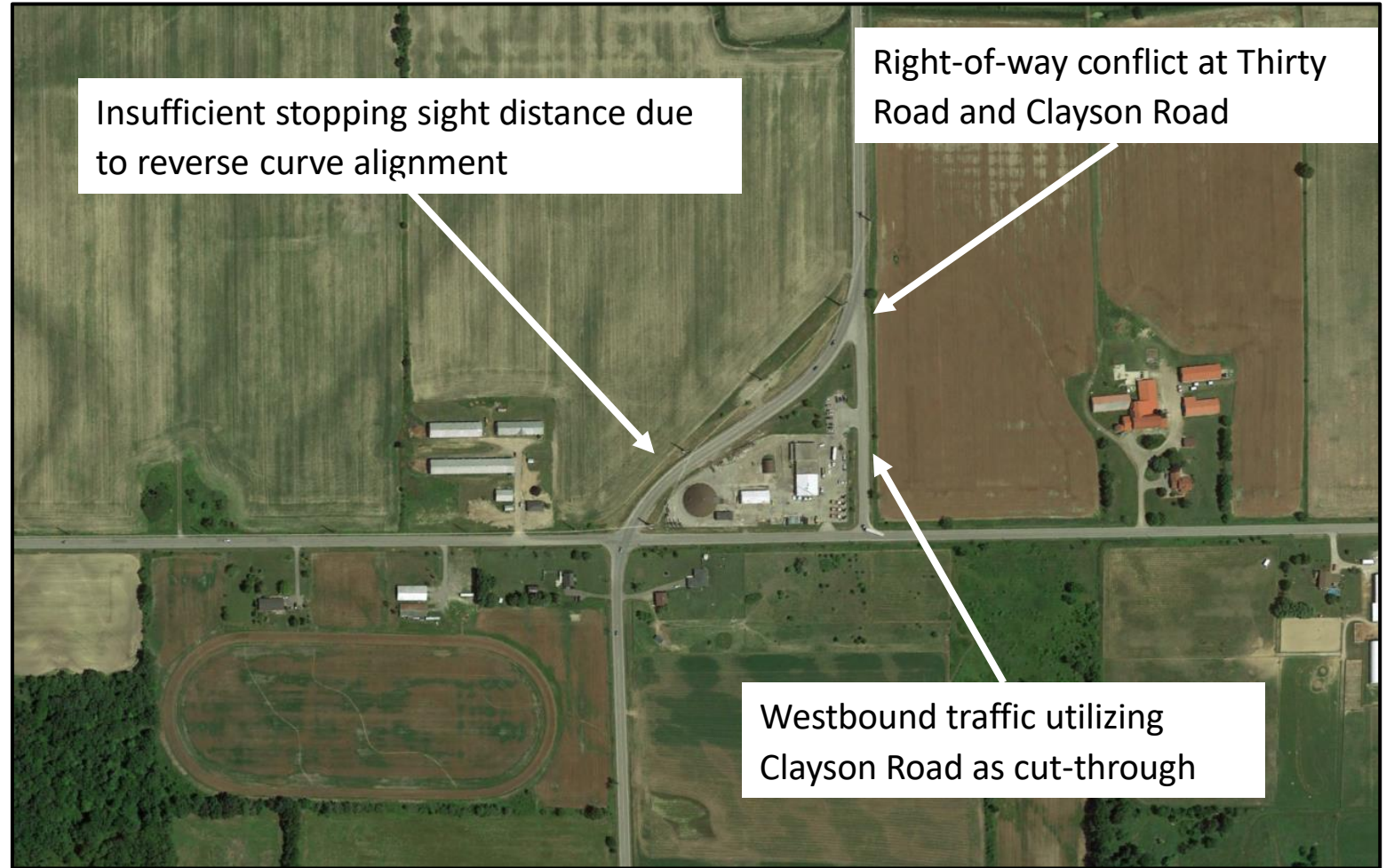
- **Young Street**

- Arterial Rural Road
- Two-lane cross-section
- 20m right-of-way
- 80 km/h posted speed



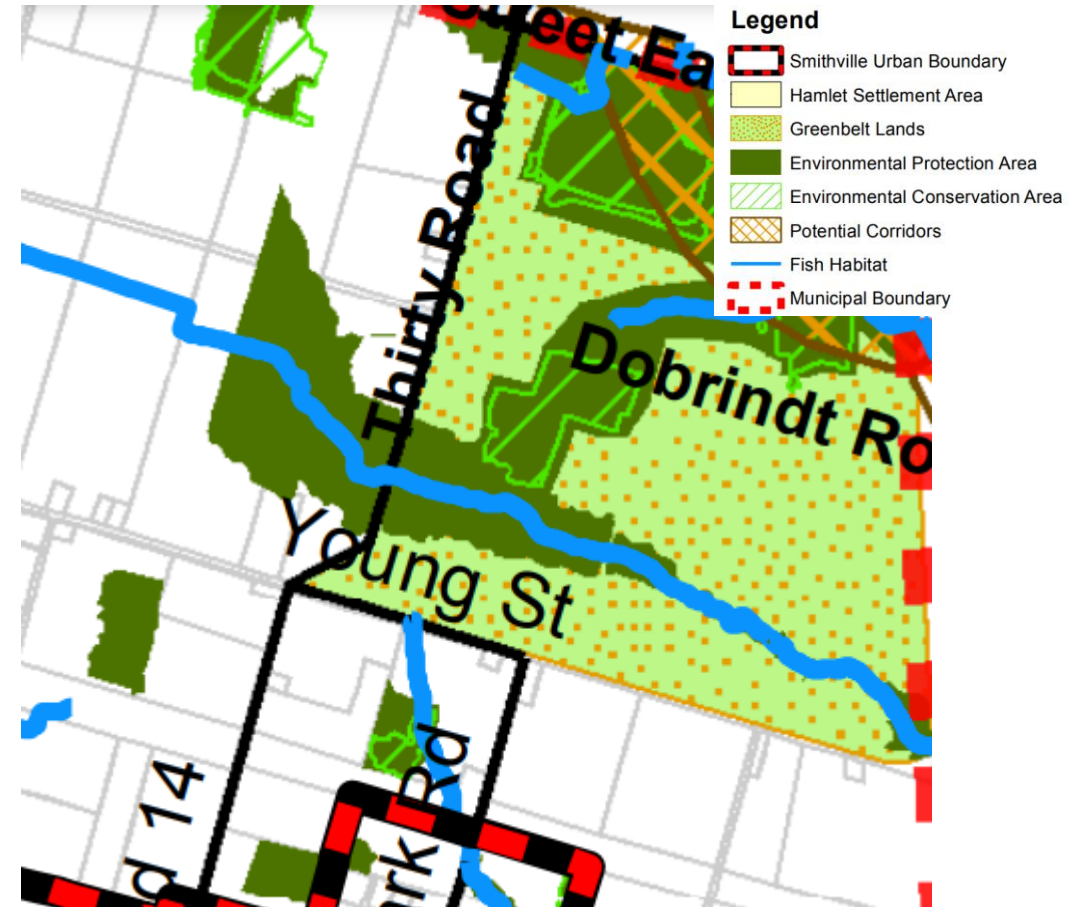
Existing Conditions – Transportation (*Continued*)

- 14 collisions over last six years (2017 – 2022)
- All-way stop controlled intersection
- Majority of vehicles travelling north / south along Thirty Road (anticipated to increase with Smithville urban boundary expansion)
- Low east / west volumes along Young Street not anticipated to increase significantly



Existing Conditions - Natural Environment

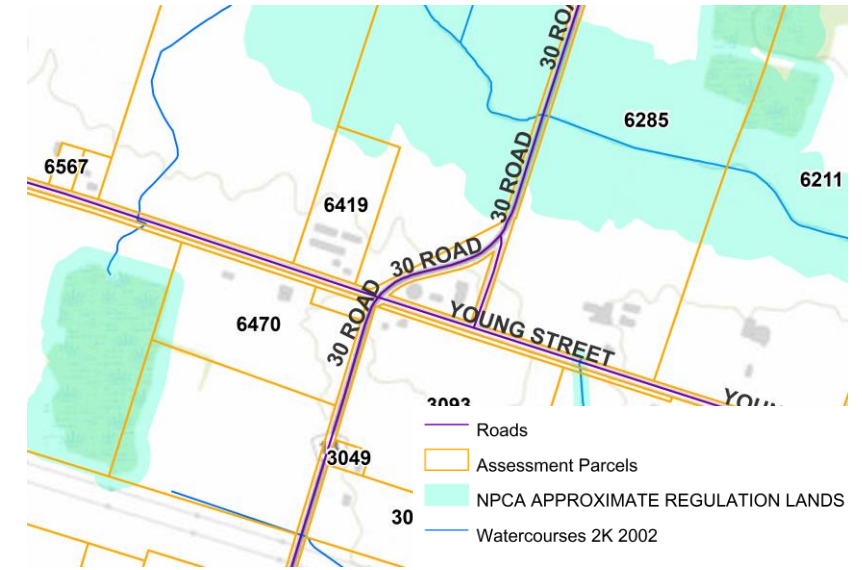
- Located within the Spring Creek subwatershed of Twenty Mile Creek,
 - Provides direct fish habitat for a warmwater aquatic community
 - Niagara Peninsula Conservation Authority (NPCA) Regulated
- Lands designated as Environmental Protection Area and Greenbelt lands
- No SAR were identified within the Study Area but suitable habitat for Monarch (Common Milkweed).



Schedule 'C-1' -Natural Heritage System – Township of West Lincoln Official Plan

Existing Conditions – Drainage & Stormwater

- Drainage conveyed by shallow roadside ditches with seasonal ponding
- Concrete box culvert north of Young Street conveys a tributary of Spring Creek under Thirty Road
- Lands surrounding the Spring Creek tributary are within the NPCA regulated floodplain and experience flooding



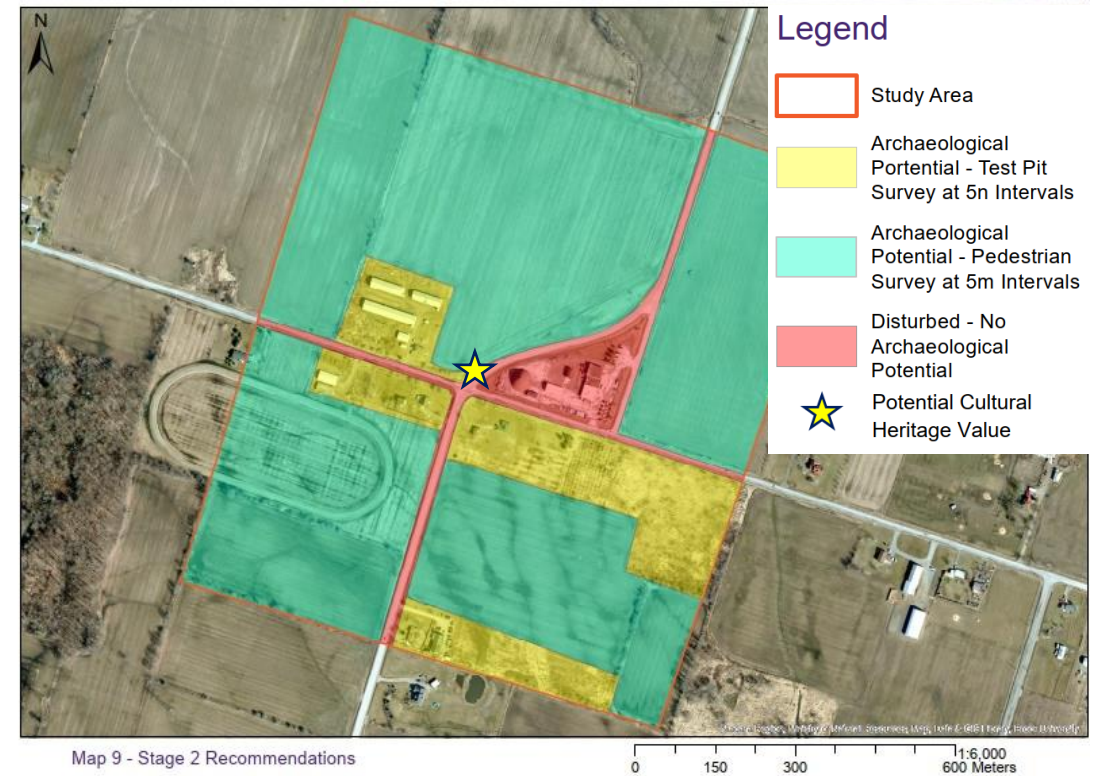
Approximate NPCA Regulated Flood Plain
(Source: NPCA Watershed Explorer ArcGIS Web Map)



Spring Creek Tributary Box Culvert

Existing Conditions - Cultural Heritage & Archaeological Resources

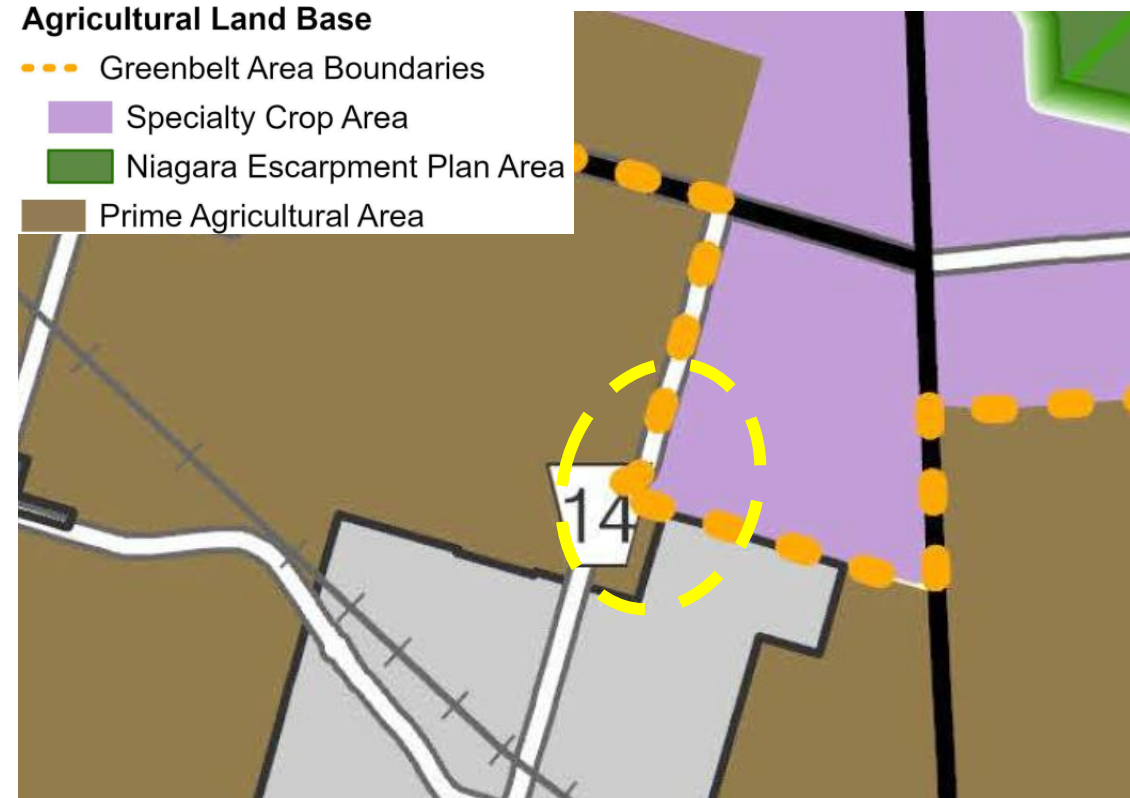
- Undisturbed lands adjacent to the roadway exhibit archaeological potential and will require a Stage 2 Archaeological Assessment prior to construction, if impacted
- No properties on the Township's Heritage Register or designated under the *Ontario Heritage Act*
- Barn on the southeast corner of the study area has *potential* for cultural heritage value



Stage 1 Archaeological and Cultural Heritage Review Findings

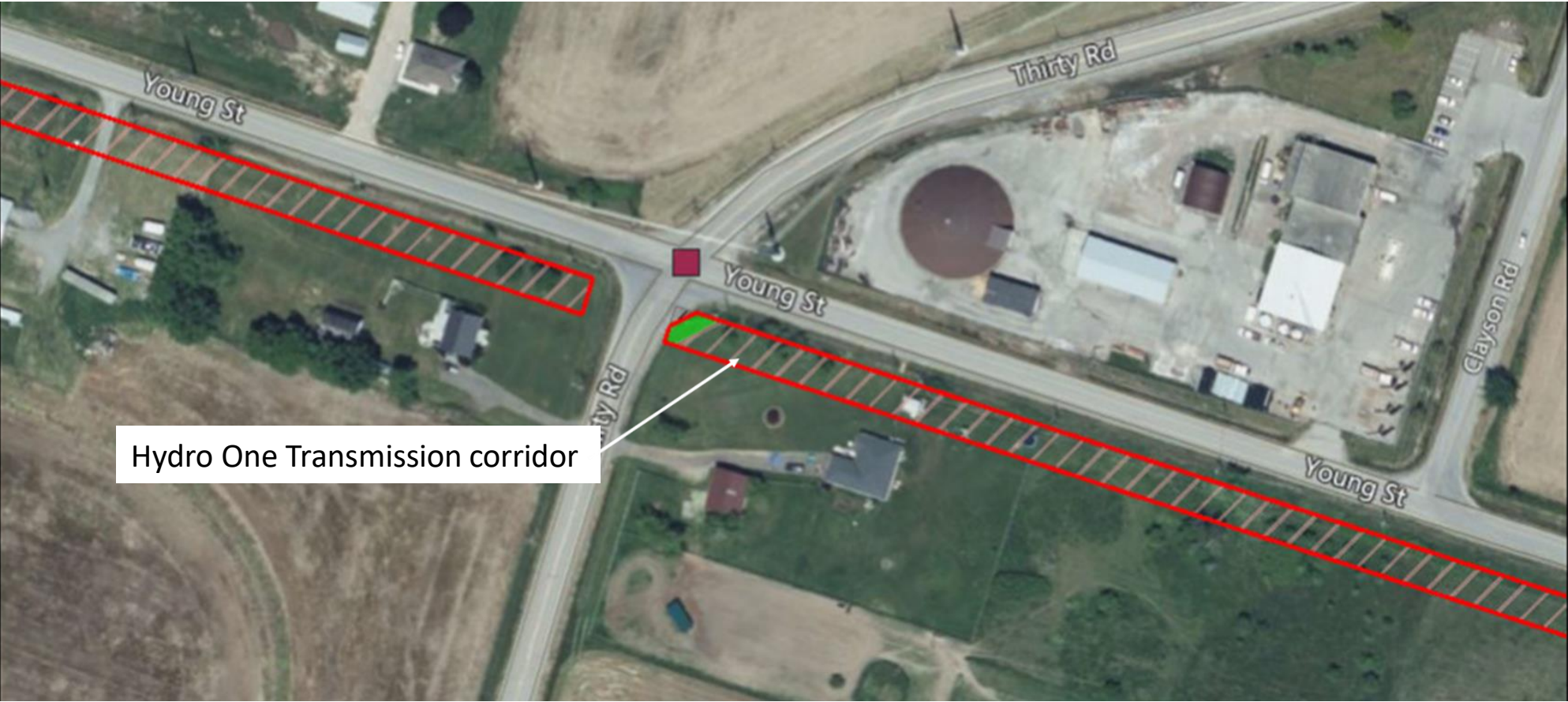
Existing Conditions - Socio-economic Environment

- Agricultural and rural residential land uses
 - Niagara Peninsula Tender Fruit and Grape Area (Specialty Crop Area) and Prime Agricultural Lands
 - Good General Agricultural Lands
- Lands south of Young Street designated within the future Smithville Urban Boundary Expansion



Schedule F - Agricultural Land Base (Niagara Region Official Plan, 2022)

Existing Conditions – Hydro One Infrastructure



Existing Conditions – NRW Infrastructure

- High voltage transmission facilities
- Extremely costly to relocate and would result in significant environmental and property impacts
- Not supported by Niagara Windfarm Corporation/Boralex or Six Nations of the Grand River Development Corporation (50% owner)



EA Phase 2 Recommendation

- Presented at First PIC in March 2023
- Undertake intersection improvements
- Close Clayson Road at northern terminus and maintain for local access only
- Direct all traffic to improved Thirty Road at Young Street intersection
- Type of intersection control (all-way stop, roundabout, traffic signal) to be determined in Phase 3

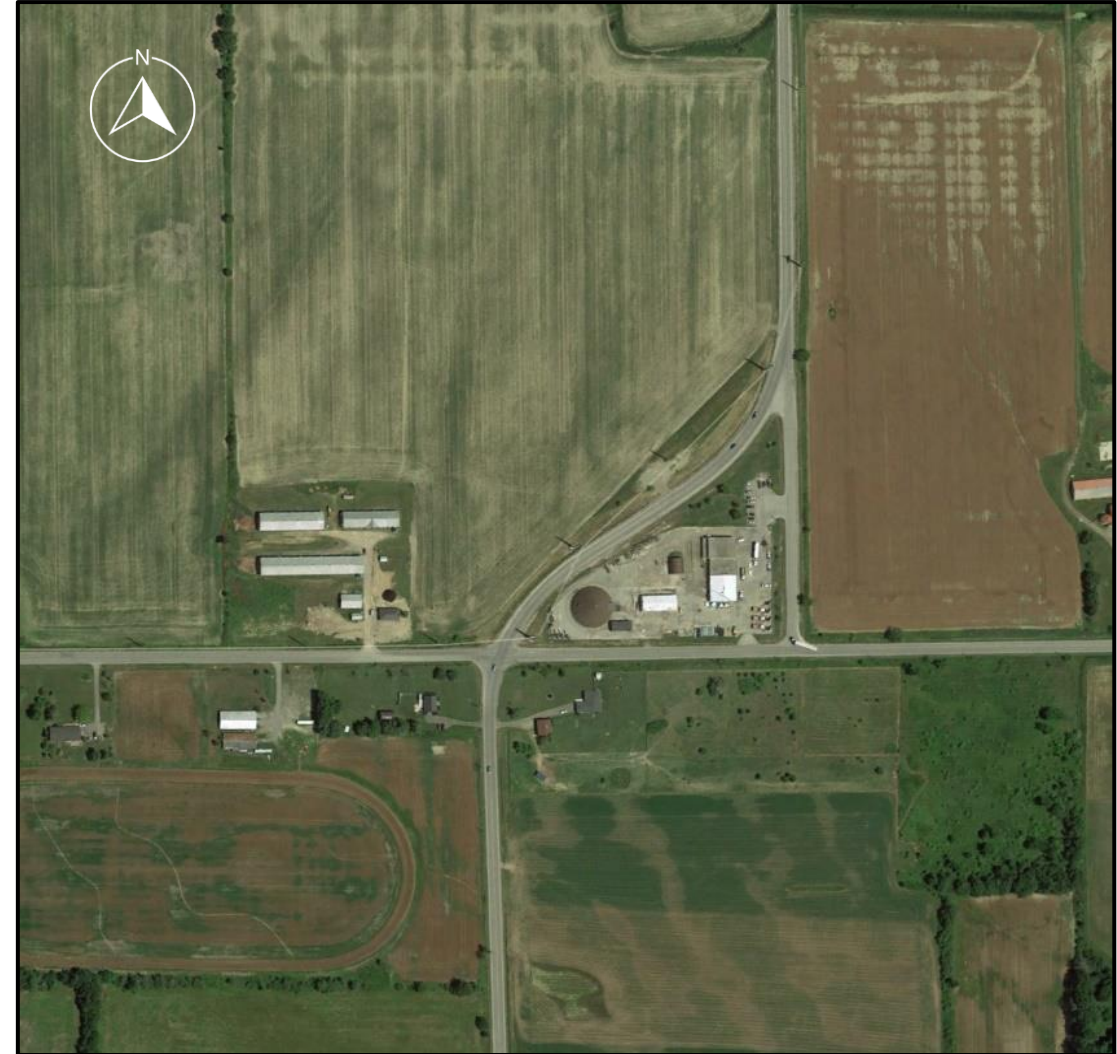


EA Phase 3: Alternative Design Concepts

- 1) Do Nothing
- 2) 4-Way Stop Controlled Intersection with Realigned Thirty Road
- 3) Signalized Intersection with Realigned Thirty Road
- 4) Roundabout Intersection with Thirty Road Realigned North of Windfarm Poles
- 5) Roundabout Intersection with Thirty Road Realigned South of Windfarm Poles
- 6) Roundabout Intersection with a Right-turn Channel

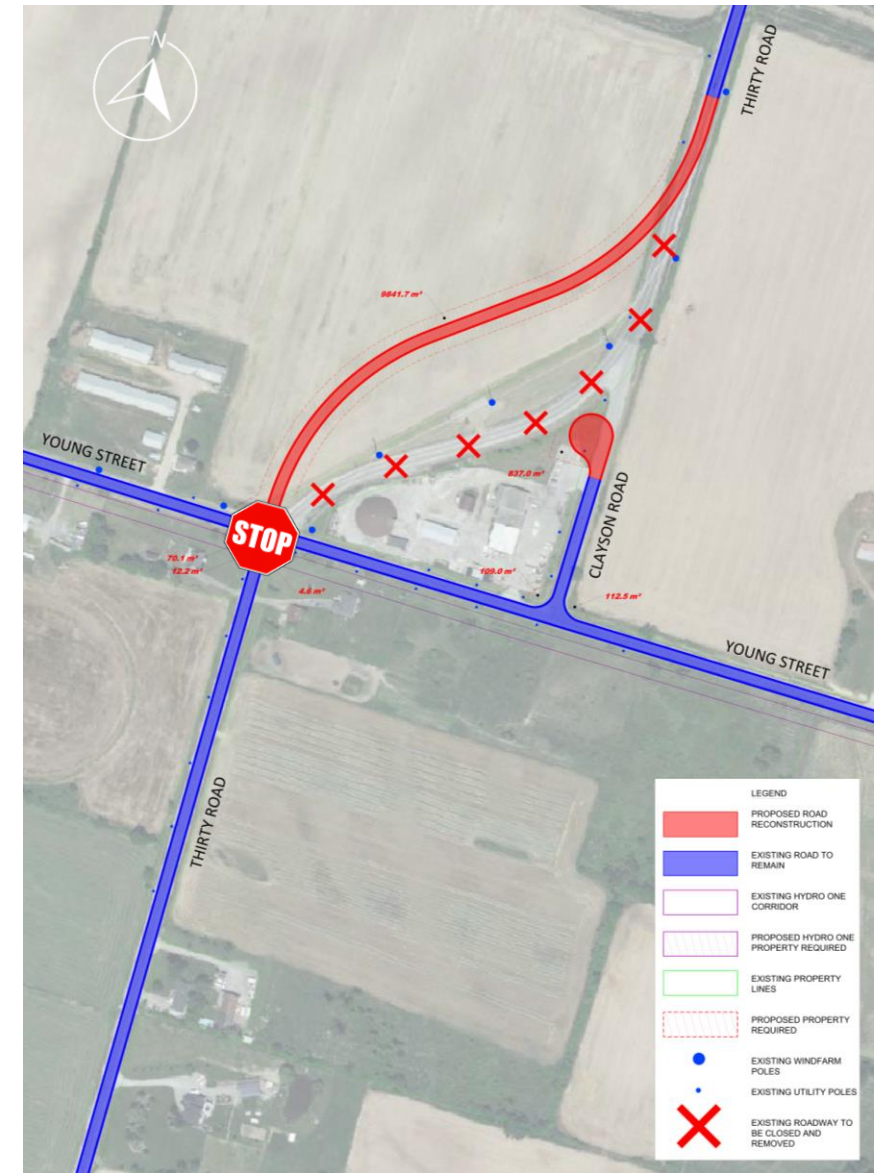
Alternative 1: Do Nothing

- ✓ No property impacts
- ✓ No construction costs
- Existing all-way stop provides partial improvements to traffic operations and safety
- ✗ Stopping distance for southbound traffic not fully addressed
- ✗ Right-of-way conflict at Thirty Road and Clayson Road intersection
- ✗ Westbound traffic heading north utilizing Clayson Road as cut-through due to acute right-turn at Thirty Road and Young Street intersection



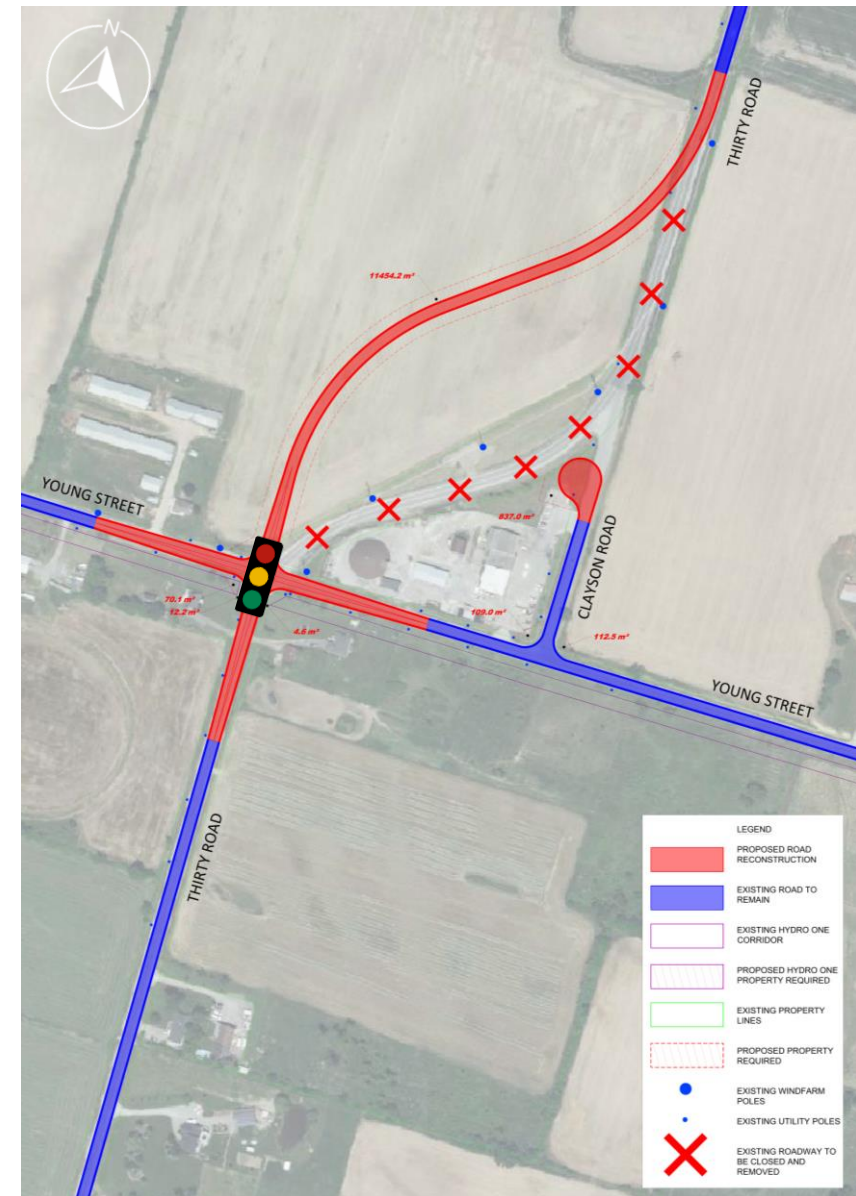
Alternative 2: 4-Way Stop Controlled Intersection with Realigned Thirty Road

- ✓ Addresses sightline and right-of-way conflict issues
- Moderate construction costs
- No significant traffic calming benefit
- ✗ Requires significant realignment of Thirty Road, fragmenting agricultural lands north of Young Street
- ✗ Significant property impacts
- ✗ Geometric guidelines for the north leg of Thirty Road not fully addressed
- ✗ Impacts floodplain and Highly Vulnerable Aquifer



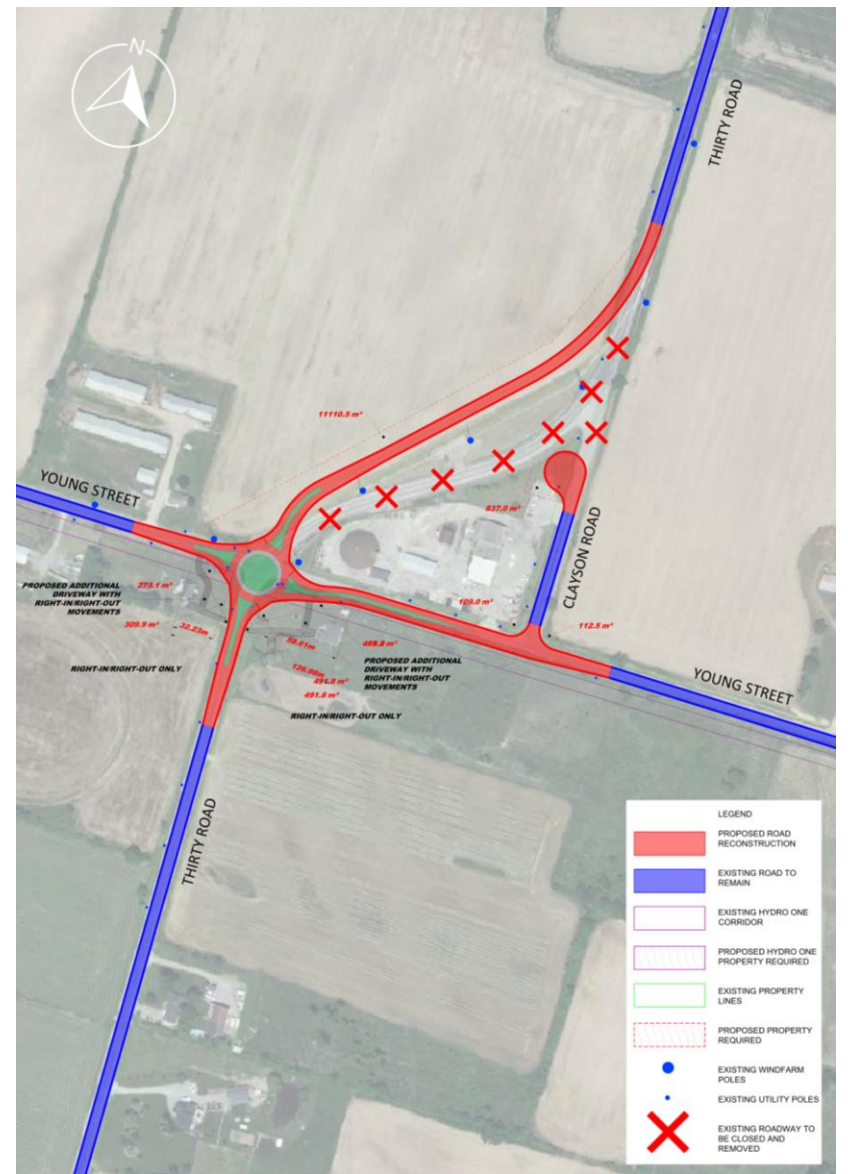
Alternative 3: Signalized Intersection with Realigned Thirty Road

- ✓ Addresses sightline and right-of-way conflict issues
- ✓ Geometric guidelines for the north leg of Thirty Road fully addressed
- No significant traffic calming benefit
- ✗ Requires significant realignment of Thirty Road to meet TAC standards, fragmenting agricultural lands north of Young Street
- ✗ Significant property impacts
- ✗ Impacts floodplain, requiring new culvert. Impacts regulated watercourse and Highly Vulnerable Aquifer
- ✗ High construction costs



Alternative 4: Roundabout Intersection with Thirty Road Realigned North of Windfarm Poles

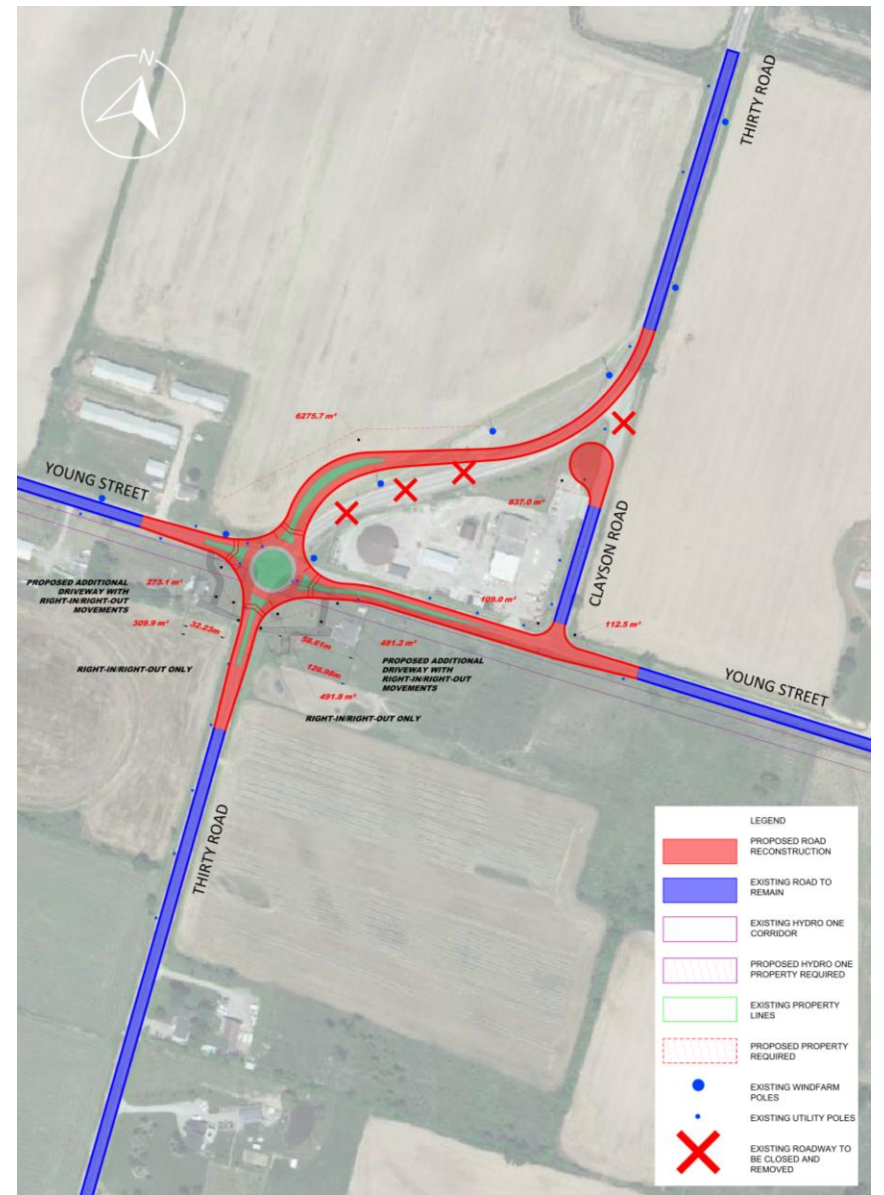
- ✓ Addresses sightline and right-of-way conflict issues
- ✓ Geometric guidelines for the north leg of Thirty Road fully addressed
- Provides minor traffic calming benefit
- Moderate impacts to agricultural lands
- Impact to floodplain requires new culvert and indirect impacts to regulated watercourse and Highly Vulnerable Aquifer. Impacts can be mitigated
- Additional illumination required for roundabout
- ✗ Largest amount of property required, including Hydro One lands
- ✗ Highest construction costs



Alternative 5: Roundabout Intersection with Thirty Road Realigned South of Windfarm Poles

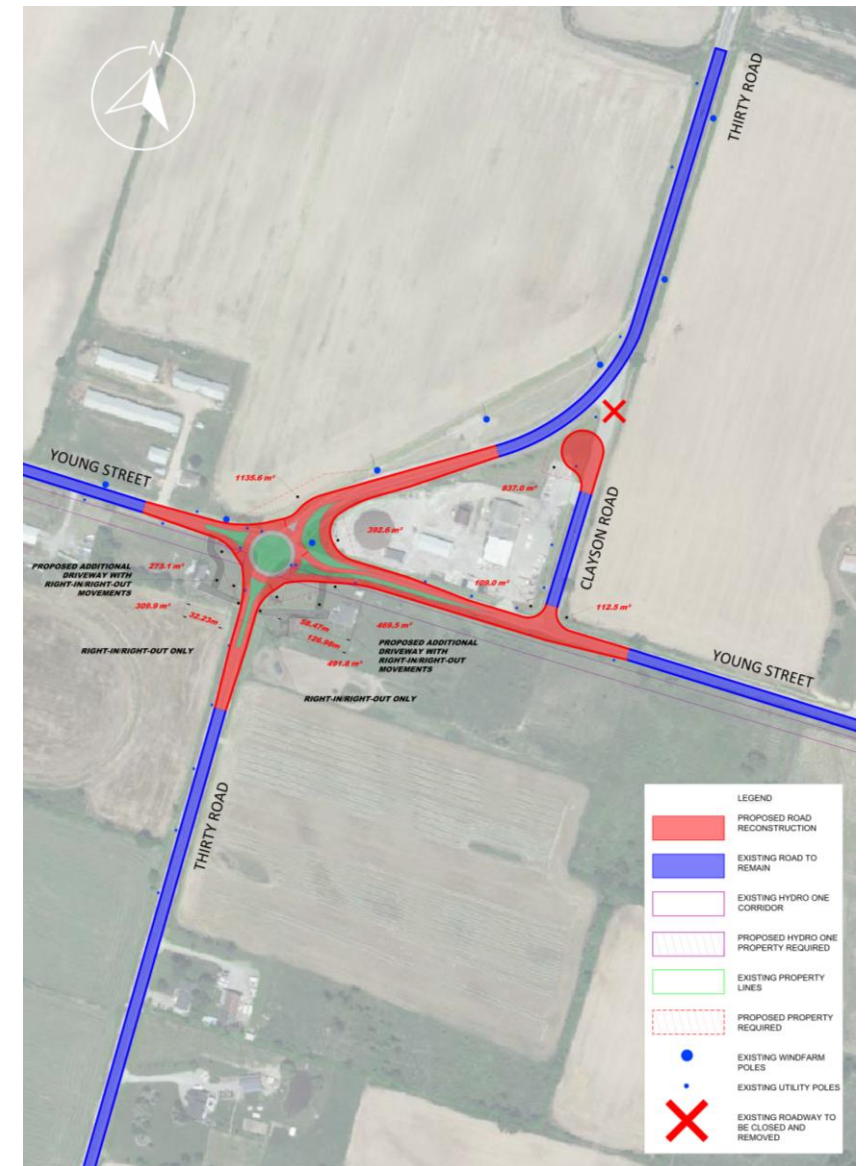
- ✓ Addresses sightline and right-of-way conflict issues
- ✓ Provides traffic calming benefit
- ✓ Geometric guidelines for the north leg of Thirty Road fully addressed
- ✓ Minimizes impacts to agricultural lands
- ✓ Reduces impacts to floodplain, regulated watercourse and Highly Vulnerable Aquifer
- Additional illumination required for roundabout
- Moderate amount of property required, including Hydro One lands
- Moderate construction costs

*Larger image of alternative available at end of presentation slides.



Alternative 6: Roundabout Intersection with a Right-turn Channel

- ✓ Addresses sightline and right-of-way conflict issues
- ✓ Generally avoids agricultural lands
- ✓ Reduces impacts to floodplain, regulated watercourse and Highly Vulnerable Aquifer
- ✓ Lowest amount of property required, including Hydro One lands
- ✓ Lowest construction costs
- Provides minor traffic calming benefit
- Additional illumination required for roundabout
- ✗ Geometric guidelines for the north leg of Thirty Road not fully addressed
- ✗ Largest intersection footprint and complex driving environment



Evaluation Criteria

CRITERIA	DESCRIPTION
Traffic Operations and Safety	Does the alternative improve the safety (sightlines, stopping distance, conflict) of the intersection? How will the alternative serve the existing and future vehicular (car, truck and farm vehicle), pedestrian and cycling traffic needs?
Socio-Economic Environment	What impacts will the alternative have on the local community (e.g., compatibility with current and planned area land use, impacts on prime agricultural lands, property requirements, access restrictions, etc.)
Natural Environment and Climate Change	How does the alternative affect existing vegetation, floodplain, water quality, fisheries/wildlife and habitat? Does the alternative address climate change?
Cultural Heritage Resources	Will the alternative affect archaeological, cultural heritage resources or Indigenous communities?
Costs	What is the capital cost of the alternative? What is the cost for utility relocations, property acquisitions, maintenance and operation costs?

Evaluation of Design Alternatives

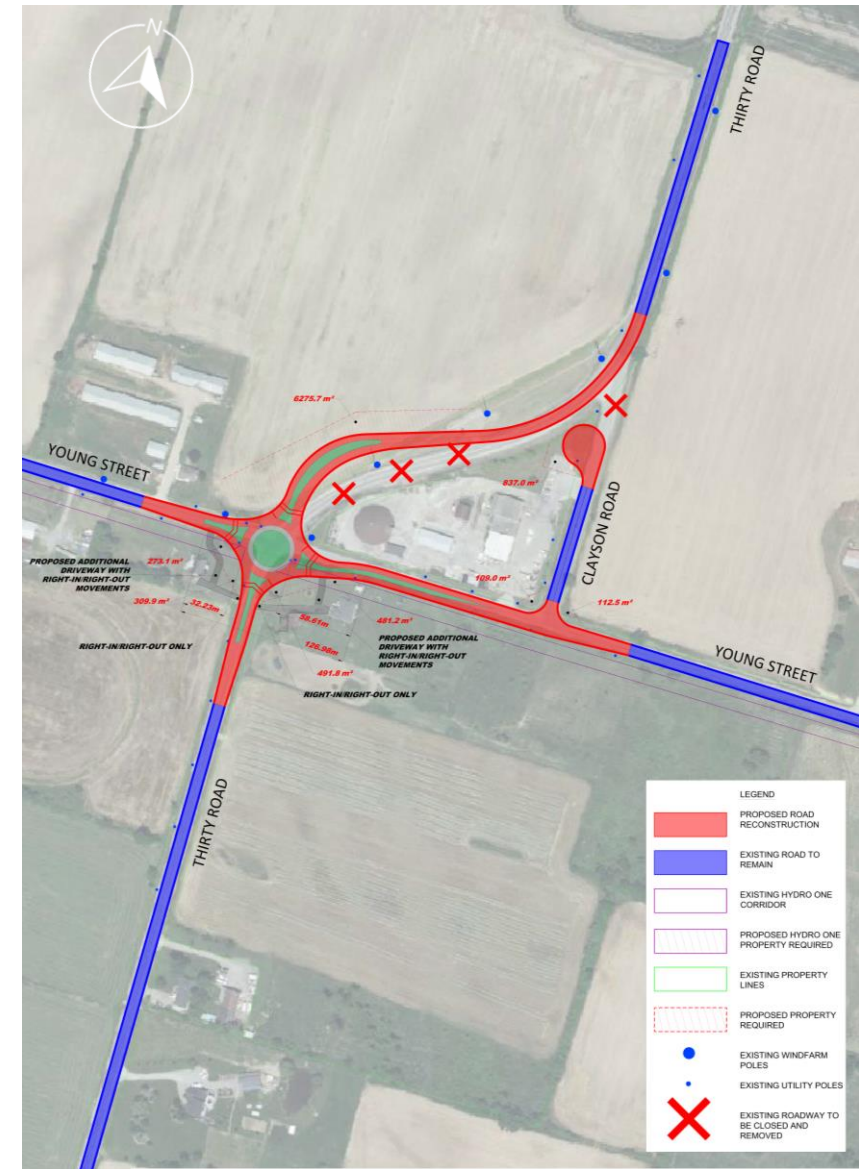
EVALUATION CRITERIA	1. Do Nothing	2. 4-Way Stop Controlled Intersection with Realigned Thirty Road	3. Signalized Intersection with Realigned Thirty Road	4. Roundabout Intersection with Thirty Road Realigned North of Windfarm Poles	5. Roundabout Intersection with Thirty Road Realigned South of Windfarm Poles	6. Roundabout Intersection with a Right-turn Channel
TRAFFIC OPERATIONS & SAFETY						
SOCIO-ECONOMIC ENVIRONMENT						
NATURAL ENVIRONMENT						
ARCHAEOLOGICAL AND CULTURAL BUILT HERITAGE						
COST						
EVALUATION SUMMARY	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Recommended to be Carried Forward	Not Recommended

Alternative 5 – is recommended to be carried forward

Preliminary Recommended Design

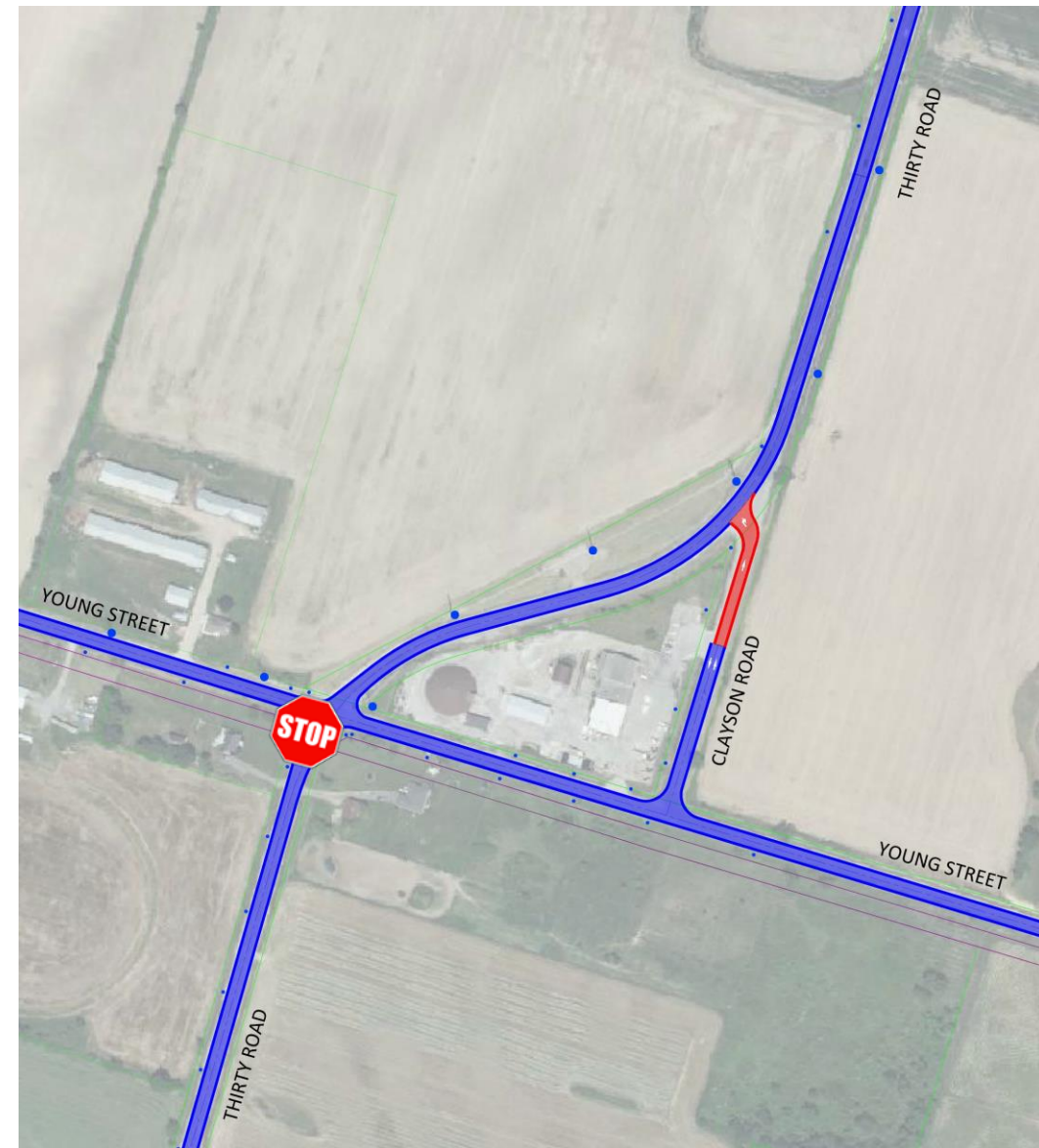
- **Alternative 5: Roundabout intersection with Thirty Road realigned south of the windfarm poles**
 - ✓ Addresses sightline and right-of-way conflict issues
 - ✓ Provides a moderate traffic calming benefit
 - ✓ Minimizes impacts to agricultural lands to the north
 - ✓ Reduces impacts to floodplain, regulated watercourses, and Highly Vulnerable Aquifer
 - Additional illumination required for roundabout
 - Moderate construction costs
 - Moderate amount of property required

*Larger image of alternative available at end of presentation slides.



Interim Configuration

- To be implemented until budget allows for preferred roundabout configuration
- Thirty/Young Intersection remains 4-way stop
- Clayson Road becomes **northbound one-way only** north of the Smithville Yard entrance and realigned to allow for better sightlines for traffic turning north onto Thirty Road
- Restricts SB Left Turn movement onto Clayson Road
- Region to monitor traffic operations in the area



*Larger image of alternative available at end of presentation slides.

Next Steps

1. Confirm preferred design concept in consideration of feedback received from the public and technical agencies.
2. Review and incorporate results of the studies currently underway.
3. Prepare and submit Environmental Study Report for 30 Day public review (Q1 2024).
4. Future detailed design and construction (subject to Council approval and budget).

Getting Involved in the Next Steps



Review presentation slides on the Region's project webpage



Submit any questions, comments or suggestions use the online comment form or by contacting the Study's Project Managers.



Request to be added to the Study Contact List to receive future notices.



Visit the Region's project webpage for study updates
niagararegion.ca/projects/regional-road-14/



Questions?

Your feedback is important. Your comments will be reviewed and considered as the Study progresses. To submit questions/comments/suggestions after this PIC, please use the online comment form available on the project webpage **by December 13th, 2023:**

niagararegion.ca/projects/regional-road-14/

If you have further questions, please contact one of the Study's Project Managers:

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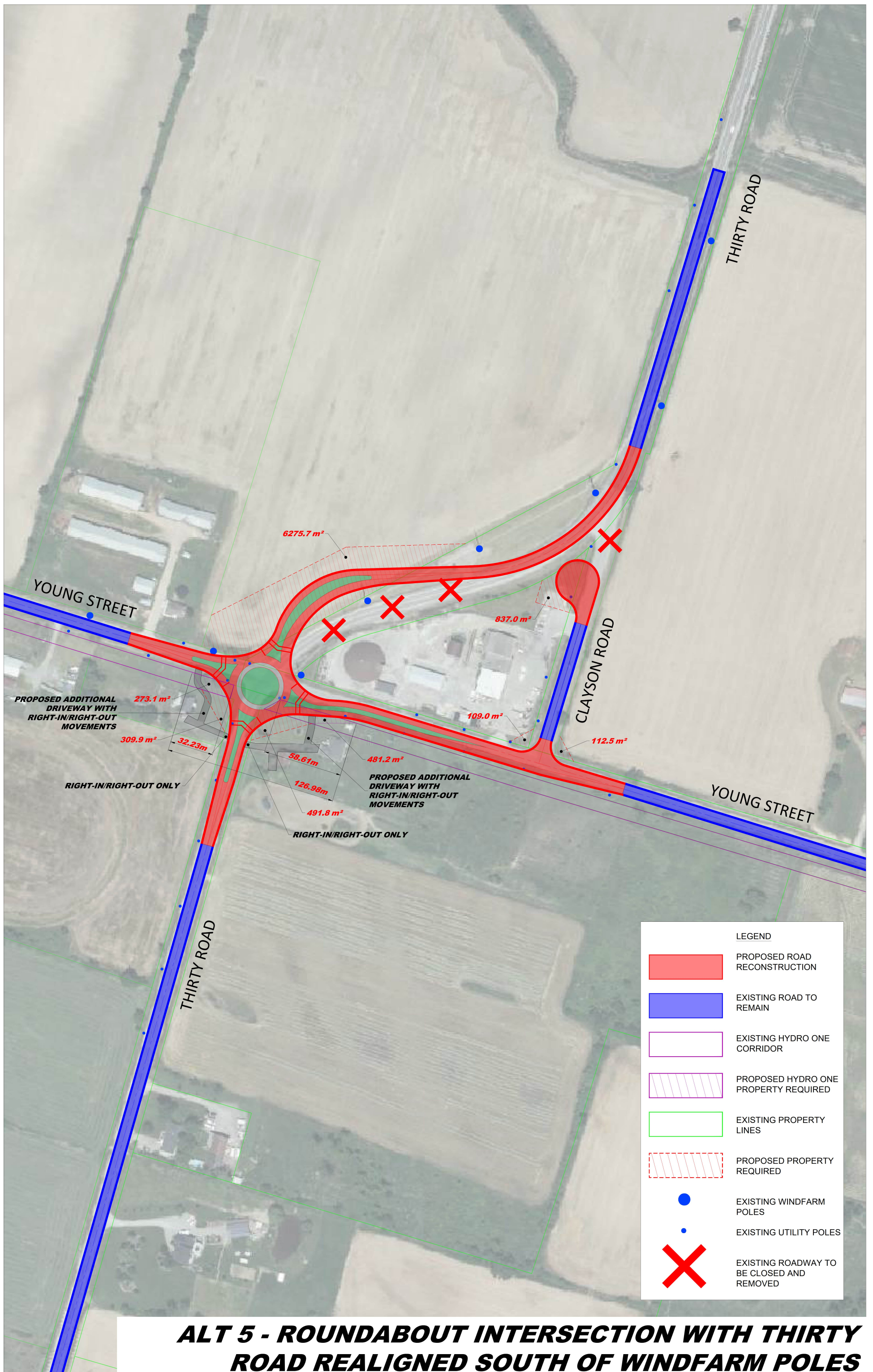
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amcgregor@rvanderson.com

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ALT 5 - ROUNDABOUT INTERSECTION WITH THIRTY ROAD REALIGNED SOUTH OF WINDFARM POLES



YOUNG STREET

THIRTY ROAD

CLAYSON ROAD

YOUNG STREET

THIRTY ROAD