

### Public Information



## Tutela Heights Road-Proposed Cul-de-sac



## Welcome

- If you have questions, our representatives are available to discuss the project with you
- To request additional information or provide comments about the project please contact the undersigned

#### Hyder Rajab, MBA, P. Eng.

Manager of Design & Construction City of Brantford, Public Works Commission 58 Dalhousie St., P.O. Box 818 Brantford, ON, N3T 2J2

Tel: (519)-759-4150 ext. 5571 Email: <u>HRajab@brantford.ca</u>

#### **Clint Brown**

Public Works Technologist
County of Brant (Infrastructure
Services)
26 Park Avenue
Burford, ON, NOE 1A0

Tel: 519-442-7268 ext. 2211 Email: clint.brown@brant.ca

#### David Sinke, B.Eng. Mgt., P.Eng.

Consultant Project Manager
Wood Environment & Infrastructure
3450 Harvester Road Suite 100
Burlington, ON, L7N3W5

Tel: (905) 335-2353 ext. 3024 Email: david.sinke@woodplc.com



## Key Plan

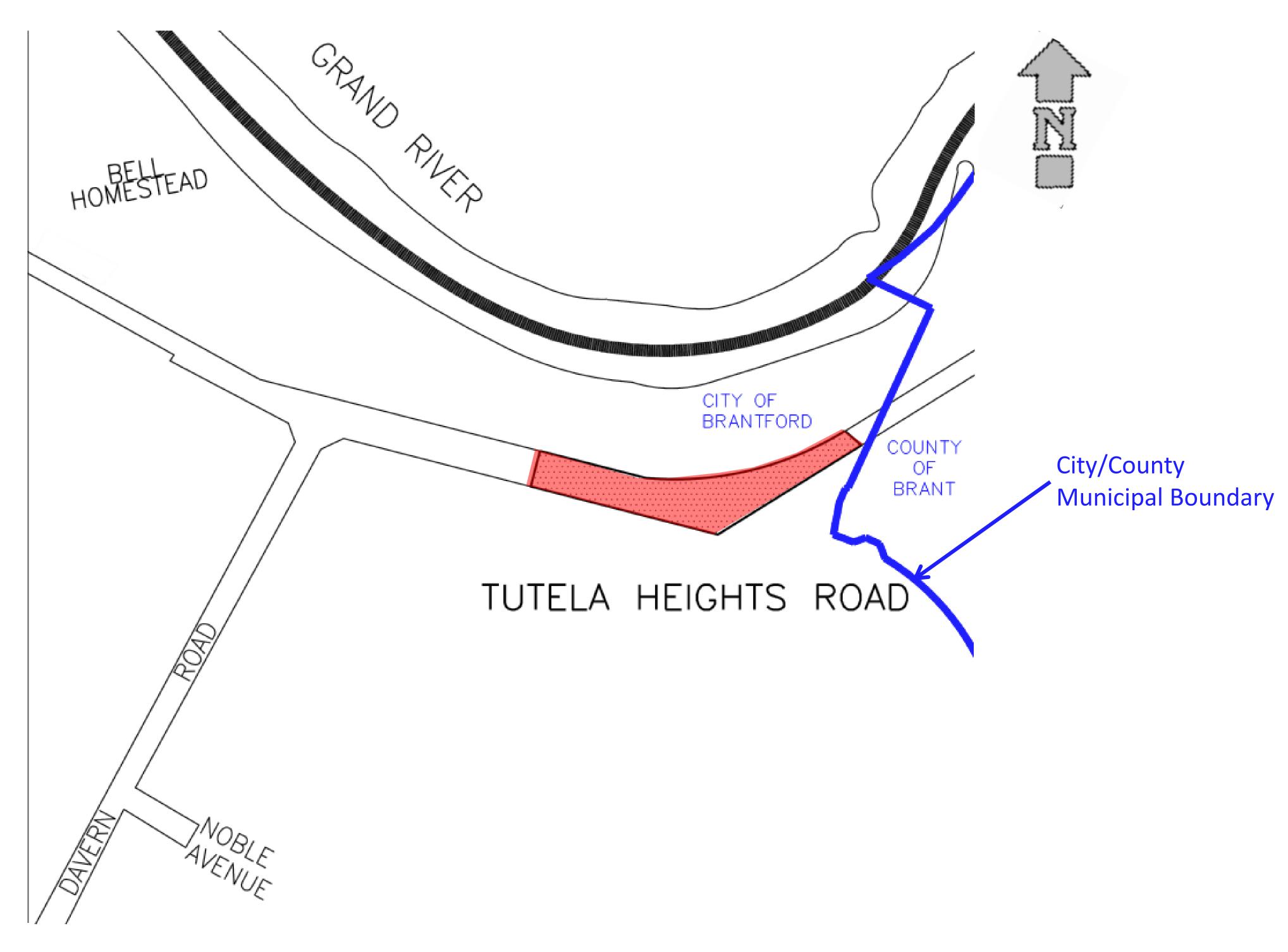


FIGURE 01: Project Area Key Plan

## Existing Conditions

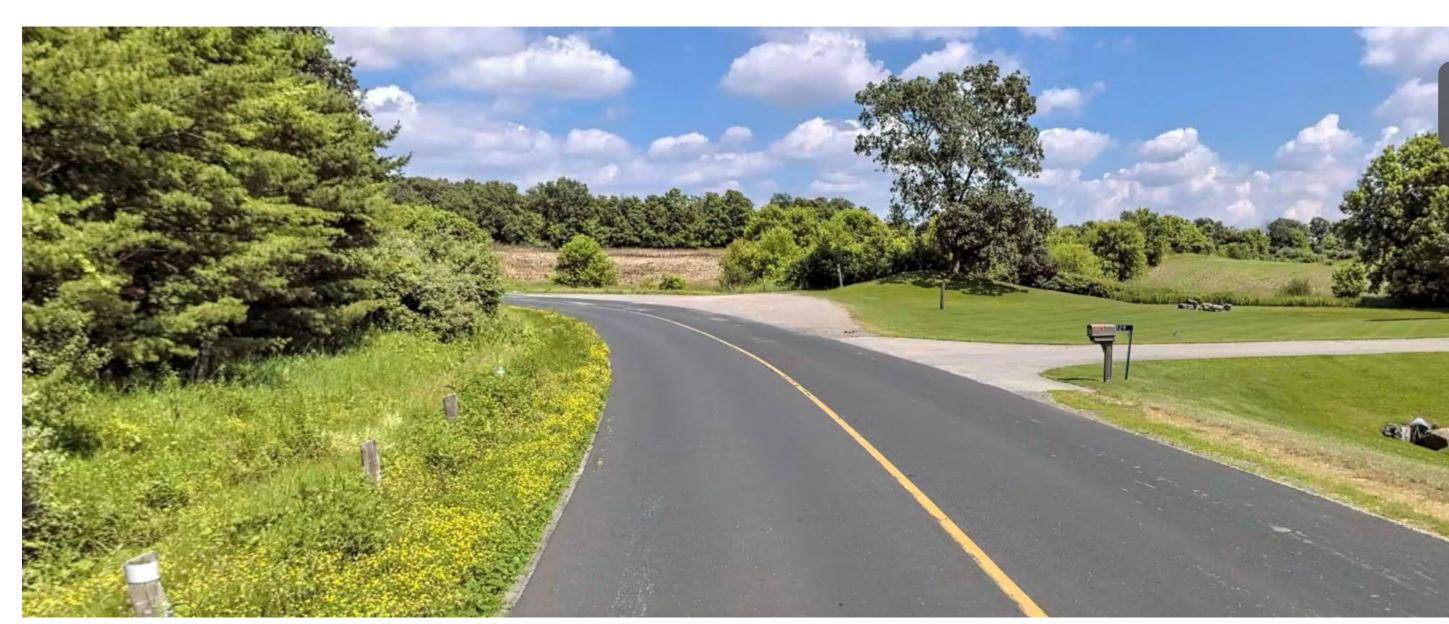


FIGURE 02: Photograph of Existing Roadway (Looking East)

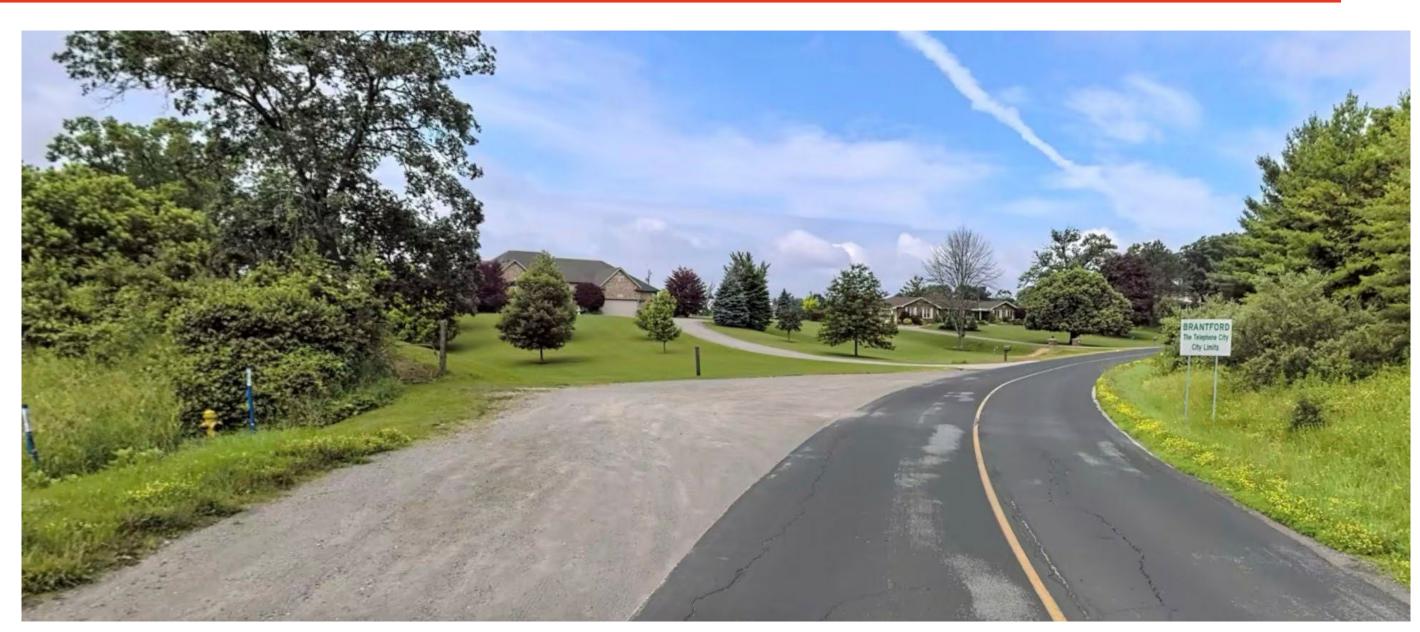


FIGURE 03: Photograph of Existing Roadway (Looking West)



FIGURE 04: Existing Roadway (Plan View)

## Background Study

- June 2017, the County of Brant completed a Class Environmental Assessment and filed a Project File Report to identify and address impacts on Tutela Heights Road (From the Bell Homestead to app. 1Km East) due to slope instability along the Grand River embankment adjacent to the roadway
- The Project File Report recommended monitoring of the slope embankment failure as it progresses and eventual closure of Tutela Heights Road when warranted (Parsons Inc., 2017)

• Following investigation of the slope instability an Erosion Hazard Limit (EHL) was determined as a limit from the Grand River embankment slope within which it is unsafe to carry out future development,

infrastructure and site alteration activities

 Both the City & County are working closely with the MECP to ensure public safety of roadway users and residents adjacent to the erosion hazard limit. A Road Closure Traffic Management Plan is being prepared that will outline long term safety measures, alternative property access and anticipated project schedules

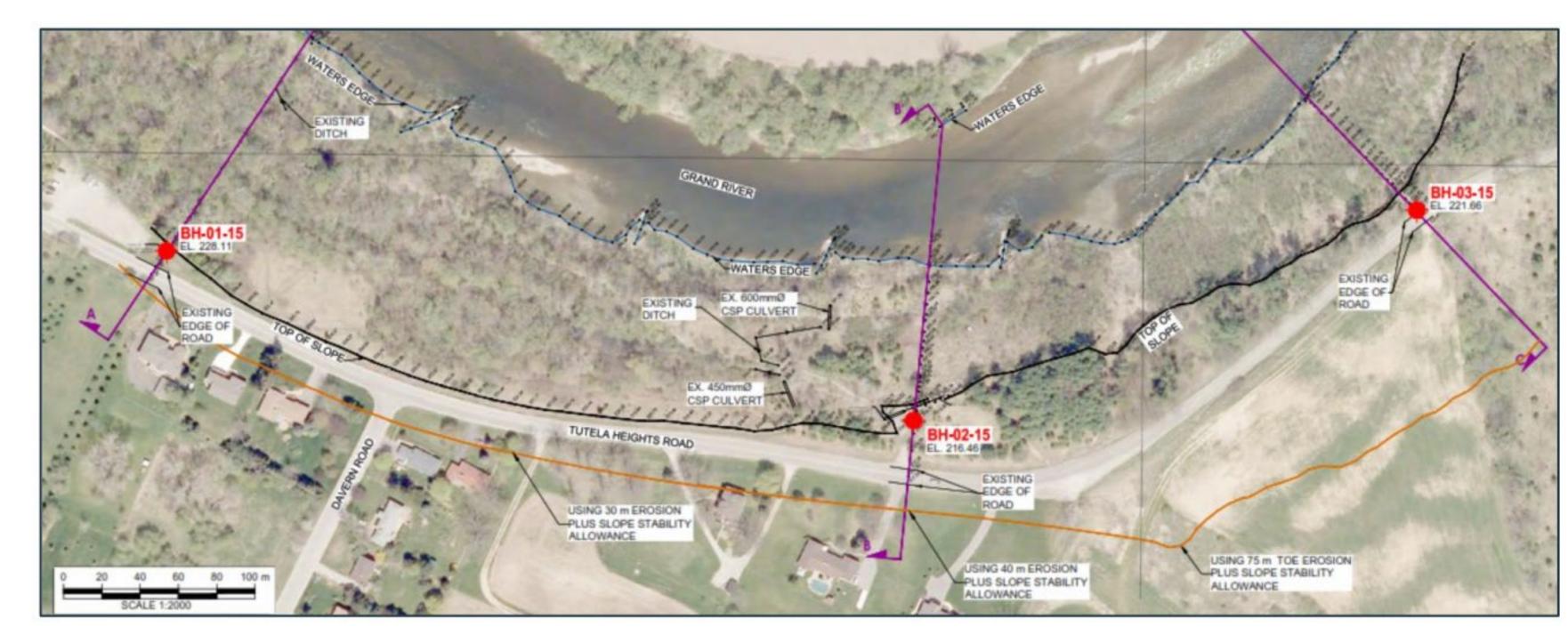


FIGURE 05: Approximate Erosion Hazard Limit (Project File Report, Parsons 2017)



## Need and Justification

- A dead-end cul-de-sac will act as an interim solution to allow property access for residents within the erosion hazard zone while the City/County periodically monitor & investigate slope deterioration
- The Cul-de-sac will prohibit vehicular traffic along Tutela heights between City of Brantford and Brant County
- Long term solution to ensure public safety
  - Full Roadway and trail closure and placement of warning signage to prohibit vehicular and pedestrian access to unsafe slope areas
  - ➤ Minimize drainage to protect from surface runoff by directing runoff away from the area of concern
  - Long term alternative property access for properties along Tutela Heights within the hazard zone via driveway modifications and future rear lot entrances

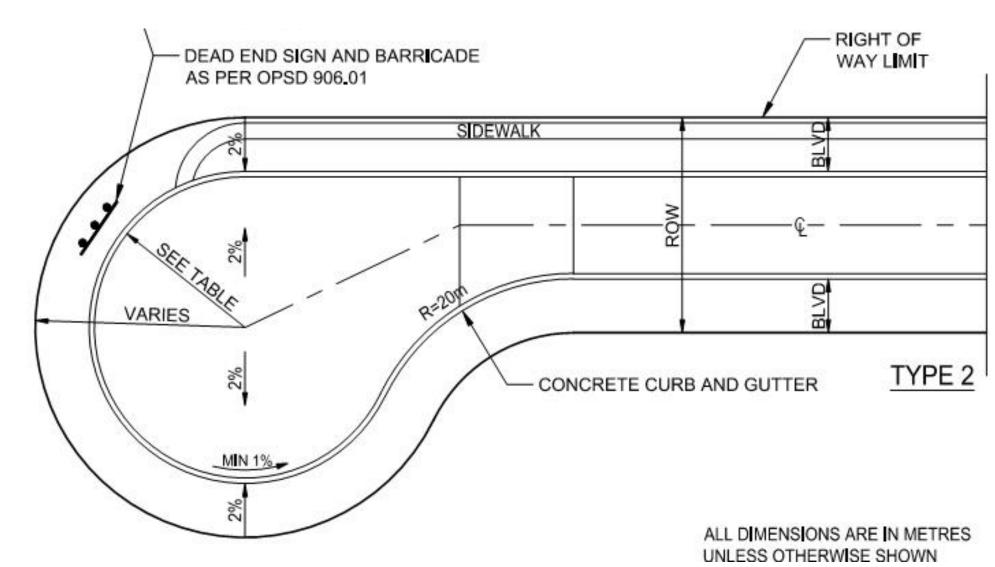


FIGURE 06: Standard TYPE 2 Cul-de-sac (City of Brantford Engineering Standard Drawing RD-106)



## Proposed Design

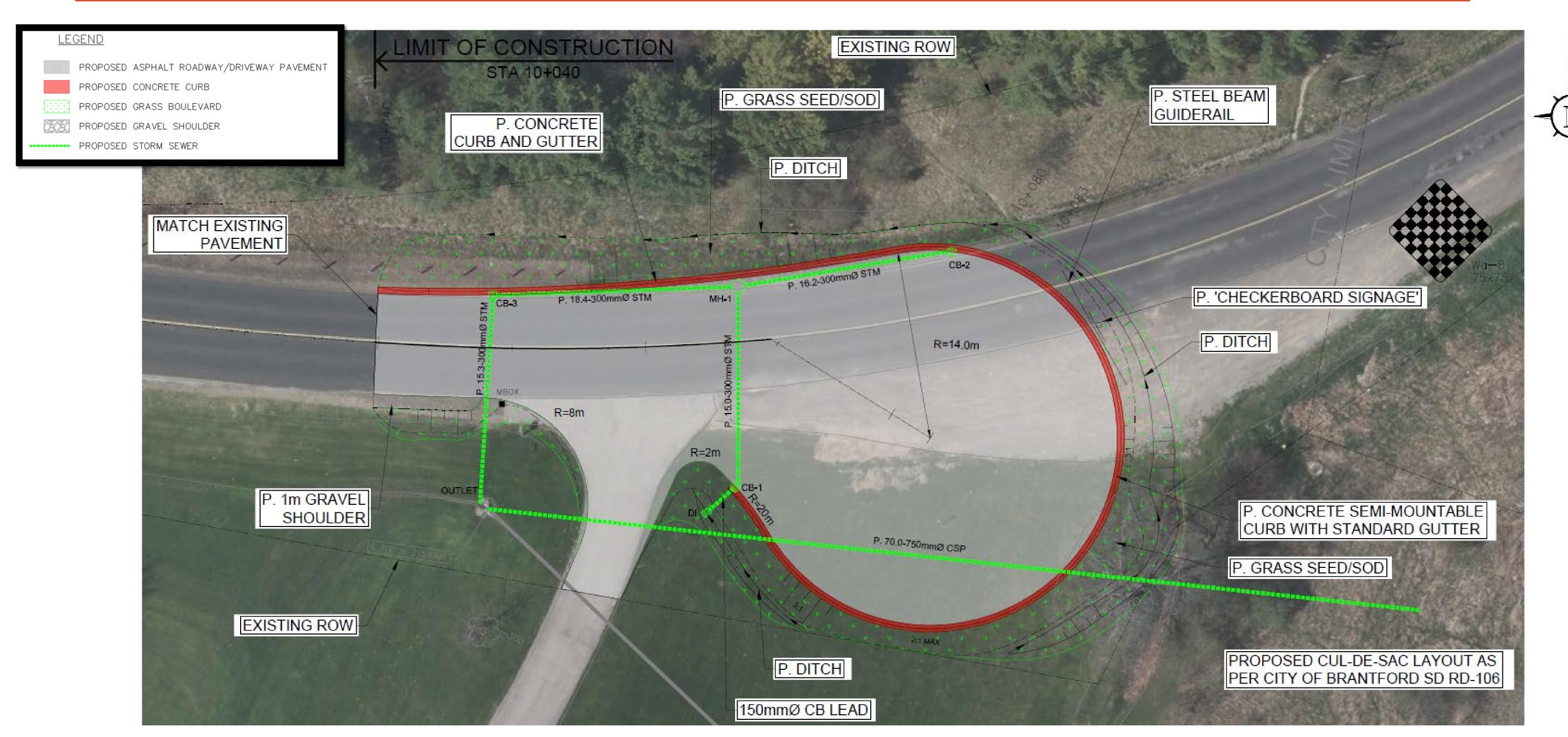
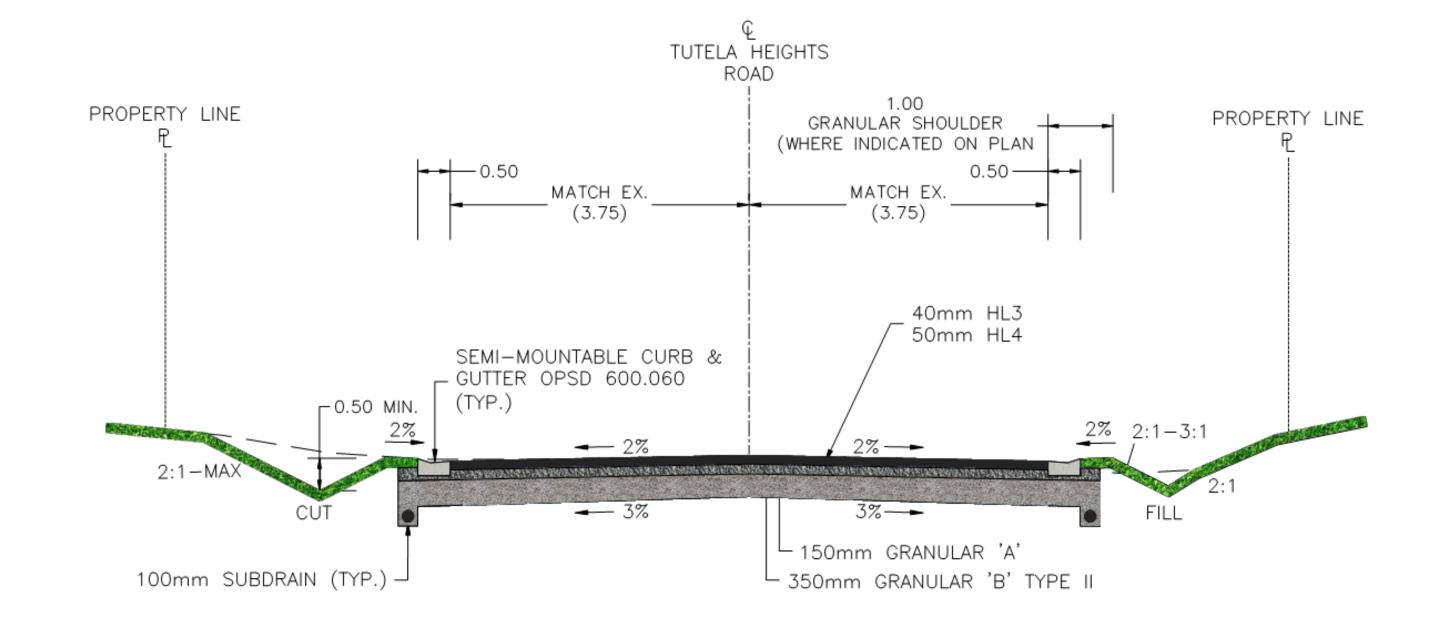


FIGURE 07: Proposed Cul-de-sac Design (Plan View)



## Proposed Design Features

- Proposed Interim Cul-de-sac design features include;
  - Semi-mountable Curb & Gutter (Per OPSD 600.060). The proposed design has been reviewed to ensure fire emergency vehicles have sufficient clearance to turn within the proposed cul-de-sac.
  - ➤ Proposed storm sewer system and inlet structures to direct roadway runoff to an existing drainage culvert (Shown in Figure 09). [Subject to GRCA Approval]
  - Sodded roadside ditches have been graded to direct additional surface runoff to the existing drainage culvert at 129 Tutela Heights Rd (See Figure 09). This will minimize stormwater runoff and erosion of the Grand River embankment and redirect stormwater to a natural watercourse south of the existing roadway. [Subject to GRCA Approval]
  - ➤ All grading extents are contained within the existing ROW to avoid any property requirements
  - > Steel beam guiderail barricade and Checkerboard Warning Signage to warn drivers of dead-end



TUTELA HEIGHTS ROAD
PROPOSED TYPICAL SECTION
N.T.S.

FIGURE 08: Proposed Roadway Typical Section



FIGURE 09: Existing Drainage Culvert (NW Corner of Property 129 Tutela Heights Rd)



## Next Steps/Comments

- Slides will be posted for Public Information.
- Design and Construction to be completed in 2024.

### Contact Us

#### Hyder Rajab, MBA, P. Eng.

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Burlington, ON, L7N3W5

Tel: (905) 335-2353 ext. 3024 Email: david.sinke@woodplc.com

Website: https://www.brantford.ca/en/your-government/tutela-heights-stabilization.aspx



## Public Information



ADDITIONAL INFORMATION LOCATED at www.brant.ca/TutelaHeights

## Tutela Heights Slope Stabilization Class EA



Date: September 2023
Public Information

### Why Are We Here?

### Background Review

- The Project File Report recommended monitoring of the slope embankment failure as it progresses and eventual closure of Tutela Heights Road when warranted (Parsons Inc., 2017). The City of Brantford and County of Brant provide ongoing monitoring of the slope through semi-annual surveys and weekly inspections by Operations staff.
- ➤ Both the City and county are working closely with the Ministry of the Environment, Conservation and Parks (MECP) to ensure the public safety of roadway users and residents adjacent to the erosion hazard limit. A Road Closure Traffic Management Plan has been prepared that outlines long-term safety measures, alternative property access and anticipated project schedules



### Key Plan

The County of Brant completed a Municipal Class Environmental Assessment (Class EA) in June 2017, to identify and address impacts on Tutela Heights Road, from the Bell Homestead to approximately one kilometer east due to unstable conditions in the slope area between the roadway and Grand River. A number of slope stabilization alternatives and roadway alternatives were reviewed throughout the Class EA process, ultimately the Road Closure option was chosen to be the most beneficial alternative economically and socially. Since the completion of the Class EA the City of Brantford and the County of Brant have undergone boundary adjustments that now place portions of the slope area in the County of Brant and in the City of Brantford jurisdictions.

#### **Tutela Heights Road Closure**

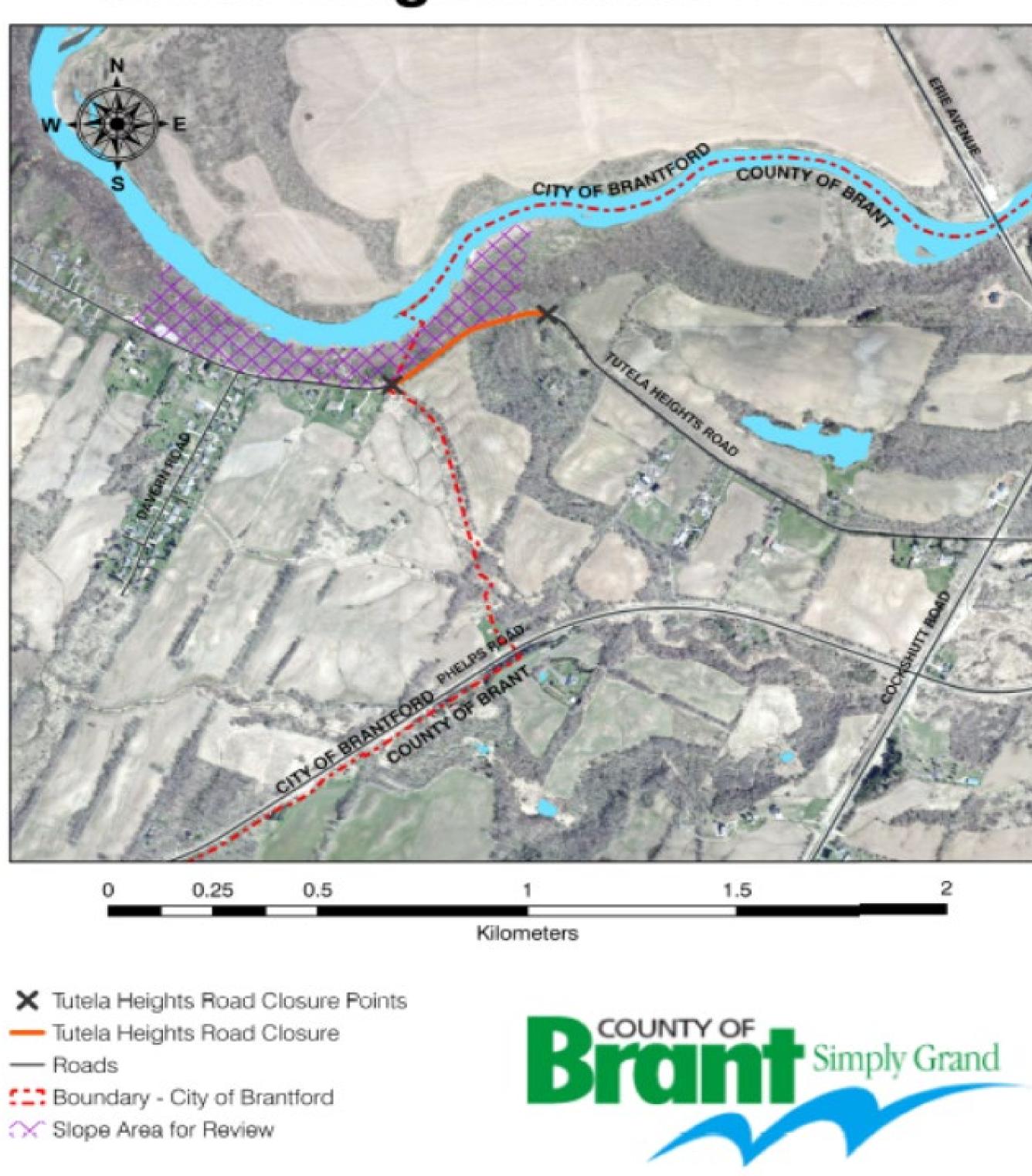


FIGURE 01: Project Area Key Plan



### Need and Justification

- A dead-end cul-de-sac on Tutela Heights Road between Mount Pleasant Road and Cockshutt Road, will not create significant impacts on the road network serving the Tutela Heights Settlement Area. The impact on through traffic will be minimal, and local traffic at present can be served by the intersection at Mount Pleasant Road at satisfactory levels of service. The Cul-de-sac will prohibit vehicular traffic along Tutela Heights between the City of Brantford and the County of Brant.
- A double swing gate will be constructed to allow access to property owners who require access past the dead-end cul-de-sac. A key will be provided to these property owners and the gate will be monitored weekly. This gate will also provide access to emergency services in this area.

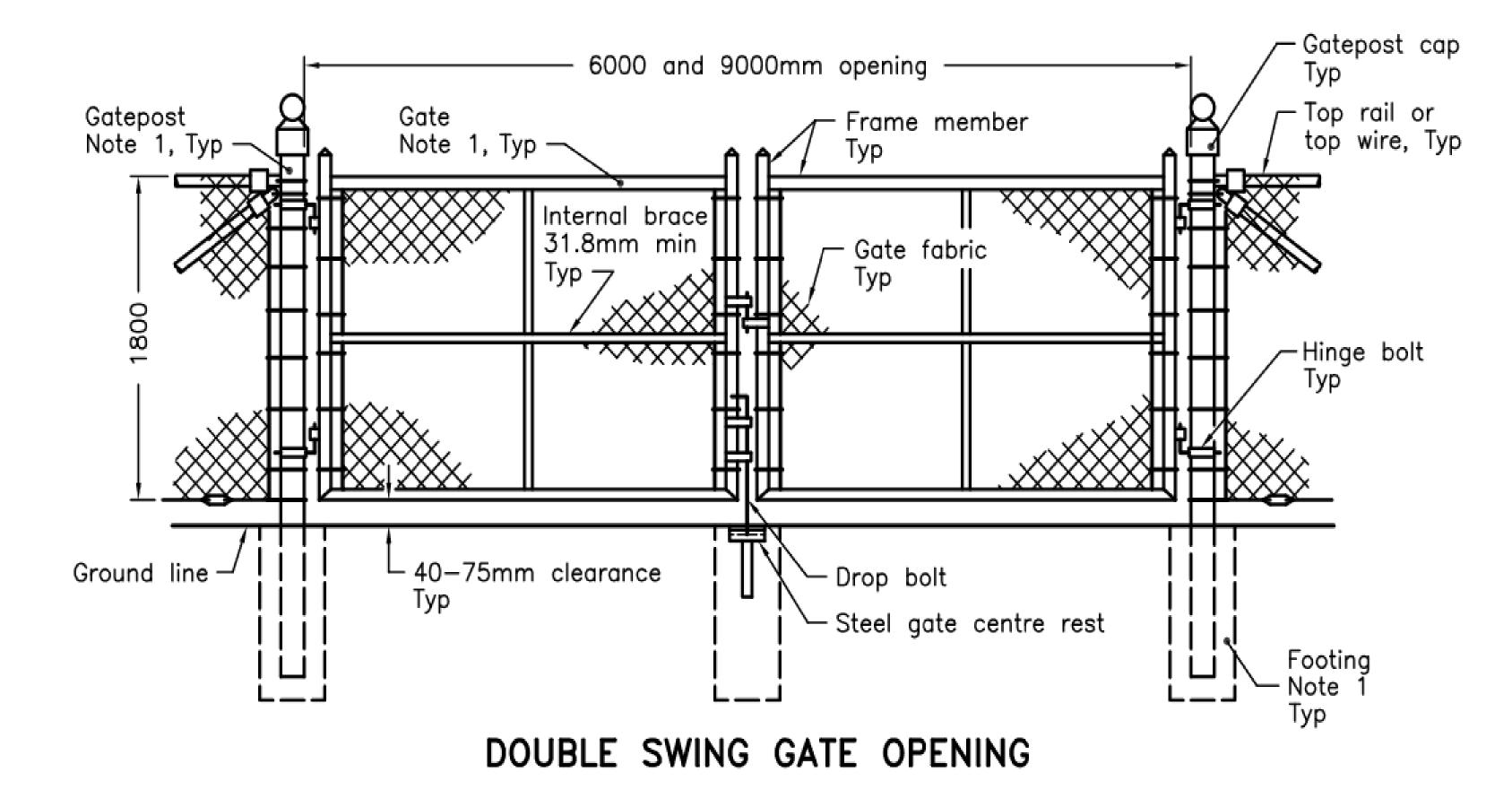


FIGURE 02: Double Swing Gate OPSD 972.102



## Existing Conditions



FIGURE 03: Photograph of Existing Roadway (Looking West)

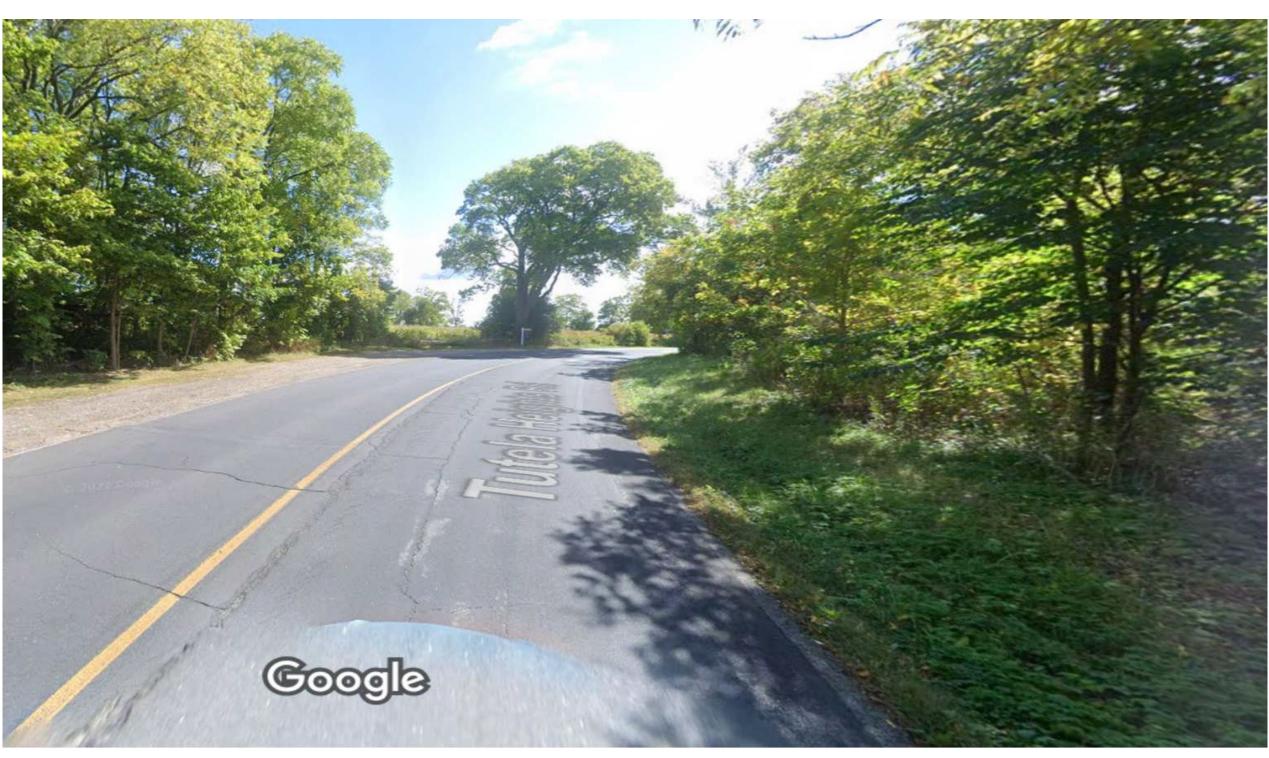


FIGURE 05: Photograph of Existing Roadway (Looking East)

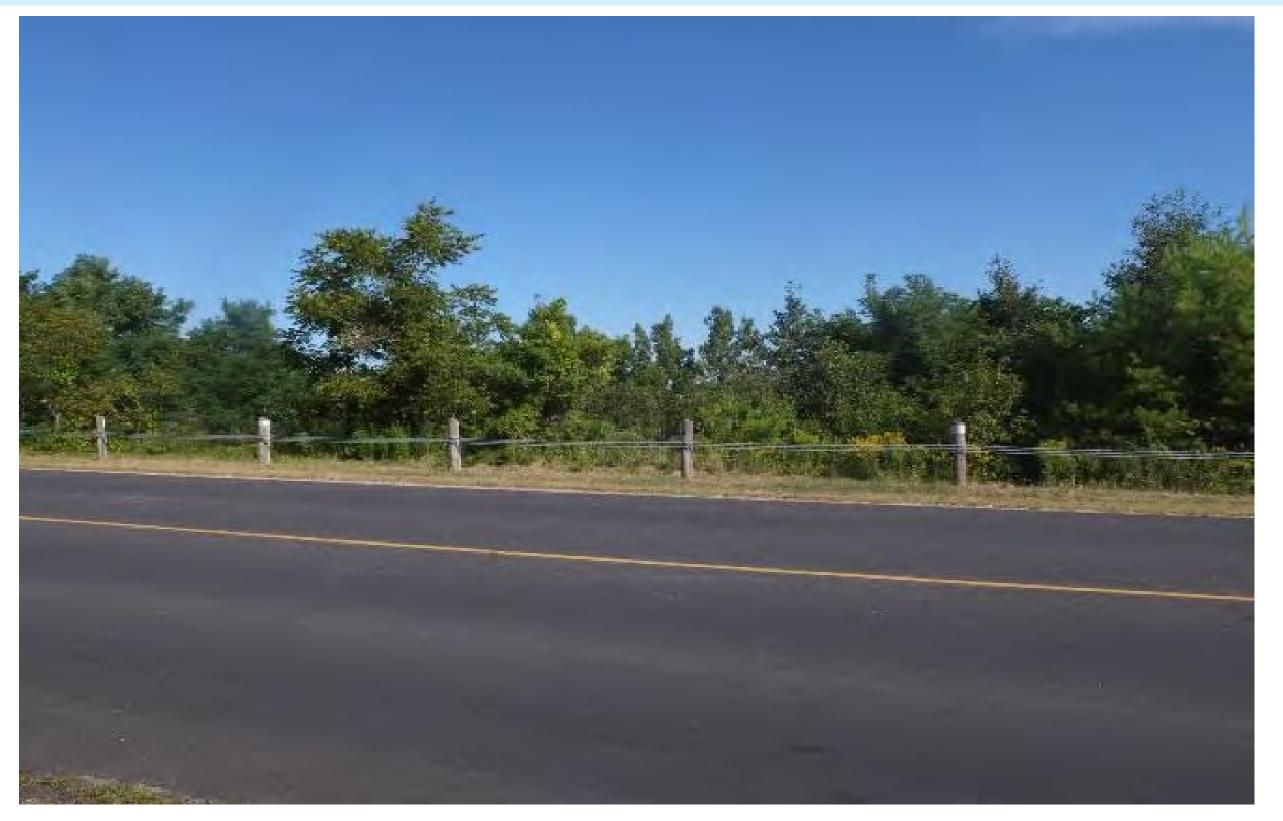


FIGURE 04: Photograph of Existing Roadway (Looking Towards Slope Concern)

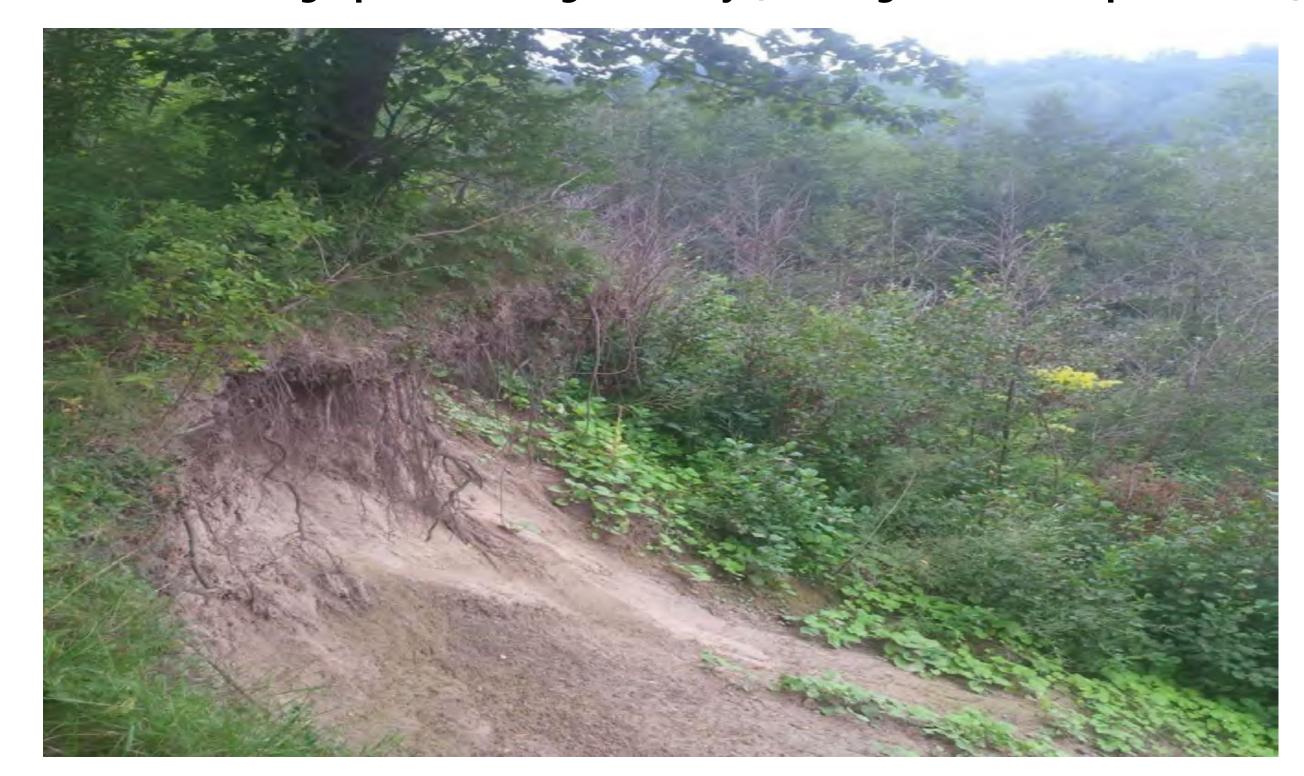


FIGURE 06: Photograph of Slope Failure



# Similar Progressive Slope Failure Salt Spring Church Road



FIGURE 07: Photograph of Existing Roadway (Spring)



FIGURE 08: Photograph of Existing Roadway (Winter)



## Proposed Design Concept

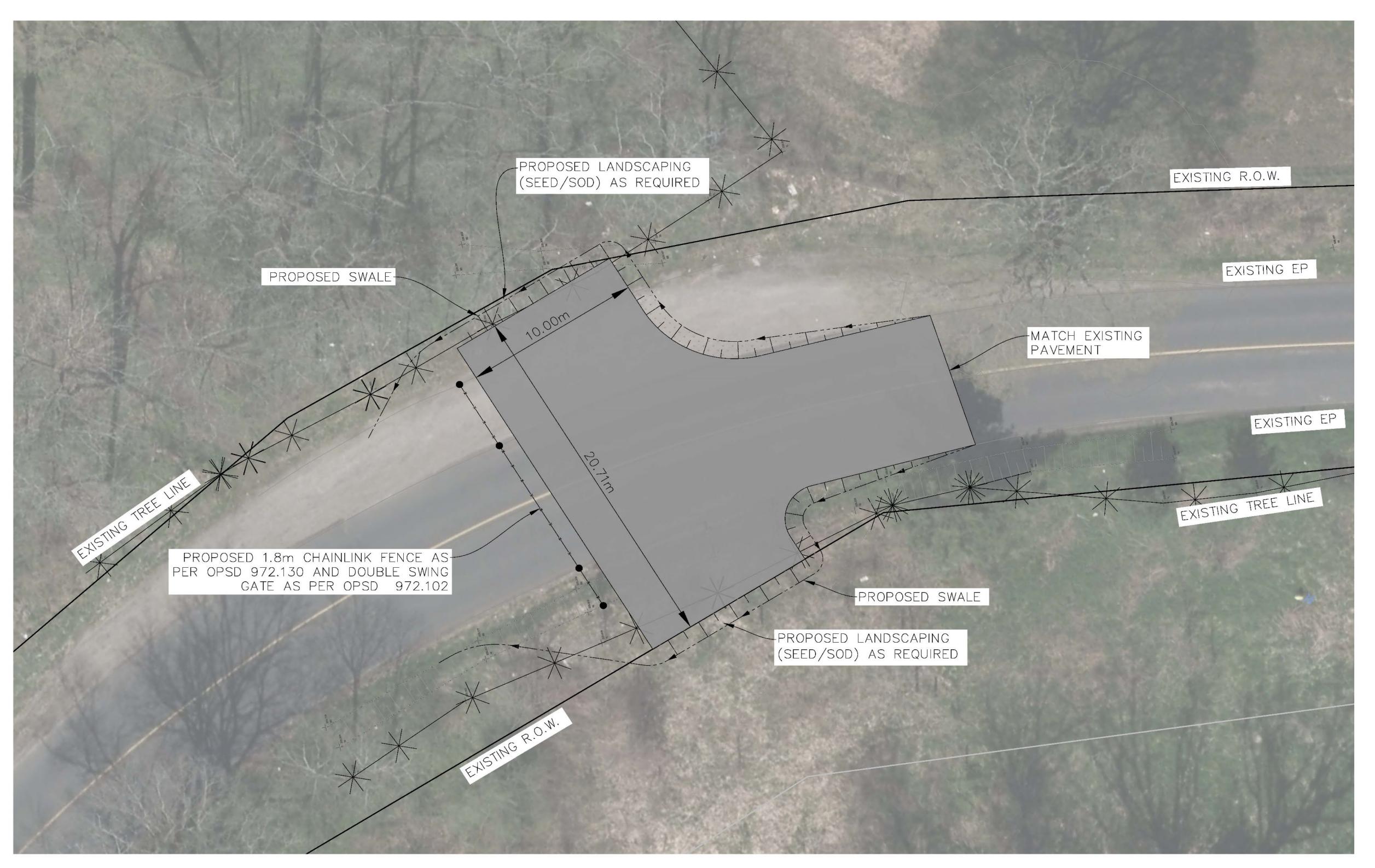


FIGURE 09: Proposed Hammerhead Turnaround (Plan View)



### Proposed Design Characteristics

#### 1. Proposed Cul-De-Sac Features Include;

- Sodded/Seeded roadside ditches will be graded to direct additional surface runoff to the existing ditches (See Figure 09).
- All grading extents are contained within the existing ROW to avoid any property requirements
- Chain link fence (as per OPSD 972.130) and a Double Swing Gate (as per OPSD 972.102)
- Steel beam guiderail barricade (Per OPSD 973.130) and Wa-8 Checkerboard Warning Signage (Per OTM Book 6) to warn drivers of dead-end



FIGURE 10: Photograph of Existing Roadway Proposed Hammerhead Location (Plan View)



### Summary

Due to the instability of the slope on Tutela Heights Road and the very real possibility of failure at any given time, the County of Brant is taking a proactive approach for the safety of the public and will be closing Tutela Heights Road.

There have been several similar slope stabilization issues throughout the County in the past few years where the County has taken similar precautions to ensure the safety of the public.



### Public Information



- > Slides will be posted for Public Information on the County of Brant's website, www.brant.ca/TutelaHeights
- ➤ Design and Construction to be completed in 2024.

Comments and information regarding this Municipal Class Environmental Assessment are being collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record. Notices and updates will be posted on the County of Brant's website, www.brant.ca/TutelaHeights and City of Brantford's website, https://www.brantford.ca/en/your-government/tutela-heights-road-closure-project.aspx.

#### For more information, or if you have further questions or comments about the project, please contact:

#### **Clint Brown**

Public Works Technologist County of Brant (Operations) 26 Park Avenue Burford, ON, NOE 1A0 Tel: 519-449-2451 ext. 2211

Email: clint.brown@brant.ca

#### David Sinke, B.Eng. Mgt., P.Eng.

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