



Intersection Assessment

Intersection Location:	Click here to enter text.
Staff Name:	Click here to enter text.
Assessment Date:	Click here to enter text.

The following report provides details related to operational and safety issues identified for the subject intersection.

DATA SOURCES

Data Type	Used?	Source	Date of Collection (if applicable)
Aerial photography for the study area	☒		
Ground level imagery	☒		
Collision records	☐		
Traffic Data and Signal Warrant Analysis	☒		
As-built drawing	☐		
Other: Click here to enter text.	☐		

REQUIRED FIGURES

The following figures should be appended to this assessment:

- Site Plan Map
- Sight Distance Diagram (Major and Minor Roadways)
- TAC Clear Zone Diagram
- Diagram of Proposed Recommendations (if applicable)

EXISTING CONDITIONS

Transportation Facilities

The following sections describe the existing transportation facilities at the subject intersection.

Major Roadway: [Insert name]

Detail	Existing Condition
Primary Direction	Choose an item.
County Road #	Click here to enter text.
Local Name	Click here to enter text.
Jurisdiction	Click here to enter text.
Posted Speed (km/h)	Choose an item.
# of Lanes <i>(include turning lanes)</i>	Choose an item.
Divided / Undivided	Click here to enter text.
Drainage Type	Click here to enter text.
Shoulder Width & Material	Click here to enter text.
Active Transportation Accommodation	Click here to enter text.

Minor Roadway: [Insert Name]

Detail	Existing Condition
Primary Direction	Choose an item.
County Road #	Click here to enter text.
Local Name	Click here to enter text.
Jurisdiction	Click here to enter text.
Posted Speed (km/h)	Choose an item.
# of Lanes <i>(include turning lanes)</i>	Choose an item.
Divided / Undivided	Click here to enter text.
Drainage Type	Click here to enter text.
Shoulder Width & Material	Click here to enter text.
Active Transportation Accommodation	Click here to enter text.

Intersection Design

Detail	Condition
Existing Traffic Control Type	Choose an item.
Existing Auxiliary Lanes <i>(list existing turning lanes and locations)</i>	Click here to enter text.
Intersection Lighting	Click here to enter text.

OPERATIONAL AND SAFETY REVIEW OF EXISTING CONDITION

Existing conditions within the study area were examined for the following:

- Warrant for additional traffic control based on volumes and/or collision frequency;
- General adherence of the geometric design to applicable standards;
- Adequacy of sight distances at intersections and pedestrian crossings;
- Roadside safety related to unprotected hazards located within the clear zone; and
- Trends in the location, frequency or type of collisions occurring within the study area.

Traffic Signal Warrant

(Collect traffic counts in order to assess traffic signal warrants. The warrant for left turn lanes should be determined using the nomographs provided in the MTO Supplement to the TAC Geometric Design Guide)

Complete County of Wellington Traffic Signal Warrant Form.

Table 1: Traffic Signal and Auxiliary Lane Warrant

Design Element		Traffic Count	Warranted (Yes/No)
Traffic Control (Signal or Roundabout)			Choose an item.
Left Turn Lane Warrant	Northbound		Choose an item.
	Southbound		Choose an item.
	Eastbound		Choose an item.
	Westbound		Choose an item.
Right Turn Lane Warrant	Northbound		Choose an item.
	Southbound		Choose an item.
	Eastbound		Choose an item.
	Westbound		Choose an item.

Comments:

[Click here to enter text.](#)

Geometric Design

(Evaluate horizontal and vertical design of the intersection and its immediate approaches using the Roadway Design Criteria Form. Horizontal alignment should be assessed based on current TAC geometric standards. Vertical alignment can be reviewed based on as-built drawing or other available materials).

Roadway Design Criteria		Existing
Facility Widths	Through Lane, m	
	Shoulder, m	
	Rounding, m	
	Cycling Lane, m	
	Sidewalk, m	
	Multi-Use Pathway, m	
Auxiliary Lanes	Lane Width, m	
	Right Turn Parallel Length, m	
	Right Turn Taper Ratio	
	Left Turn Parallel Length, m	
	Left Turn Taper Ratio	
Horizontal Alignment	Minimum Curve Diameter, m	
	Maximum Rate of Superelevation	
	Minimum Curve Radius for reverse crown section, $e_{\max}=0.04$ m/m	
	Minimum Curve Radius for superelevated section, $e_{\max}=0.04$ m/m	
	Horizontal Curve, Normal Crown	
Vertical Alignment	Minimum Grade, %	
	Maximum Grade, %	
	Minimum Crest 'K'	
	Minimum Sag 'K' (Headlight)	
	Minimum Sag 'K' (Comfort)	
Intersection	Minimum Tangent at Intersection	
	Minimum Curb Return Radius	

Based on the assessment above, note any issues related to horizontal and vertical alignment.

Roadway	Issue Identified?	Comments
Horizontal Alignment	☒	Click here to enter text.
Vertical Alignment	☐	Click here to enter text.

Sight Distances

Recommended minimum stopping and decision sight distances for each of the road corridors are identified in **Table 2**. Sight distance diagrams are provided in **Figures 2 and 3** in **Appendix A1**.

(Identify stopping and decision sight distances for each intersection in accordance with the *TAC Geometric Design Guide for Canadian Roads*, Chapter 9).

Ensure these are illustrated in appended Sight Distance Diagrams.

Table 2: Outcome of Sight Distance Review

Sight Distance Criteria	T-Intersection (One Way Stop Control)	Two-Way Stop Control	All Way Stop Control	Signalized	Distance (m)	Meets Standards (Yes/No)
Major Road						
Minimum Stopping Sight Distance	☐	☐	☐	☐	Click here to enter text.	Choose an item.
Minimum Intersection Sight Distance for left turn from stopped across road with free flowing traffic (Case B1) ^a	☐	☐	☐	☐	Click here to enter text.	Choose an item.
Minimum Intersection Sight Distance for right turn from stopped onto road with free flowing traffic (Case B2) ^b	☐	☐	☐	☐	Click here to enter text.	Choose an item.
Minimum Intersection Sight Distance for through movement from stopped across road with free flowing traffic (Case B3) ^c	☐	☐	☐	☐	Click here to enter text.	Choose an item.
Minimum Intersection Sight Distance for left turn on road with free flowing opposing traffic (Case F) ^d	☐	☐	☐	☐	Click here to enter text.	Choose an item.
Minor Road						
Minimum Stopping Sight Distance	☐	☐	☐	☐	Click here to enter text.	Choose an item.

^a TAC GDG, Chapter 9, Table 9.9.3 adjusted for design vehicle and grade.

^b TAC GDG, Chapter 9, Table 9.9.6 adjusted for design vehicle and grade.

^c TAC GDG, Chapter 9, Table 9.9.6 adjusted for design vehicle and grade.

^d TAC GDG, Chapter 9, Table 9.9.12, adjusted for design vehicle and grade.

Sight Distance Criteria	T-Intersection (One Way Stop Control)	Two-Way Stop Control	All Way Stop Control	Signalized	Distance (m)	Meets Standards (Yes/No)
Minimum Intersection Sight Distance for left turn from stopped across road with free flowing traffic (Case B1) ^e	☐	☐	☐	☐	Click here to enter text.	Choose an item.
Minimum Intersection Sight Distance for right turn from stopped onto road with free flowing traffic (Case B2) ^f	☐	☐	☐	☐	Click here to enter text.	Choose an item.
Minimum Intersection Sight Distance for through movement from stopped across road with free flowing traffic (Case B3) ^g	☐	☐	☐	☐	Click here to enter text.	Choose an item.
Minimum Intersection Sight Distance for left turn on road with free flowing opposing traffic (Case F) ^h	☐	☐	☐	☐	Click here to enter text.	Choose an item.

Deficiencies identified:

[Click here to enter text.](#)

^e TAC GDG, Chapter 9, Table 9.9.3 adjusted for design vehicle and grade.

^f TAC GDG, Chapter 9, Table 9.9.6 adjusted for design vehicle and grade.

^g TAC GDG, Chapter 9, Table 9.9.6 adjusted for design vehicle and grade.

^h TAC GDG, Chapter 9, Table 9.9.12, adjusted for design vehicle and grade.

Roadside Safety

Clear Zone

The clear zones for each of the study corridors are summarized in **Table 3** and illustrated in **Figure 5**.

(Identify TAC Clear Zone Distance based on TAC Geometric Design Guide for Canadian Roads Chapter 7 and Table 7.3.1)

Table 3: Clear Zone Distances for Each Study Corridor

Roadway	Estimated AADT	Posted Speed (km/h)	TAC Clear Zone Distance (m)
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

Identified Hazards

Were hazards identified in the clear zone?

☐ Yes ☐ No

If yes, list:

Click here to enter text.

Collision Records

(Obtain collision records from OPP)

Average number of intersection-related collisions per year: Click here to enter text.

Table 4: Collision Causes

Cause	% of Cases
Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.

Comments:

(Include: changes in collision rates over time, data related to fatalities and injuries)

Click here to enter text.

Are collisions a noted issue for this intersection?

☐ Yes ☐ No

Operating Speeds

(Provide commentary on current posted speed limit and history of speed audit completion).

Click here to enter text.

Table 5 provides the 85th percentile operating speed of the roadways involved in the intersection.

Table 5: Operating Speed

Roadway	85 th Percentile Operating Speed
Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.

Comments:

(Comparison of 85th percentile operating speed to posted speed limit)

Click here to enter text.

PUBLIC CONCERNS

(List comments received by the public related to this intersection)

Click here to enter text.

SUMMARY

Based on the review of the existing condition, the following issues are to be addressed:

- ☐ Traffic operations
- ☐ Failure to yield
- ☐ Operating speeds
- ☐ Collision history
- ☐ Clear zone
- ☐ Other: [Click here to enter text.](#)

Comments:

[Click here to enter text.](#)

If speeding is identified as a concern, refer to Speed Management Guideline. Note the results of the Speed Management assessment if applicable:

[Click here to enter text.](#)

POTENTIAL SOLUTIONS

Potential Solutions	Estimated Construction Costs	Source of Estimated Construction Costs
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Evaluation of alternative solutions:

[Click here to enter text.](#)

RECOMMENDED SOLUTION

Based on review of the existing operational and safety conditions, the following design changes are recommended at the subject intersection:

Recommended Solutions	Estimated Construction Costs
Click here to enter text.	Click here to enter text.

Comments:

Click here to enter text.

Identify the impact on roadway design criteria based on the proposed changes, if applicable:

Roadway Design Criteria		Proposed
Classification		
Design Vehicle		
Right-of-Way Width		
Design Speed		
Posted Speed		
Facility Widths	Through Lane, m	
	Shoulder, m	
	Rounding, m	
	Cycling Lane, m	
	Sidewalk, m	
	Multi-Use Pathway, m	
Auxiliary Lanes	Lane Width, m	
	Right Turn Parallel Length, m	
	Right Turn Taper Ratio	
	Left Turn Parallel Length, m	
	Left Turn Taper Ratio	
Horizontal Alignment	Minimum Curve Diameter, m	
	Maximum Rate of Superelevation	
	Minimum Curve Radius for reverse crown section, $e_{\max}=0.04$ m/m	
	Minimum Curve Radius for superelevated section, $e_{\max}=0.04$ m/m	
	Horizontal Curve, Normal Crown	

Roadway Design Criteria		Proposed
Vertical Alignment	Minimum Grade, %	
	Maximum Grade, %	
	Minimum Crest 'K'	
	Minimum Sag 'K' (Headlight)	
	Minimum Sag 'K' (Comfort)	
Intersection	Minimum Tangent at Intersection	
	Minimum Curb Return Radius	

ADDITIONAL NOTES:

(Provide any additional details that may impact intersection assessment and recommended solutions)

Click here to enter text.

FIGURES:

(Provide any relevant figures such as maps and diagrams).



Figure 1: Site Plan Map

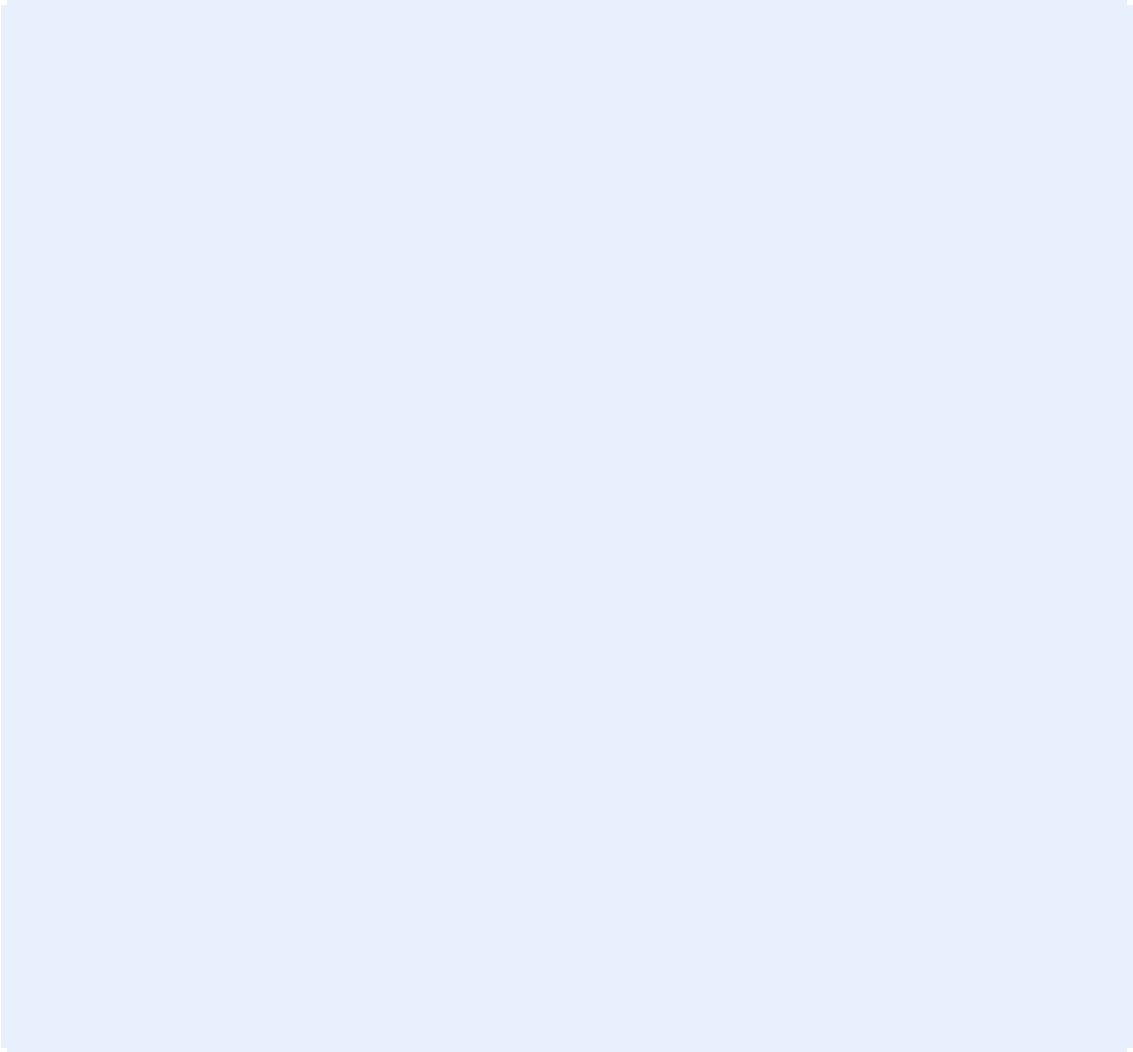


Figure 2: Sight Distance Diagram (Major and Minor)



Figure 3: TAC Clear Zone Diagram

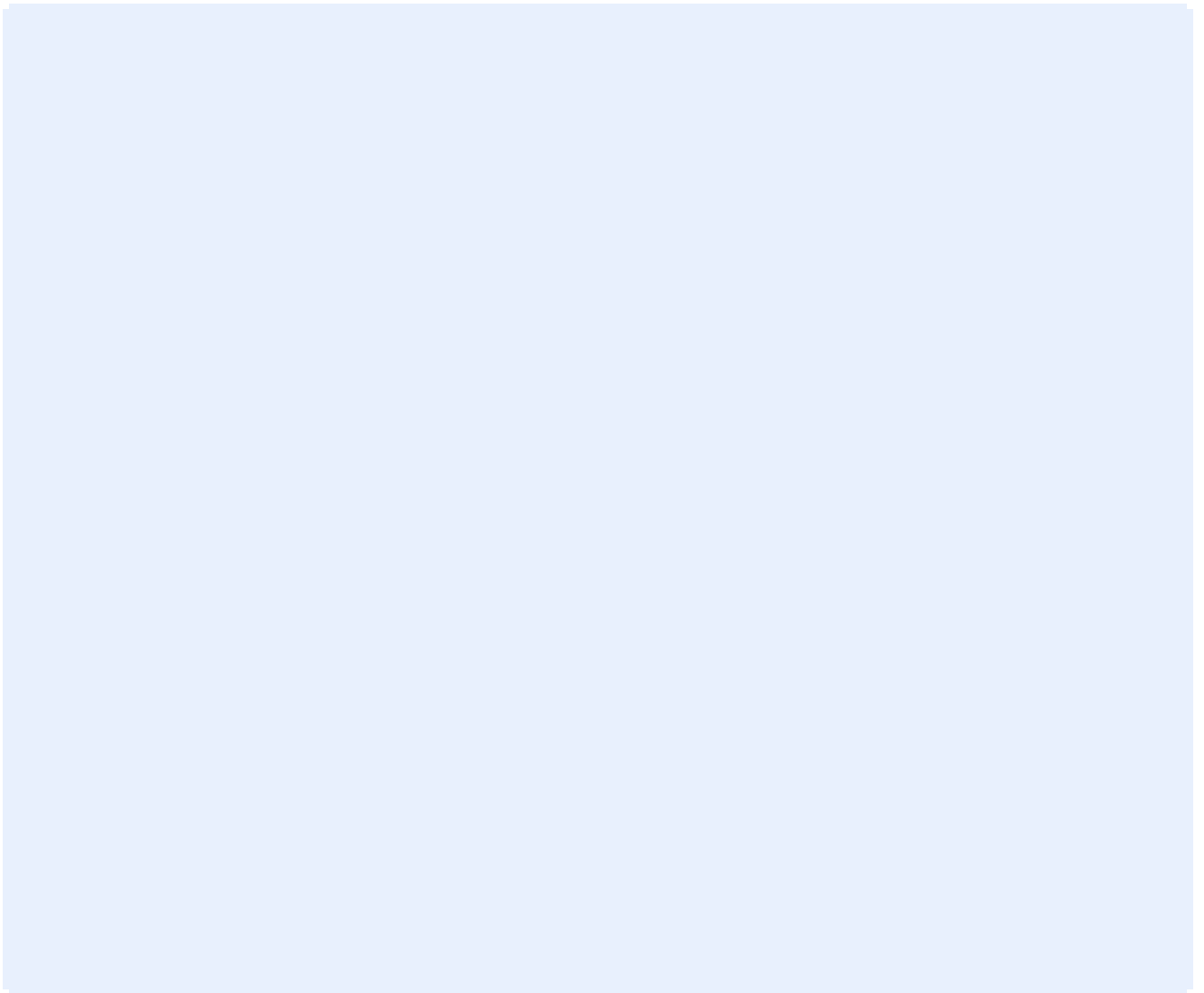


Figure 4: Diagram of Proposed Recommendations (if applicable)