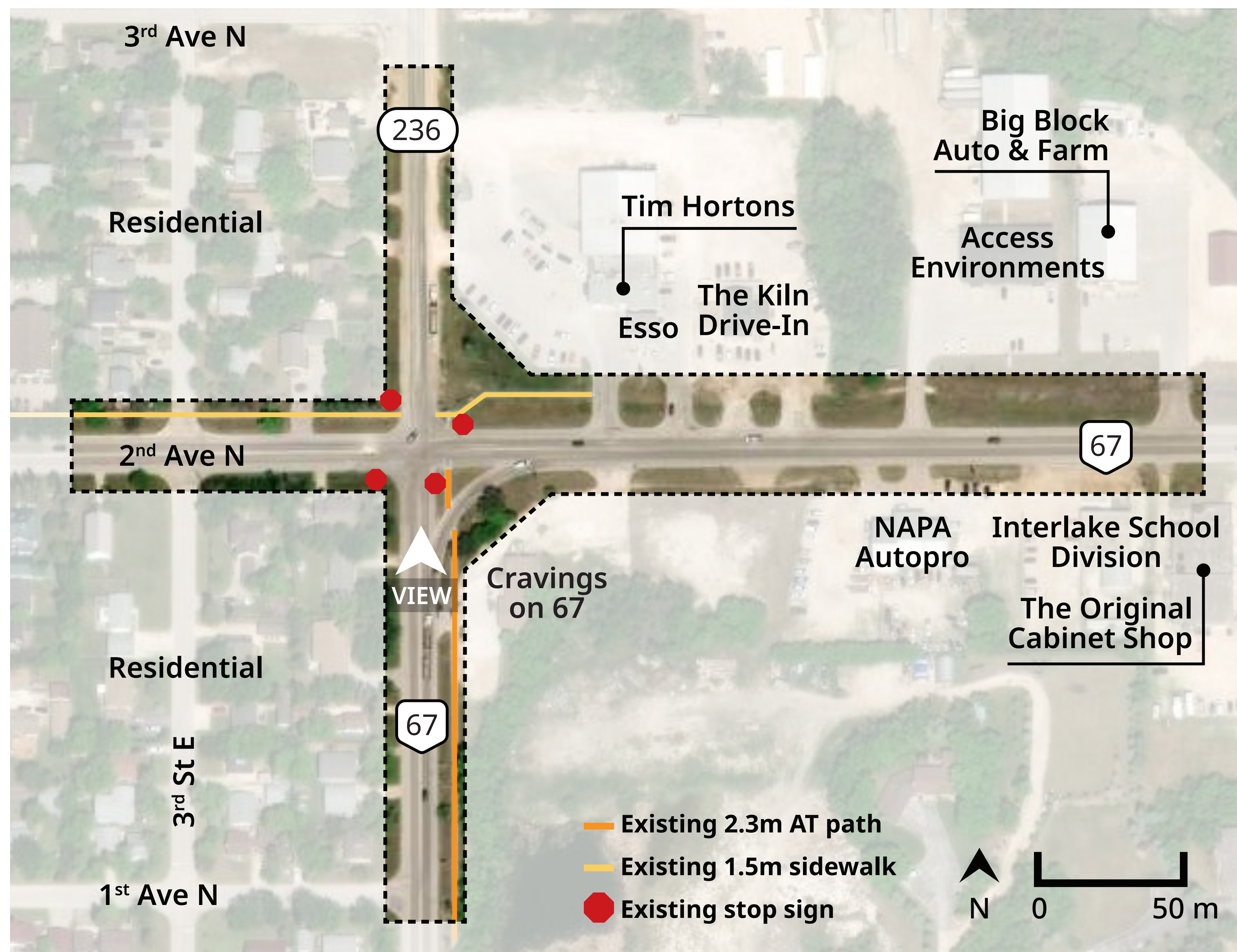


## Functional design of intersection improvements at PTH 67 & PR 236 (North Junction)

### Project Area



### What is this project about?

Manitoba Transportation and Infrastructure (MTI) recognized an increase in traffic volumes at the **north junction of the Provincial Trunk Highway (PTH) 67 and Provincial Road (PR) 236 intersection**, at this key location in Stonewall, and they have determined the need for intersection improvements.

Northbound view on PTH 67, towards intersection



## Why is this project important?

The intersection at PTH 67 and PR 236 (North Junction) is a gateway into Stonewall. As the Town continues to grow and develop, the traffic volumes are anticipated to increase.

Though the intersection may function satisfactorily today, growth in the area is anticipated to negatively impact its operation.

## Safety & Accesses

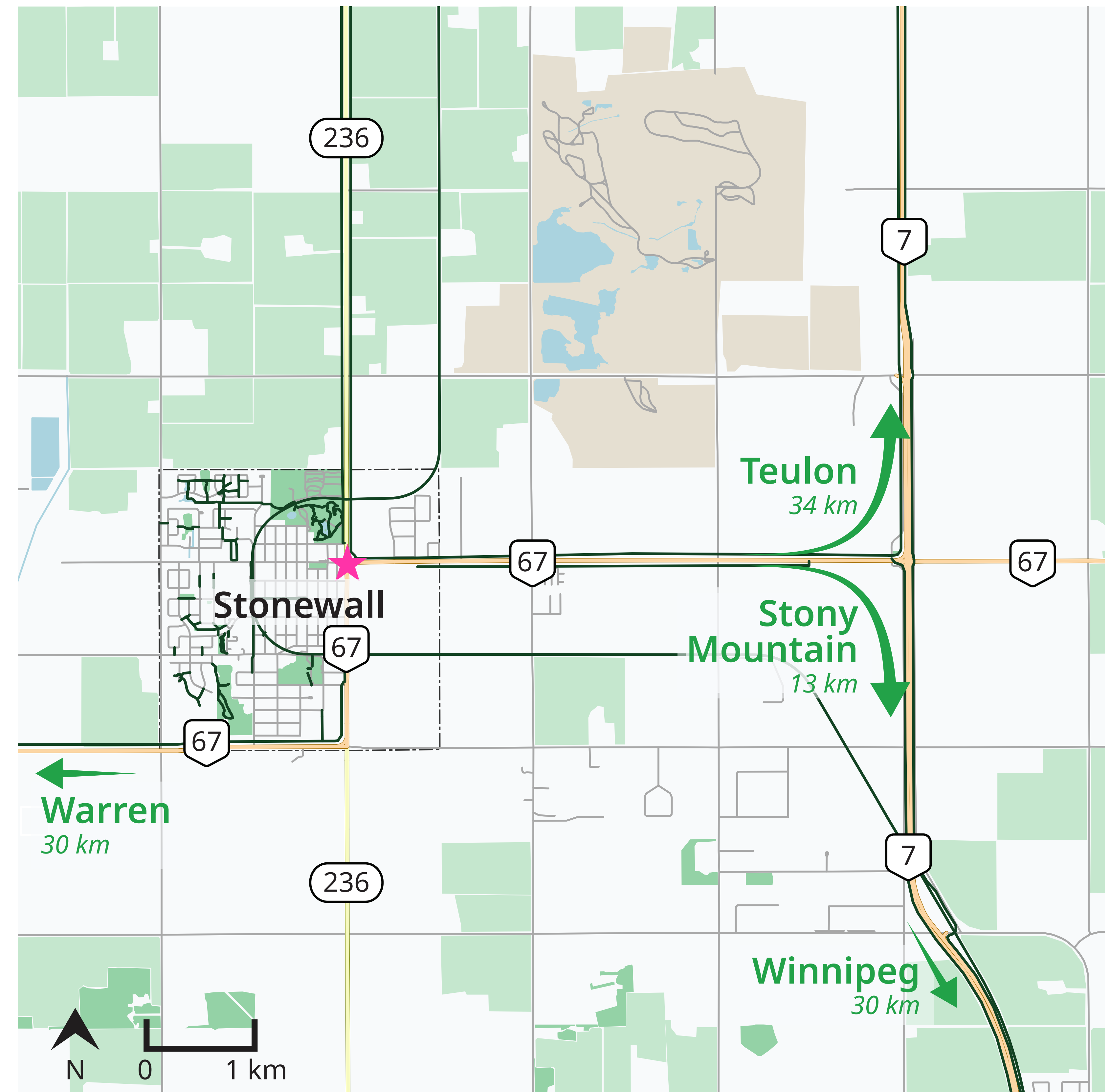
Of the 18 collisions recorded along PTH 67 between 2017 and 2021, nine occurred at the study intersection.

The number of accesses is excessive within near proximity to the study intersection.

The existing accesses in close proximity to the intersection are causing traffic delays.

## Connections

- ★ Project site
- Stonewall boundary
- Parks and greenspace
- Agricultural land
- Quarry
- Provincial Trunk Highway
- Provincial Roads
- Local roads
- Active transit pathway



## Project Goals

- ▶ Enhance the main intersection leading into Stonewall
- ▶ Design to accommodate continued growth and traffic volume
- ▶ Improve safety and overall level of service of intersection

## Engineering + Engagement

Engagement opportunities are taking place at regular intervals throughout this project. Design alternatives must be informed by the needs and desires of:



**Drivers**  
*(personal vehicles and trucking)*



**Active transportation users**



**Pedestrians**

## Project Milestones



**Site Analysis**



**Pre-Phase Engagement:**  
*Information Gathering*



**Develop Design Alternatives**

We are here

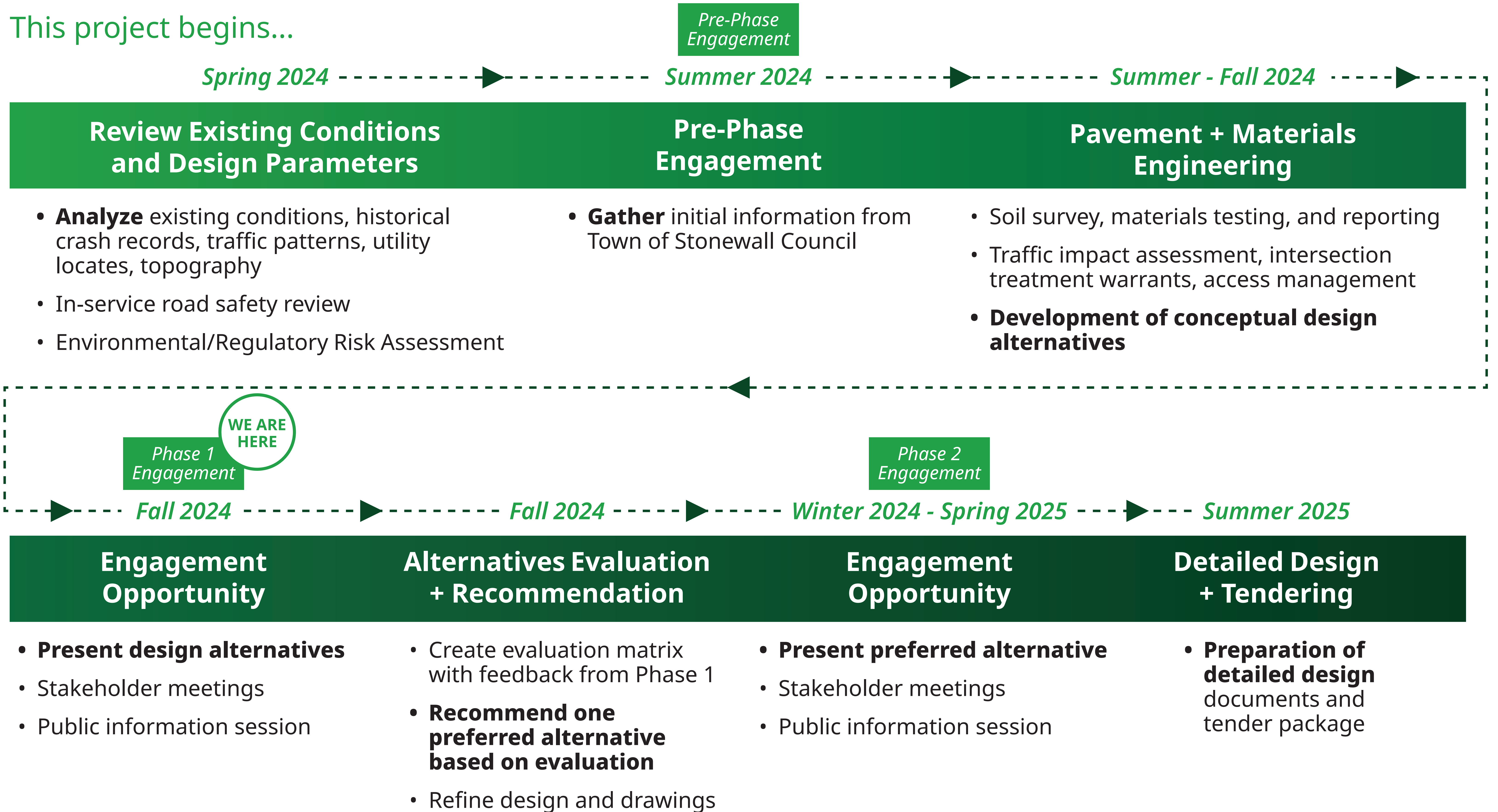
**Phase 1 Engagement:**  
*Share Design Alternatives*

**Select Preferred Alternative**

**Phase 2 Engagement:**  
*Present Preferred Alternative*

**Prepare Detailed Design Documents for Construction**

This project begins...



## On-Site Observations

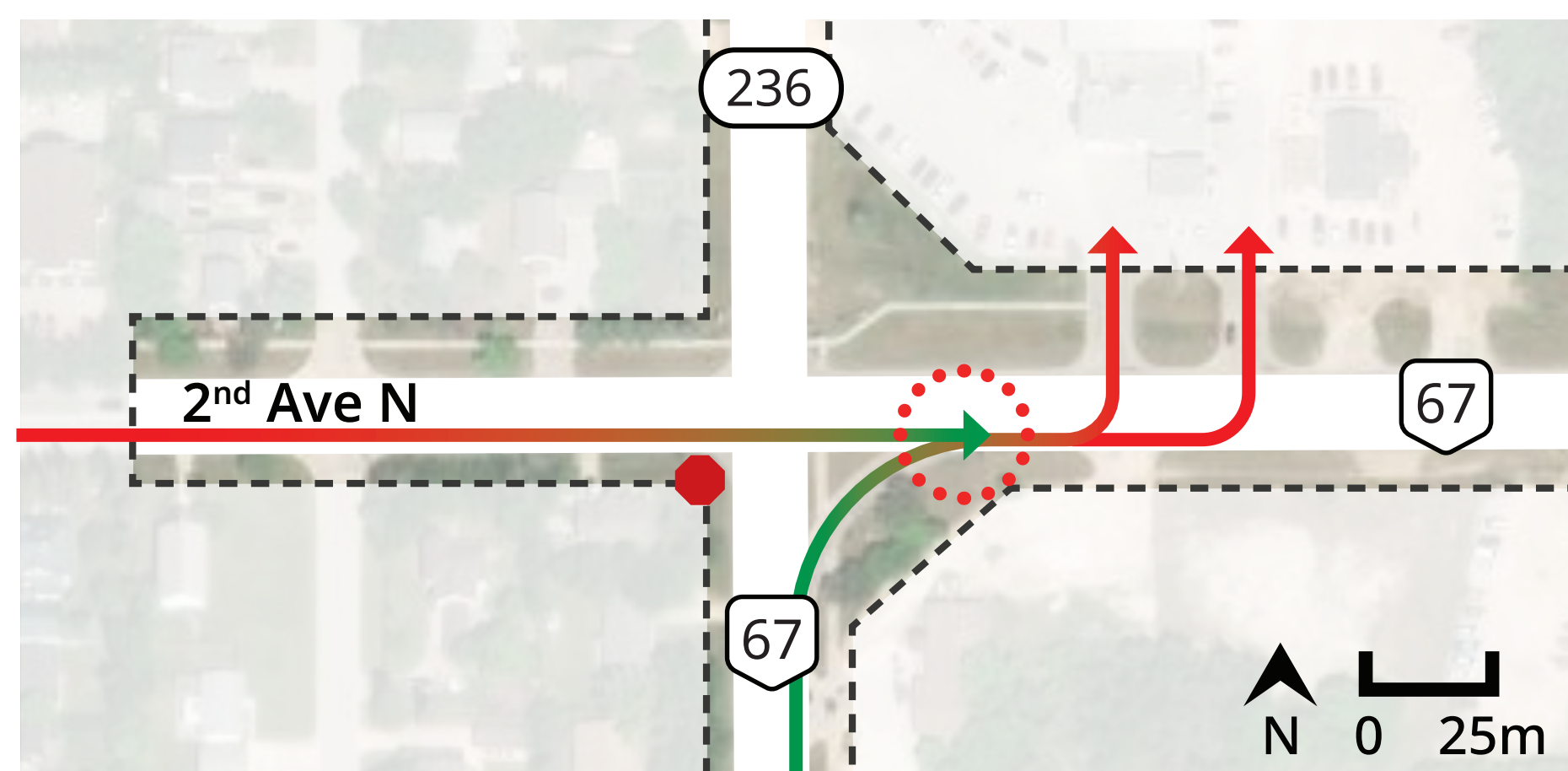
This data is collected when visiting the study site.

### This analysis:

- ▶ documents and observes traffic flow firsthand.

### Results of analysis:

- A potential conflict was identified:
  - **Northbound PR 236 right-turning traffic slows rapidly on PTH 67** to enter the Tim Horton's / Esso Station parking lot.
  - Westbound 2nd Ave N traffic accelerating consistently from a stop are at **risk of a rear-end collision.**

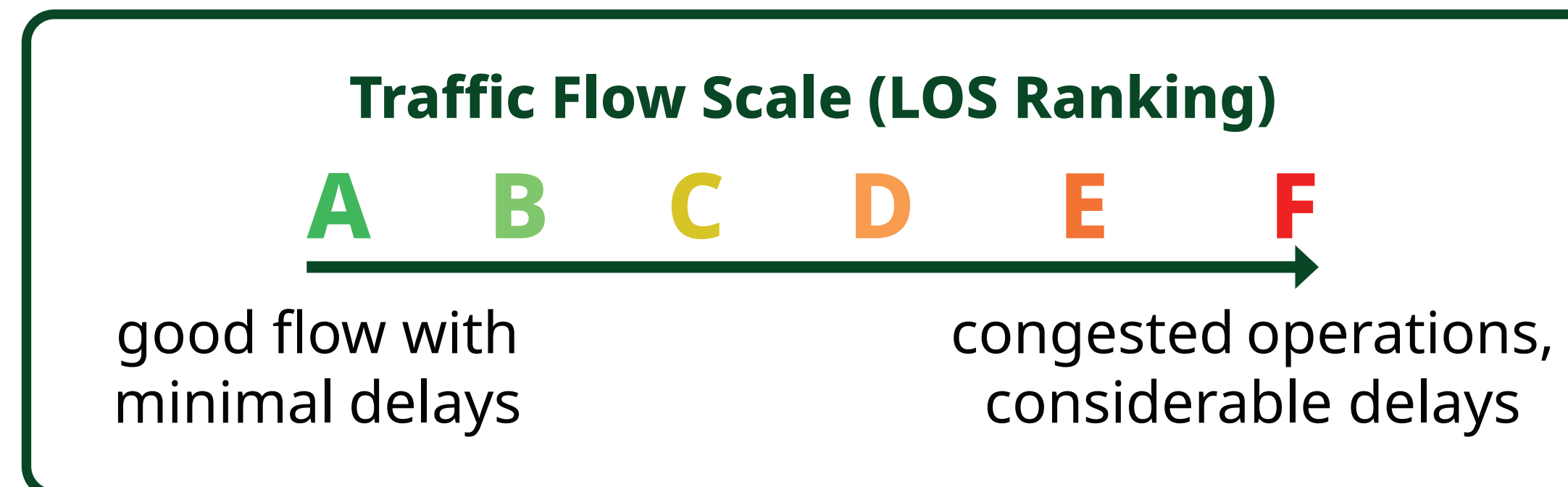


## Level of Service (LOS)

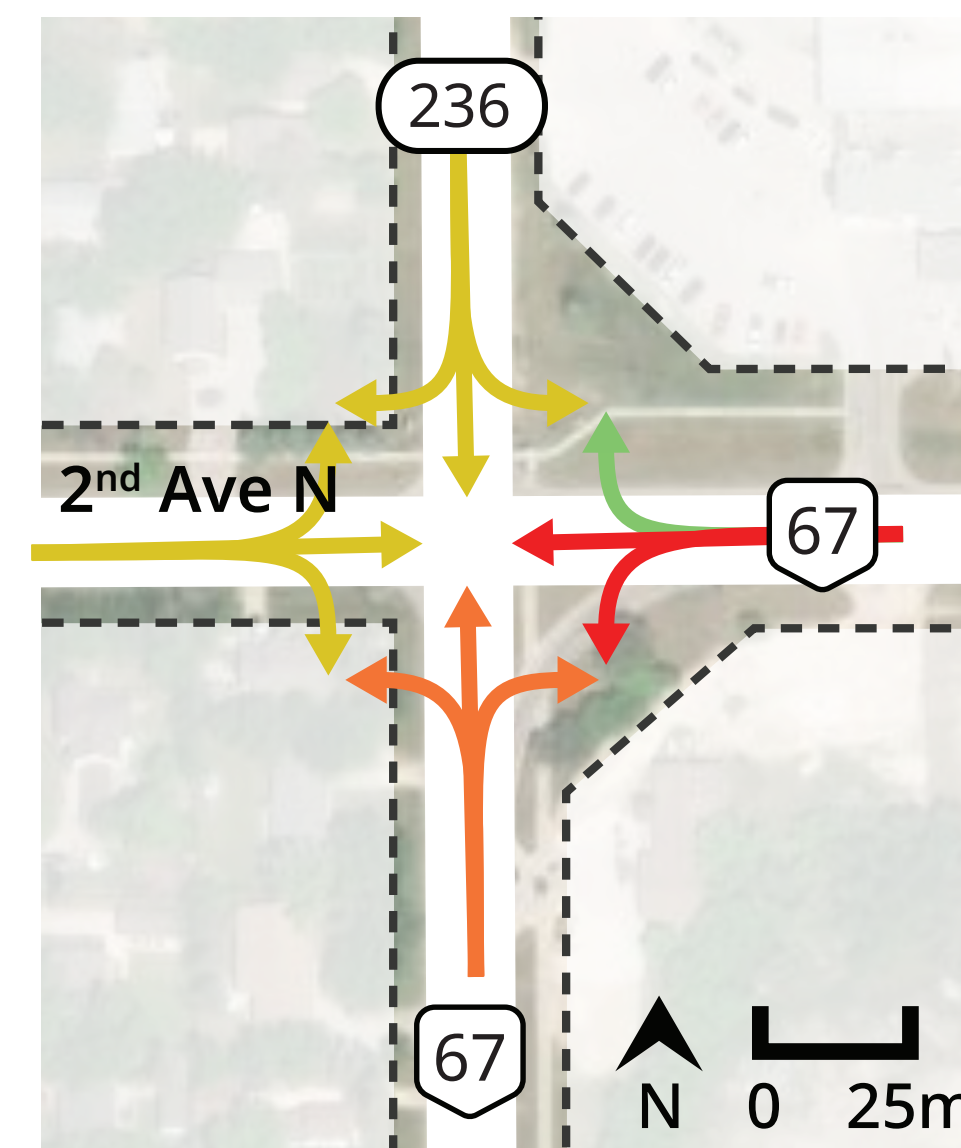
The LOS determines the operating conditions of the intersection (flow rate).

### This analysis:

- ▶ uses traffic simulation software to gather information.



### Results of analysis:



Traffic in the project area ranks on the LOS scale as follows:

- C** North leg, all directions
- B** East leg, turning right
- F** East leg, through and left
- E** South leg, all directions
- C** West leg, all directions

## Warrant Analysis

The process to determine if improvements are needed.

### This analysis:

- ▶ review of existing conditions.
- ▶ identifies critical movements and possible negative impacts.

### Results of analysis:

- The need for **auxiliary lanes** was identified to improve the LOS for the 20-year traffic volume forecast.
- Additionally, **traffic signals** could be added to improve flow through the intersection.

The following project factors guided the development of the design alternatives.

These factors led to three alternatives that could best improve the intersection functioning.

## Safety

### Goals

- **Reduce conflict** on roads
- **Consolidate accesses** to provide safer operations and better organization of vehicles
- Provide **intersection lighting** to improve pedestrian safety

## Active Transportation (AT)

### Goals

- **Identify potential enhancement and connections** to AT network around the intersection

## Business

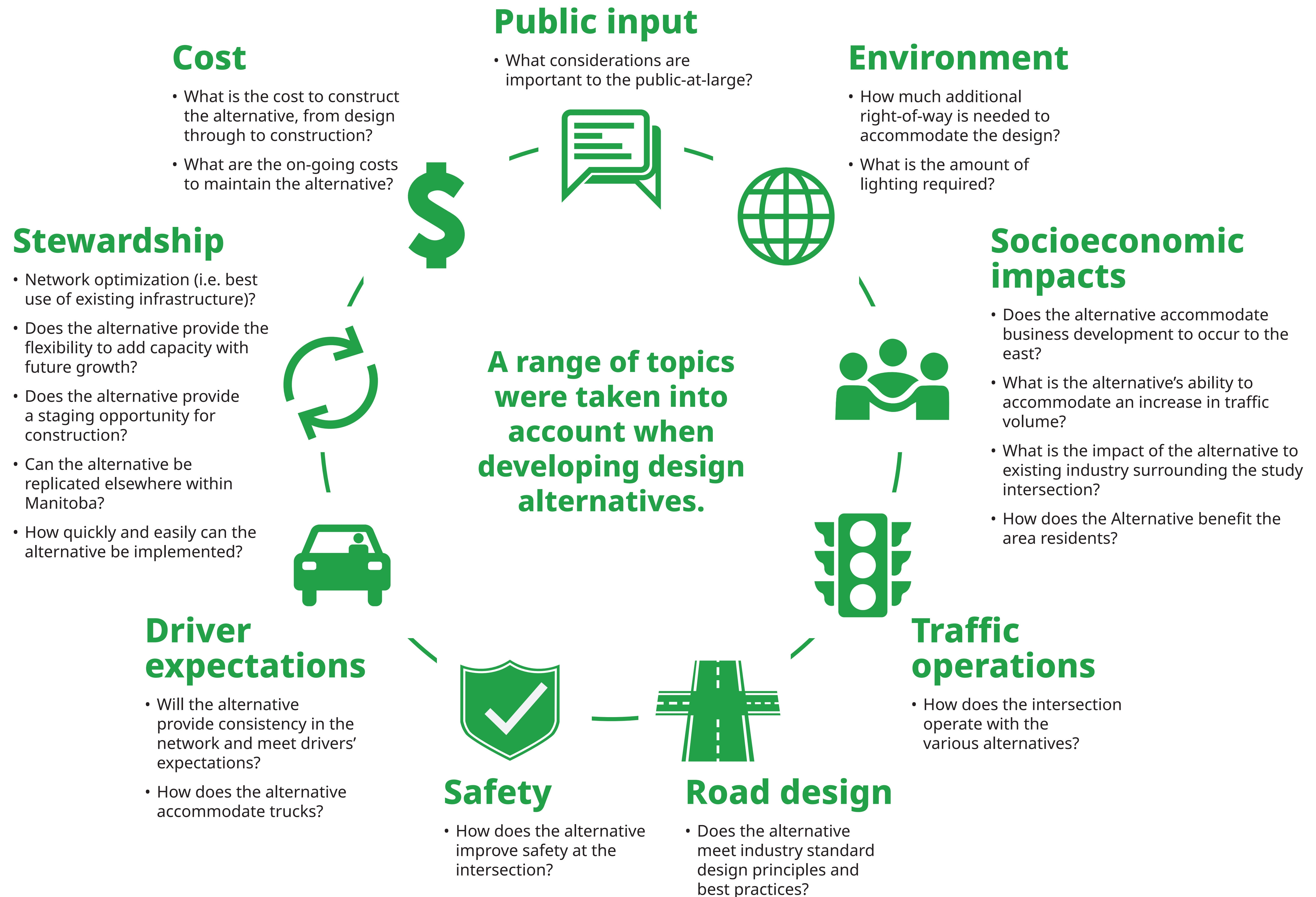
### Goals

- Ensure patrons can access surrounding businesses by **minimizing queueing at accesses**

## Growth

### Goals

- Ensure intersection can **acomodate increasing number of vehicles** as Stonewall grows





## Modifications

There are **25 accesses** belonging to both residents and businesses in the project area. The Town of Stonewall has jurisdiction of accesses on three of four legs of the intersection.

Revision of these accesses along PTH 67 need to ensure:

- Consolidation to provide safer operations and improved intersection operation
- Better organization of vehicles entering and exiting
- Parcels are not land locked
- Access to businesses is maintained

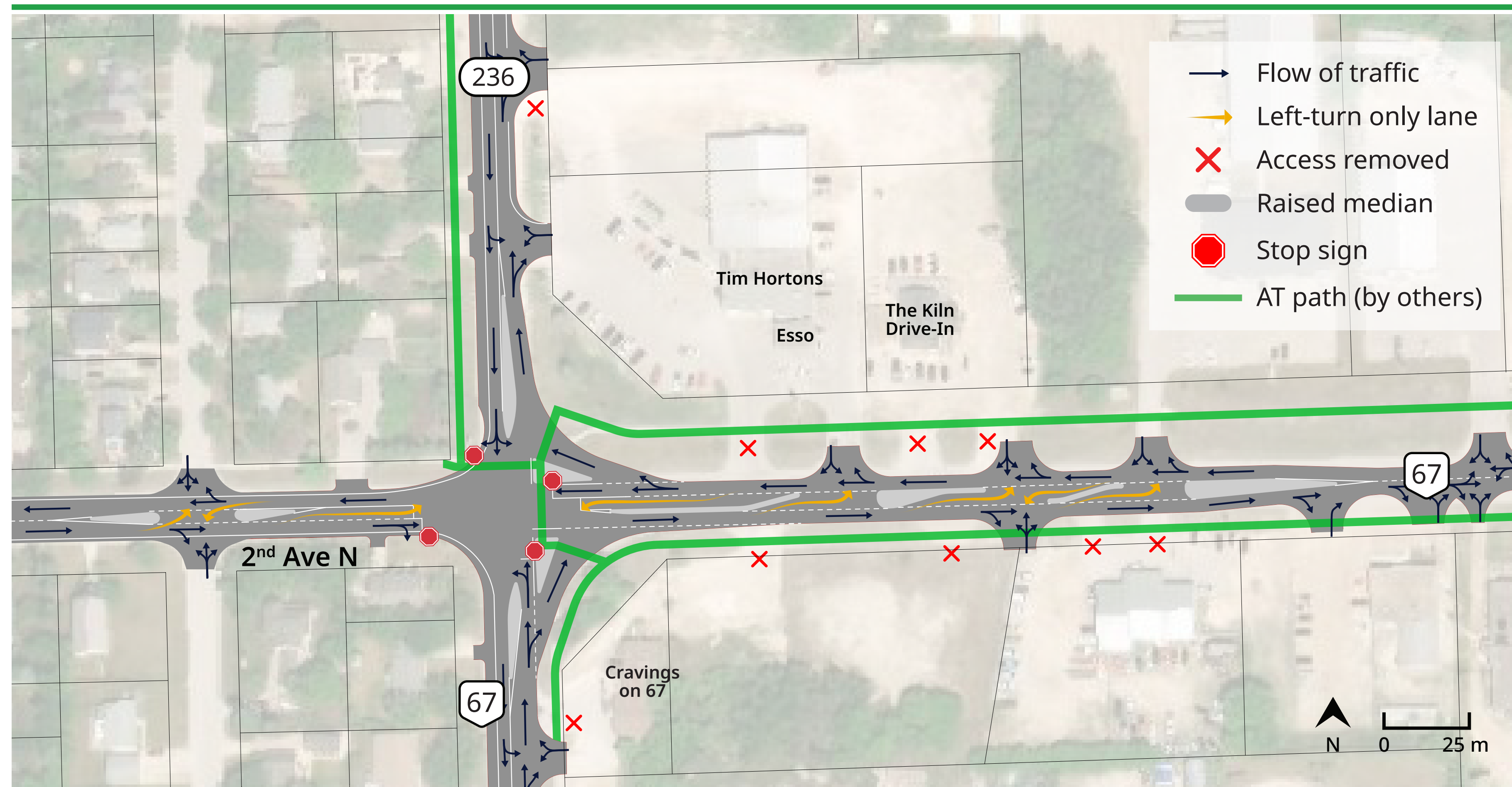
*All three design alternatives proposed incorporate the following modifications:*

- ✓ Access remains
- ✗ Access moved (existing)
- ✚ Access relocated (proposed)
- ✖ Access removed



## All-Way Stop Controlled

### Plan View



### Design Description

Alternative 1 represents a similar layout to the existing intersection. Geometry is refined to accommodate large trucks and increase pedestrian safety and operations at the intersection.

This alternative provides an adequate level of service for lower traffic volumes.

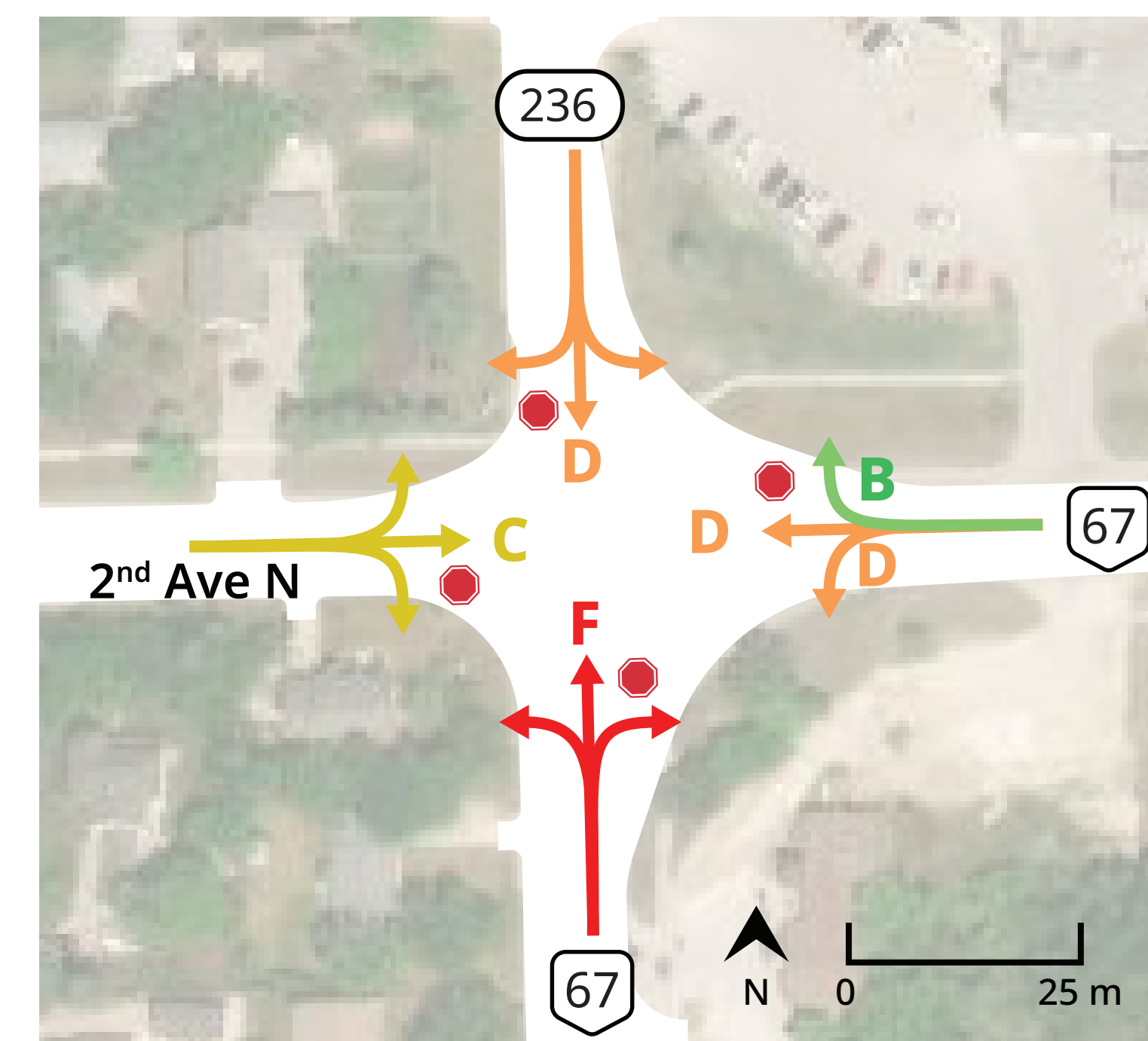
#### Benefits

- ▶ lower maintenance cost (snow clearing)
- ▶ new left-turn lanes for accesses on PTH 67 and 2<sup>nd</sup> Ave reduce delays and queues
- ▶ site accesses expected to operate well

#### Challenges

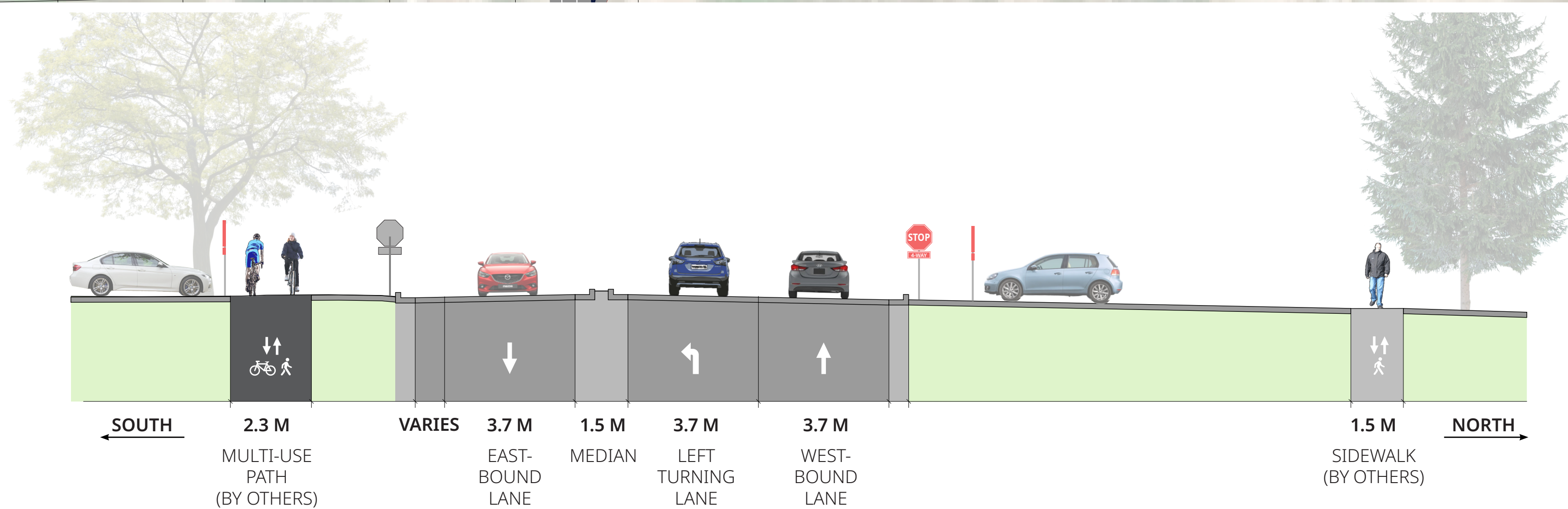
- ▶ northbound and southbound approaches expected to operate poorly, with LOS F
- ▶ site accesses expected to operate with some delay

### Level of Service at Afternoon Peak Hour



#### Traffic Flow Scale (LOS Ranking)

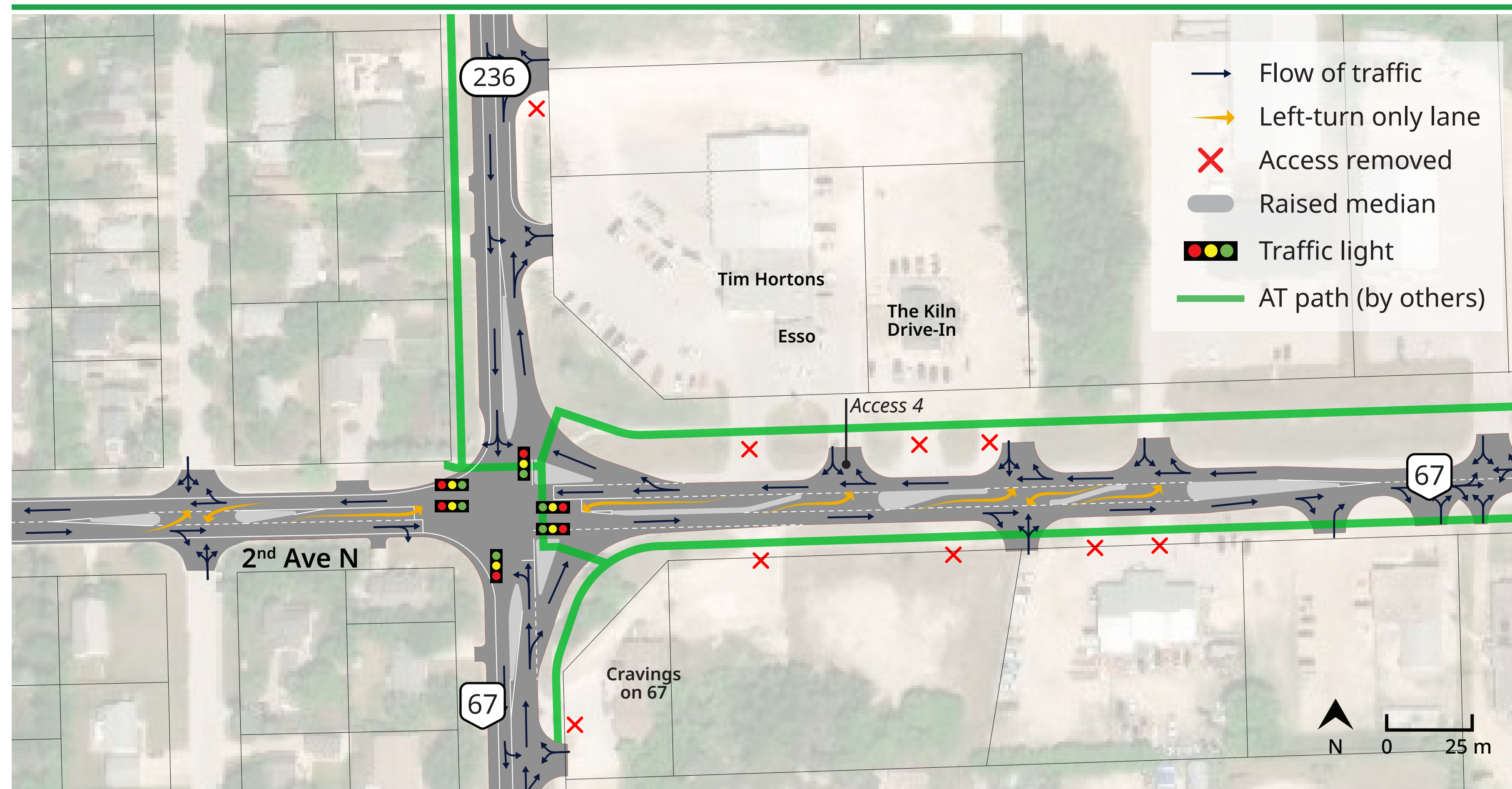
- A** good flow with minimal delays
- B**
- C**
- D**
- E**
- F** congested operations, considerable delays



Section view of PTH 67 looking west toward intersection.

## Traffic Signals

### Plan View



### Design Description

Alternative 2 is to install traffic signals with improvements to the lanes and geometry of the existing intersection.

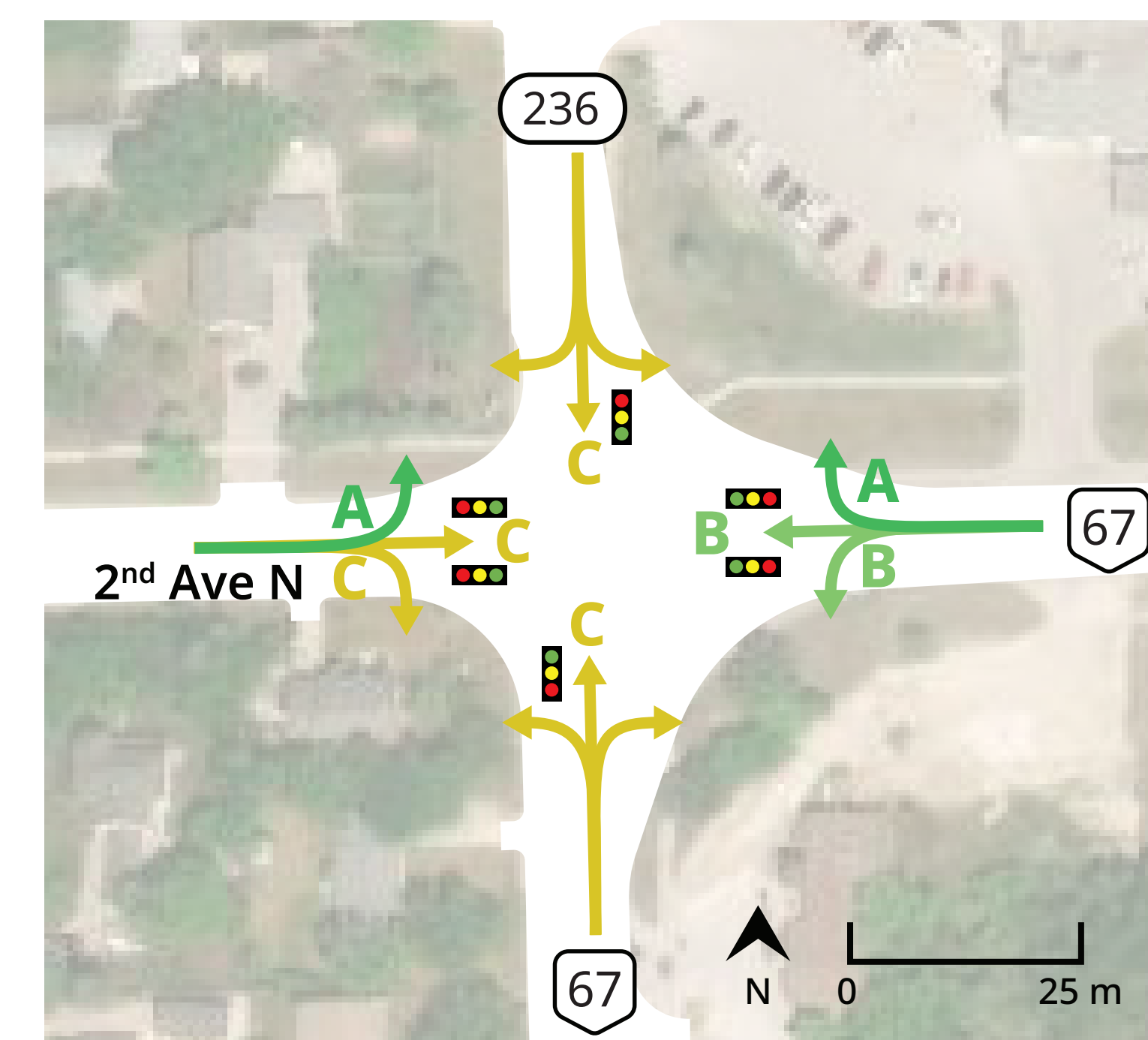
#### Benefits

- ▶ control and order
- ▶ pedestrian-friendly
- ▶ adaptable
- ▶ traffic operations improve significantly with implementation of traffic signals
- ▶ accesses will operate well overall

#### Challenges

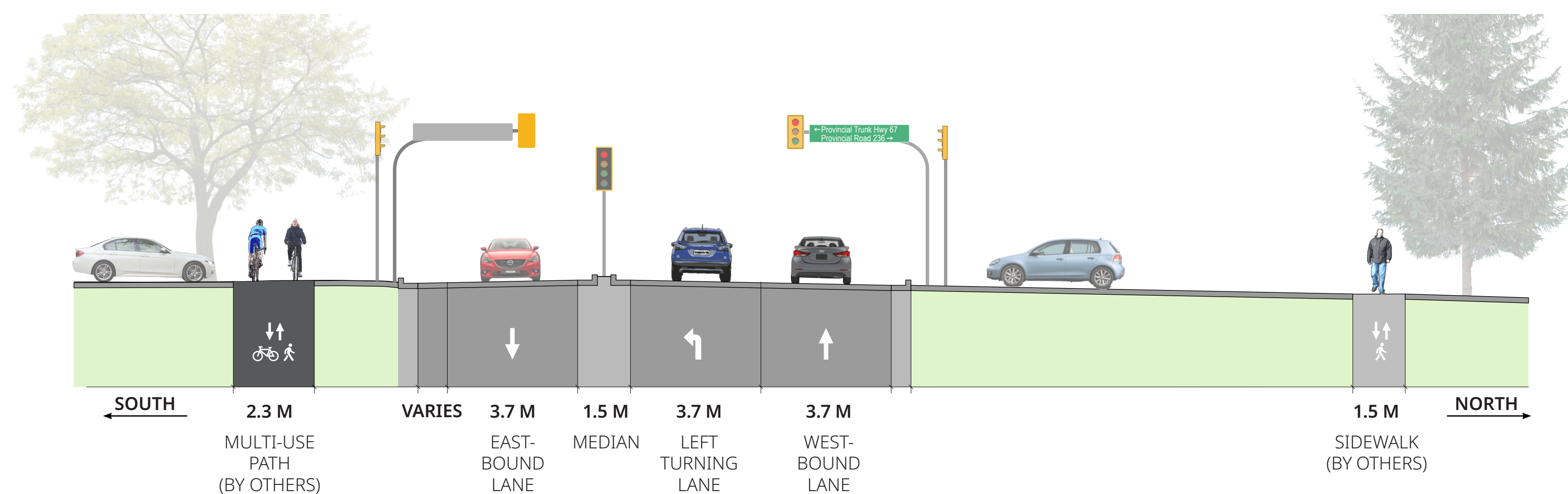
- ▶ northbound queues have the potential to block access to Cravings on PTH 67
- ▶ some queuing in eastbound through lane on PTH 67 at Access 4

### Level of Service at Afternoon Peak Hour



#### Traffic Flow Scale (LOS Ranking)

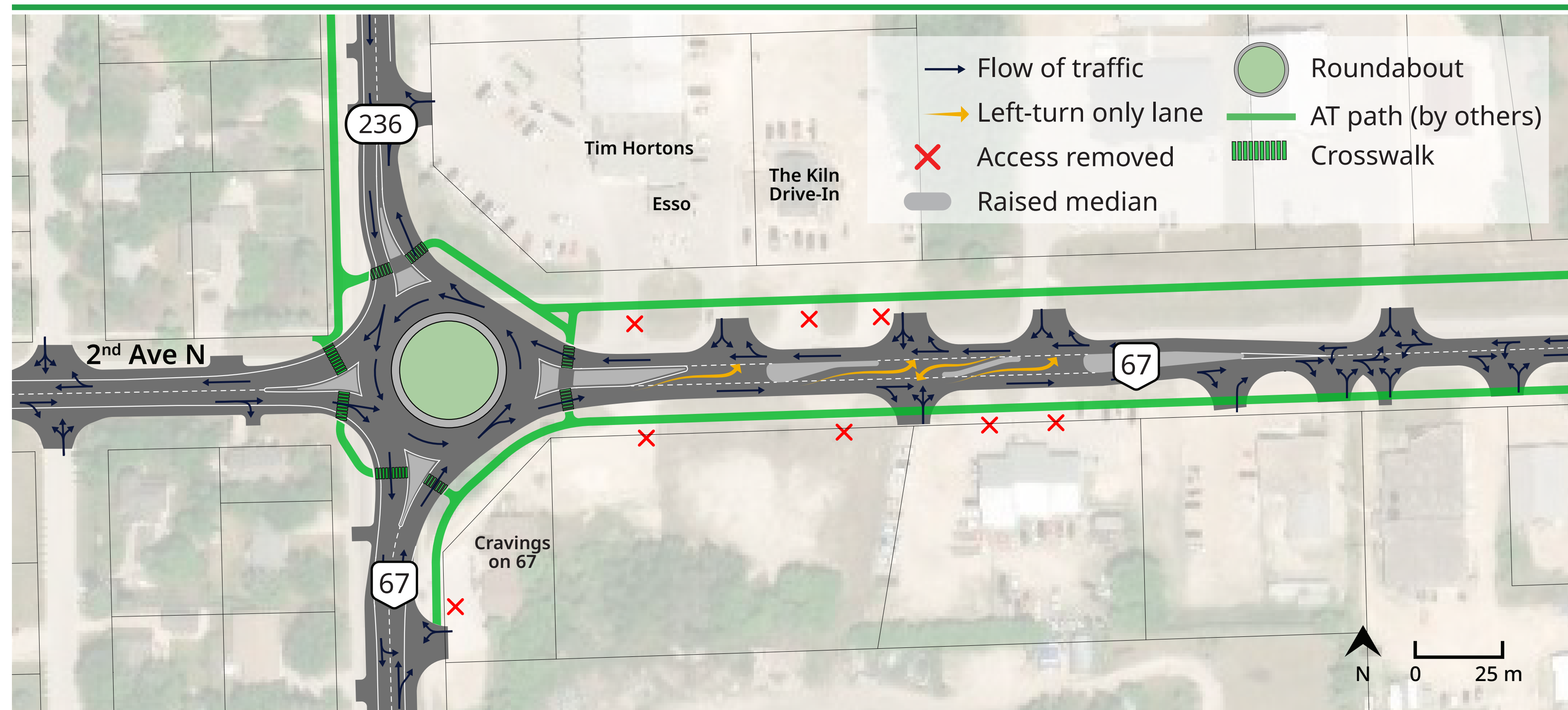
- A** good flow with minimal delays
- B**
- C**
- D**
- E**
- F** congested operations, considerable delays



Section view of PTH 67 looking west toward intersection.

## Roundabout

### Plan View



### Design Description

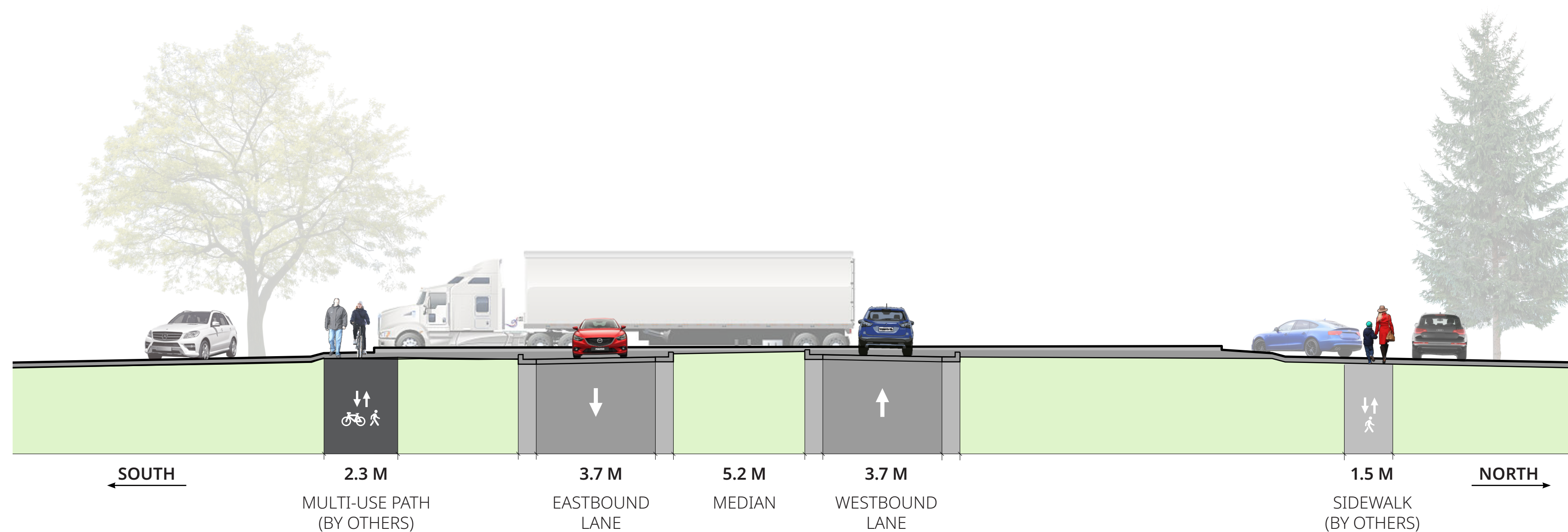
Alternative 3 is a single-lane roundabout. The north and south lanes are realigned eastward to accommodate the diameter and AT pathways. Pedestrian crossing distances are reduced.

#### Benefits

- ▶ enhanced safety
- ▶ reduced fuel consumption and emissions
- ▶ lower maintenance costs (snow clearing)
- ▶ provides best level of service overall with the shortest queue of vehicles during peak hours
- ▶ accesses operate well

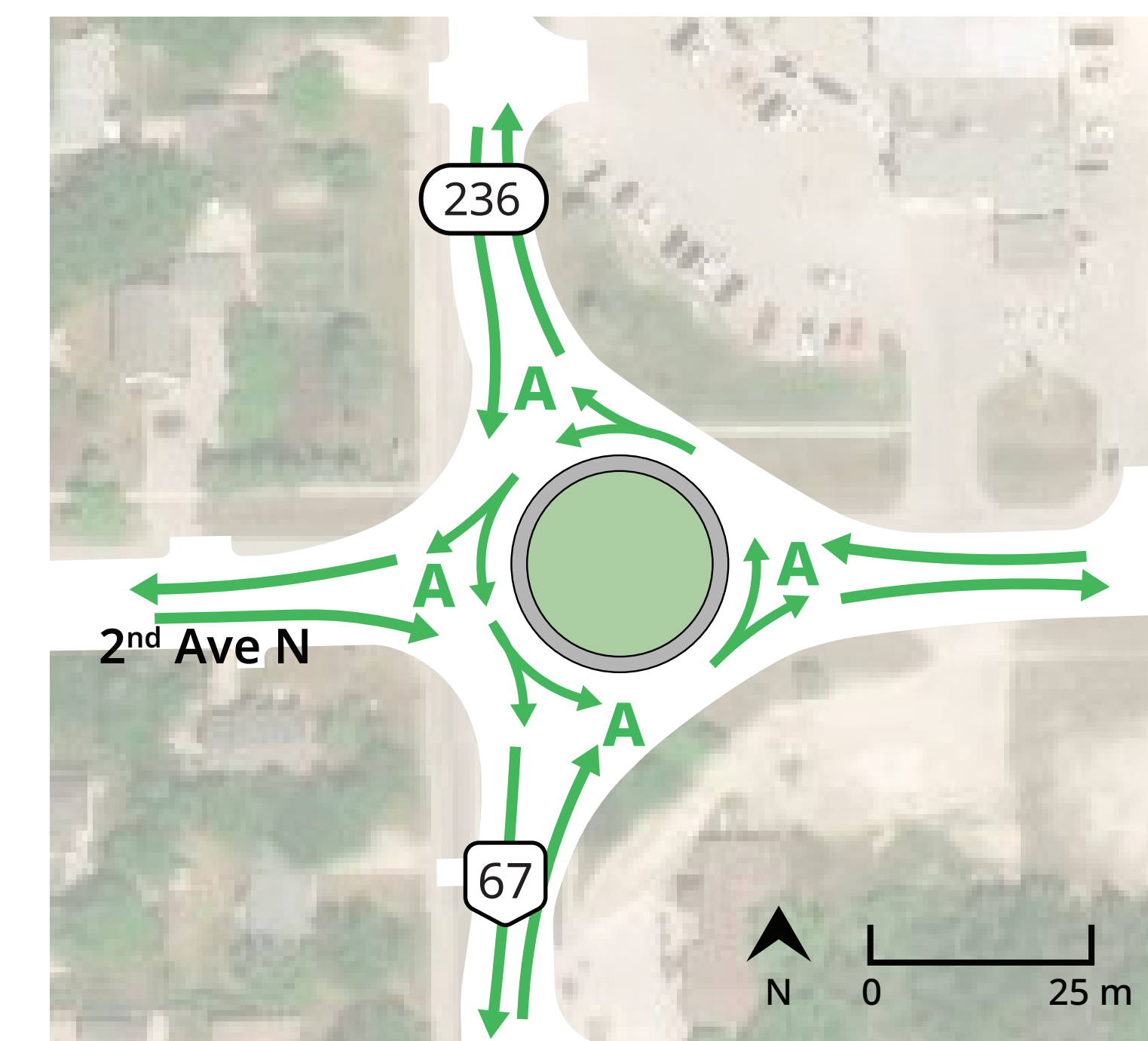
#### Challenges

- ▶ larger footprint
- ▶ more complicated construction staging



Section view of PTH 67 looking west toward intersection.

### Level of Service at Afternoon Peak Hour



For this alternative, all traffic ranks on the flow scale at an **A** level.

## Thank you for your participation today!



Your feedback will be taken into consideration as the project team selects the appropriate design alternative.

### Today's Activities

Once you have reviewed the information on the project boards, we invite you to:

1. **Share your questions and feedback with members of the project team.**
2. **Complete the mapping activity.**
3. **Complete a comment form.**



Today's comment form is also available online until January 2, 2025 at:

[surveymonkey.com/r/StonewallIntersection](https://www.surveymonkey.com/r/StonewallIntersection)

### Upcoming Engagement

A Public Open House will take place in Winter 2025, to present the selected alternative.



Promotion for this session will begin approximately **two weeks** before the event date.

**We hope to see you there!**

### Contact Us

If you have further questions/comments for the project team, please contact:

**Elise Ouellette,**  
*Community Engagement Specialist,*  
*Scatliff + Miller + Murray*



[eouellette@scatliff.ca](mailto:eouellette@scatliff.ca)