

# GLEN ALLAN TRAFFIC CALMING STUDY

## Strathcona County

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September 1, 2015

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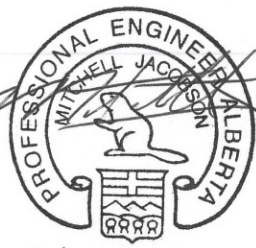
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Prepared by: **Boulevard Transportation, a division of Watt Consulting Group**

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## 1.0 INTRODUCTION

The Glen Allan neighbourhood was identified by Strathcona County as an area for potential traffic calming, as a result of resident input and confirmation of issues based on vehicle speed counts. Boulevard Transportation (a Division of Watt Consulting Group), in partnership with ISL Engineering and Land Services, and Soles and Company were retained by the County to undertake a comprehensive traffic calming study that assesses the nature of the traffic calming issues (speeding and short-cutting), incorporates significant stakeholder and public input, and proposes solutions and recommendations based on technical, community, and stakeholder considerations.

## 2.0 BACKGROUND

### 2.1 Traffic Calming Policy

The Strathcona County Traffic Calming Policy outlines a process by which neighbourhoods are identified for potential traffic calming. Key preliminary elements are 1) identification of issue and support for a study by residents, and 2) establishing if there is an issue of a magnitude sufficient to trigger traffic calming measures. Specifically, any road identified for preliminary traffic calming is found to have an 85<sup>th</sup> percentile speed of greater than 5 km/h over the speed limit is considered to be a candidate for traffic calming. Additional considerations for traffic calming include an excessive volume of short-cutting traffic.

Glenbrook Rd was found to have a speeding problem based on speed measurements taken by the County, with the 85<sup>th</sup> percentile speed being found to be more than 5 km/h more than the speed limit (57-60 km/h, on a 50 km/h road). This indicates that there is in fact a speeding concern along this roadway and that, based on the Traffic Calming Policy, it is appropriate for subsequent review and consideration for traffic calming.

Traffic calming is not, however, a single roadway consideration, but a neighbourhood consideration. Efforts to calm one area can, depending on the type and frequency of treatments, merely shift the issue to other roads. Therefore a comprehensive perspective must be undertaken, including adjacent and nearby routes.

### 2.2 Glen Allan Neighbourhood Overview

Glen Allan is a primarily residential neighbourhood, developed in the 1970's. It is mostly comprised of single family homes, but there are commercial land uses along Sherwood Dr. It is bounded by four major arterial roadways: Baseline Rd, Sherwood Dr, Granada Dr, and Clover Bar Rd. There are schools in the centre of the neighbourhood, specifically Glen Allan Elementary School and Jean Vanier Catholic School. Sherwood Park Mall is on the western

frontage of the neighbourhood on Sherwood Dr, with access via Sherwood Dr and Gatewood Blvd.

There is an internal collector road network to the neighbourhood, but these roads also residential roads, with houses and driveways along the frontage. There are no back lanes in the neighbourhood; driveways for every house are on the street. All of the roads within the neighbourhood are of sufficient width to allow for on-street parking on both sides of the street and have a posted speed limit of 50 km/h. There are transit buses on Georgian Way, Gatewood Blvd, Galloway Dr, and Glenbrook Blvd (north of Galloway Dr).

Strathcona County identified the following roads as key corridors for consideration in the study:

- Glenbrook Blvd
- Georgian Way (between Glenbrook Blvd and Grenada Blvd)
- Gatewood Blvd
- Galloway Dr
- Graham Rd
- Galaxy Way

See **Figure 1** for a map of the study area.

There are some traffic calming installations already in place on some neighbourhood roads, specifically Glencoe Blvd (raised crosswalks with curb extensions) as well as portions of Georgian Way, near the schools (with raised medians and curb extensions).



**FIGURE 1: PEAK HOUR INTERSECTION VOLUMES**

### 3.0 TRAFFIC CONDITIONS

Traffic data was collected and compiled for the study area, including speed counts, intersection turning movement counts, traffic models, and a neighbourhood short-cutting survey. Speed counts, several turning movement counts, and synchro traffic models along the arterial roads (Sherwood Dr and Baseline Rd) were provided by the County. Shortcutting counts and additional turning movement counts were collected by the consulting team. In addition, site visits were undertaken to establish general conditions, school hour conditions, and peak hour conditions throughout the neighbourhood.

#### 3.1 Vehicle Speeds

Vehicle speeds were collected from road tube counter installations on key study area roads. Per the traffic calming policy, roads are considered to have a speeding issue if speeds are greater than 5 km/h over the posted speed limit (in this case 50 km/h for all roads). Table 1 summarizes the 85<sup>th</sup> percentile speeds for key roads, for weekdays.

**TABLE 1: VEHICLE SPEEDS – GLEN ALLAN**

	Total Traffic (Vehicles/Day)	85 <sup>th</sup> Percentile Speed
<b>Glenbrook Blvd</b>	<ul style="list-style-type: none"> <li>• Northbound: 2880</li> <li>• Southbound: 2215</li> </ul>	<ul style="list-style-type: none"> <li>• Northbound: <u>57.7 km/h</u></li> <li>• Southbound: <u>64.0 km/h</u></li> </ul>
<b>Georgian Way (Glenbrook to Gatewood)</b>	<ul style="list-style-type: none"> <li>• Eastbound: 1989</li> <li>• Westbound: 1945</li> </ul>	<ul style="list-style-type: none"> <li>• Eastbound: <u>60.0 km/h</u></li> <li>• Westbound: <u>60.0 km/h</u></li> </ul>
<b>Georgian Way (Gatewood to Grenada)</b>	<ul style="list-style-type: none"> <li>• Northbound: 1370</li> <li>• Southbound: 2047</li> </ul>	<ul style="list-style-type: none"> <li>• Northbound: <u>74.1 km/h</u></li> <li>• Southbound: <u>56.8 km/h</u></li> </ul>
<b>Galaxy Way</b>	<ul style="list-style-type: none"> <li>• Northbound: 415</li> <li>• Southbound: 274</li> </ul>	<ul style="list-style-type: none"> <li>• Northbound: <u>55.0 km/h</u></li> <li>• Southbound: <u>61.8 km/h</u></li> </ul>
<b>Graham Rd</b>	<ul style="list-style-type: none"> <li>• Eastbound: 468</li> <li>• Westbound: 561</li> </ul>	<ul style="list-style-type: none"> <li>• Eastbound: <u>57.3 km/h</u></li> <li>• Westbound: <u>62.9 km/h</u></li> </ul>
<b>Galloway Dr</b>	<ul style="list-style-type: none"> <li>• Eastbound: 1296</li> <li>• Westbound: 1246</li> </ul>	<ul style="list-style-type: none"> <li>• Eastbound: <u>53.3 km/h</u></li> <li>• Westbound: <u>57.8 km/h</u></li> </ul>
<b>Gatewood Blvd</b>	<ul style="list-style-type: none"> <li>• Eastbound: 1959</li> <li>• Westbound: 2757</li> </ul>	<ul style="list-style-type: none"> <li>• Eastbound: <u>48.2 km/h</u></li> <li>• Westbound: <u>46.8 km/h</u></li> </ul>



The results indicate that there is a speeding issue on all study area roads (greater than 5 km/h over the speed limit), with the exception of Gatewood Blvd (where the 85<sup>th</sup> percentile speeds are below the speed limit).

### 3.2 Traffic Operations

Traffic operations were reviewed in terms of travel time and delay, to establish if there are any roadway operations that may contribute to adverse behavioral or safety concerns. Traffic operations were reviewed for AM and PM peak hours, as possible from the available data.

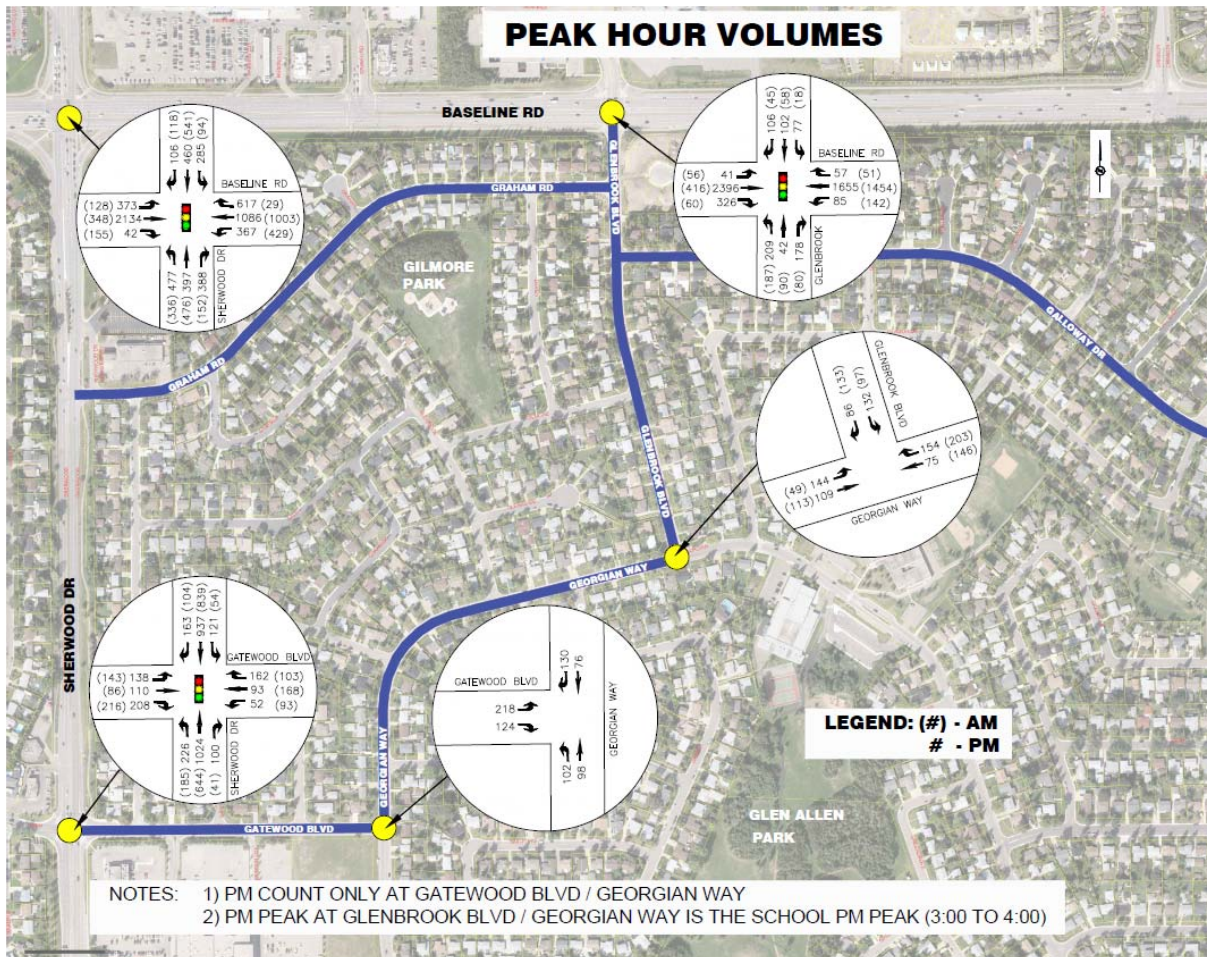
Traffic conditions were assessed using Synchro traffic modelling software. Synchro is a traffic modelling software that provides analysis of traffic conditions based on traffic control, geometry, volumes and traffic operations. Synchro software (Synchro 8) is used because of its ability to provide analysis using the Highway Capacity Manual (2010) methodology. These measures of effectiveness include level of service (LOS), delay and 95<sup>th</sup> percentile queue length. The delays and type of traffic control are used to determine the level of service. The level of services are broken down into six letter grades with LOS A being excellent operations and LOS F being unstable/failure operations. Level of service C is generally considered to be an acceptable LOS by most municipalities. Level of service D is generally considered to be on the threshold between acceptable and unacceptable operations.

**Figure 2** shows peak hour turning movement volumes and **Figure 3** shows peak hour levels of service.

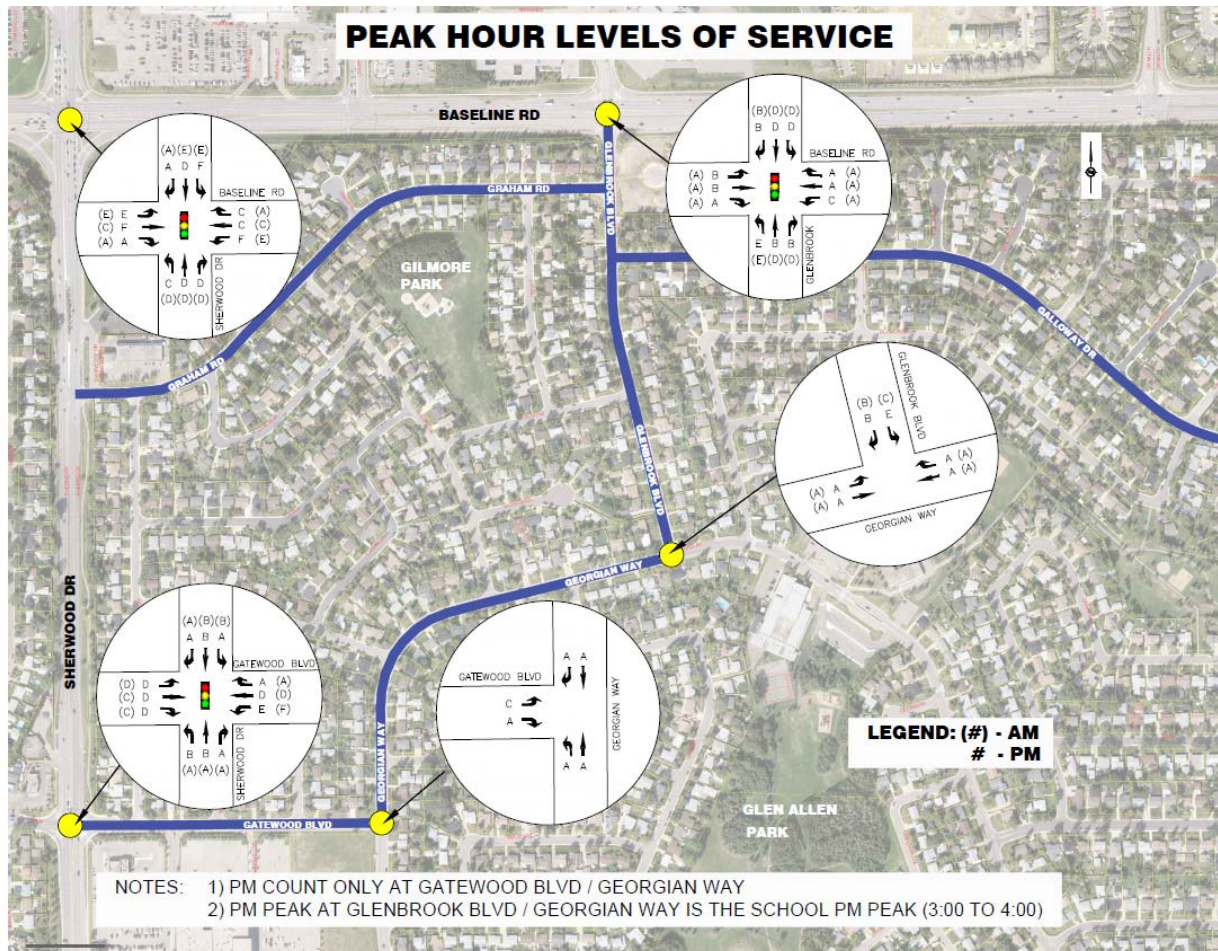
At Glenbrook Blvd & Georgian Way, there is a significant delay for southbound left turners in the AM peak hour (LOS E). This was observed to manifest in risk-taking by some drivers, turning with small gaps and often resulting in conflicts with eastbound vehicles (near-misses and honking was observed in-field). In the PM peak, conditions are considered acceptable for a peak hour (LOS C or better). Conditions at Gatewood Blvd & Georgian Way are also considered acceptable with LOS C or better.

Delays are more significant for some turn movements at the intersections on the bordering arterial roads. At Glenbrook Blvd & Baseline Rd, the northbound left turn has a long delay (LOS E) in the AM and PM peak hours. At Gatewood Rd & Sherwood Dr, the left turn from Gatewood Blvd has LOS E or F in peak hours. At Sherwood Dr & Baseline Rd, there are multiple peak-hour movements with LOS E or F, including the westbound left turn movement. This delay results in added travel time that could result in some drivers' short-cutting to the mall if arriving from the northeast (particularly if their destination is at the north end of the mall off of Gatewood Blvd).





**FIGURE 2: PEAK HOUR INTERSECTION VOLUMES**



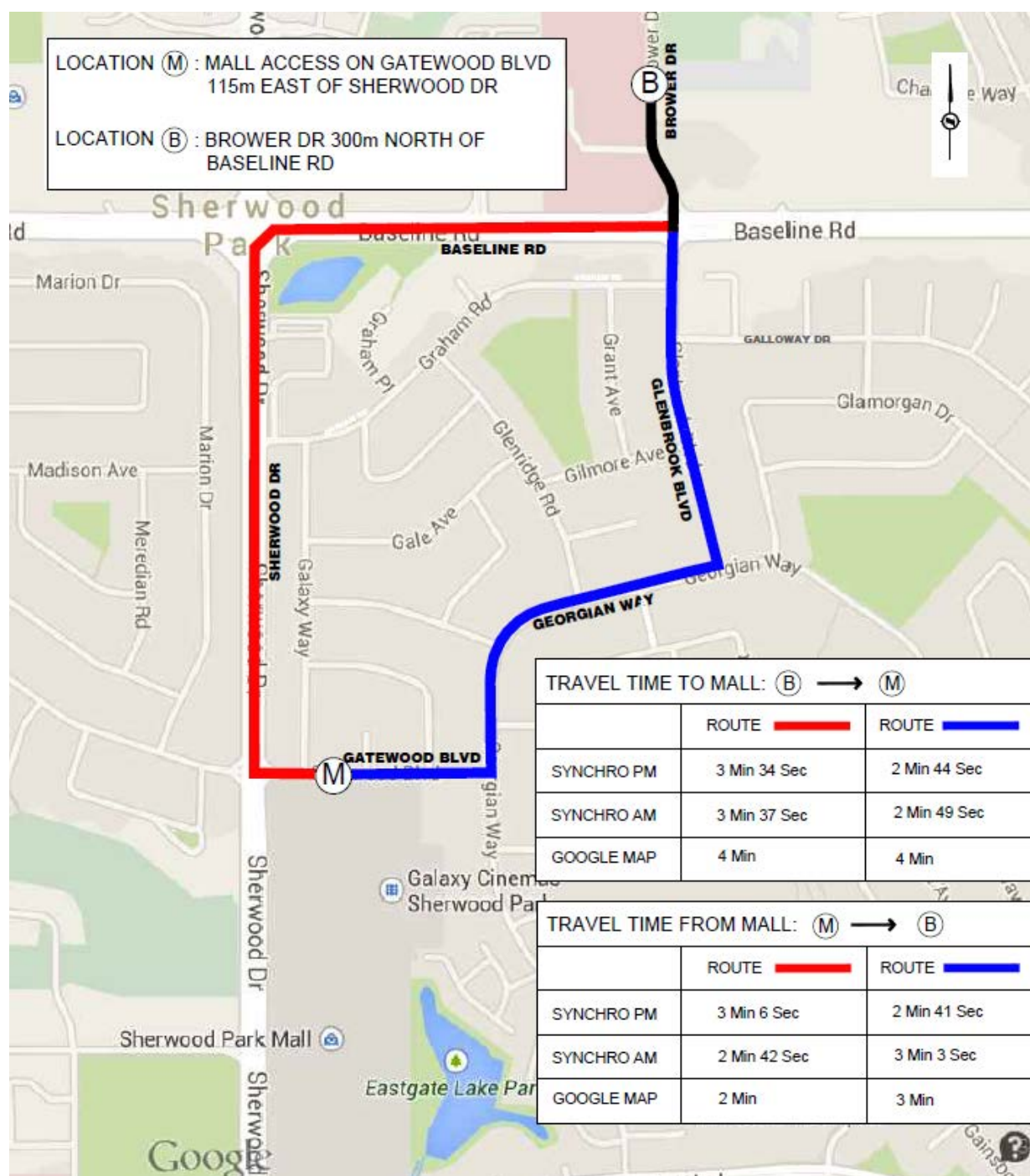
**FIGURE 3: PEAK HOUR LEVELS OF SERVICE**

### 3.3 Travel Time and Short-Cutting Survey

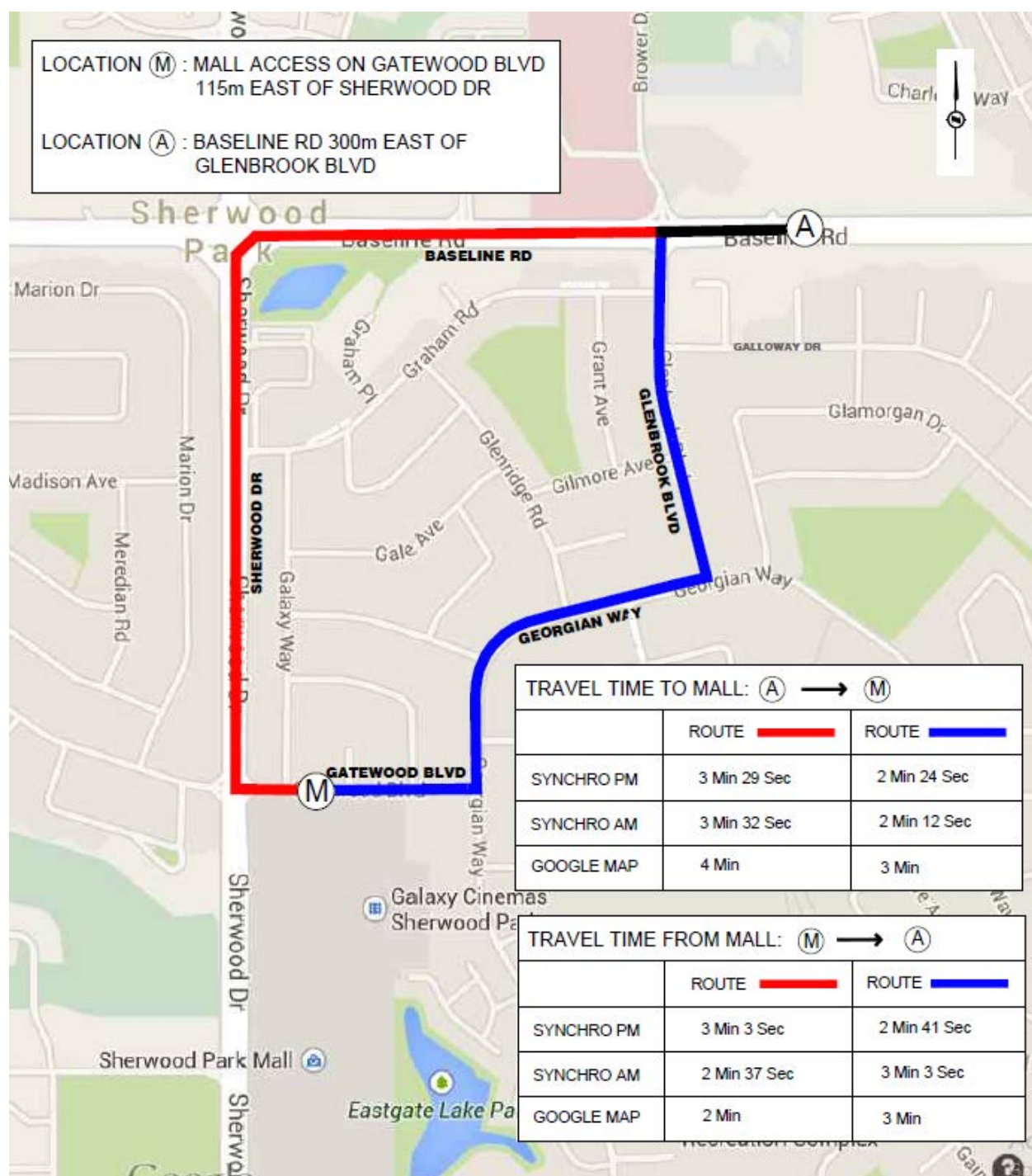
A preliminary review of travel time was conducted to assess whether Glenbrook Blvd is a likely shortcutting route based on drive time savings. This assessment was done using travel time estimates through the network via Synchro (incorporating intersection delays and segment travel times), and compared to Google Maps routing times. **Figure 4** and **5** show the travel times to/from the Sherwood Park Mall and Brower Dr (Figure 4) and Baseline Rd east of Glenbrook Rd (Figure 5).

The results indicate that using Glenbrook Blvd can save approximately one minute of travel time in peak hours when travelling to the mall, and approximately 30 seconds travelling from the mall, and thus may potentially be a route for short-cutting.



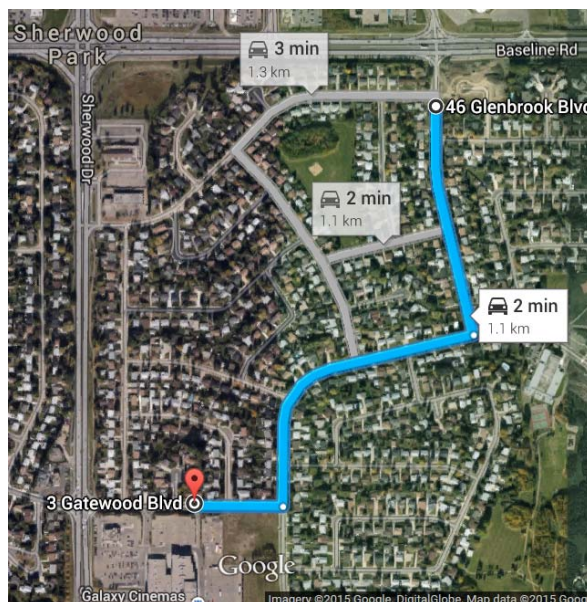


**FIGURE 4: ESTIMATED TRAVEL TIMES TO/FROM THE SHERWOOD PARK MALL & BROUWER RD**



**FIGURE 5: ESTIMATED TRAVEL TIMES TO/FROM THE SHERWOOD PARK MALL & BASELINE RD EAST**

A licence plate survey was conducted to establish the magnitude of cut-through traffic between Glenbrook Blvd & Baseline Rd and the Sherwood Park Mall. Counts were taken on Saturday April 18, 2015 (between 11:20 AM and 1:25 PM, to capture the weekend peak) and Tuesday, April 21, 2015 (between 3:55 PM and 5:00 PM to capture the PM peak hour). The counts compared the licence plate digits to determine those vehicles that passed by both points. The route assessed is shown in **Figure 6**, and the results are shown in Table 2.



**FIGURE 6: SHORT-CUTTING SURVEY AREA (BASELINE & GLENBROOK TO/FROM SHERWOOD PARK MALL, GATEWOOD ACCESS)**

**TABLE 2: SHORTCUTTING SURVEY RESULTS – BETWEEN GLENBROOK / BASELINE AND SHERWOOD PARK MALL**

	Total Traffic	Matched Vehicles	% Shortcutting
<b>Saturday Mid-Day – To the Mall</b>	<ul style="list-style-type: none"> <li>At Glenbrook: 269 veh</li> <li>At Mall: 210 veh</li> </ul>	34 vehicles	<ul style="list-style-type: none"> <li>At Glenbrook: <u>12.6%</u></li> <li>At Mall: <u>16.2%</u></li> </ul>
<b>Saturday Mid-Day – From the Mall</b>	<ul style="list-style-type: none"> <li>At Glenbrook: 253 veh</li> <li>At Mall: 240 veh</li> </ul>	42 vehicles	<ul style="list-style-type: none"> <li>At Glenbrook: <u>16.6%</u></li> <li>At Mall: <u>17.5%</u></li> </ul>
<b>Tuesday PM Peak – To the Mall</b>	<ul style="list-style-type: none"> <li>At Glenbrook: 587 veh</li> <li>At Mall: 238 veh</li> </ul>	28 vehicles	<ul style="list-style-type: none"> <li>At Glenbrook: <u>4.8%</u></li> <li>At Mall: <u>11.8%</u></li> </ul>
<b>Tuesday PM Peak – From the Mall</b>	<ul style="list-style-type: none"> <li>At Glenbrook: 290 veh</li> <li>At Mall: 348 veh</li> </ul>	66 vehicles	<ul style="list-style-type: none"> <li>At Glenbrook: <u>22.8%</u></li> <li>At Mall: <u>19.0%</u></li> </ul>



The survey found that shortcutting was greatest in the weekday PM peak hour, where between 19 and 23% of vehicles were identified as travelling between the two points (from the mall, between 5 and 6 PM). This is approximately one in five vehicles. The proportion of short cutting traffic in other measured periods was lower (less than 1 in 5 vehicles). For collector roads, whose purpose is to serve primarily adjacent area access but also facilitate some through-area movements, this is not considered a high portion of shortcutting traffic, nor is it of a magnitude that it materially changes the roadway operating characteristics of either Glenbrook Blvd or Gatewood Blvd. Nonetheless there is an identified portion of traffic that is travelling through the neighbourhood rather than on the adjacent arterial road network.

### 3.4 All-way Stop Warrant – Glenbrook / Georgian and Gatewood / Georgian

All-way stop warrants were reviewed for the intersections of Glenbrook Blvd & Georgian Way and Gatewood Blvd & Georgian Way, to assess whether all-way stop control is an appropriate consideration. All-way stop control can be effective in managing certain traffic operations issues, but is generally not considered a safety or traffic calming device on their own, as they can be ignored by drivers (e.g. roll-through), and if not perceived as necessary can result in speeding downstream. The Transportation Association of Canada's (TAC) warrant from the *Manual of Uniform Traffic Control Devices for Canada* (MUTCDC) was considered for this review. There are five criteria<sup>1</sup> identified where, if one or more are met, then All-way Stop control may be warranted.

- Criteria a) Volumes on intersecting roads are approximately equal, with 200 veh/hr or more on the minor road for an 8-hour period. **MET, at both intersections**
- Criteria b) average delay to minor road exceeds 30 seconds in peak hour **MET at Glenbrook/Georgian**
- Criteria c) signal not warranted, but five or more collisions per year **not met**
- Criteria d) interim measure prior to signals **n/a**
- Criteria e) interim measure prior to switching stop control orientation **n/a**

Therefore the warrant is met for both locations, and in particular at Glenbrook Blvd & Georgian Way where two warrant measures are met.

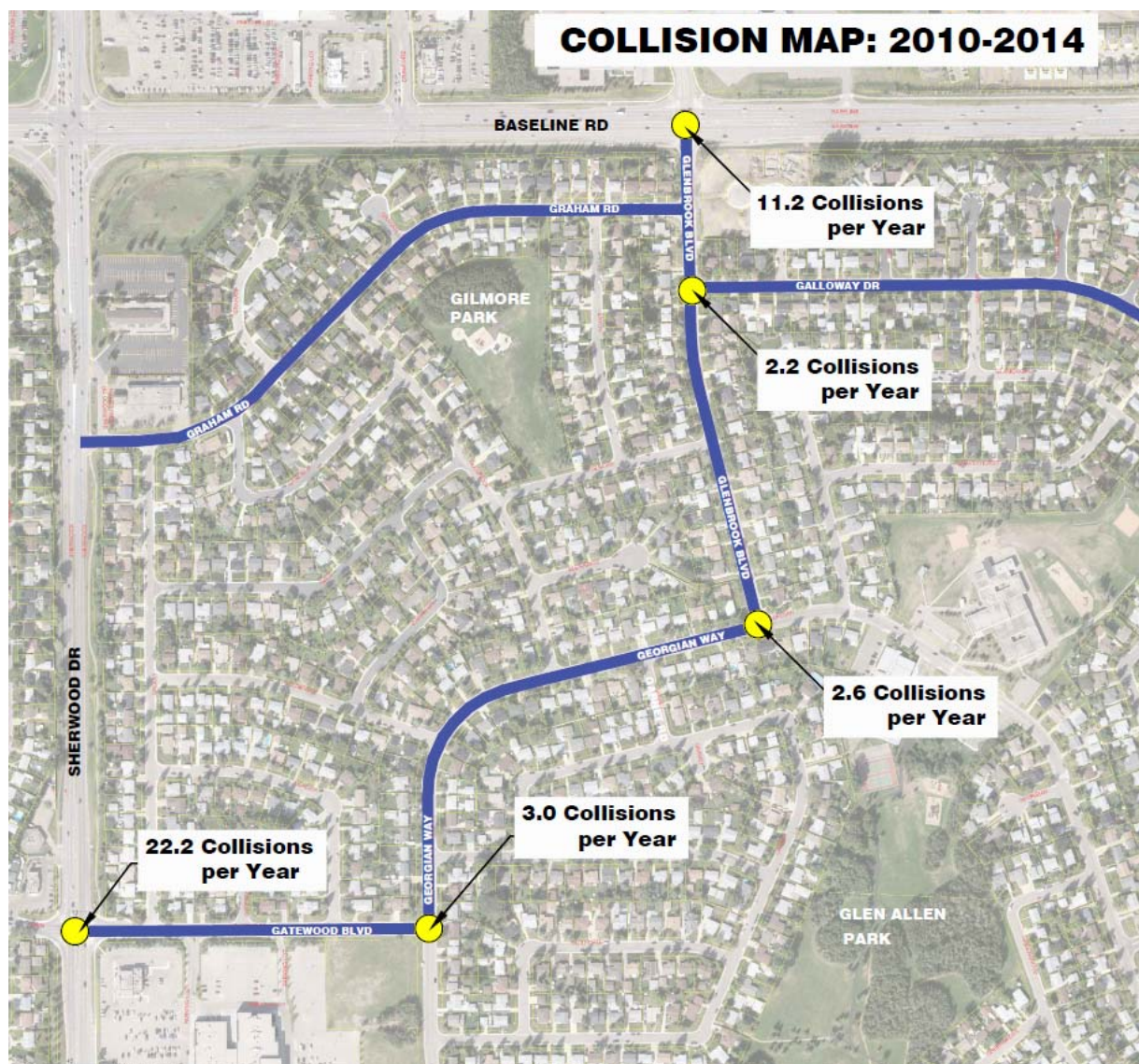
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<sup>1</sup> TAC Manual of Uniform Traffic Control Devices for Canada 5<sup>th</sup> Ed (January 2014), Section A2.2.1.3



## 4.0 COLLISION ANALYSIS

The County provided collision data for the neighbourhood, via their online collision data management system. Collisions were assessed for the 5-year period from 2010 to 2014. See **Figure 7** for a map that summarizes intersection collisions per year at main intersections along Gatewood Blvd, Georgian Way, and Gatewood Blvd.



**FIGURE 7: INTERSECTION COLLISION SUMMARY MAP**

Within the neighbourhood collector roads, the highest collision frequency was observed at Gatewood Blvd & Georgian Way, at 3.0 collisions per year (0.4 per year resulting in injury). Between 2.0 and 3.0 collisions per year was observed at Glenbrook Blvd & Georgian Way (0.6

injury collisions/year) and Glenbrook Blvd & Galloway Dr (0.4 injury collisions/year). While collisions were also observed midblock and at other intersections, the frequency in any one location was lower than these intersections.

At Glenbrook/Galloway and Glenbrook/Georgian, a high percentage of these collisions were right-angle (36 percent and 31 percent respectively), which may indicate factors where either geometry and/or operations result in risk-taking by left turning vehicles. Right angle collisions are of particular concern as they tend to be more severe in nature.

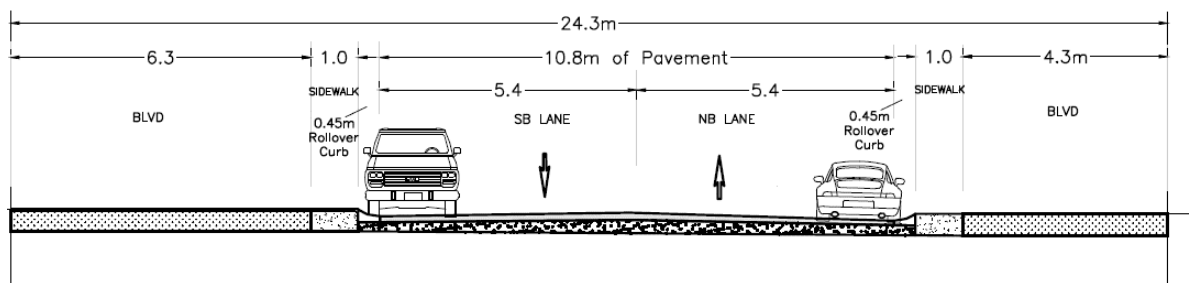
Collision frequencies were much greater on the arterial roads of Sherwood Dr (22.2 collisions / year at Gatewood Blvd) and Baseline Rd (11.2 collisions / year at Glenbrook Blvd). The internal neighbourhood intersection collisions are not a major issue when compared to external / highest-frequency collision intersections, but nonetheless indicate some level of safety concern.

## 5.0 EXISTING GEOMETRIC CHARACTERISTICS

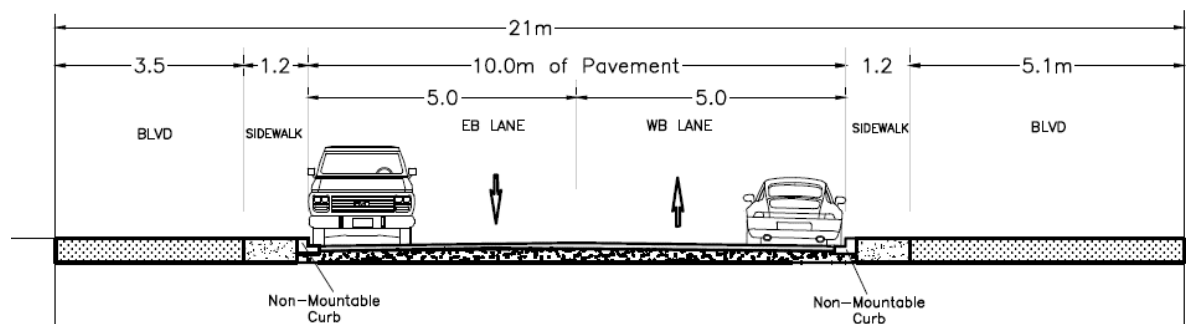
### 5.1 Cross Sections

Existing cross sections were reviewed for the study area roads, to understand existing characteristics and assist in establishing potential design elements for traffic calming devices.

**Figure 8** shows a typical cross section that is representative of Glenbrook Blvd, Gatewood Blvd, and Georgian Way, and **Figure 9** shows as representative cross section of Graham Rd and Galloway Dr.



**FIGURE 8: TYPICAL EXISTING CROSS SECTION FOR GLENBROOK BLVD, GEORGIAN WAY, AND GATEWOOD BLVD**



**FIGURE 9: TYPICAL EXISTING CROSS SECTION FOR GRAHAM RD AND GALLOWAY DR**

The Glenbrook / Georgian / Gatewood cross section has a typical road pavement curb-to-curb width of 10.8m, to accommodate moving and parked vehicles in both directions. This is less than the current Strathcona standard of 11.5m for minor residential collector roads and 13.5m for major residential roads. There are narrow sidewalks (1.0m) with roll-over curbs, which does not provide a high level of pedestrian accommodation. The dimensions are similar on Graham Rd and Galloway Dr, with slightly narrower road surfaces and slightly wider sidewalks 1.2m). Note that the current minimum standard for sidewalks in Strathcona is 1.5m, and that the trend in many new developments throughout Alberta and BC is to incorporate 2.0m wide sidewalks to facilitate passing by wheelchairs and strollers. There is minimal geometric differentiation between collector and local roads in the Glen Allan neighbourhood.

## 5.2 Sight Lines

Sight lines were noted as being an issue at many intersections throughout the neighbourhood, where vehicles wishing to turn from a given road had their sight lines limited due to roadway curvature and/or the presence of on-street parking. Specific locations where sight lines were found to be a concern include, but are not limited to:

- From Galloway Dr (looking south) at Glenbrook Blvd, due to curvature and parked vehicles
- Glenbrook Blvd (looking east) at Georgian Way, due to large tree
- Side roads onto Graham Rd (numerous locations), due to road curvature plus parked cars
- Gatewood Blvd (looking north) at Georgian Way, due to parked vehicle(s)
- Side roads onto Galloway Dr (numerous locations), due to road curvature plus parked cars
- Side roads onto Georgian Way, due to parked cars

## 6.0 TRAFFIC CALMING OPTIONS

Traffic calming options were considered for each of the locations in consideration of roadway / cross-section geometry, intersection spacing, driveway locations, pedestrian corridors, and design vehicle requirements. For Glenbrook Blvd, Georgian Way (between Glenbrook Blvd and Gatewood Blvd), and Galloway Dr, two options were developed, whereas one option was developed at the other locations (as one option was generally viewed as sufficient for discussion and input given those site-specific locations and constraints).

The high frequency of driveways limits traffic calming options in many locations to those that do not interfere with in/out turning movements.

General traffic calming elements that were considered were the following, and were considered with the goal of reducing 85<sup>th</sup> percentile speeds to an acceptable speed given speed limits:

- **Curb extensions at intersections:** narrows the roadway (constrained environment), requires slower turning speeds, shortens crossing distances for pedestrians, and improves sight lines for vehicles turning onto the calmed roadway
- **Raised intersections:** slows traffic via vertical deflection for three or four approaches, and benefits pedestrians crossing at intersections (legal crossing locations) by requiring slow driver speeds
- **Raised medians:** horizontal deflection that reduces lane widths (constrained environment to slow vehicles), can facilitate two-stage pedestrian crossings.
- **Raised crosswalk:** slows traffic via vertical deflection for two approaches, and benefits pedestrians by highlighting the crosswalk and requiring slow driver speeds
- **Speed Table:** slows traffic via vertical deflection for two approaches (but no directly-associated pedestrian accommodation benefit)
- **Roundabout:** slows traffic while providing a high level of traffic capacity; facilitates two-stage pedestrian crossings at clearly defined locations

There was an iterative process involving the consulting team, County staff, and stakeholder input that led to the ultimate version of the options for presentation to the public for feedback. Consideration was given to ensure lane widths are appropriate for cyclists at traffic calming devices. Note that raised features can generally be safely negotiated by cyclists without undue impact to riding control.

Appendix A contains an overview figure that shows the extent of proposed traffic calming in the neighbourhood, as well as site-specific functional traffic calming plans with all options. Note that these plans consider design vehicle movements (including school bus and transit bus); turn templates can be found in Appendix B.



## **6.1 Glenbrook Blvd & Georgian Way**

Two options considered were:

- Option 1: Raised intersection with curb extensions and all-way stop control, and
- Option 2: Roundabout

Both options have challenges in this location as they require re-apportioning area that currently allows for on-street parking. The roundabout has additional challenges in terms of accommodating the existing driveways (but can be done by use of flush textured medians).

## **6.2 Gatewood Blvd & Georgian Way**

Two options considered were:

- Option 1: Raised intersection with curb extensions and all-way stop control, and
- Option 2: Roundabout

Both options have challenges in this location as they require re-apportioning area that currently allows for on-street parking. The roundabout has additional challenges in terms of accommodating the existing driveways (but can be done by use of flush textured medians).

## **6.3 Glenbrook Blvd (between Baseline Rd & Georgian Way)**

Two options considered were:

- Option 1: Raised intersections at Galloway and Gilmore, raised median at Graham, raised crosswalk across Graham
- Option 2: Raised intersections and curb extensions at Galloway and Gilmore, raised crosswalk and curb extensions across Graham

Raised intersections were identified as a means to reduce speeds to the desired level, while also benefiting pedestrians at Galloway and Gilmore. In Option 1 the median can give a “gateway” feel with landscaping opportunity, to cue the driver that they are entering a slower speed residential area. In Option 2, curb extensions can be beneficial for reducing pedestrian crossing distances and improving sight lines for drivers turning onto Glenbrook Blvd. The raised crosswalk across Graham Rd can serve to dissuade this route as an alternative short-cut route.

## **6.4 Georgian Way (between Glenbrook Blvd & Gatewood Blvd)**

Two options considered were:

- Option 1: Curb extensions and raised intersection at Gillingham Cres
- Option 2: Raised medians at three locations

For Option 1, a raised intersection can reduce speeds to the desired level and where curb extensions can serve to reduce the expanse of the road. Option 2, raised medians, would also slow vehicles, and do so without intrusive vertical deflections, but would require a greater loss of on-street parking.

## **6.5 Galloway Dr**

Two options considered were:

- Option 1: Curb extensions
- Option 2: Curb extensions and speed tables

Option 1 provides a small degree of speed reduction while improving intersection sight line concerns and reducing pedestrian crossing distances in some locations. Option 2 is similar but with added speed reduction benefits from the periodic use of speed tables.

## **6.6 Gatewood Blvd**

The option incorporates raised medians, with one at the existing crosswalk across Gatewood Blvd (facilitating two-stage crossings by pedestrians) and one that will prevent currently-prohibited (but frequently violated) westbound left turns at the eastmost mall access.

## **6.7 Galaxy Way**

The option incorporates raised intersections, one at Gillingham Cres and one at Graham Rd, which can slow and dissuade any speeding traffic from using this route over Sherwood Dr.

## **6.8 Graham Rd**

The option incorporates a raised intersection at Galaxy Way, raised crosswalks (west of Grant Ave and at Glenbrook Blvd), and curb extensions at side streets (which can improve sight lines for turning vehicles onto Graham Rd)

## **6.9 Georgian Way (south of Gatewood Blvd)**

The option incorporates three raised intersections with curb extensions, road narrowing (on the west side) and installation of a multi-use path on the west side. The southbound lane will be narrowed and on-street parking will only be permitted northbound (it was observed that there is little to no on-street parking southbound at present). The multi-use path will connect to Grenada Blvd as well as to a proposed new path to the Sherwood Park Mall.



## 6.10 Speed Limit Reduction to 40 km/h

Many residents attending March workshops for this project indicated that they supported the reduction of the speed limit in Glen Allan to 40 km/h. The reduction of residential speed limits in isolation (i.e. without the addition of physical traffic calming features) has been shown to be ineffective in reducing traffic speeds, unless there is significant and sustained enforcement. Research shows a 17% compliance with 40km/h speed signs used in isolation<sup>2</sup>.

In Strathcona County, the speed reduction on Mission Street (done without the addition of physical traffic calming features) resulted in a speed reduction of 0-5 km/h over a series of measurements (85th percentile). On Manor Drive, where two raised crosswalks were installed in conjunction with the speed limit reduction, data consistently indicates the 85th percentile speed has been reduced by approximately 5-6 km/h.

Strathcona County's policy with regards to speed limit reductions is that they can be considered in conjunction with the implementation of physical traffic calming devices. Note that a reduction of a speed limit requires the adoption of a bylaw, and is thus a decision made by County Council.

## 7.0 ASSESSMENT AND CONSULTATION ON OPTIONS

### 7.1 Speed Reductions by Device

Actual speed reduction benefits associated with traffic calming devices are highly context specific. Frequency and consistency of installations are influential, as are lane widths, prevalence of on-street parking usage, and the character of the adjacent built area. (E.g., a dense urban residential area is more conducive to slower speeds than empty fields or sparse / semi-rural areas.) In addition, combining traffic calming measures can result in increased speed reductions over single elements.

Below are speed reductions associated with devices based on before/after observations in the Glen Allan Neighbourhood, as well as the Transportation Association of Canada's *Canadian Guide to Neighbourhood Traffic Calming*.

- **Raised crosswalk with Curb extensions:** 10 km/h reduction (observed on Glencoe)
- **Raised medians:** 3 km/h reduction
- **Curb extensions:** between 2 to 8 km/h reduction, for residential collector roads

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<sup>2</sup> TAC *Canadian Guide to Neighbourhood Traffic Calming*

- **Raised intersections:** 11 km/h reductions (measured mid-block)
- **Raised crosswalk:** from 5 to 13 km/h reductions (measured mid-block)
- **Roundabout:** from 3 to 15 km/h reductions

**Spacing considerations:** for raised devices (intersections, crosswalks or hums), for 85<sup>th</sup> percentile speeds of 40 km/h, requires installation every 80m, and 50 km/h requires installation every 125m. (Note: proposed spacing is closer to 120m to 150m).

**Compliance for 40 km/h Posted Speed limit signs** (on their own, without other design measures): 17% compliance

## 7.2 Parking Impacts

Some of the proposed traffic calming measures may reduce the available on-street parking. This does not necessarily introduce a problem in terms of on-street parking capacity (as there may be available on-street parking areas nearby), but it may introduce a level of inconvenience for some residents. The estimated parking impacts by location and option are as follows. Note that, in most cases, curb extensions do not reduce parking supply as they are placed in areas at the intersection that vehicle typically are not permitted to park in anyways. The exception is at T-intersections. Raised intersections do not inherently result in a loss of parking on their own, but some drivers may not be comfortable parking on them.

- **Intersection of Glenbrook Blvd & Georgian Way:**
  - Option 1 (curb extension / raised intersection): 5 stalls, all on south side of Georgian Way
  - Option 2 (roundabout): 13-15 stalls. 9 stalls on south side of Georgian Way, 4 stalls on Glenbrook (2 each side), and possible 2 stalls on north side of Georgian Way (if relocating the bus stop)
- **Glenbrook Corridor:**
  - Option 1 (raised intersections and raised median): 2 stalls (south of Graham, west side)
  - Option 2 (raised intersections and curb extensions): 1 stall (south of Graham, west side)

- **Intersection of Gatewood Blvd & Georgian Way:**
  - Option 1 (curb extension / raised intersection): 2 stalls, all on east side of Georgian Way
  - Option 2 (roundabout): 11 stalls. 7 stalls on east side of Georgian Way, 3 stalls on west side of Georgian Way, and one on north side of Gatewood.
- **Gatewood Corridor** (raised medians): 3 stalls, north side just east of Gatewood Pl.
- **Georgian Way (between Gatewood & Glenbrook):**
  - Option 1 (curb extensions and raised intersection): 0 stalls
  - Option 2 (raised medians): 9 stalls at Gillingham, 6 on the southeast side, 3 on northwest side, 2 stalls at Glenridge (south side) 6 stalls at Garnet Ave (3 each side of Georgian Way)
- **Georgian Way (south of Gatewood)** curb extensions and raised intersections: 0 stalls east side, ALL parking on west side (approximately 50 stalls. Note however that parking occupancy on this side is very low)
- **Graham Rd Corridor** (curb extensions and raised intersection / X-walk): 0 stalls
- **Galaxy Way Corridor** (raised intersection): 0 stalls
- **Galloway Dr:**
  - Option 1 (curb extensions) -- 1 stall (east side, north of Glengarry Cres)
  - Option 2 (curb extensions + speed tables) – 7 stalls (2 stalls at each of the three speed tables, and 1 stall east side, north of Glengarry Cres)

### 7.3 Cost Estimates

Cost estimates were undertaken for the proposed options, and are summarized in Table 3. Note that these costs are on the order of 20 percent of rehabilitation costs for a given roadway.

**TABLE 3: COST ESTIMATES OF THE OPTIONS**

Intersection of Glenbrook Blvd & Georgian Way	Option 1 (raised + curb extensions):	\$ 125,000
	Option 2 (roundabout):	\$ 361,000
Intersection of Gatewood Blvd & Georgian Way	Option 1 (raised + curb extensions):	\$ 105,000
	Option 2 (roundabout):	\$ 407,000
Galloway Dr	Option 1 (curb extensions):	\$ 314,000
	Option 2 (curb extensions and speed tables):	\$ 345,000
Glenbrook Blvd - Corridor	Option 1 (raised intersections with median):	\$ 141,000
	Option 1 (raised + curb extensions):	\$ 201,000
Gatewood Blvd	Option (raised medians):	\$ 54,000
Georgian Way (between Gatewood and Glenbrook)	Option 1 (curb extensions + raised intersection)	\$ 165,000
	Option 1 (raised medians):	\$ 49,000
Georgian Way (south of Gatewood)	Option (raised intersections, curb extensions, road narrowing, and bike path):	\$ 527,000
Graham Rd	Option (raised intersection / raised crosswalk / curb extensions) *includes the raised intersection at Galaxy Way	\$ 236,000
Galaxy Way	Option (raised intersections) *raised intersection at Graham Rd included for Graham Rd	\$ 45,000

#### 7.4 Criteria Assessment Matrix

For each option of the corridors and intersections under consideration, a criteria assessment matrix was developed. This matrix considered the rating of the proposed measure for up to eight categories for each location (where the public identified the most important criteria for each location), in consideration of the following criteria:

- Improve walkability / pedestrian safety
- Reduce speeds effectively
- Discourage short-cutting
- Reduce congestion / maintain traffic flow
- Minimize impacts to on-street parking
- Improve visibility
- Minimize traffic noise
- Decrease collision risk

They were rated on a five-point scale as they relate to the current situation, from “significantly worse”, to “somewhat worse”, “about the same”, “somewhat better” and “significantly better”. Professional judgement was used in the assessments. As there is a degree of subjectivity, the options were assessed by multiple professional engineers on the consultant team to establish an agreed-upon final result. The matrices do not provide an overall “best answer”, but provide a degree of context to how the suggested measures influence various criteria. These results were presented alongside the options at the final Open House.

### 7.4.1 Glenbrook Blvd & Georgian Way Assessment

<b>Option 1: Raised Intersection/All Way Stop</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?					X
Reduce speeds effectively?					X
Discourage short-cutting?				X	
Minimize impacts to on-street parking?		-5 stalls			
Reduce congestion/maintain traffic flow?				X	
Improve visibility?				X	
Minimize traffic noise?		X			
Decrease collision risk?				X	

Other considerations: In terms of traffic flow, the intersection will balance the good flow on Georgian Way with delay issues on Glenbrook Blvd in peak hours. This necessarily introduces delay on Georgian Way but overall the flow will be balanced in terms of traffic delays to all approaches. Cost: \$125 000

<b>Option 2: Roundabout</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?					X
Reduce speeds effectively?					X
Discourage short-cutting?			X		
Minimize impacts to on-street parking?	-15 stalls				
Reduce congestion/maintain traffic flow?					X
Improve visibility?					X
Minimize traffic noise?			X		
Decrease collision risk?					X

Cost: \$361,000

## 7.4.2 Gatewood Blvd & Georgian Way Assessment

<b>Option 1: Raised Intersection/All Way Stop</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?					X
Reduce speeds effectively?					X
Discourage short-cutting?				X	
Minimize impacts to on-street parking?		-2 stalls			
Reduce congestion/maintain traffic flow?				X	
Improve visibility?				X	
Minimize traffic noise?		X			
Decrease collision risk?				X	

Cost: \$105 000

<b>Option 2: Roundabout</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?					X
Reduce speeds effectively?					X
Discourage short-cutting?			X		
Minimize impacts to on-street parking?	-11 stalls				
Reduce congestion/maintain traffic flow?					X
Improve visibility?					X
Minimize traffic noise?			X		
Decrease collision risk?					X

Cost: \$407,000



### 7.4.3 Glenbrook Blvd Corridor Assessment

<b>Option 1: Raised Intersections / Raised Median / Raised Crosswalk</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?				X	
Reduce speeds effectively?					X
Discourage short-cutting?				X	
Minimize impacts to on-street parking?		-2 stalls			
Improve visibility?				X	
Minimize traffic noise?		X			
Decrease collision risk?				X	

Other considerations: Cost: \$141 000

<b>Option 2: Raised Intersections / Raised Crosswalk With Curb Extensions</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?					X
Reduce speeds effectively?					X
Discourage short-cutting?				X	
Minimize impacts to on-street parking?			-1 stall		
Improve visibility?					X
Minimize traffic noise?		X			
Decrease collision risk?				X	

Other considerations: Cost: \$201,000

#### 7.4.4 Georgian Way (between Glenbrook Blvd and Gatewood Blvd) Assessment

<b>Option 1 - Raised Intersection / Curb Extensions</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?				X	
Reduce speeds effectively?				X	
Discourage short-cutting?				X	
Minimize impacts to on-street parking?			0 stalls		
Improve visibility?				X	
Minimize traffic noise?		X			

Cost: \$165 000

<b>Option 2 - Raised Medians</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?				X	
Reduce speeds effectively?				X	
Discourage short-cutting?			X		
Minimize impacts to on-street parking?	-17 stalls				
Improve visibility?				X	
Minimize traffic noise?			X		

Cost: \$49 000

#### 7.4.5 Galloway Dr Assessment

<b>Option 1 - Curb Extensions</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?				X	
Reduce speeds effectively?				X	
Discourage short-cutting?			X		
Minimize impacts to on-street parking?			1 stall		
Improve visibility?				X	
Minimize traffic noise?			X		

Cost: \$314 000

<b>Option 2 - Curb Extensions / Speed Tables</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?				X	
Reduce speeds effectively?					X
Discourage short-cutting?				X	
Minimize impacts to on-street parking?		-7 stalls*			
Improve visibility?				X	
Minimize traffic noise?		X			

Other considerations: It may be possible to park on top of the speed tables, but it is likely uncomfortable for many drivers to do so due to the difference in level.

Cost: \$345 000

#### 7.4.6 Gatewood Blvd Assessment

<b>Option – Raised Medians</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?				X	
Discourage short-cutting?				X	
Minimize impacts to on-street parking?		-3 stalls			
Improve visibility?				X	
Minimize traffic noise			X		

Other considerations: The median option can prevent illegal westbound left turns into the Mall at the east-most Mall access on Gatewood Blvd, which in turn can potentially mitigate some of the Mall-related neighbourhood short-cutting. Cost: \$ 54 000

#### 7.4.7 Galaxy Way Assessment

<b>Option – Raised Intersection</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?			X		
Reduce speeds effectively?				X	
Discourage short-cutting?				X	
Minimize impacts to on-street parking?			0 stalls		
Improve visibility?			X		
Minimize traffic noise		X			

Cost: \$45 000 (cost of raised intersection at Graham Road is included in Graham Road design estimate)

#### 7.4.8 Graham Rd Assessment

<b>Option – Raised Intersection, Raised Crosswalk, and Curb Extensions</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?				X	
Reduce speeds effectively?					X
Discourage short-cutting?					X
Minimize impacts to on-street parking?			0 stalls		
Improve visibility?				X	
Minimize traffic noise		X			

Cost: \$236 000 (cost includes raised intersection at Galaxy Way)

#### 7.4.9 Georgian Way (south of Gatewood) Assessment

<b>Option – Raised Intersection / Curb Extensions / Multi-Use Path</b>	Significantly worse than current situation	Somewhat worse than current situation	About the same as current situation	Somewhat better than current situation	Significantly better than current situation
Improve walkability/pedestrian safety?					X
Reduce speeds effectively?					X
Discourage short-cutting?					X
Minimize impacts to on-street parking?		-50 stalls*			
Improve visibility?				X	
Minimize traffic noise		X			

\*All parking will be removed on the west side of Georgian Way south of Galveston Avenue. Note that there is very low usage of this area for parking as no homes front here. This option has been developed to complement the Sherwood Park Mall's improved pedestrian access from the north. Cost: \$527 000

## 8.0 PUBLIC AND STAKEHOLDER INPUT

### 8.1 Transit

Strathcona County Transit reviewed preliminary concepts and provided input that was used to refine the final options. This included comments regarding bus turning requirements (and where curb extensions may either not be feasible at all or where the design may require larger curve radii) and bus stop considerations. In addition, a consideration was for designs that could accommodate future routes (e.g. a route where buses turn to/from Glenbrook Blvd & Georgian Way).

### 8.2 Public Engagement

The public was involved and consulted throughout the project. The engagement process was led by Soles and Company, and assisted as required by Boulevard Transportation and ISL. This included the following elements:

**Preliminary Public Workshop (March 25 & 26);** The focus of these workshops were to hear and understand resident concerns and issues, and to obtain their opinions regarding the criteria that should be considered and that is important to them, and relative importance of elements, for assessing / comparing options. (E.g., is on-street parking important, pedestrian safety, speeding, etc.).

**Public Stakeholder Working Group;** A public stakeholder group was established with a smaller representative number of residents, and their input was sought and considered after the preliminary workshop and before the open house to present options.

**Specific Resident Consultation;** Specific residents that expressed significant concerns with proposed plans were further consulted on an individual basis (specifically in the areas of the intersection of Glenbrook Blvd & Georgian Way and Gatewood Blvd & Georgian Way), as they identified significant safety, operational, and/or parking concerns.

**Open House for the Options (June 24);** An open house was held on June 24 that presented the options for the entire neighbourhood traffic calming plan to the public. Study background information, functional designs of options, technical rationale, and criteria considerations were all presented in a work-station format (whereby each location and option was located at one table). Attendees were given a survey form with which to provide feedback on the options, with a range from “strongly do not support”, to “do not support”, “neutral”, “support”, and “strongly support”. They were also encouraged to provide specific written feedback. The results were tabulated for each option and location, and summarized for overall feedback as well as adjacent



/ nearby resident feedback (to be able to compare community-wide opinions vs. those most directly impacted).

### 8.2.1 Open House Feedback

The results of the open house are as follows. Details of the feedback results can be found in Appendix C.

#### **Glenbrook Blvd & Georgian Way Intersection:**

- All Neighbourhood Residents: good support for Option 1, raised intersection with curb extensions (74% support or strongly support), poor support for Option 2, roundabout (67% do not support or strongly do not support)
- Adjacent Residents: good support for Option 1, raised intersection with curb extensions (86% support or strongly support), poor support for Option 2, roundabout (87% strongly do not support)

Based on the feedback (Option 1 as overwhelmingly preferred), along with consideration that Option 1 is a viable option based on the consideration of the evaluation criteria, it is the recommended option.

#### **Gatewood Blvd & Georgian Way Intersection:**

- All Neighbourhood Residents: good support for Option 1, raised intersection with curb extensions (60% support or strongly support), poor support for Option 2, roundabout (66% do not support or strongly do not support)
- Adjacent Residents: good support for Option 1, raised intersection with curb extensions (63% support or strongly support), poor support for Option 2, roundabout (78% strongly do not support)

Based on the feedback (Option 1 as overwhelmingly preferred), along with consideration that Option 1 is a viable option based on the consideration of the evaluation criteria, it is the recommended option.

#### **Glenbrook Blvd Corridor:**

- All Neighbourhood Residents: ok support for Option 1 (57% support or strongly support), ok support for Option 2 (59% do not support or strongly do not support)
- Adjacent Residents: good support for Option 1 (80% support but 0% strongly support), very good support for Option 2 (89% strongly support)

Based on the feedback (Option 2 slightly preferred), along with consideration that Option 2 is a viable option that performs better than Option 1 against the evaluation criteria, Option 2 it is the recommended option (raised intersections with curb extensions).

**Georgian Way (between Glenbrook Blvd and Gatewood Blvd):**

- All Neighbourhood Residents: good support for Option 1 (68% support or strongly support), poor support for Option 2 (55% do not support or strongly do not support)
- Adjacent Residents: good support for Option 1 (67% support or strongly support), poor support for Option 2 (50% do not or strongly do not support)

Based on the feedback (Option 1 preferred), along with consideration that Option 1 is a viable option in consideration of the evaluation criteria, Option 1 it is the recommended option (raised intersection with curb extensions). Note however that an adjustment is required to one of the curb extensions at Gillingham Cres to facilitate transit.

**Galloway Dr:**

- All Neighbourhood Residents: neutral support for Option 1 (33% support or strongly support, 37% do not support), ok support for Option 2 (48% support or strongly support)
- Adjacent Residents: poor support for Option 1 (67% strongly do not support), poor support for Option 2 (71% do not or strongly do not support)

Based on the feedback, neither option was clearly preferred, although Option 2 was slightly preferred by overall respondents. Since Option 2 performs better in the evaluation criteria, it is the recommended option. Note, however, that the east-side curb extension north of Glengarry Cres (north of Glencoe) was cited by many as not a viable location due to vehicle requirements. Removing this curb extension from the design does not have a significant impact and therefore is recommended for removal from the final recommended plan.

**Gatewood Blvd:**

- All Neighbourhood Residents: ok / neutral support for the Option (43% support or strongly support, 31% do not support)
- Adjacent Residents: n/a

Based on the feedback, the option for medians was received overall as a positive measure, and since it is a beneficial measure as identified in the evaluation criteria, it is recommended.

**Galaxy Way:**

- All Neighbourhood Residents: good support for the Option (59% support or strongly support, 6% do not support)
- Adjacent Residents: n/a

Based on the feedback, the option for raised intersections was generally well received, and since it is a beneficial measure as identified in the evaluation criteria, it is recommended.

#### Graham Rd:

- All Neighbourhood Residents: good support for the Option (64% support or strongly support, 15% do not support)
- Adjacent Residents: n/a

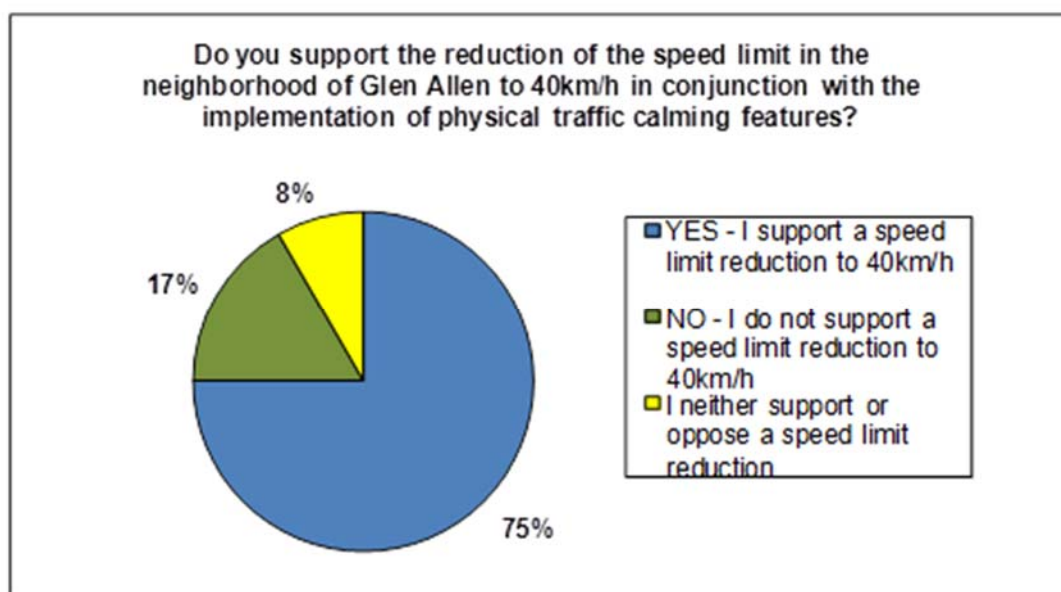
Based on the feedback, the option for raised intersections, curb extensions, and raised crosswalks was generally well received, and since it is a beneficial measure as identified in the evaluation criteria, it is recommended.

#### Georgian Way (south of Gatewood Blvd):

- All Neighbourhood Residents: ok support for the Option (51% support or strongly support, 22% do not support)
- Adjacent Residents: neutral support for the Option (33% support, 67% neutral, 0% do not support)

Based on the feedback, the option for raised intersections, curb extensions, and multi-use path was somewhat positively received, and since it is a beneficial measure as identified in the evaluation criteria, it is recommended.

#### Reducing Speed Limit in Glen Allan to 40 km/h:



The question of whether residents support a speed limit reduction in the neighbourhood to 40 km/h was well received (75% support). It is therefore recommended that consideration be given by the County to investigate and pursue a reduction in speed limit to 40 km/h, but only in conjunction with installation of neighbourhood-wide traffic calming measures as suggested by the recommended plan.

## 9.0 RECOMMENDED PLAN

The recommended plan is based on feedback from the public and stakeholders, and consists of the following elements:

- **Glenbrook Blvd & Georgian Way:** raised intersection with curb extensions and all-way stop control (Option 1)
- **Gatewood Blvd & Georgian Way:** raised intersection with curb extensions and all-way stop control (Option 1)
- **Glenbrook Blvd Corridor:** raised intersections with curb extensions (Option 1)
- **Georgian Way (between Glenbrook Blvd and Gatewood Blvd):** raised intersection at Gillingham Cres with curb extensions (modified Option 1, to better accommodate transit)
- **Galloway Dr:** curb extensions and speed tables (modified Option 2, removal of one curb extension at Glengarry Cres as per resident concerns)
- **Gatewood Blvd:** raised medians
- **Galaxy Way:** raised intersections
- **Graham Rd:** raised intersection, curb extensions and raised crosswalks
- **Georgian Way (south of Gatewood Blvd):** raised intersections, curb extensions, and multi-use path

The following figures show the recommended designs for each location.

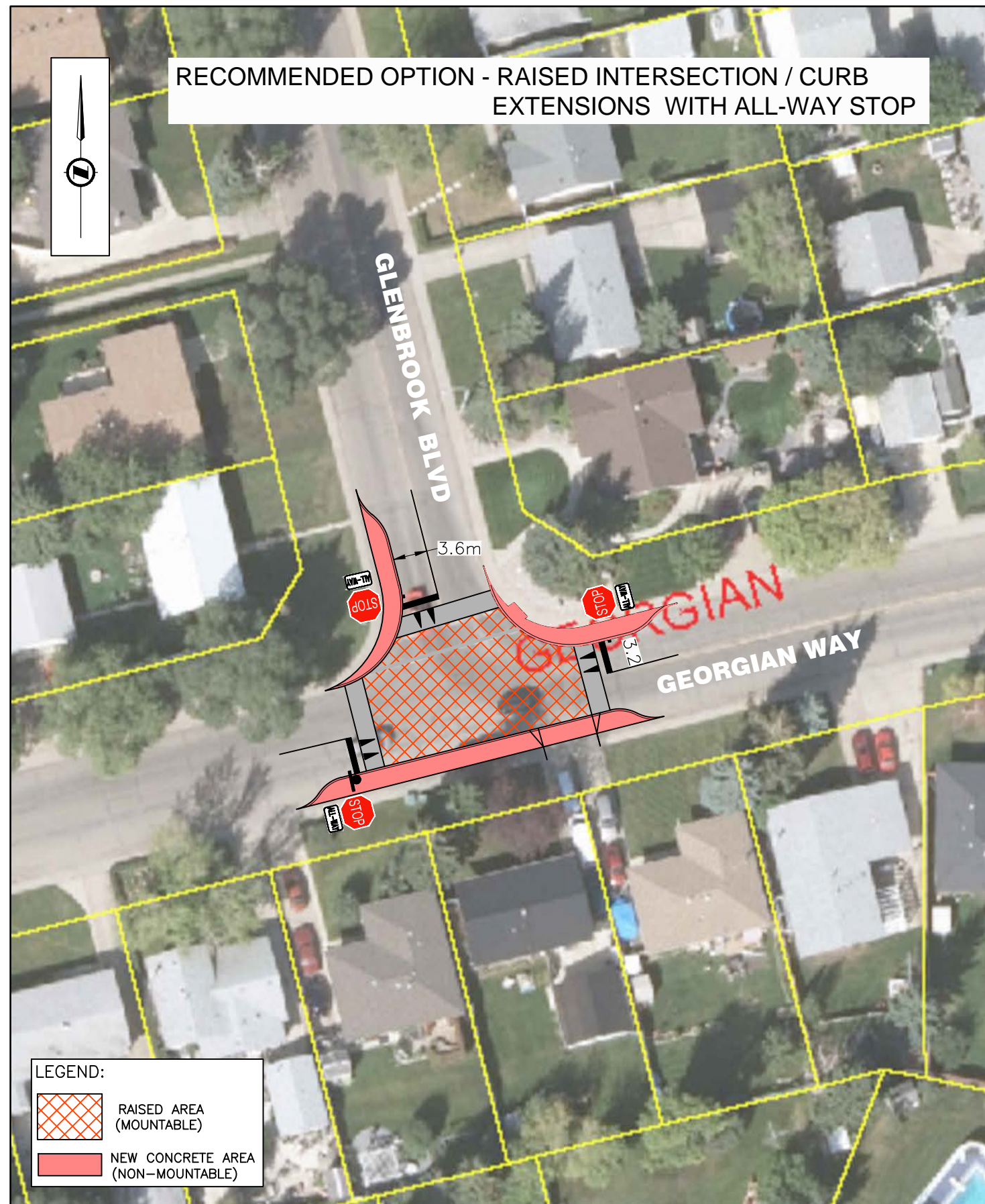
The implementation of these measures should be undertaken in conjunction with roadway rehabilitation projects. This will minimize construction costs and will allow for a manageable scheduling of implementation throughout the neighbourhood.

## 10.0 CONCLUSIONS

The conclusions of the Glen Allan traffic calming study are as follows. The neighbourhood was identified as a potential traffic calming candidate by County staff and neighbourhood residents. Under guidance from the County's *Traffic Calming Policy*, it met the threshold for further study. The technical assessment confirmed that speeding is an issue throughout the neighbourhood, and that traffic calming measures would be required to meaningfully reduce speeds and address short-cutting concerns. Short-cutting was not found to be a major component of the



neighbourhood traffic but nonetheless occurs. Safety concerns were also identified, including intersection concerns, sight lines, and pedestrian accommodation. A series of traffic calming options were developed for each location (either one or two options). These were assessed in terms of evaluation criteria (up to eight criteria, as well as cost), and were presented to the public for feedback. Based on the results of public and stakeholder feedback as well as technical considerations, the final recommendation was made.



## GLEN ALLAN TRAFFIC CALMING

INTERSECTION OF GEORGIAN WAY / GLENBROOK BLVD

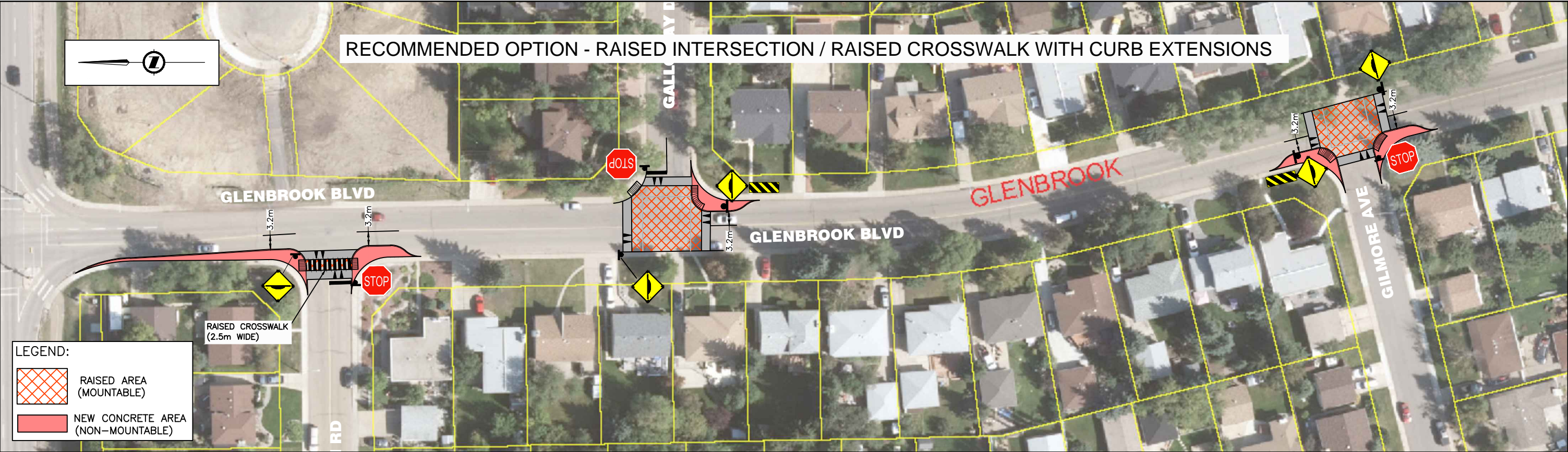




**GLEN ALLAN TRAFFIC CALMING**

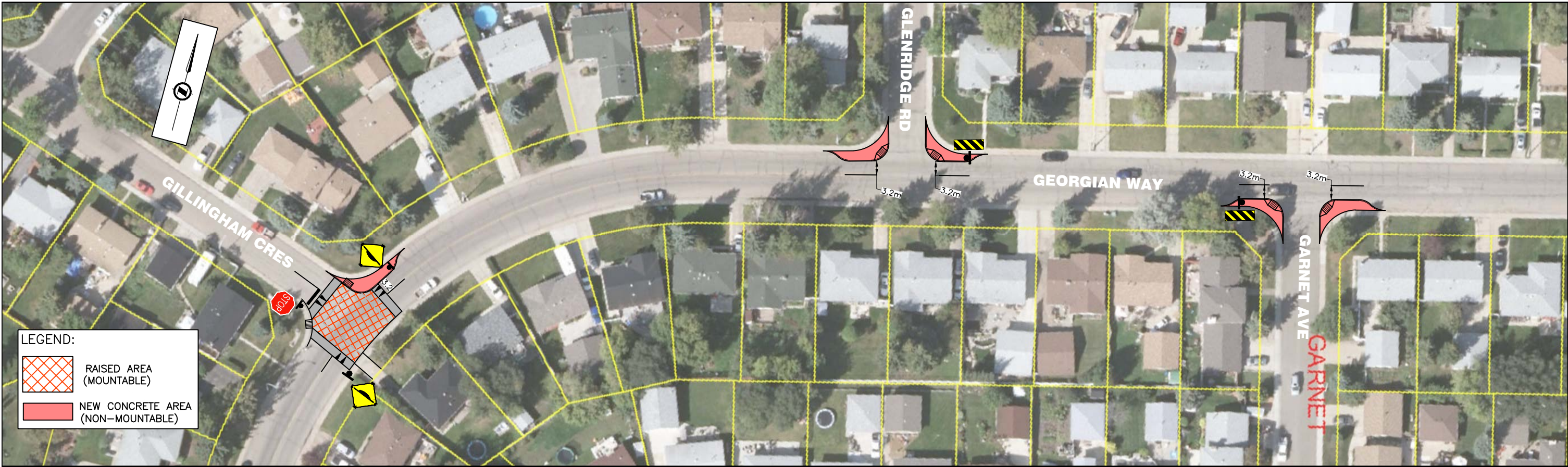
INTERSECTION OF GEORGIAN WAY / GATEWOOD BLVD







RECOMMENDED OPTION - RAISED INTERSECTION / CURB EXTENSIONS

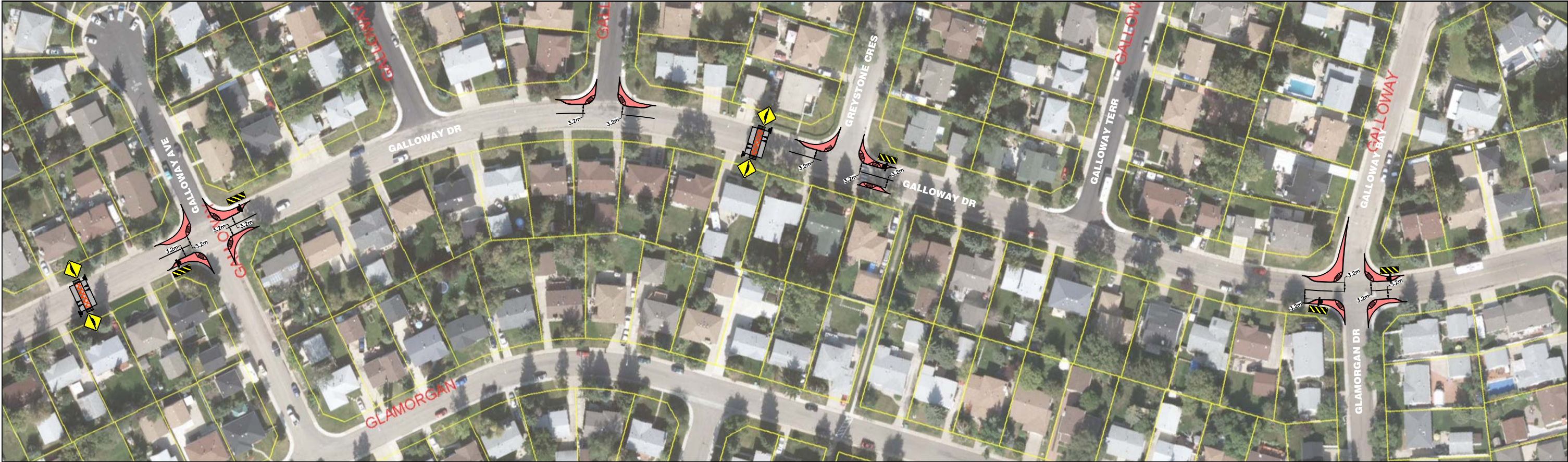


**GLEN ALLAN TRAFFIC CALMING**

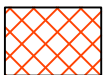
GEORGIAN WAY: GILLINGHAM CRES TO GARNET AVE



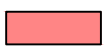
## RECOMMENDED OPTION - CURB EXTENSIONS / SPEED TABLES



LEGEND:



RAISED AREA  
(MOUNTABLE)

NEW CONCRETE AREA  
(NON-MOUNTABLE)

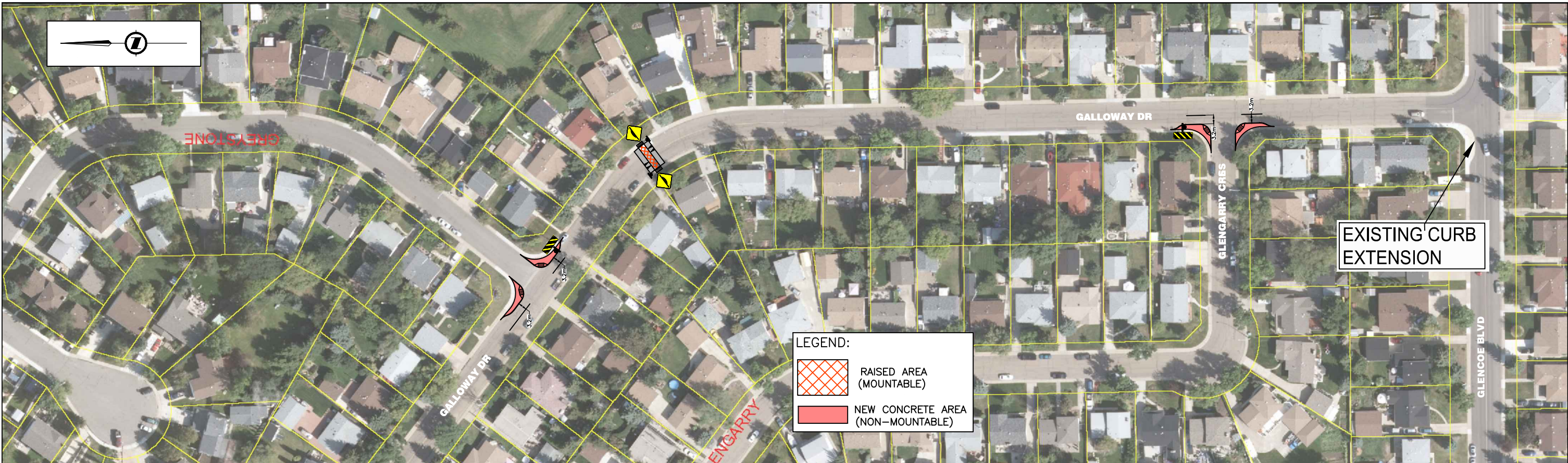
## GLEN ALLAN TRAFFIC CALMING

GALLOWAY DR: GALLOWAY AVE TO GLAMORGAN DR

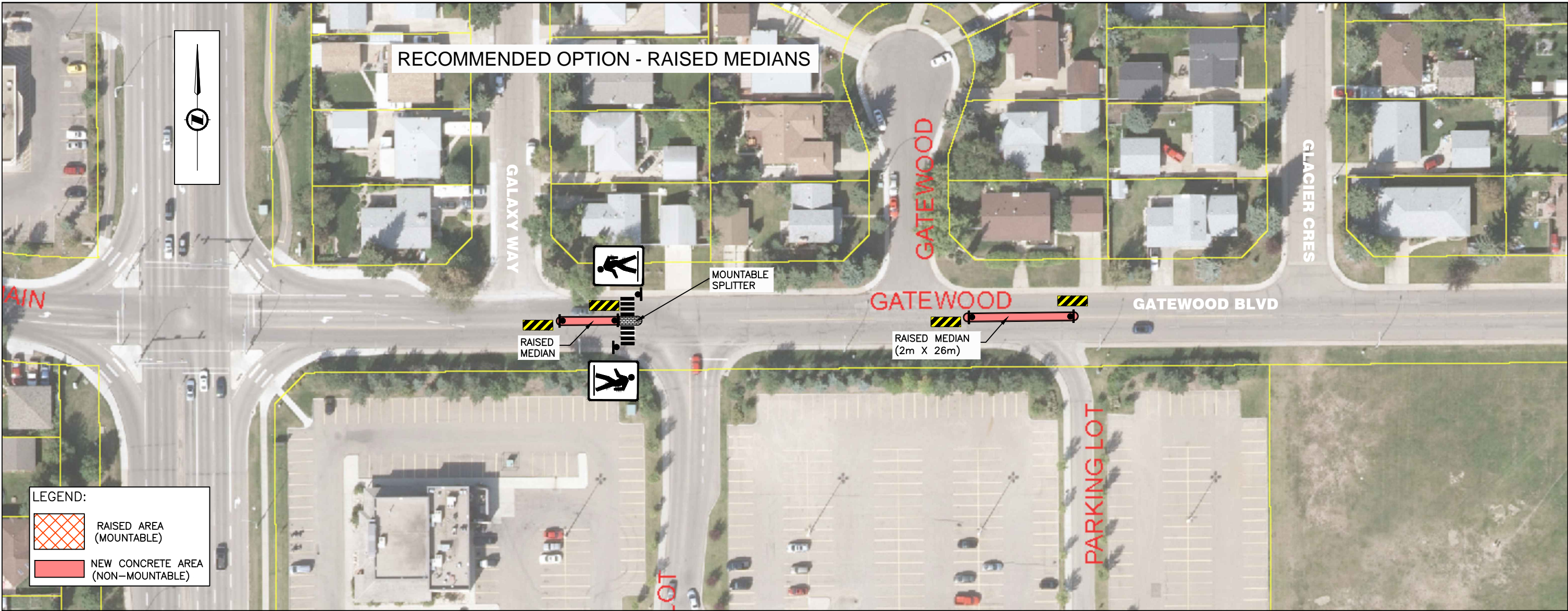




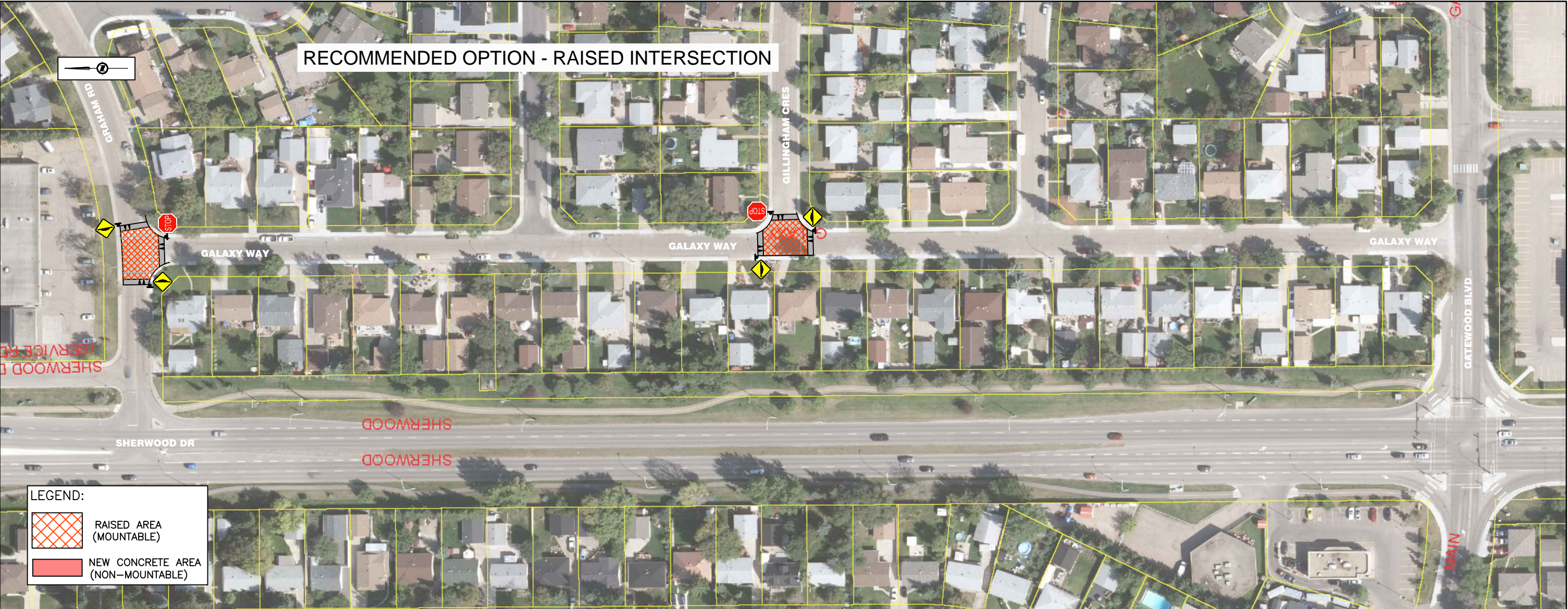
RECOMMENDED OPTION - CURB EXTENSIONS / SPEED TABLES



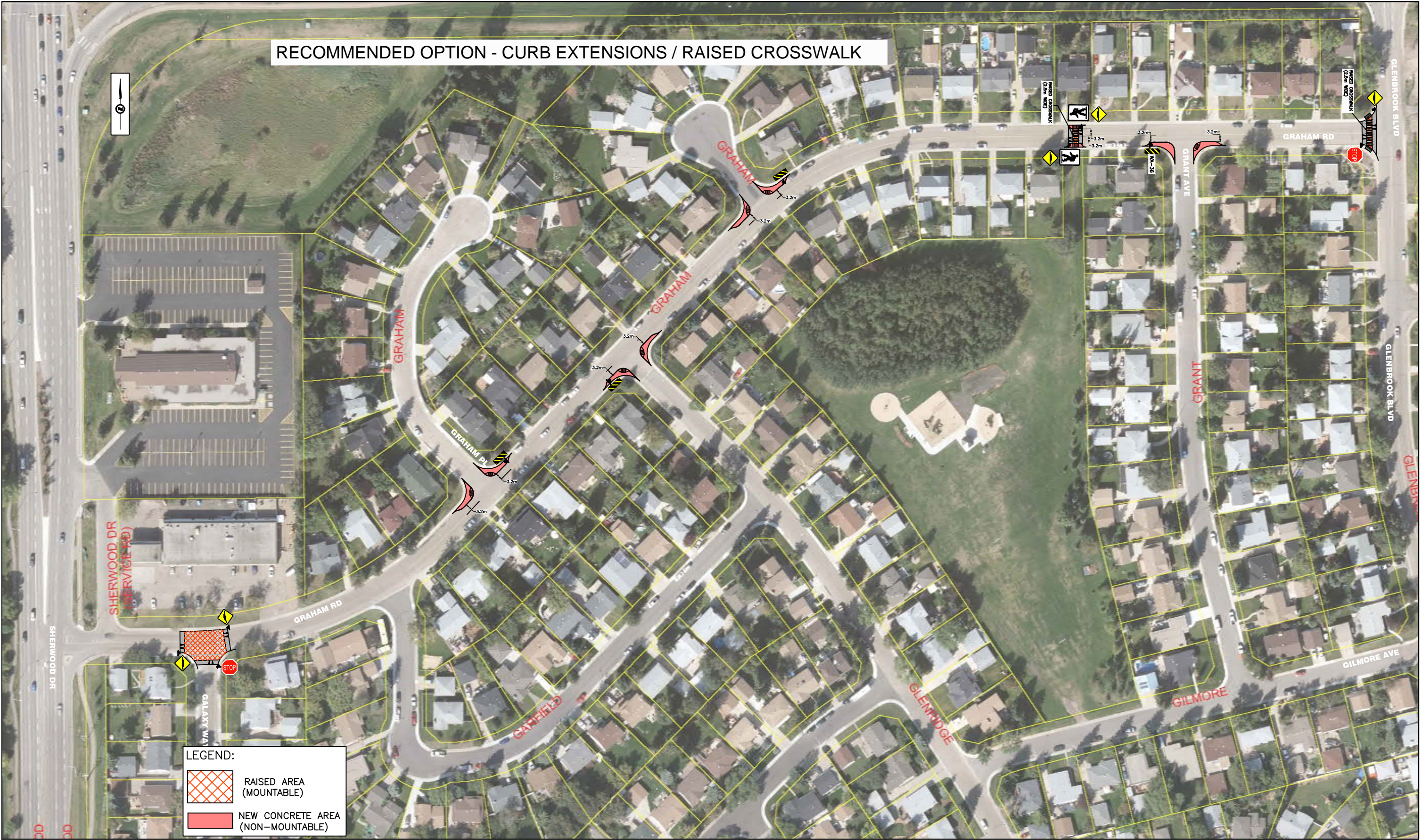












**GLEN ALLAN TRAFFIC CALMING**

GRAHAM RD: SHERWOOD DR TO GLENBROOK BLVD



Boulevard  
TRANSPORTATION  
a division of Watt Consulting Group

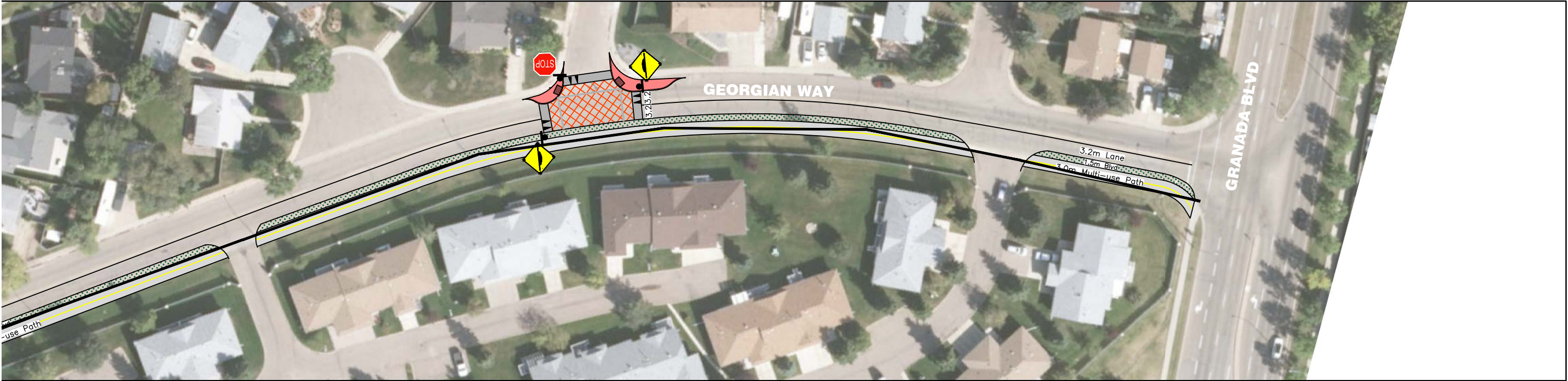
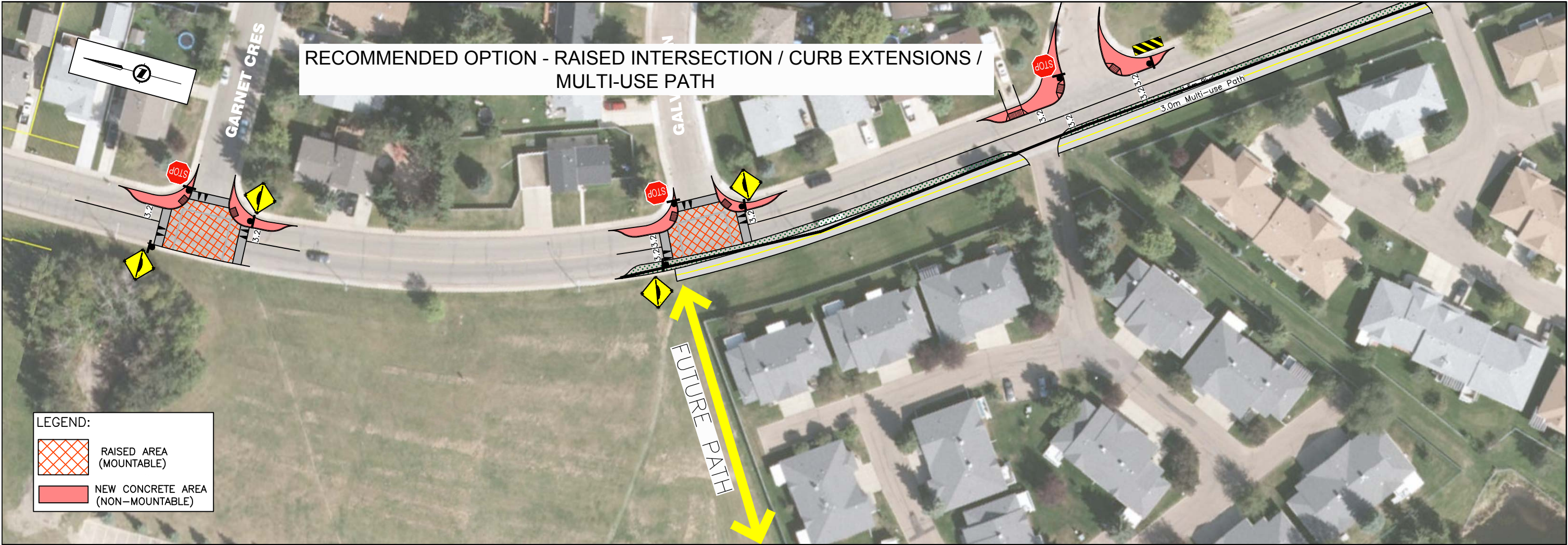


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STRATHCONA  
COUNTY





**GLEN ALLAN TRAFFIC CALMING**

GEORGIAN WAY: GARNET CRES TO GRANADA BLVD

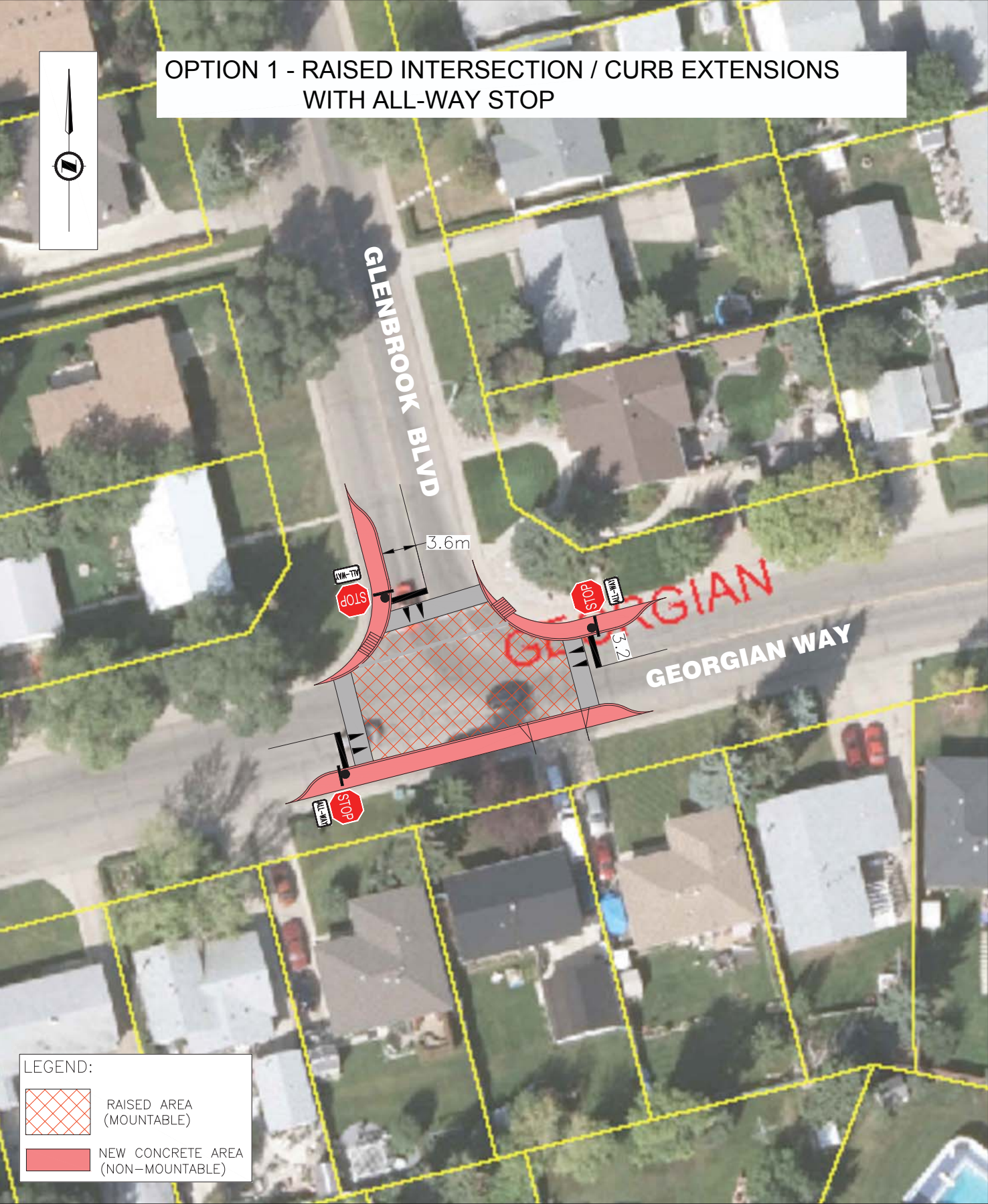


## **APPENDIX A:      TRAFFIC CALMING OPTIONS FOR PUBLIC AND STAKEHOLDER INPUT**









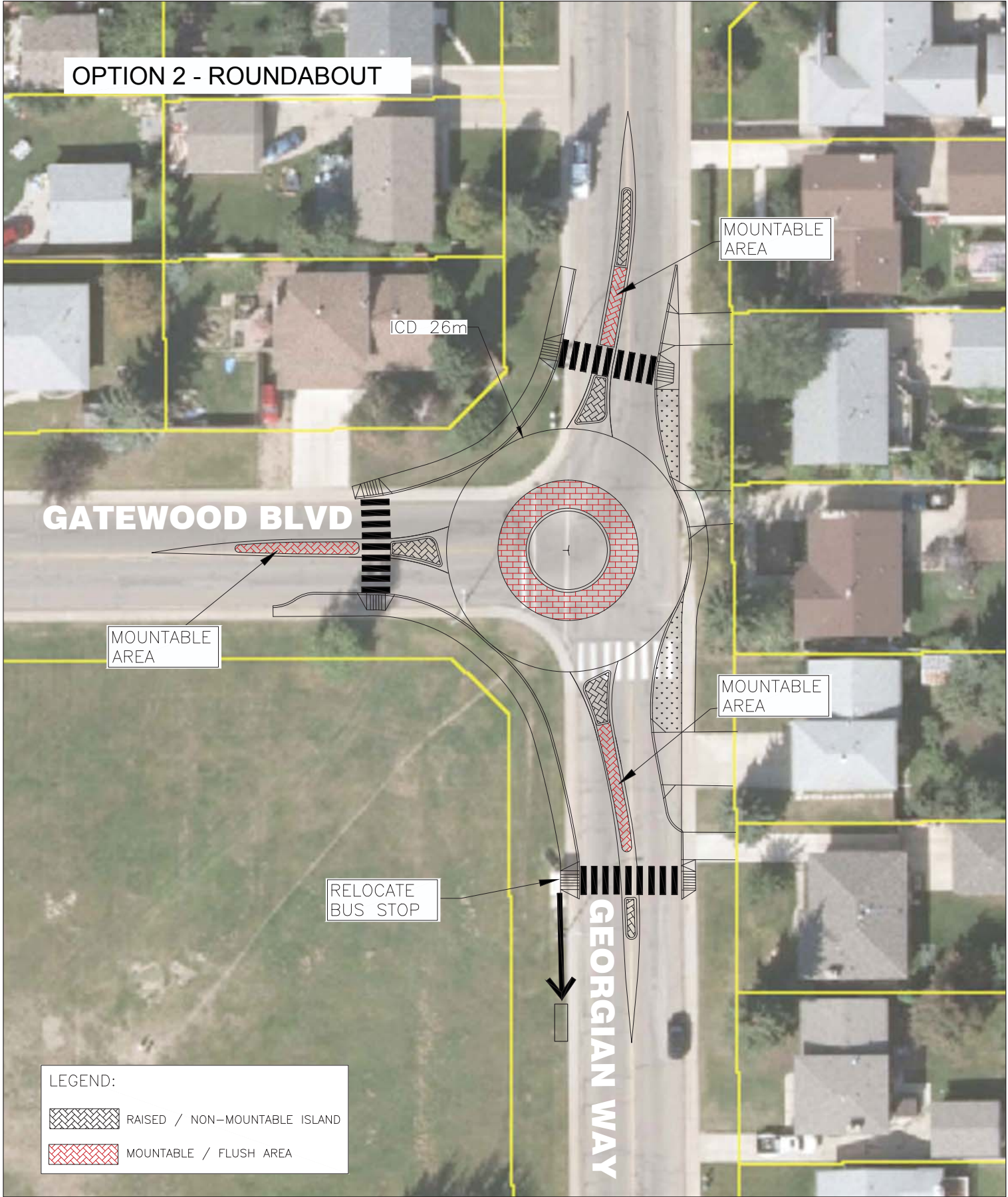
**GLEN ALLAN TRAFFIC CALMING**

INTERSECTION OF GEORGIAN WAY / GLENBROOK BLVD





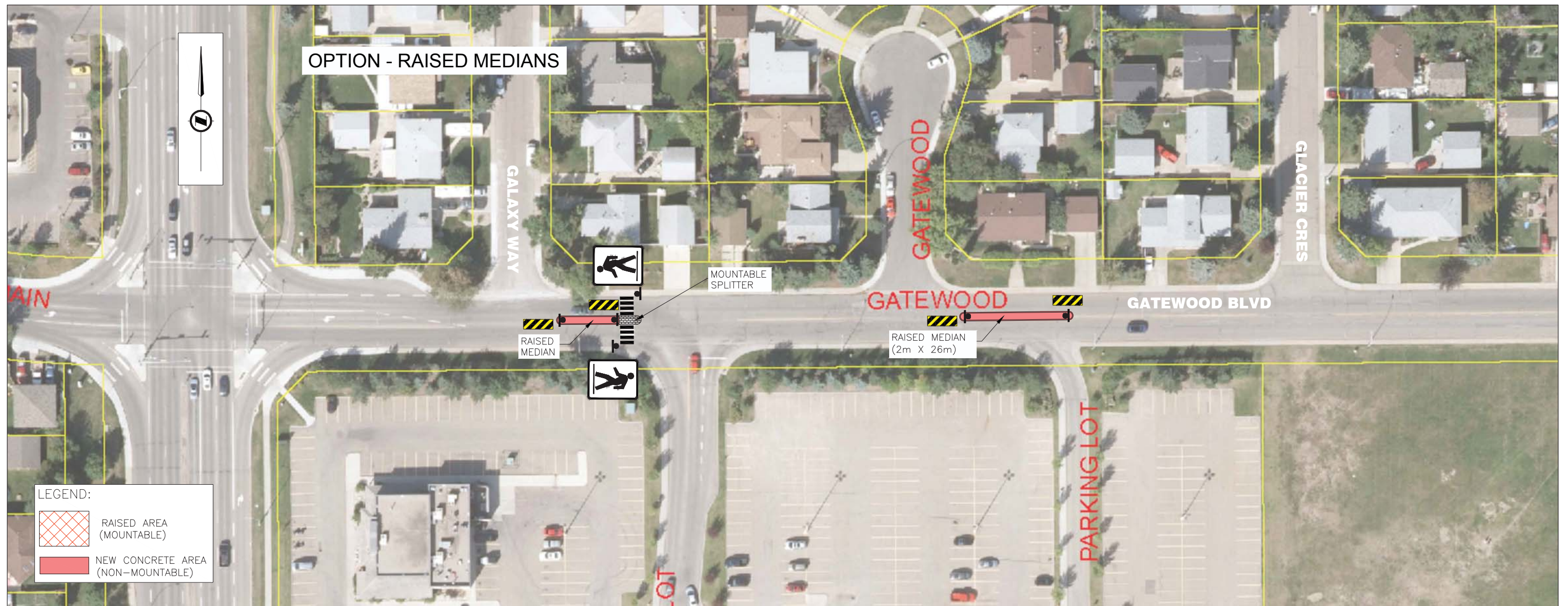




**GLEN ALLAN TRAFFIC CALMING**

INTERSECTION OF GEORGIAN WAY / GATEWOOD BLVD

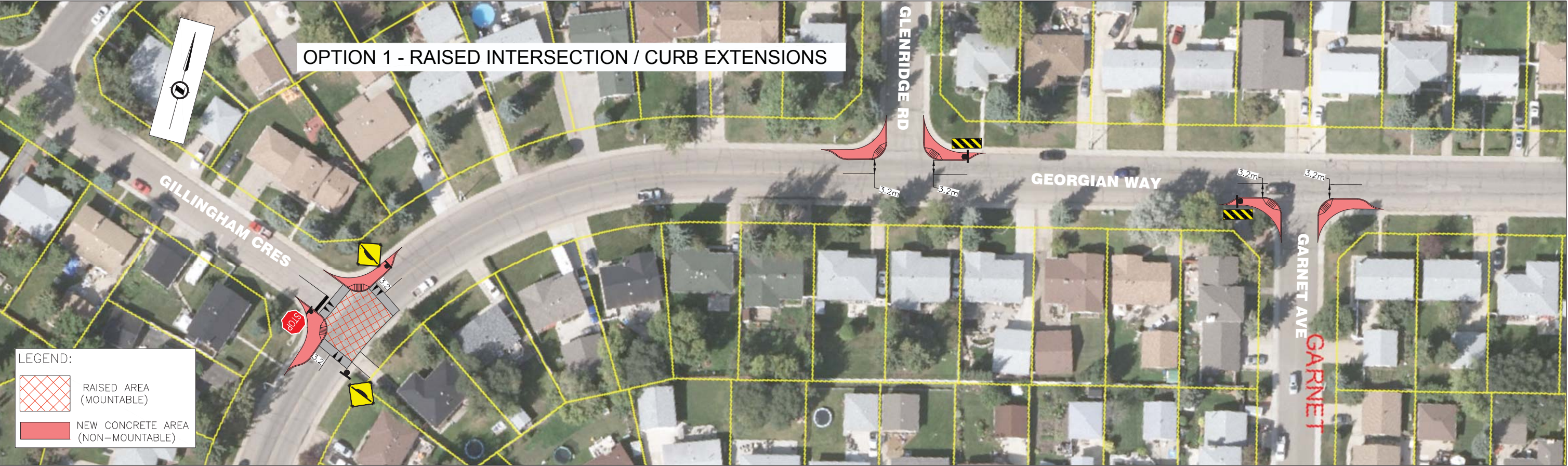




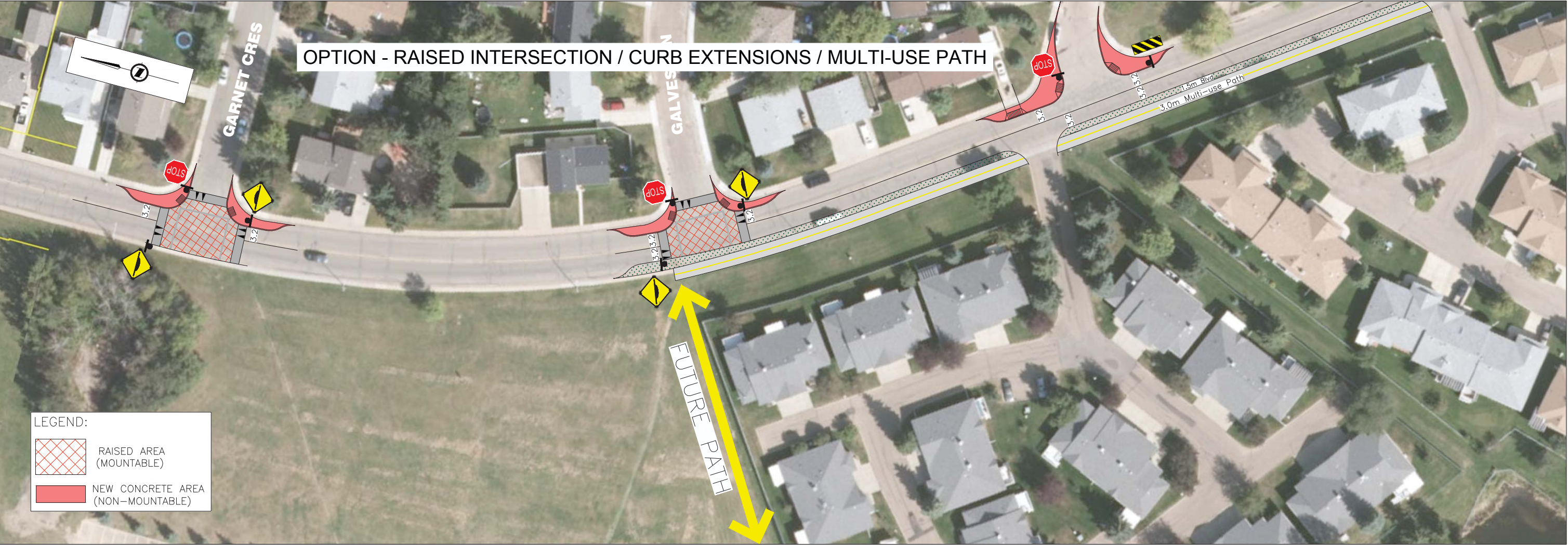
## GLEN ALLAN TRAFFIC CALMING

GATEWOOD BLVD: GALAXY WAY TO GEORGIAN WAY







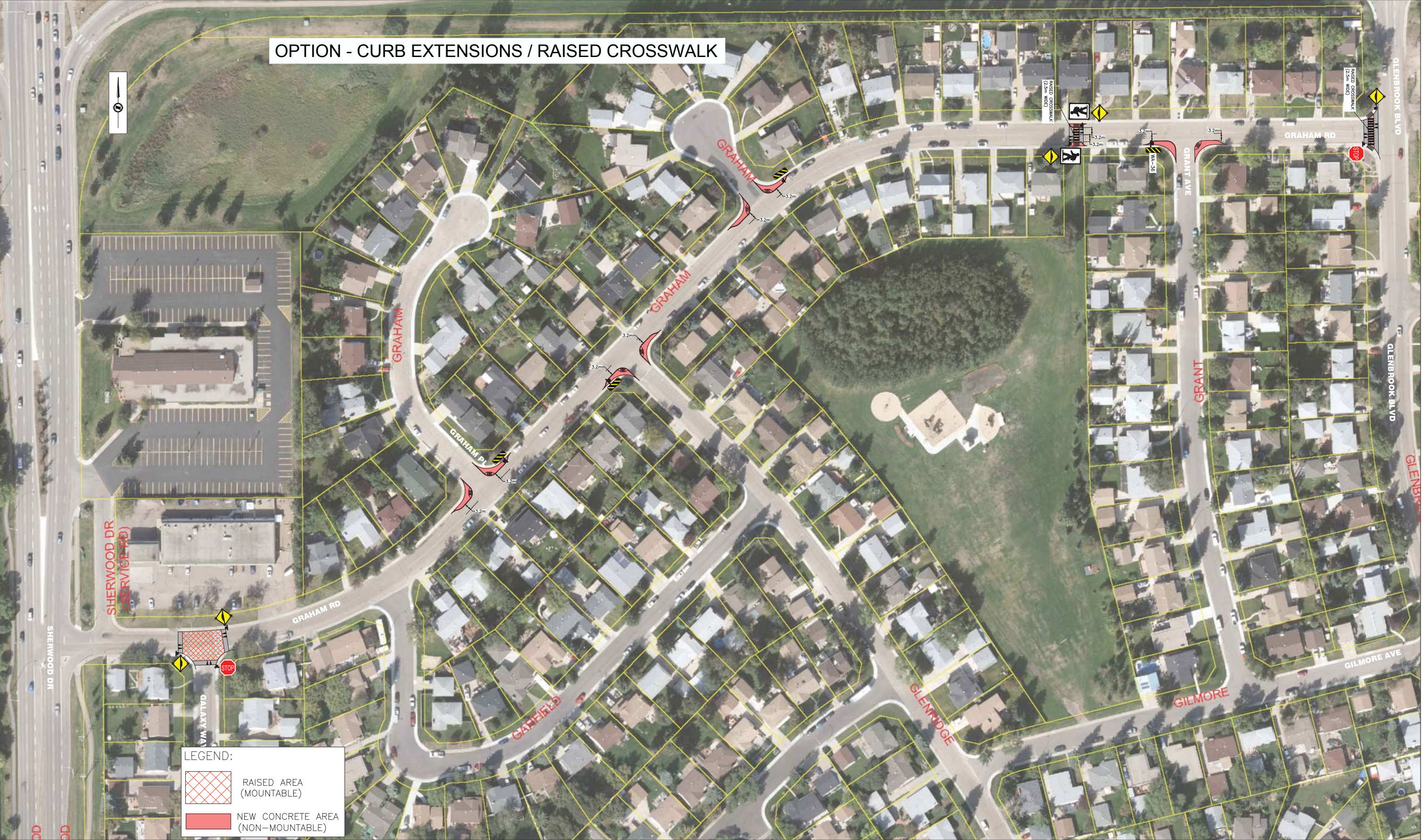


**GLEN ALLAN TRAFFIC CALMING**

GEORGIAN WAY: GARNET CRES TO GRANADA BLVD










**GLEN ALLAN TRAFFIC CALMING**

GRAHAM RD: SHERWOOD DR TO GLENBROOK BLVD

  
a division of Watt Consulting Group

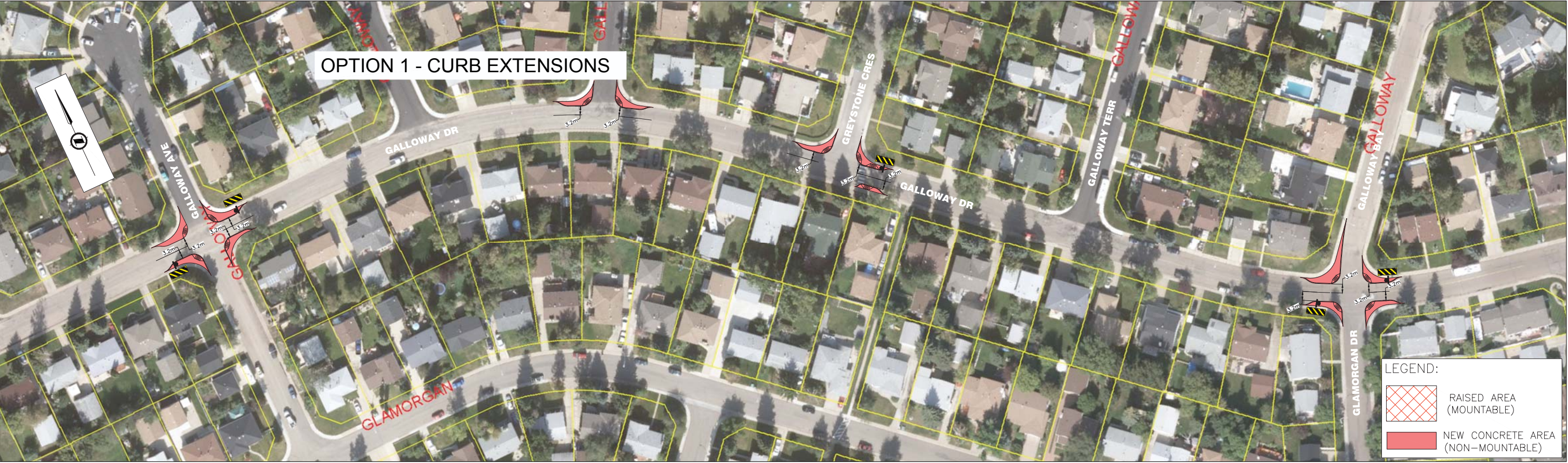
















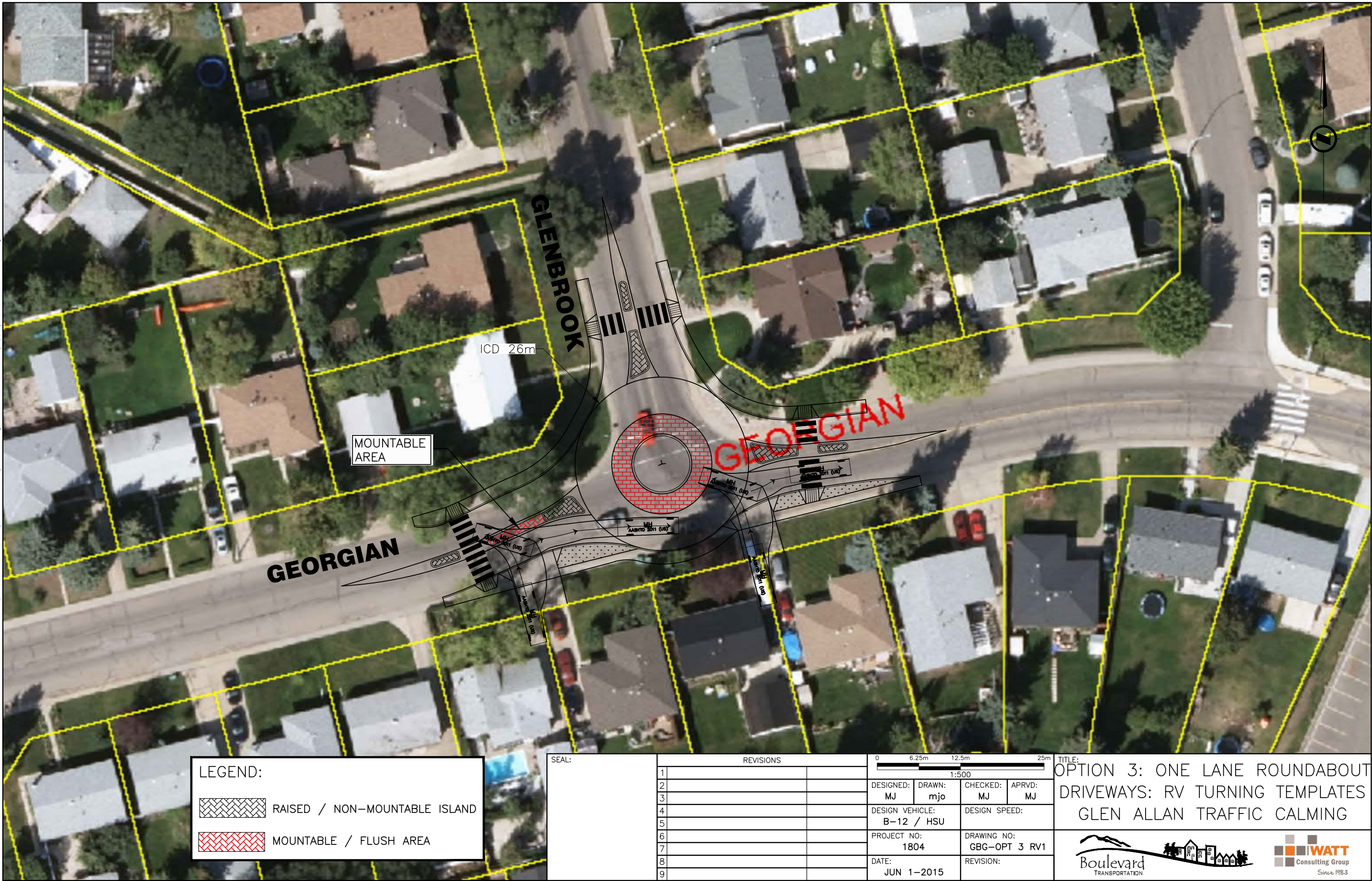


## **APPENDIX B:      TURNING MOVEMENT TEMPLATES**





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PLOT DATE: 6/1/2015 12:35 PM  
PLOTTER: B:\Myongjoon Oh

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LEGEND:

 RAISED / NON-MOUNTABLE ISLAND

 MOUNTABLE / FLUSH AREA

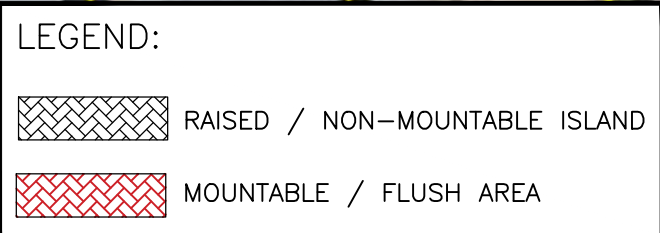
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JUN 1-2015			

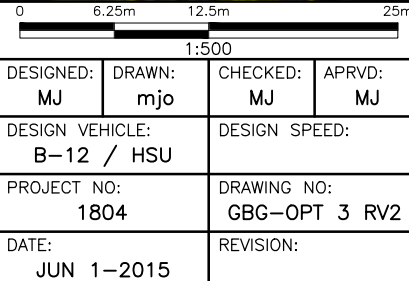
TITLE: OPTION 3: ONE LANE ROUNDABOUT  
DRIVEWAYS: RV TURNING TEMPLATES  
GLEN ALLAN TRAFFIC CALMING





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TITLE:

OPTION 3: ONE LANE ROUNDBABOUT

DRIVEWAYS: RV TURNING TEMPLATES

GLEN ALLAN TRAFFIC CALMING

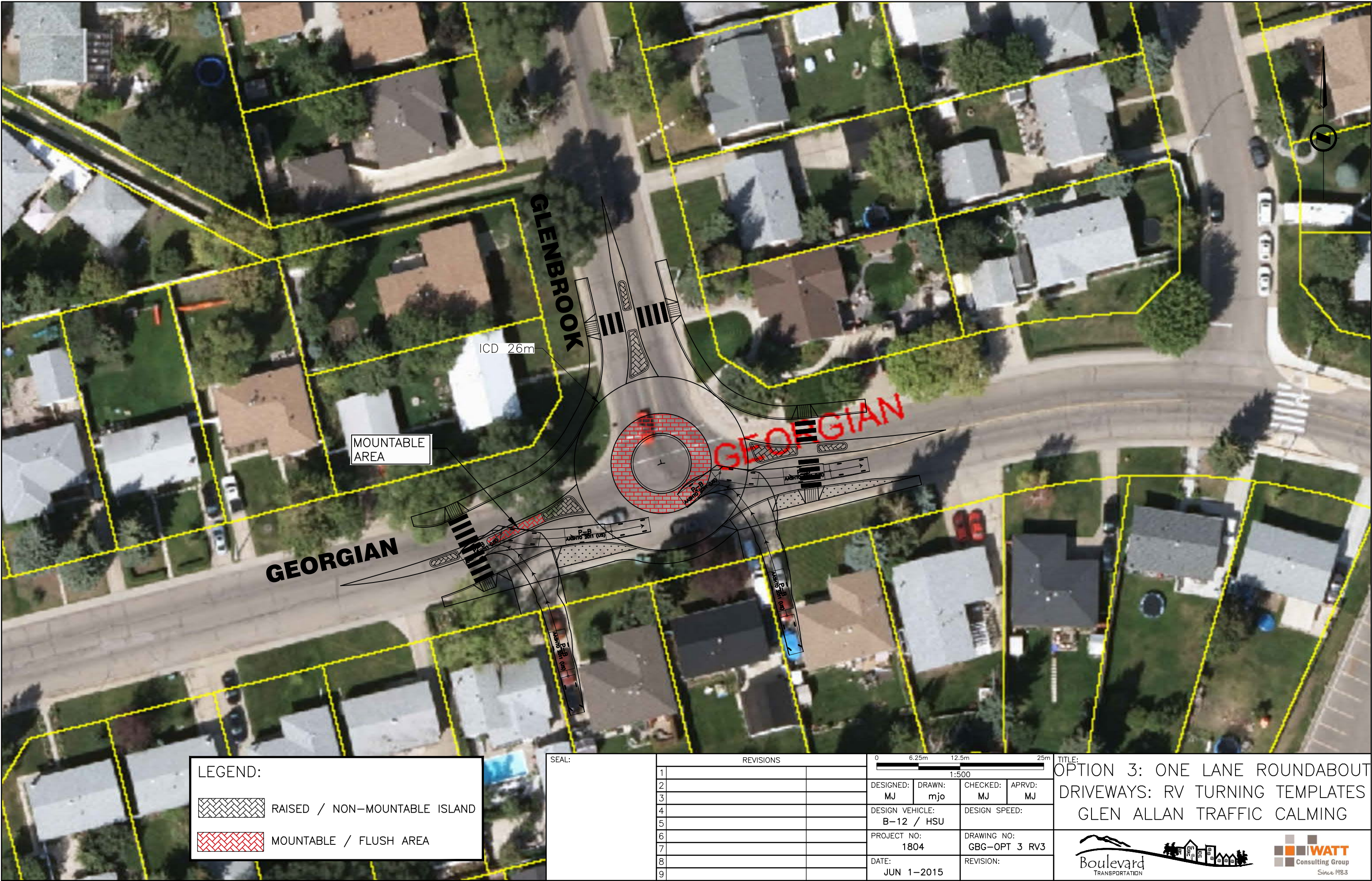
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 Boulevard  
TRANSPORTATION



 **WATT**  
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PROJECT: V:\Project Files\1804 - Glen Allan Traffic Calming - Strathtoon\DWG\Proposed Design for Mitigation Measures\Option 3\_Two Roundabouts Concept Design\_RV Turning Templates\_Jun 1-2015.dwg  
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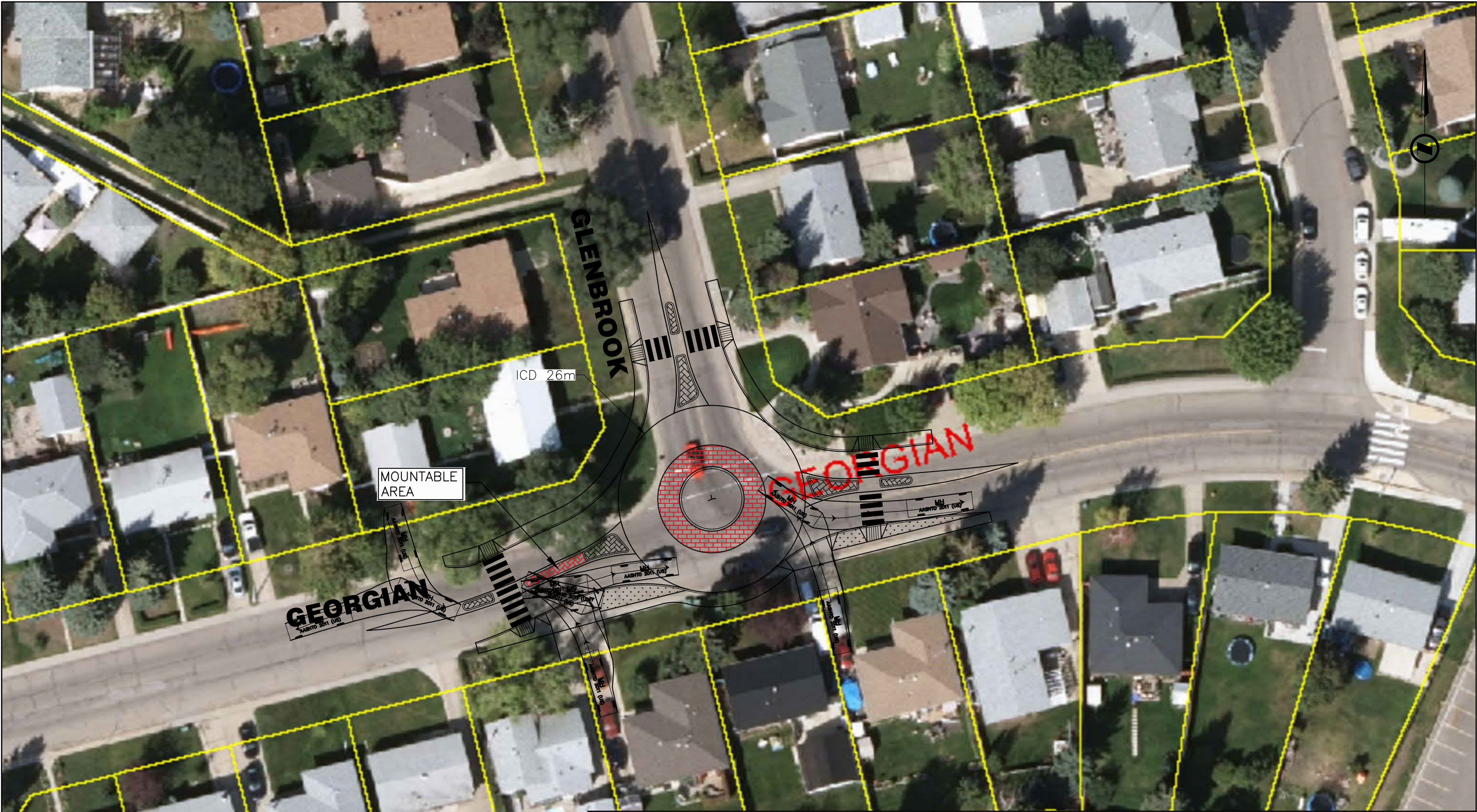
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	RAISED / NON-MOUNTABLE ISLAND
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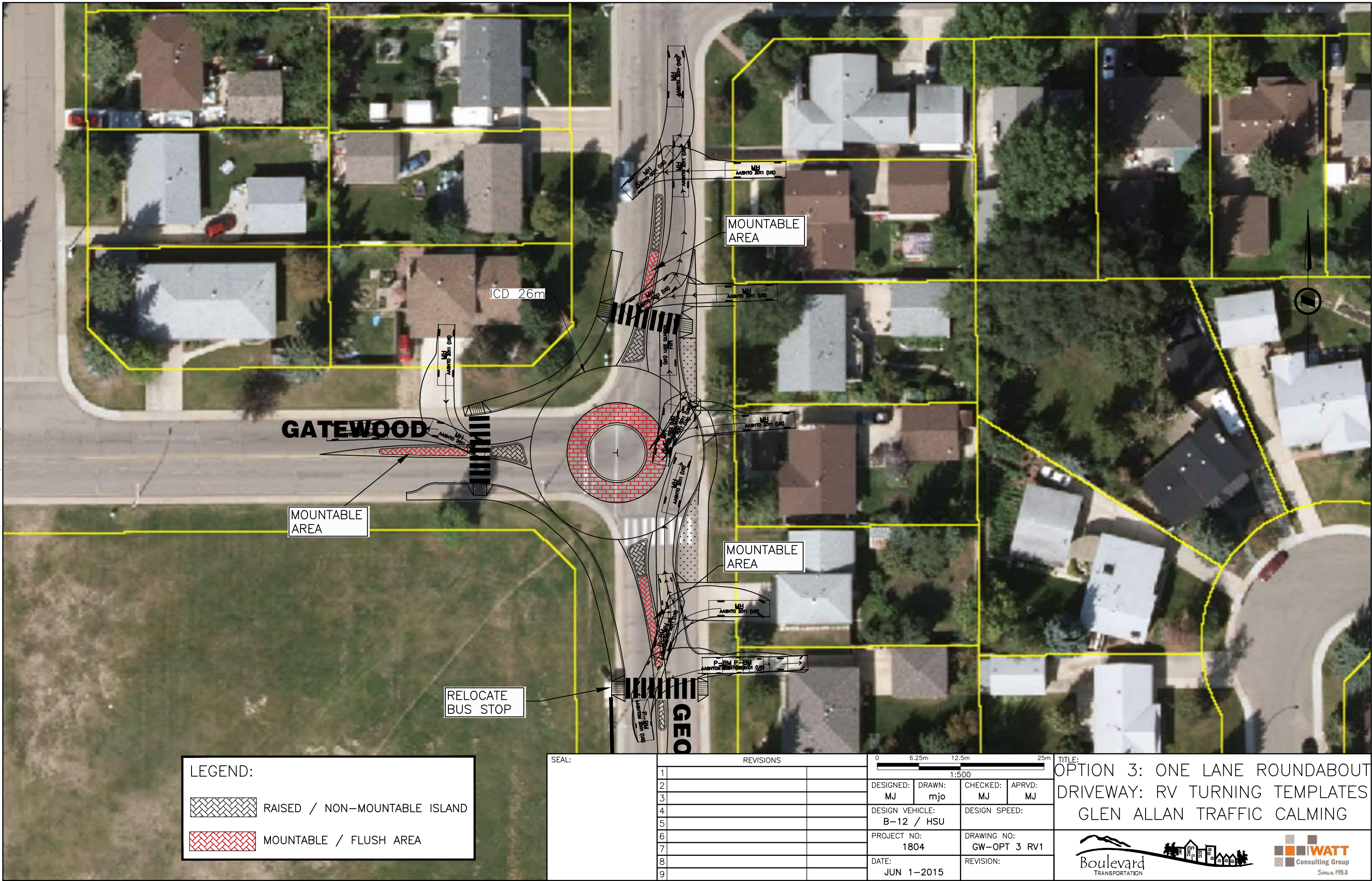
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DRIVEWAYS: RV TURNING TEMPLATES  
GLEN ALLAN TRAFFIC CALMING





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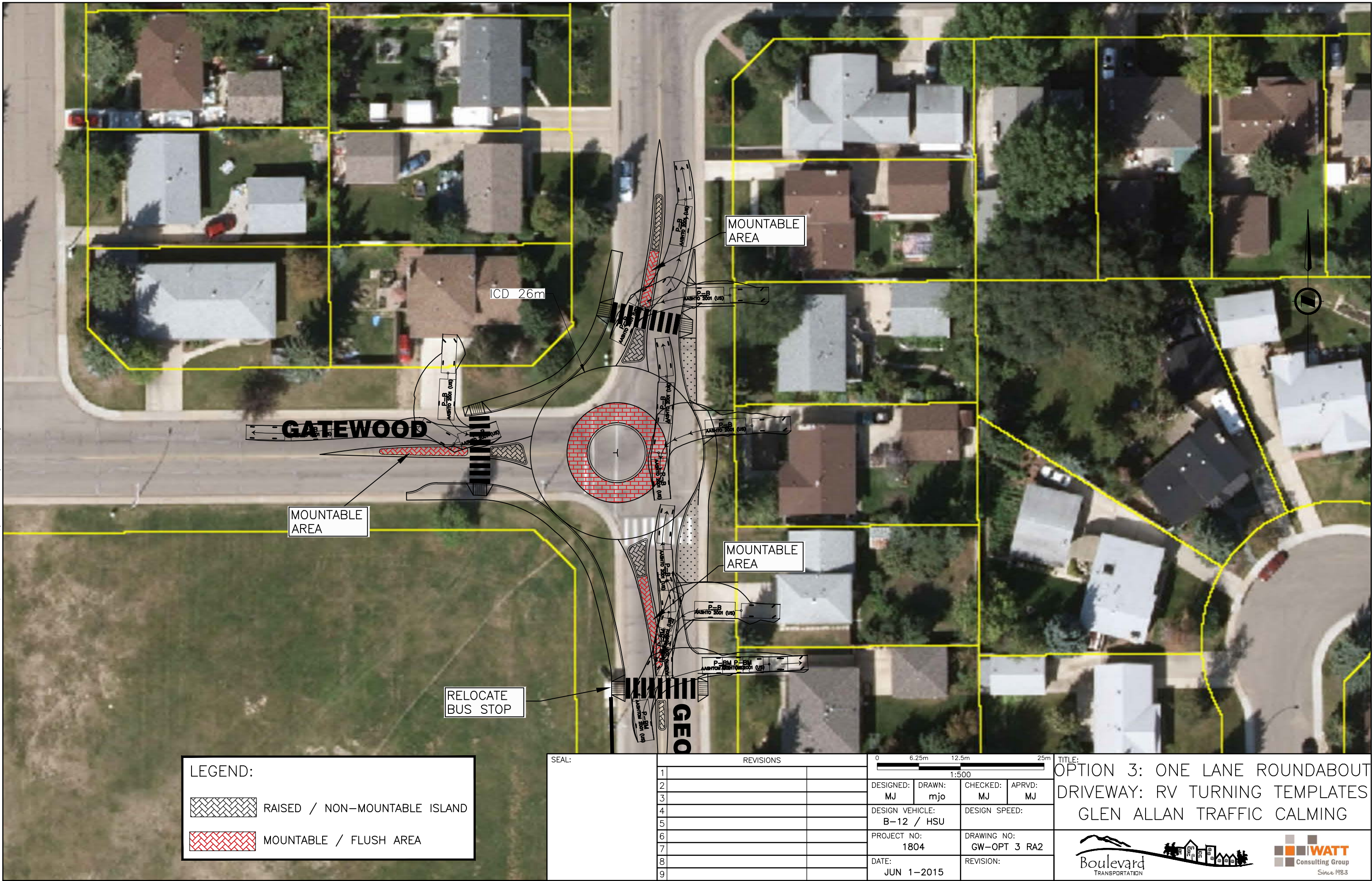
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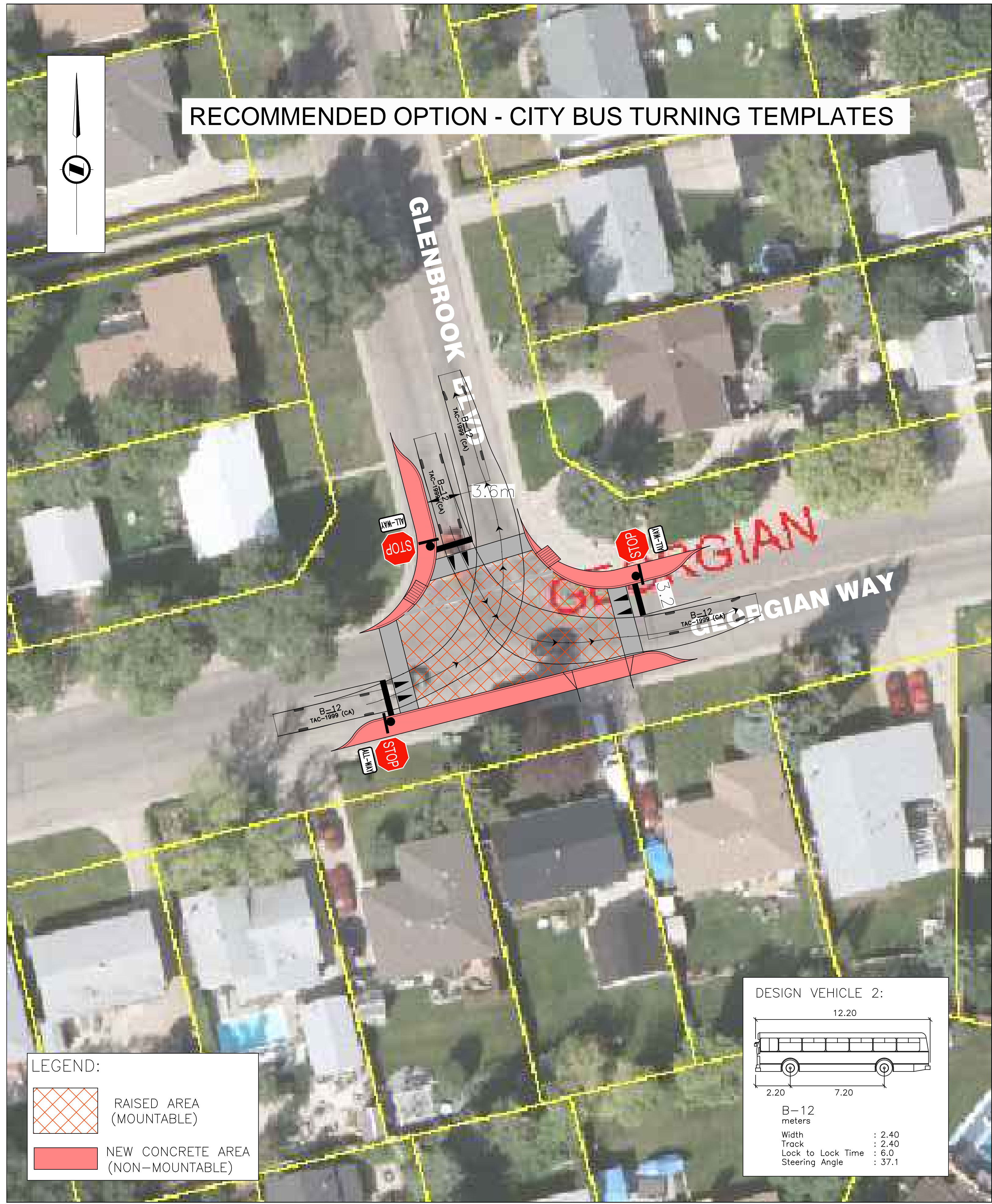
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PLOTTER: B:\Myongjoon Oh

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RECOMMENDED OPTION - CITY BUS TURNING TEMPLATES



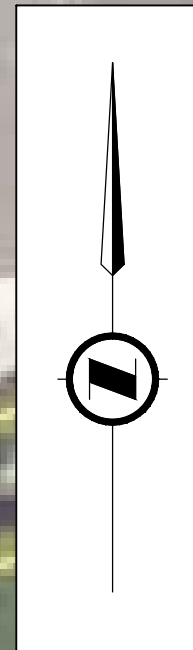
**GLEN ALLAN TRAFFIC CALMING**

INTERSECTION OF GEORGIAN WAY / GLENBROOK BLVD

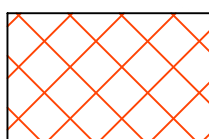





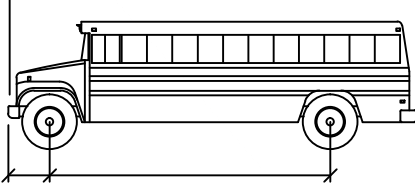
# RECOMMENDED OPTION - SCHOOL BUS TURNING TEMPLATES



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 RAISED AREA (MOUNTABLE)

 NEW CONCRETE AREA (NON-MOUNTABLE)

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	10.91
	
	0.76 6.49
S-BUS-11M	meters
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Track	: 2.44
Lock to Lock Time	: 6.0
Steering Angle	: 37.6



## GLEN ALLAN TRAFFIC CALMING

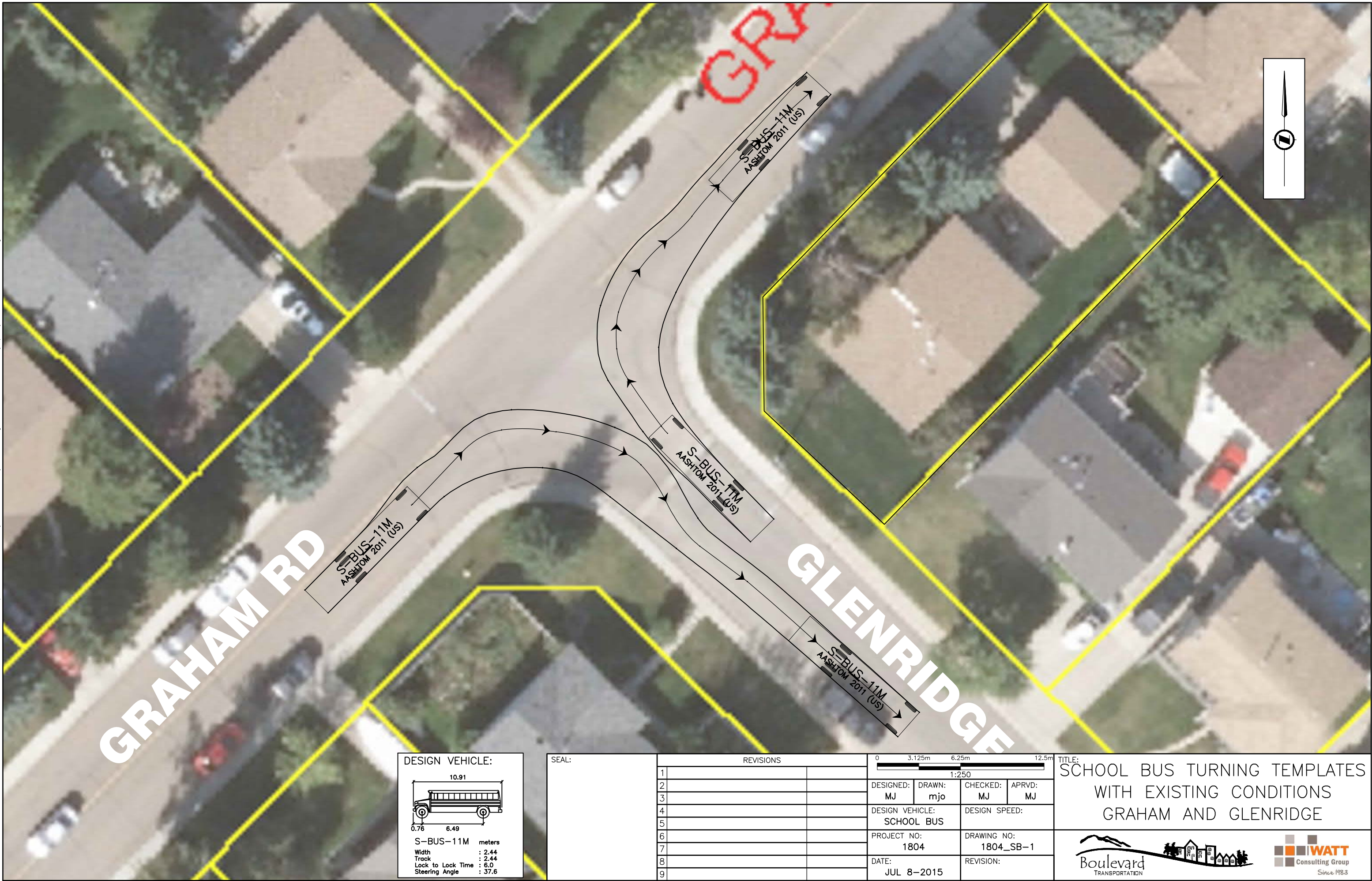
INTERSECTION OF GEORGIAN WAY / GLENBROOK BLVD





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PLOT DATE: 7/8/2015 1:11 PM  
PLOTTER: B:\Myongjeon Oh

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DESIGN VEHICLE:

10.91

S-BUS-11M meters

Width : 2.44

Track : 2.44

Lock to Lock Time : 6.0

Steering Angle : 37.6

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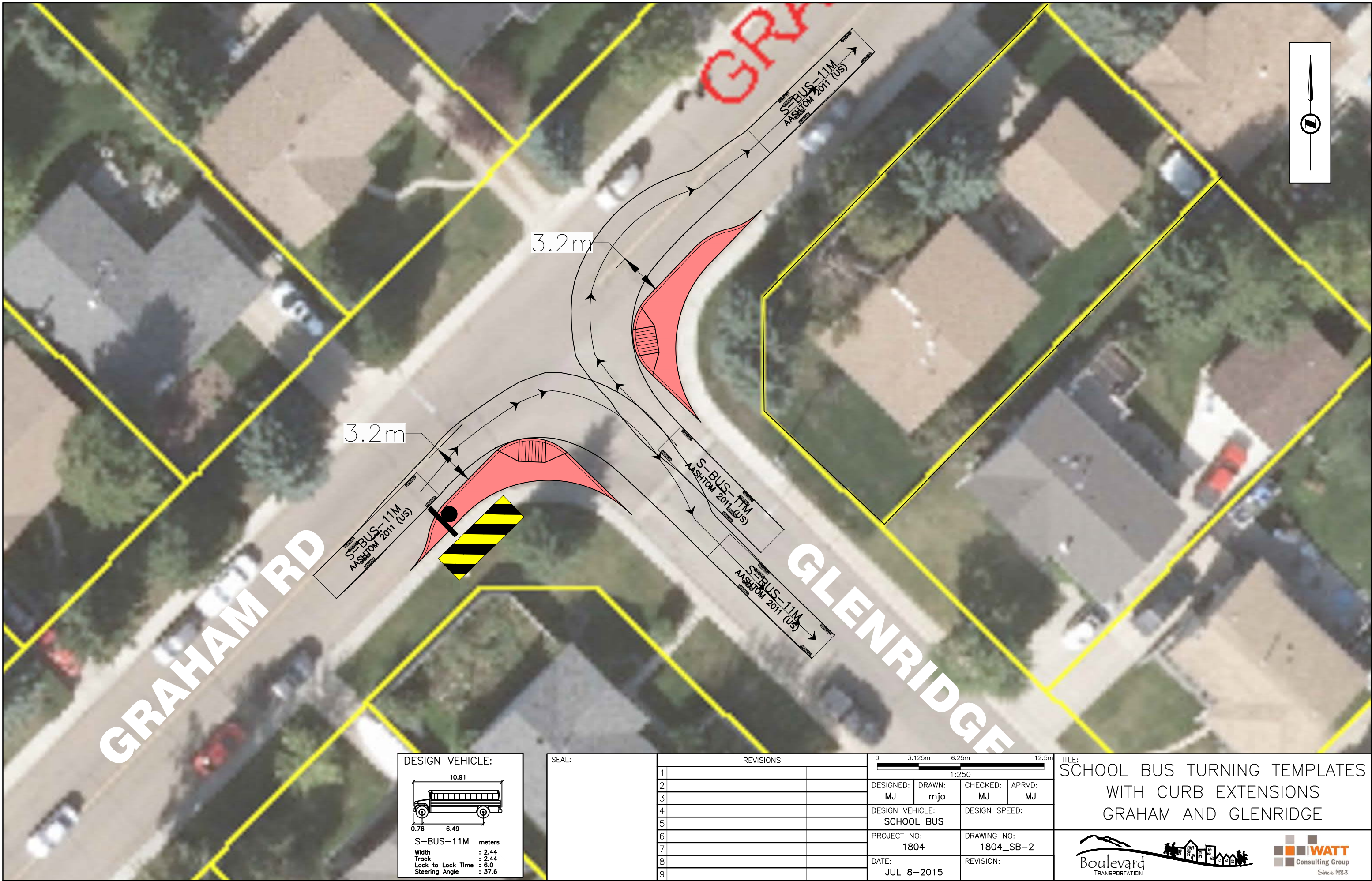
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MJ	mjo	MJ	MJ
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SCHOOL BUS			
PROJECT NO:		DRAWING NO:	
1804		1804_SB-1	
DATE:		REVISION:	
JUL 8-2015			

TITLE: SCHOOL BUS TURNING TEMPLATES WITH EXISTING CONDITIONS GRAHAM AND GLENRIDGE



PROJECT: V:\Project Files\1804 - Glen Allan Traffic Calming - Stratthcona\Draw\Proposed Design for Mitigation Measures\Open House Option School bus turning Templates\_JUL 8-2015.dwg  
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PLOTED BY: Myoungjoon Oh

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DESIGN VEHICLE:

10.91

S-BUS-11M meters

Width : 2.44

Track : 2.44

Lock to Lock Time : 6.0

Steering Angle : 37.6

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DESIGN VEHICLE: SCHOOL BUS		DESIGN SPEED:	
PROJECT NO: 1804		DRAWING NO: 1804_SB-2	
DATE: JUL 8-2015		REVISION:	

TITLE: SCHOOL BUS TURNING TEMPLATES WITH CURB EXTENSIONS GRAHAM AND GLENRIDGE

Boulevard TRANSPORTATION

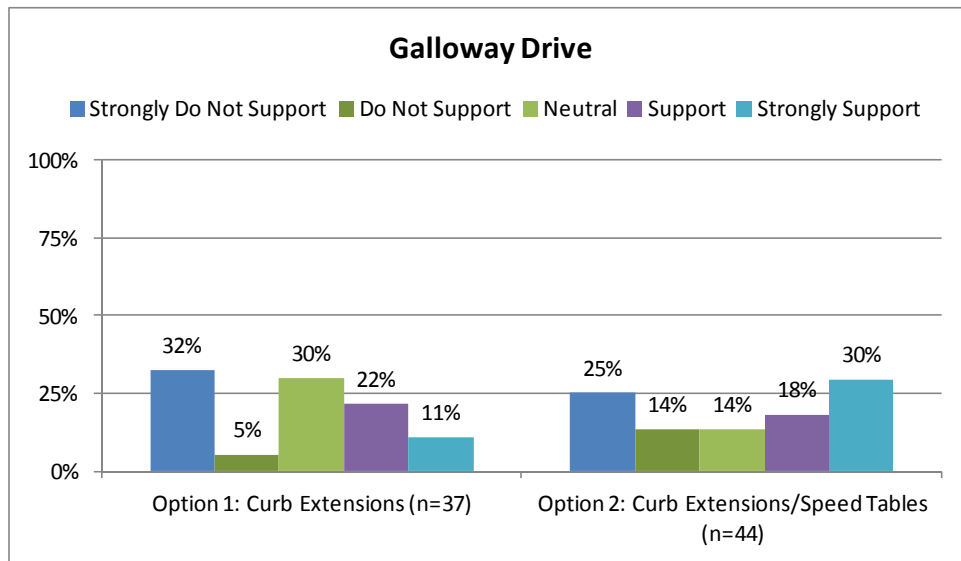
WATT Consulting Group Since 1983



## **APPENDIX C: OPEN HOUSE FEEDBACK (JUNE 24, 2015)**

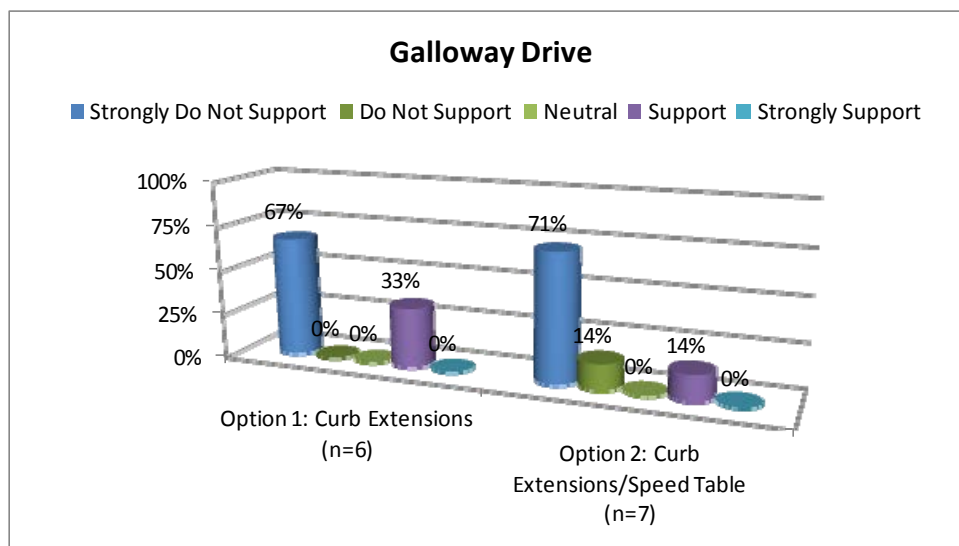


## **Station A**



**Figure 1**  
**Options on Galloway Drive**

Respondents overall were somewhat more in favour of Option 2 over Option 1, with 48% supporting or strongly supporting Curb Extensions/Speed Tables and 33% supporting or strongly supporting Curb Extensions. Similar numbers of respondents indicated they do not support or strongly do not support Option 1 (37%) and Option 2 (39%).



**Figure 2**  
**Options on Galloway Drive**  
**by Residents**

Among respondents who answered this question and who indicated they lived on Galloway Drive or Galloway Bay, 33% supported or strongly supported Option 1 compared to 14% who supported or strongly supported Option 2. Further, 71% of residents indicated they do not



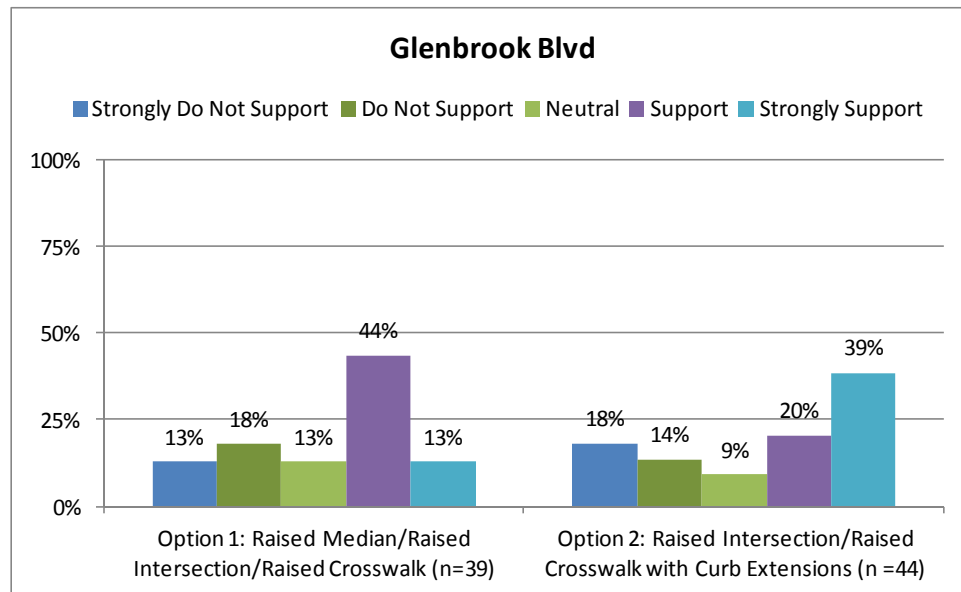
support or strongly do not support Option 2 compared to 67% who do not support or strongly support Option 1.

### **Comments**

Talked to Marcel, 142 Galloway needs speed table. Don't narrow the street - put stop signs at Glencoe and Galloway.
Take into account new traffic flow from new super boxes for mail. Galloway Dr/Bay snow churned at corner - already hard to get out of. Need space on road to get by bus at bus stop, coming up hill when icy you cannot get started again. (We like the current location of the bus stops).
No curb extensions.
Reduce speed
We require parking that is accessible for a van with a ramp. Will traffic raise be a problem?
See back comments
No parking in front of house due to curb extension and bus stop.
Removes only parking on street for several homes.
Speed tables only, no curb extensions.
Already narrow and difficult for buses and passing two way traffic.
Roundabout on Galloway and Glenbrook.
Curb extensions tend to get banged up - they need a lot of maintenance.
Tables should deter excess speed very nicely.
More effective in slowing traffic with speed tables
Option 1: Less impact to residents parking
No extensions (support is without extensions)
No curb extensions
Speed table needed at Glengarry Crescent instead of curb extensions
Talked to Marcel, 142nd needs speed table. Don't narrow street. Stop sign at Glencoe and Galloway, 2 bus stops there.
No extensions on South East corner of Galway and Glenbrook
If combined these make for a good control of traffic

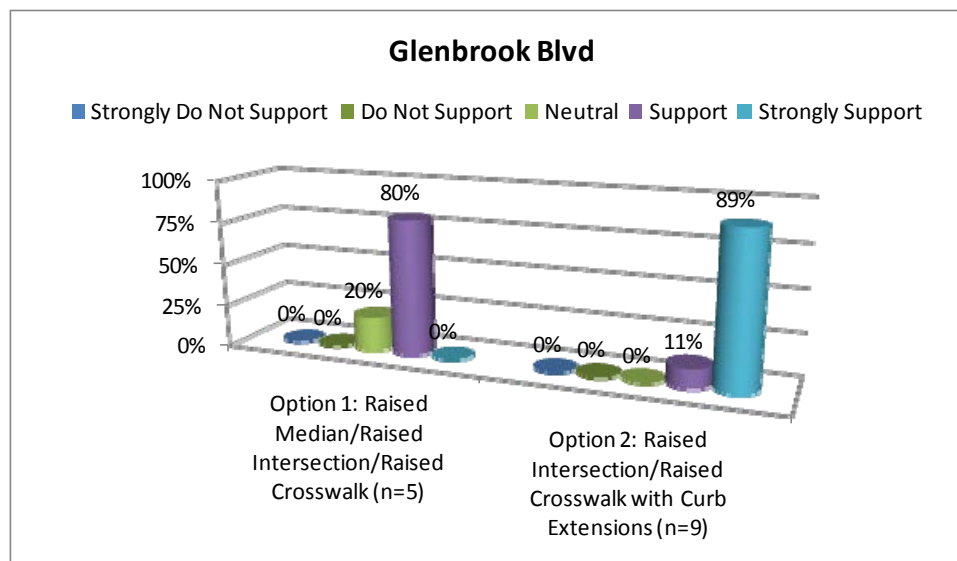


## **Station B**



**Figure 3**  
**Options on Glenbrook Blvd**

Respondents overall were almost equally in favour of the options, with 57% supporting or strongly supporting a Raised Median/Raised Intersection/Raised Crosswalk, and 59% supporting or strongly supporting a Raised Intersection/Raised Crosswalk with Curb Extension. Similarly, about the same numbers respondents indicated they do not support or strongly do not support Option 1 (31%) and Option 2 (32%).



**Figure 4**  
**Options on Glenbrook Blvd**  
**by Residents**



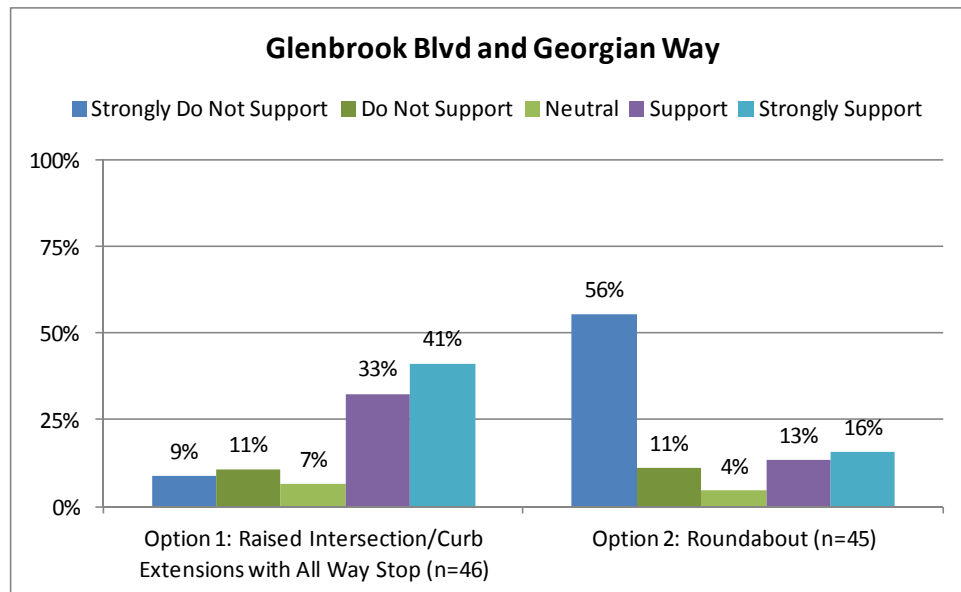
Among respondents who answered this question and who indicated they lived on Glenbrook Blvd, support was strong for both options, with 80% supporting or strongly supporting Option 1 and 89% supporting or strongly supporting Option 2.

### **Comments**

Already have trouble with narrow intersection at Glenbrook and Galloway.
I pick option 2 - make speed limit lower; 40km/h.
Speed limit slower (40km/h).
Need a raised marked crosswalk on Glenbrook at Gilmore.
3 raised intersections on Glenbrook Blvd.
Raise intersection to 4" and speed limit 40km/h.
Safer intersection crossing and parking not affected! Plus 40km/h added.
Prefer nothing.
Tougher for cyclists.
Too many s tops. This makes it difficult to get into my neighborhood. Stops too close to light - a lot of traffic in peak time would get very backed up.
Raised crosswalk with no curb cut.
Option 1: Like medians. I like elements of both. Option 2: I like narrowing at Gilmore.
I like this compared to the alternatives.
Option 1: Too restrictive regarding ingress/egress from Baseline Road. Plowing issues (Winter 6-7 months).
No support for extensions.
Do not support curb extensions.
No curb extensions.
Raised Median - No; Raised intersections no ... Speed tables only.

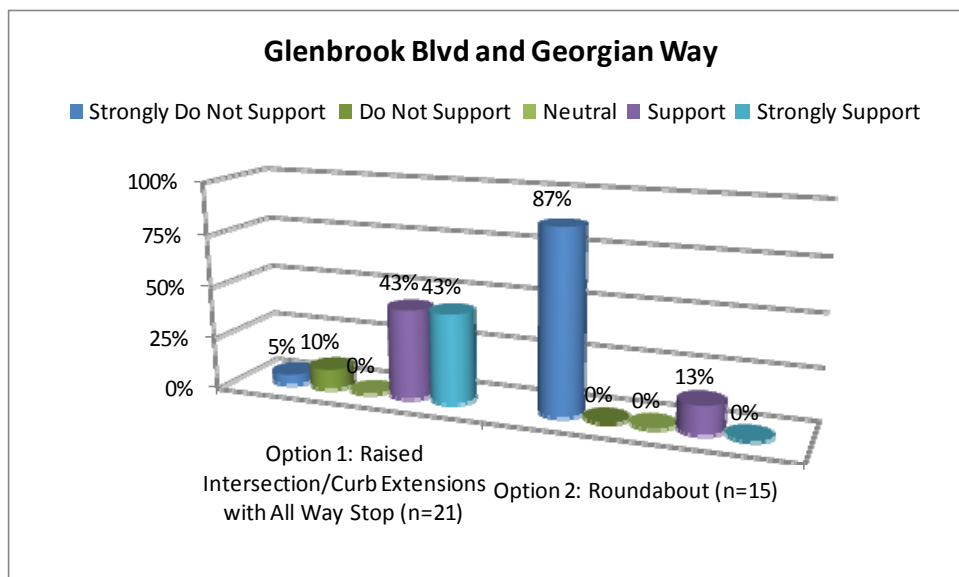


## Station C



**Figure 5**  
**Options on Glenbrook Blvd and Georgian Way**

Respondents overall were strongly in favour of Option 1 over Option 2, with 74% supporting or strongly supporting Raised Intersection/Curb Extensions with All Way Stop, and 29% supporting or strongly supporting a Roundabout. Similarly, just 20% indicated they do not support or strongly do not support Option 1 while 67% indicated they do not support or strongly do not support Option 2.



**Figure 6**  
**Options on Glenbrook Blvd and Georgian Way, by Residents**  
**by Residents**



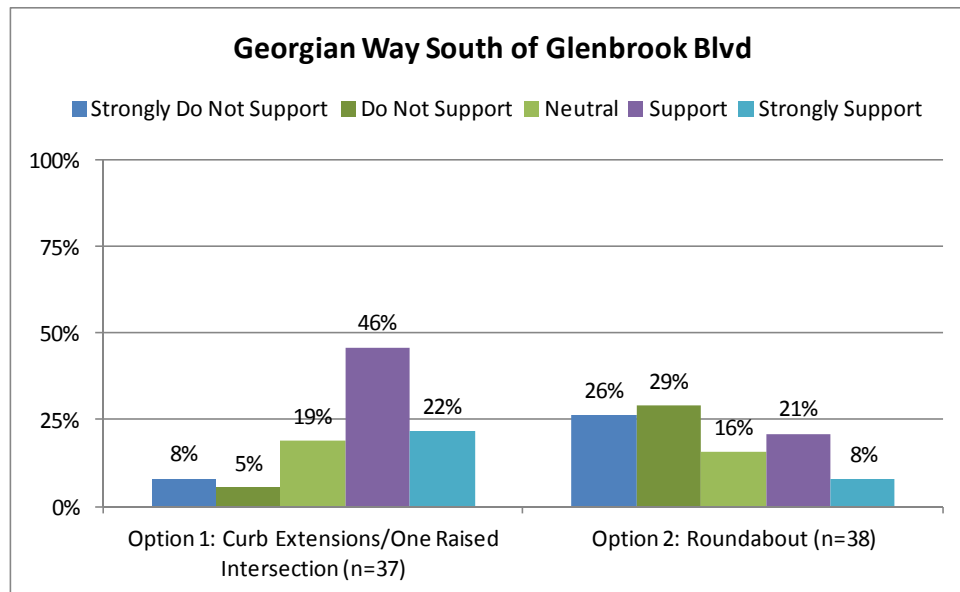
Among respondents who answered this question and who indicated they lived on Glenbrook Blvd or Georgian Way, 86% supported or strongly supported Option 1 compared to 13% who supported or strongly supported Option 2. Further, 87% of residents indicated they do not support or strongly do not support Option 2 compared to 15% who do not support or strongly support Option 1.

### **Comments**

We need all way stop! ... But don't need raised intersections.
No curb extensions - raised intersections or all way stop is okay however.
Slows traffic, to reduce short cutting. The second option is costly but effective.
Heavy use.
Roundabout is a stupid idea - no pedestrian safety, and poor visibility.
Prefer nothing.
Cost is a significant factor.
Roundabout is freer flowing. Less delays.
Only three way stop signs.
Three way stop okay. No raised intersection like roundabouts; large effect on houses.
Roundabouts are not safe for children trying to cross. I think the only thing that will work is a three way stop. People already drive over curbs there, so extending them won't stop that.
I think it would be easier for my child to cross to get to school at the circle option.
Looks good relative to alternative.
3 way stop would be best.
No roundabout.
Should try a 3 way stop "temporarily" to see impact on traffic first, before any construction.
Concerns regarding water drainage and exhaust.
Option 2 won't solve problem - traffic will still have to wait to enter circle. Affects too many neighbors who have been there 40 years or slightly less.
I would have no accessibility to coming or going into my driveway with a traffic circle.
Safety of resident's? Visitor parking? Property value goes down. Where does our garbage go?
No roundabouts, just three way stops.
Just make it a three way stop.
Option 2: Cost is excessive as main power line and cable will need to be moved - will likely cost \$500,000 plus.
Exclude the curb extensions. Raised bumps where stop is now, and the other intersection.
Existing stop from Glenbrook onto Georgian is adequate.
Better due to local school zone.
Raised crosswalk on Glenbrook and on the West intersection on Georgian.

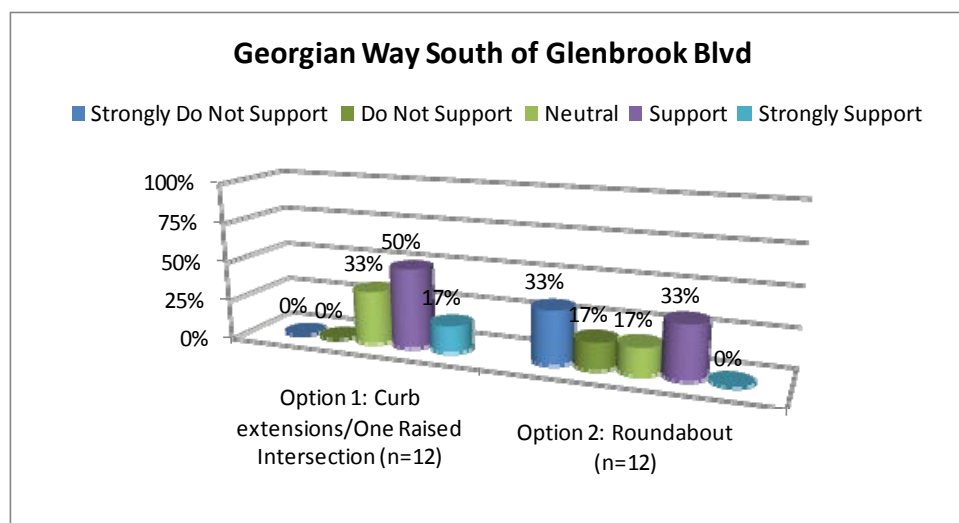


## Station D



**Figure 7**  
**Options on Georgian Way South of Glenbrook Blvd**

Respondents overall were more in favour of Option 1 over Option 2, with 66% supporting or strongly supporting Curb Extensions/One Raised Intersection, and 29% supporting or strongly supporting a Roundabout. Just 11% indicated they do not support or strongly do not support Option 1 while 55% indicated they do not support or strongly do not support Option 2.



**Figure 8**  
**Options on Georgian Way South of Glenbrook Blvd**  
**by Residents**



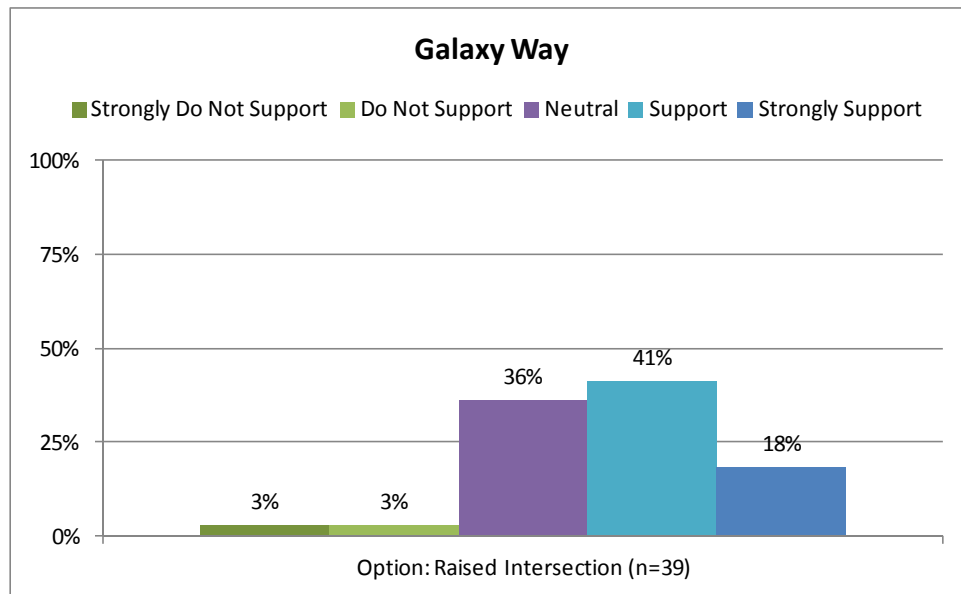
Among respondents who answered this question and who indicated they lived on Georgian Way or Glenbrook Blvd, 67% supported or strongly supported Option 1 compared to 33% who supported or strongly supported Option 2. Further, 50% of residents indicated they do not support or strongly do not support Option 2 compared to 0% who do not support or strongly support Option 1.

### **Comments**

Option 1: Reduce shortcutting, yes! Option 2: Cost effective but 17 stalls ... Not good!
Keep people from crossing center line on corner.
Roundabout.
I think this would slow people who shortcut through the neighborhood but don't live here.
Might work!
Slow traffic.
Turning radius for buses (school) affected with curb extensions. We support a raised intersection.
No support for extensions. Won't slow traffic though.
Support raised area but not curb extensions.
Too many sections.



## **Station E**



**Figure 9**  
**Option on Galaxy Way**

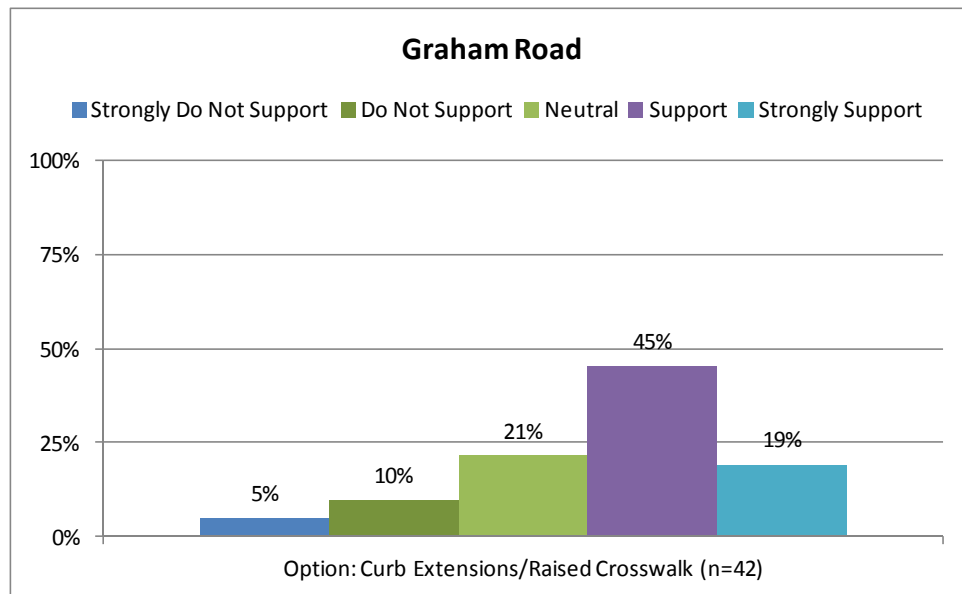
The option of a Raised Intersection was supported or strongly supporting by 59% of respondents overall, with just 6% indicating they do not support or strongly do not support the option, and 36% indicating they were neutral.

### ***Comments***

Not aware of any issues.
Lots of speeders and short cuts.
I do not travel this road.
Looks good.
Minimal but effective treatments here.
Doesn't drastically change the area.
Not necessary - not enough traffic.
Should be more than one!



## Station F



**Figure 10**  
**Option on Graham Road**

The option of Curb Extensions/Raised Crosswalk was supported or strongly supporting by 64% of respondents overall, with 15% indicating they do not support or strongly do not support the option, and 21% indicating they were neutral.

## Comments

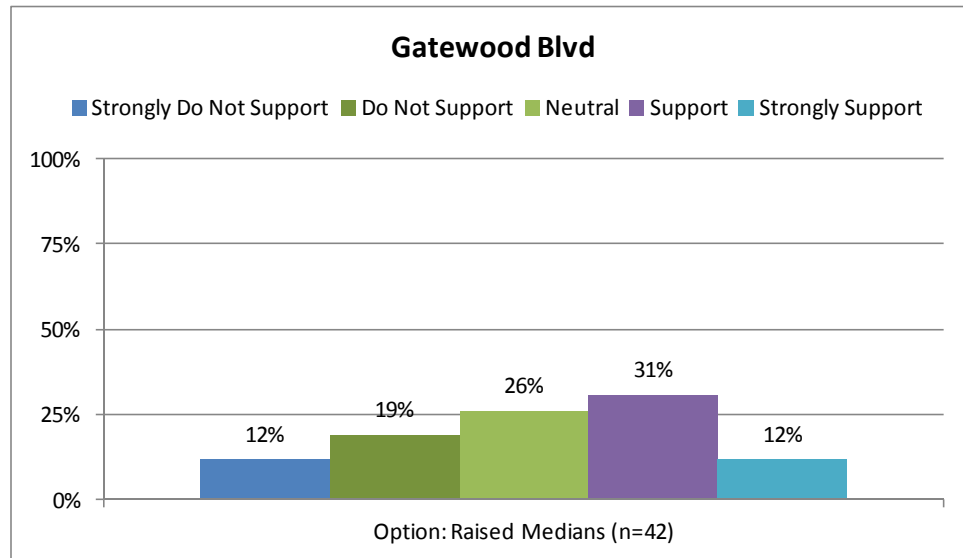
Reduce speed limit to 30km/h. Mailbox going in at that corner, need high visibility signs at crosswalks like the ones in Spruce Grove. There's two bus stops here!
Mailbox problem.
Watch for mailbox placement, will cause congestion.
Should have raised intersection.
raised crosswalk welcomed at the park, other than that - no comment.
Street very narrow with parking on both sides. We avoid it now.
No curb extensions.
Don't need curb extensions at corners by cul de sac.
Very good plan.
I do not travel this road. Don't find it effective.
Raised crosswalk only.
Watch for placement of Canada Post Boxes.
I like raised crosswalks - not sure about curb extensions. What about larger sidewalks?
Crosswalks are a good idea - I question the merits of curb extensions. No vert(ical?) deflections proposed?
Support raised intersection at Galaxy Way - curb extensions not necessary as road is narrowed.
No curb extensions.
Raised crosswalk ok.



Leave it alone.
Playground crosswalk should have pedestrian lights.
Can we widen the sidewalks?
Reduce speed to 30.
Raised walkways at corner crosswalks.



## **Station G**



**Figure 11**  
**Option on Gatewood Blvd**

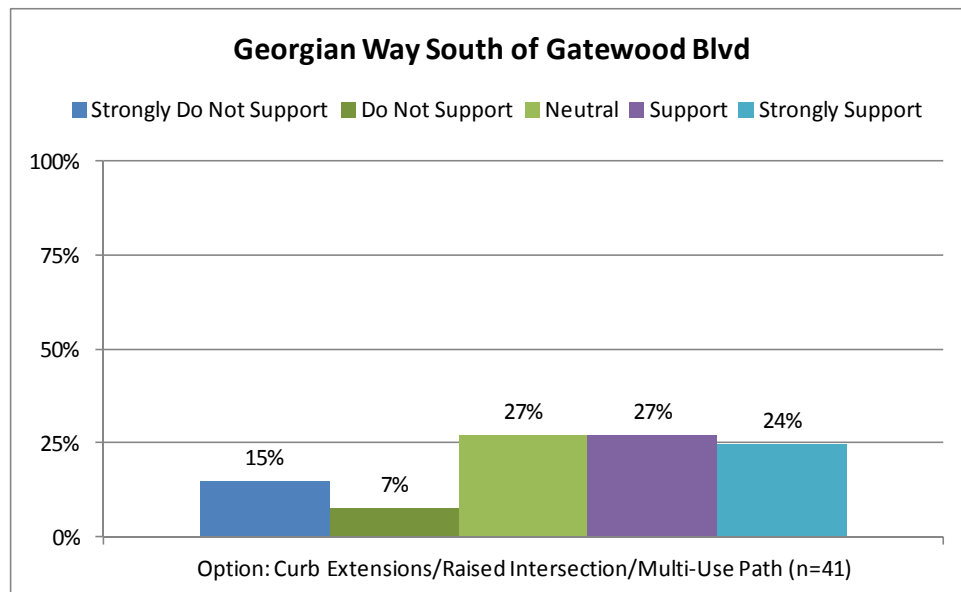
The option of Raised Medians was supported or strongly supported by slightly more respondents overall (43%) than those who indicated they do not support or strongly do not support the option (31%), while 26% indicated they were neutral.

### ***Comments***

Need flex space.
Not sure it will reduce short cutting?
Mall access is the problem.
Crosswalk lights could be installed. Raised medians, no parade on Canada Day?
Will stop people turning left into one way and reduce jaywalking.
Right angled curbs between Gatewood Place and Galaxy Way for pedestrian safety.
Doesn't look like enough calming for busy mall traffic.
Unnecessary obstacles. However, a raised pedestrian cross walk adjacent to Galaxy Way would better serve pedestrians.
Support raised median only. Suggest lights to facilitate left turns from mall to Sherwood Drive.
Narrowing roadway will impact semi's coming into shopping center.
No raised area to slow traffic down.
Not sure there is a significant problem.
Leave it alone.
Is more calming needed here? Raised sidewalks, two way traffic into mall ... Remove the one way.
Sherwood Drive and Gatewood is dangerous for left turns east - left turn lane is not far enough over, cannot see oncoming traffic.
Raised walkways at intersections.

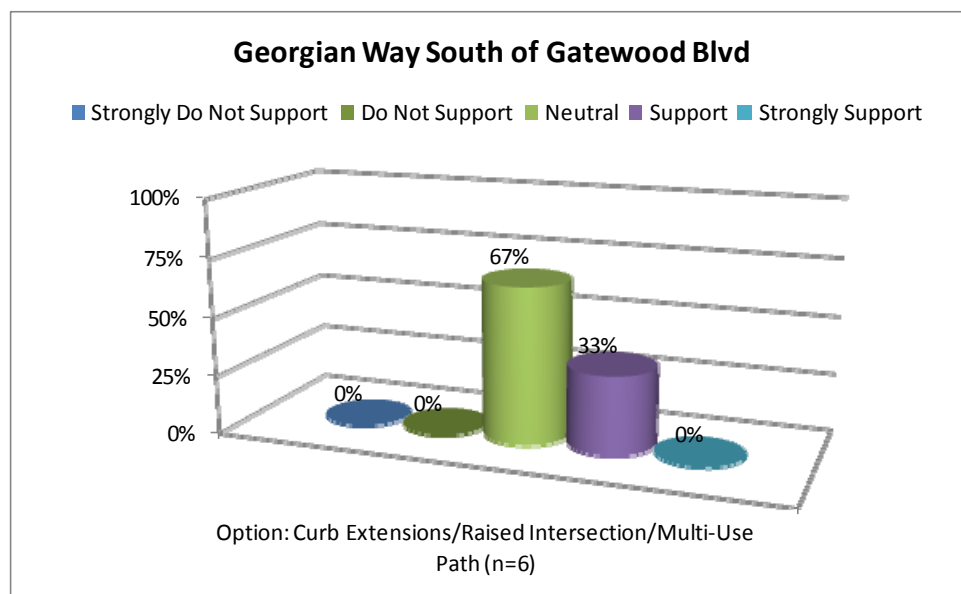


## **Station H**



**Figure 12**  
**Option on Georgian Way South of Gatewood Blvd**

The option of Curb Extensions/Raised Intersection/Multi-Use Path was supported or strongly supported by more respondents overall (51%) than those who indicated they do not support or strongly do not support the option (22%), while 27% indicated they were neutral.



**Figure 13**  
**Option on Georgian Way South of Gatewood Blvd**  
**by Residents**

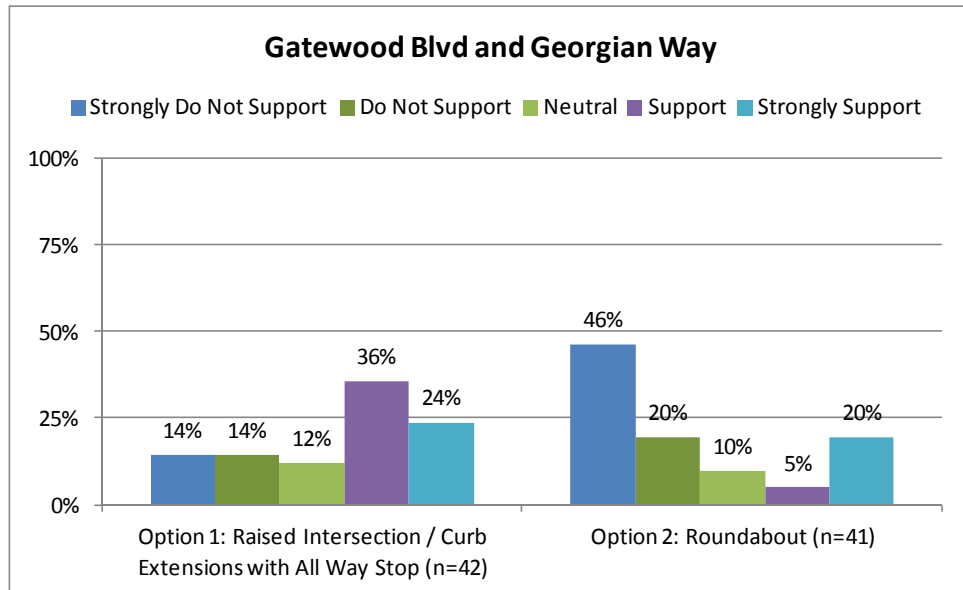


Among respondents who answered this question and who indicated they lived on Georgian Way, 33% supported or strongly supported the option of Curb Extensions/Raised Intersection/Multi-Use Path, while 67% were neutral.

### **Comments**

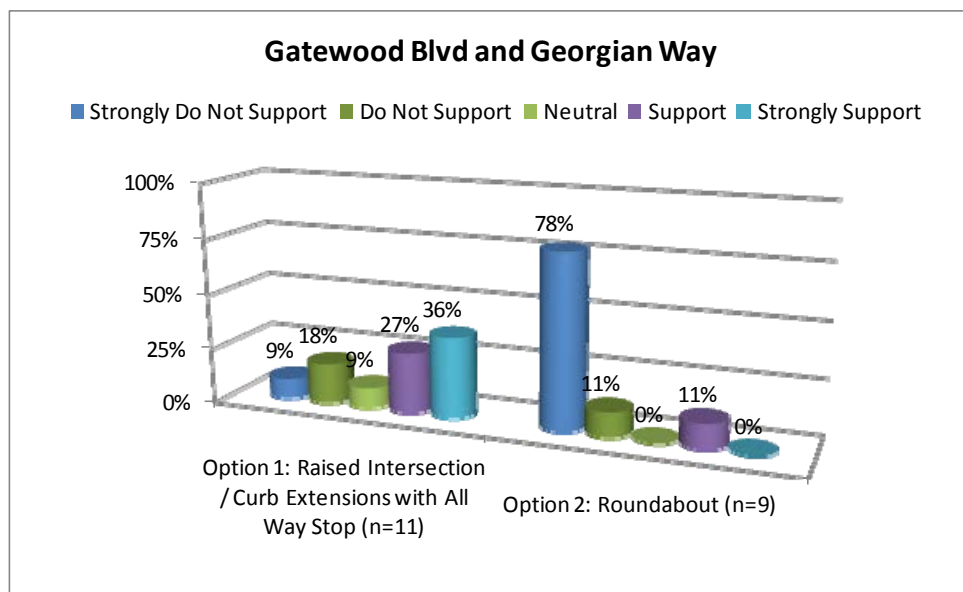
Nice but expensive.
A big problem with speeders, raise intersections.
Dislike raised intersections, like stop signs for side streets rather than yield signs.
Fantastic!
One raised intersection at Galveston would be a good idea in conjunction with community mail box at this intersection. This option is overkill.
Like it but concern regarding cost - \$525,000 seems like a lot of tax payer money.
Curb extensions will make things difficult for pulling RV's and 5th wheels.
No curb extensions.
No curb extensions.
Agree with raised intersections but not curb extensions.
One is okay, but overkill to have three.
Leave it alone.

## **Station I**



**Figure 14**  
**Options on Gatewood Blvd and Georgian Way**

Respondents overall identified Option 1 as their preference over Option 2, with 60% supporting or strongly supporting a Raised Intersection/Curb Extensions with All Way Stop. Only 25% supported or strongly supported a Roundabout. Further, 66% of respondents indicated they do not support or strongly do not support Option 2 compared to 28% who do not support or strongly support Option 1.



**Figure 15**  
**Options on Gatewood Blvd and Georgian Way**  
**by Residents**

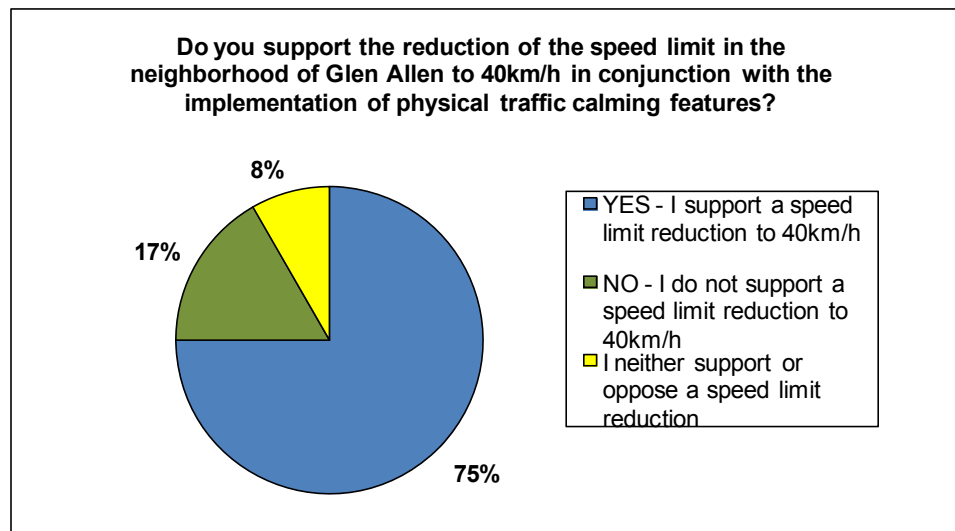


Among respondents who answered this question and who indicated they lived on Gatewood Blvd or Georgian Way, 63% supported or strongly supported Option 1 compared to 11% who supported or strongly supported Option 2. Further, 78% of residents indicated they do not support or strongly do not support Option 2 compared to 27% who do not support or strongly support Option 1.

### **Comments**

Option 1: Stop short cutting and reduce speed, ok. Option 2: Too expensive, too many stalls gone.
Dangerous intersection.
No curb extensions.
Prefer nothing.
I didn't realize it was a problem. But then I use it mostly during the day.
All way stop ok, no raised intersection. Roundabouts have big impact on nearby houses.
Roundabout is the only way.
Option 1 could jam up traffic all three ways.
Traffic circle looks nice!
My issue is drivers that want to get up to speed within 100 feet of intersection. The noise is quite loud (mostly truckers).
Just do three way stop.
Option 2: Huge impact on residents market value; safety concerns regarding backing out into a roundabout/crosswalk, excessive cost.
It needs a three way stop.
Extensions are going to look awful after the first winter - the roundabout is very poorly placed.
Existing stop from Gatewood onto Georgian is adequate. No other stop signs needed.
Suggest also limiting commercial vehicle parking close to stop signs.
Not needed.
Very high speeds in this area. Needs pedestrian lights.

## **Station J**



**Figure 16**  
**Speed Limit Reduction**

Respondents overall were strongly in favour of speed reduction, with 75% of respondents supporting a reduction to 40 km/h. Seventeen percent did not support the speed reduction, and 8% of respondents were neutral.

## ***Comments***

One owner thinks YES, one owner thinks NEUTRAL.
Perfect - and then have it enforced by the police. Write tickets!
Have police enforce.
Would it be enforced though?
A marked crosswalk on Glenbrook at Gilmore is really needed to cross to Gilmore Park. It's dangerous to cross.
It needs to be enforced by the RCMP so when the high flyers get enough tickets they might learn.
As any speed limit, it is only effective if it is enforced.
Very much need reduced speed.
Only if it comes with enforcement.
Enforce this with photo radar - old neighborhood, poor design, needs slower speed.
Speed reduction to 40km/h. No special calming features needed.
We don't drive much over 40km/h anyways, must be old fogies.
If it will be effective ok. A lot of people go 30-40km/h now.
We need enforcement.
It only slows the lawful drivers
This will help, but won't be perfect.
On a trial basis only - if it works, good. If not, revert to 50km/h.
Should be consistent throughout residential areas.
Enforcement is needed.
50 km/h is okay.



Not needed - enforce the present speed limit.
Strongly support.
Enforcement is needed.

## General Comments

Please call us! Robert & Adele Delplanque (no number given; 142 Galloway Drive).
Galloway Bay - only put curb extension on inside of curve (side is out bus stop, like bus stop here so do not move it). I would like 40km/h speed limits - warning signs when entering neighborhood of lower speed limit in the neighborhood. Three way stops and lighted flashing crosswalks at Galloway Drive and Glenbrook please. All times of day, left turn light going west on Baseline turning into Glen Allan at Glenbrook please. No Roundabouts!
Glenbrook Blvd and Graham RD should have a raised intersection which would give three areas to slow down on Glenbrook, or a raised crosswalk across Glenbrook.
Station A: Will traffic raise cause a problem at 116 and Galloway Drive with Parking for Accessible Van + wheelchair ramps, in front of house? (116 Galloway Dr).
Having lived on Galloway Drive from 1996, I find that especially in the past few years, a steady increase in traffic. I have observed a steady stream of traffic using Glencoe, Galloway, and Glenbrook to access Baseline Road (avoiding four steps of traffic lights). The major issue is the number of lights on Baseline Road - need longer left turn light to allow traffic from [cannot make out road] to Baseline, also sequencing of lights on Baseline, and motion sensors at intersections.
A speed bump would be better. A stop sign at corner of Galloway Drive and Glencoe Blvd.
The curb extensions on the east side of Galloway will remove the only street parking we have since there is also a bus stop across the street. We also think it will really not slow the traffic. Some form of speed table would slow traffic, and reduced speed limit would help more.
In my opinion the curb extensions do not work and the speed tables are not big enough. Curb extensions take away parking. You can phone me to talk about this - 780-464-6251 at home, or 780-242-1321 Cell.
Glen Allan residents are "trapped" in our corner due to increased traffic on Baseline and Sherwood Drive. We've had to change our typical routes in and out because there are no lights at Graham and Sherwood, or at Galaxy and Gatewood. Surely other sections of Glen Allan are similar and many residents have changed their typical routes resulting in increased traffic in Glen Allan. Just residents trying to get in and out! Please take a good look at Galaxy and Gatewood.
Require advance light on Baseline Road east of Glenbrook for a left turn.
Despite our address we are still equally affected by changes on the main roads as we use them every day to get to and from our home.
Enforcement of existing speed laws with more punitive fines.
Either use portable radar with the current speed limits to remind drivers of their actual speed and encourage them to slow down, or reduce the speed limits but without calming measures (physical).
Glenbrook/Georgian Way - fix the chronic ice problem at north east corner (new catch basin and sewer). It cost us one car in early 2000's. I don't live on Glenbrook! My objective is solely to get through Glenbrook south to Georgian east as safely and easily as possible.
Three or four way stop signs will cure most problems and cost the least. No curb extensions, as you have to pull out into oncoming traffic. More enforcement is required.
Dislike raised tables and curb extensions. They are hard to maintain, easily damaged by snow removal equipment, and get rid of a lot of parking. Three way stops would be effective (and cost effective), and they need enforcement to back it up.
Traffic lights would solve the problem at the main intersection (Glenbrook/Georgian). Stop signs would solve the problem at the others. You need sheriffs/police to patrol the areas and enforce the rules with tickets - people will take notice, and then raised medians, roundabouts.etc are not needed. These result in wear and tear on personal vehicles which



nobody takes responsibility for. Speeders will continue to speed just for the fun of it. Have you consulted with emergency vehicles, buses.etc as to their opinions about traffic calming in other areas? Particularly roundabouts?
Curb extensions - cement seems to have broken down. I hope this can be improved with landscaping. I like the traffic circles and reduced speed; it's about safety and walkability. I would like wider sidewalks.
Some very good options and cost estimates here. Please keep me/us posted on next steps - i.e. evaluation of options and support for same along with public communications of outcomes. Will there be additional enforcement associated with proposed stop signs and potential speed reduction?
Georgian way is like a drag strip in front of GARC and needs a speed table.
Concerns about homes losing easy access to driveways and parking, as well as the loss of value for sale of property. Seems like too many locations and options being considered - it's overwhelming. What about snow removal? Windrows on medians is a problem for removal.
I don't drive but use the transit to get around - circles are awful.
There is a group of people who have chosen alternate home routes to turn left on the lights than gamble on a left turn further down the road.
I would like to see no left turn for Westbound traffic on Baseline (turning onto Glenbrook; they are shortcutting). Should use common aesthetic styles throughout the community.
Also speed bump without extensions would be acceptable.
Station C: It's a safety issue backing into my driveway, will have to back up into a cross walk.
Option 2 eliminates my parking spots (unless you want to widen my driveway), option 1 would work but I would like to see a 'speed bump' or raised sidewalk on the south side of Gillingham Crescent to reduce the length of the "speedway". There is a lot of noise from vehicles leaving the intersection and trying to get to 50 (more like 60) within a short distance.
Raised crosswalks at Georgian and Glenbrook only. Lowest impact on residents, everyone's safety is considered, and it will slow traffic while still allowing for parking. - We accessed internet studies in the U.S. - results were that roundabouts in residential neighborhoods with marked crosswalks created a high risk to pedestrian safety, especially with handicapped and the elderly. Those who's properties are directly affected by a proposed roundabout are looking at a property value loss of approximately \$40,000-\$60,000 based on the assessment of a realtor in the past three weeks. In the fair interest of those of us affected, we request a financial commitment in writing in order to protect our investment. Buy us out, rebuild our properties, and allow us to move.
Why is the missed traffic calming south of Jean Vanier and Glen Allen School on Georgian way?
A problem/issues has been identified in Glenallen and we understand and appreciate that Council has an obligation to address the problem. In addition, we wish to point out that Council, as our elected officials, also has an obligation to us. Our expectation (which we feel is reasonable) is that council will make fair decisions that will address the problems/issues but not financially devastate some home owners. The roundabout is precedent setting on the "T" intersections; access to our homes will be affected. Huge losses in market value will occur (likely hundreds of thousands of dollars), is this fair?
The curb extensions will become an eyesore within a year or two. They will make the area look like a slum.
Can't get out onto Georgian Way, South has six cars parked and trees blocking the view.
30 km/h on (P4?) streets, 40km/h on (P3?) streets.
I would rather see raised crosswalks or speed tables along Georgian way - it appears that was given limited consideration. Also suggest limiting commercial vehicle parking along Georgian Way (e.g. trailers with skid steers, furnace trucks).

Do not like roundabouts. What about roads that will be used when this road calming gets implemented, like Glenridge Road.
Strathcona Country should purchase the home for sale on Glenbrook and Georgian to make room for the traffic circle and a community gathering spot. Would like to see wider sidewalks - thank you for traffic calming in our neighborhood!
Curb extensions - remember that snow has to be removed beside them, it's all too easy for the blade to break the concrete!
Glenbrook and Georgian Way, 7:30am to 4:00pm the traffic is going and coming from county employees (County Hall), mall isn't open early.
I think rather in an effort to increase safety, decrease speed, minimally impact residents and use money economically we should use raised platform crosswalks on alternating naturally existing corner crosswalks. Especially on the corner of Glenbrook and Georgian - but everywhere in the neighborhood. Easiest solution for everything!