

COUNCIL AGENDA

Date: April 14, 2025 Item: 4.



4.

DISTRICT OF WEST VANCOUVER
750 17TH STREET, WEST VANCOUVER BC V7V 3T3

COUNCIL REPORT

Date:	March 31, 2025
From:	Sean O'Sullivan, Senior Manager Roads & Transportation Planning, Design & Projects
Subject:	Glenmore Neighbourhood Traffic Calming
File:	09.1700

RECOMMENDATION

THAT:

1. The report dated March 31, 2025, titled "Glenmore Neighborhood Traffic Calming" be received for information.
2. Staff be directed to:
 - a. construct a 1.8 m wide gravel pathway on the south side of Morven Drive between the end of the existing concrete sidewalk and Glenmore Drive (approximately 75 m);
 - b. construct a 1.8 m wide gravel pathway on the east side of Glenmore Drive between Morven Drive and the Baden Powell Trail crossing (approximately 215 m);
 - c. construct a raised crosswalk across Glenmore Drive on the south side of the Glenmore Drive/Morven Drive intersection;
 - d. construct a raised crosswalk where Baden Powell Trail crosses Glenmore Drive;
 - e. install a rapid flashing beacon where Baden Powell Trail crosses Glenmore Drive;
 - f. install a rapid flashing beacon on the south side of the Glenmore Drive/ Morven Drive intersection;
 - g. paint edge lines on Glenmore Drive to create 3.3 m wide travel lanes between Morven Drive and the Baden Powell Trail crossing; and
 - h. prohibit parking on the east side of Glenmore Drive.
3. Council specify the preferred funding source for the project.

1.0 Purpose

The purpose of this report is to respond to Council’s motion from the November 18, 2024, regular meeting directing staff to investigate traffic calming and pedestrian infrastructure improvements on Glenmore Drive between Morven Drive and the Baden Powell Trail crossing

2.0 Legislation/Bylaw/Policy

Does not apply.

3.0 Council Strategic Objective(s)/Official Community Plan

Council’s Strategic Plan

This report aligns with Council’s Strategic Objective to:

- | | |
|-------------------|---|
| Goal 4.0 Mobility | Enhance the mobility within the community. |
| Objective 4.3: | Diversify, expand, and improve the safety and appeal of active transportation options through infrastructure upgrades and traffic management solutions. |

4.0 Background

Description - Glenmore Drive between Morven Drive and Baden Powell Trail is a low volume residential local road that is approximately 7 m wide and slopes approximately 3% to the south, **Figure 1**. The north half of the roadway is straight, and the south half has a slight curve. On the east side, there is a gravel and paved boulevard along the north half of the road and along the south half there is a narrower gravel and paved boulevard with vegetation and landscaping encroachments. On the west side there is a wide gravel and paved boulevard with mature vegetation and landscaping encroachments.

Land Use – On the east side of Glenmore Drive there are 17 single family and duplex residences. On the west side of Glenmore Drive there are 5 fourplexes. The Collingwood School – Morven Campus and artificial turf sports field is on the west side of the fourplexes.

Sidewalks – There are no sidewalks on Glenmore Drive between Morven Drive and the Baden Powell crossing. With parking, landscaping, and vegetation encroachments, pedestrians must walk along the edge of the roadway. The 2015 Pedestrian Network Study did not identify Glenmore Drive as a top priority location for sidewalk improvements. The 2024 Sidewalk prioritization process also did not identify Glenmore Drive as a top priority location for sidewalk improvements.



Figure 1 - Aerial Map of Glenmore Drive and Collingwood School – Morven Campus.

Parking - On the east side, parking is prohibited 8 am to 5 pm on school days but residents are exempt from the restriction. On the west side, there are no parking restrictions. During daytime site visits, 1 or 2 vehicles were observed parking on the east side and 10 to 12 vehicles were observed parking on the west side.

Traffic Volumes - Glenmore Drive is one of two primary routes to Collingwood School – Morven Campus. During drop off and pick up times traffic volumes peak at about 270 vehicles/hour, **Figure 2**. Outside the pickup and drop off times, the average daytime traffic volume is 55 vehicles/hour. During the week, the total traffic volume average is 1,155 vehicles per day and on the weekend the average is 467 vehicles per day.

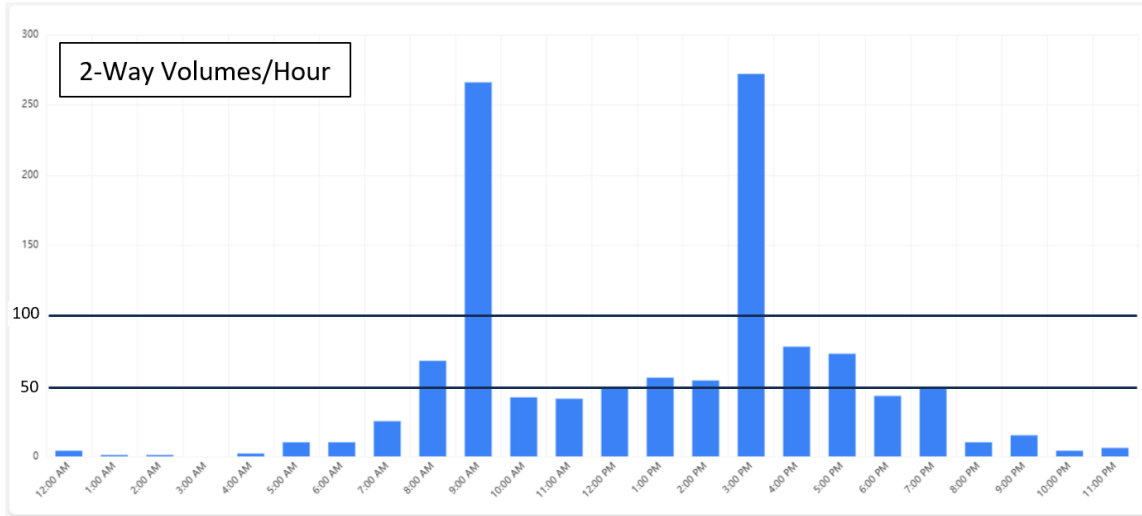


Figure 2 - Glenmore Drive 2-way Traffic Volume per Hour on Wednesday May 29, 2024.

Speed – The average speed for the week of May 25 to May 31, 2024, was between 35 km/hr and 38 km/hr. The 85th percentile speed, which is the speed that 85% of vehicles were travelling less than, is between 45 km/hr and 47 km/hr. Approximately 5% of traffic was observed exceeding the speed limit, 69% was travelling between 31 and 50 km/hr, and 27% was travelling 30 km/hr or less, **Table 1**.

Table 1 - Observed Speeds May 25 to 31, 2024

Speed	Vehicles/Day						
	25-May Saturday	26-May Sunday	27-May Monday	28-May Tuesday	29-May Wednesday	30-May Thursday	31-May Friday
<31 km/hr	85	29	97	101	129	106	138
31 km/hr - 40 km/hr	82	72	229	232	217	178	219
41 km/hr - 50 km/hr	46	39	72	118	103	100	80
51 km/hr - 60 km/hr	9	9	15	18	11	27	20
61 km/hr - 70 km/hr	1	0	0	1	1	1	1
71 km/hr - 80 km/hr	0	0	0	1	0	0	0
Total - vehicles/day	223	149	413	471	461	412	458

% Exceeding the Speed Limit	4.4%
% between 31 km/hr and 50 km/hr	69.1%
% less than 31 km/hr	26.5%

Collisions – In the 5 years between Jan 2019 and Dec 2023, there were 2 collisions reported to ICBC. One involved a person backing out of their

driveway and hitting a tree and the other involved a southbound vehicle on Glenmore Drive hitting the side mirror of a parked vehicle.

4.1 Previous Decisions

Council, at its November 19, 2024, regular meeting, passed the following resolutions:

THAT

1. the October 28, 2024, document from the Collingwood School Task Force titled Glenmore Neighbourhood Improvements (Appendix A), forming part of the November 18, 2024 regular Council meeting agenda package, be received for information; and
2. staff be directed to explore the proposed improvements, and report back to Council on feasibility and cost estimates for the following:
 - a. new gravel sidewalks on west side of Glenmore Drive between Morven Drive and Glenmore Drive;
 - b. new 30km/h speed zone on Glenmore Drive between Morven Drive and Deep Dene Road;
 - c. new Speed Hump and new Crosswalk on Glenmore Drive at intersection with Cleveland Dam Trail; and
 - d. new Speed Hump at existing crosswalk on Glenmore Drive at intersection with Baden Powell Trail;
 - e. the improvements to be paid for from CAF from the recently approved Glenmore development Community Amenity Contribution.

4.2 History

Resident Request – The residents near Collingwood School – Morven Campus have requested that Council implement several traffic calming measures around the school:

- gravel sidewalk installation
- 30 km/hr speed zone
- speed humps
- make Morven Drive one way

5.0 Analysis

5.1 Discussion

Pedestrian Walkway

Staff considered two options for the pathway on Glenmore Drive, **Figure 3**. The first option is to construct the sidewalk on the west side of the roadway and the second is to construct the pathway on the east side.

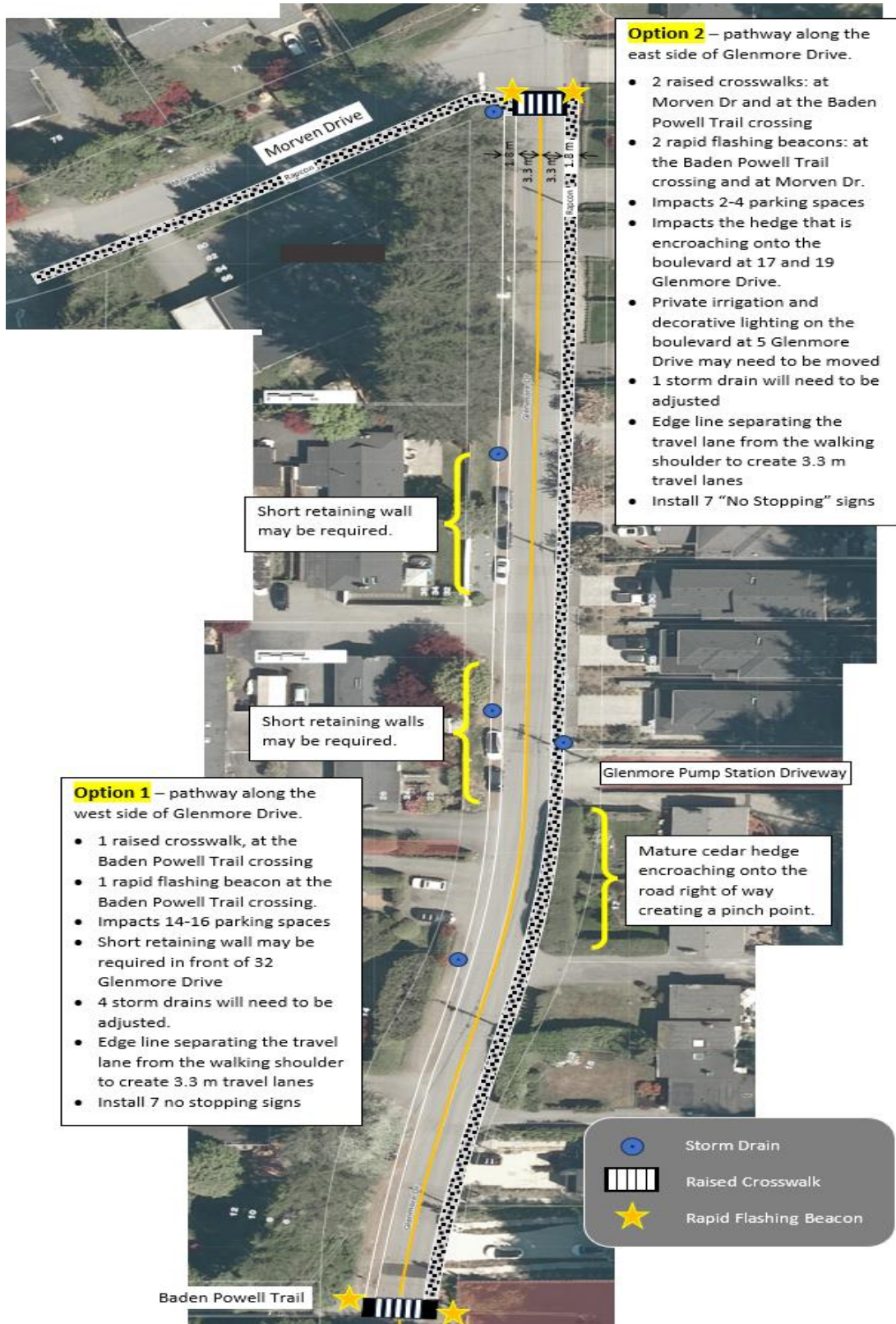


Figure 3 - Glenmore Drive Options

During the site visit, it was observed that:

- there are significantly more parking spaces available on the west side of Glenmore Drive because there are fewer driveways and landscaping encroachments;
- there are 4 storm drains on the west side of Glenmore Drive indicating that most of the rain runs off the road to the west side;
- there is 1 storm drain on the east side of Glenmore Drive;
- there is large cedar hedge encroaching onto the boulevard on the east side of Glenmore Drive that will be impacted by the construction of a pathway. During construction efforts will be made to minimize impact to the hedge;
- there is a flexible irrigation line and temporary landscaping lighting encroaching onto the boulevard on the east side of Glenmore Drive; and
- low retaining walls may be required on the west side of Glenmore Drive in front of one or two properties to construct the pathway.

With consideration to existing site conditions, staff are recommending the pathway be constructed on the east side of Glenmore Drive for the following reasons:

- Constructing the pathway on the west side of the Glenmore Drive would result in the loss of more parking spaces than if it was constructed on the east side. Because of the density of the residences, there may be high demand for on street parking for visitors and for service delivery vehicles such as Uber, Skip the Dishes, and Amazon.
- If the pathway is constructed on the west side, the catch basins may be tripping hazards and during intense rainfall events, the runoff from the road may damage the gravel pathway and force gravel into the catch basins.
- There has been no redevelopment on the west side of Glenmore Drive so there is greater opportunity for future sidewalk construction as part of redevelopment than on the east side.
- There are a limited number of non permanent encroachments on the east side of Glenmore which are relatively minor and impact of removal of which can be easily mitigated except for a large hedge in front of one property on the east side. The hedge is a mature cedar hedge that can only be trimmed 10 to 15 cm before the dead old growth is exposed, affecting the appearance.

Speed and Traffic Calming

The traffic volume and speed data collected showed that less than 5% of vehicles are exceeding the speed limit and that outside the school pick up and drop off times the traffic volumes are low. The data also showed that there has only been one collision in the past five years involving a vehicle on Glenmore Drive.

When setting speed limits, it is important to have consistency, roads with a similar environment should have a similar speed limit. If there is no connection between the driving environment and the speed limit, drivers will ignore the posted speed limit and drive at a speed they feel comfortable with which can lead to a higher collision risk on roads where the conditions are such that a lower speed is critical. Because this section of Glenmore Drive is a low volume, residential roadway without difficult driving conditions and where more than 2/3 of drivers are driving between 30 and 50 km/hr and less than 5% are exceeding the speed limit, reducing the speed limit is not recommended.

The speed limit is reduced on Morven Drive in front of the school where the highest congestion and activity is concentrated, and it is important to highlight to drivers that they are more likely to encounter difficult or unusual conditions.

Because staff have recommended constructing the gravel pathway on the east side of Glenmore Drive, staff have also recommended that raised crosswalks be constructed on the south side of the Glenmore Drive / Morven Drive intersection and at the Baden Powell Trail crossing. The raised crosswalk at the Glenmore Drive/Morven Drive intersection will connect the pathway on the south side of Morven Drive to the pathway on the east side of Glenmore Drive.

With no pathway on the west side of Glenmore Drive, there are limited benefits to installing a raised crosswalk midblock between Morven Drive and the Baden Powell Trail crossing. Pedestrians should be encouraged to walk along the pathway and cross Glenmore Drive at the crosswalks at the Morven intersection or at the Baden Powell Trail crossing. The two raised crosswalks, approximately 215 m apart, should reduce the speeds of the 5% of vehicles that are exceeding the speed limit.

Since there is limited lighting on Glenmore Drive, particularly at the Baden Powell Trail crossing, staff are recommending that rapid flashing beacons be installed at the raised crosswalk at the Baden Powell crossing. Because of the trees and the road environment, there are few indicators that there is a trail crossing. Rapid flashing beacons actively alert drivers of a pedestrian crossing or about to cross the road which significantly increases the likelihood of a driver yielding to a pedestrian and reducing the collision risk.

While there is a streetlight at the Glenmore Drive/Morven Drive intersection, because the intersection is close to a school, staff are

recommending that a rapid flashing beacon be installed at the Glenmore Drive/Morven Drive raised crosswalk, as an enhanced safety feature and to provide consistency for the crosswalks on Glenmore Drive,

Staff are recommending that parking be prohibited on the east side of the Glenmore Drive to ensure the pathway is always available for pedestrians and to minimize the damage that can be done by vehicles driving over or parking on the gravel pathway. This should have a minimal impact because the east side of Glenmore Drive only has a few parking spaces because of the number of driveways and landscaping on the boulevard. In addition, on the east side, parking is prohibited from 8 am to 5 pm on school days (residents are exempt). Parking is not regulated on the west side of Glenmore Drive.

To clearly define the travel lanes, the pathway on the east side of Glenmore Drive, and the parking shoulder on the west side, staff are recommending that white edge lines be painted on Glenmore Drive between Morven Drive and the Baden Powell Trail crossing. The edge lines will reduce the width of the travel lanes to 3.3 m.

5.2 **Climate Change & Sustainability**

By constructing a gravel pathway, raised crosswalks, and installing rapid flashing beacons, residents may feel more comfortable walking in the community which may contribute to increased use of transit and walking as a local recreation option.

5.3 **Public Engagement and Outreach**

Staff met on with several residents in 2024 to walk the area and to talk about their concerns. Residents also wrote to Council to request changes to address their concerns. Before implementing changes approved by council, staff will consult with residents that will be directly impacted by the changes to keep them informed, listen to and acknowledge concerns and aspirations, to provide feedback on how their input influenced the work, and to provide a construction schedule.

5.4 **Other Communication, Consultation, and Research**

The construction cost estimates were developed in consultation with the District’s construction contractor.

6.0 **Financial Implications**

The estimated cost to construct Option 2 (east side pathway) is \$88,000. The costs are detailed in Table 2. The anticipated annual maintenance is \$4,000. Depending on the intensity of rainfall, how road run off is channelled, and how frequently vehicles park on or drive over the gravel pathway, District staff may need to repair the pathway a couple of times a year.

Table 2 – Option 2 Cost Estimate

Item	Cost	Description
Construction	\$55,288	Includes: <ul style="list-style-type: none"> • constructing gravel pathway • trimming encroaching vegetation • constructing 2 raised crosswalks • adjusting storm manhole • relocating irrigation and landscape lighting on the boulevard • pavement markings
District to supply recycles material	\$1,000	recycled asphalt
Install Rapid Flashing Beacons	\$17,000	2 sets of rapid flashing beacons
20% contingency	\$14,658	accounts for cost increases and unexpected conditions
Total	\$87,946	

Typically, this type of project would be funded through the Asset Levy; however, it is not currently identified within the 5 year capital plan. Should Council choose to proceed, alternate funding sources such as the community amenity contribution reserve or reprioritization and deferral of an existing planned capital project could be used to fund the project.

7.0 Options

7.1 Recommended Option

THAT:

1. The report dated March 31, 2025, titled “Glenmore Neighborhood Traffic Calming” be received for information.
2. Staff be directed to:
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 - h. prohibit parking on the east side of Glenmore Drive.
3. Council specify the preferred funding source for the project.

7.2 **Considered Options**

Council may request further information or provide alternative direction.

8.0 **Conclusion**

The proposed changes to Glenmore Drive between Morven Drive and the Baden Powell Trail crossing will provide a more comfortable walking environment.

This work is not currently in the 5-year capital plan, funding sources such as the community amenity contribution reserve or reprioritization and deferral of an existing planned capital project could be used to fund the project. Staff are requesting direction on the preferred funding source for the project should Council wish to proceed with the project.

Author:



Sean O'Sullivan, Senior Manager Roads & Transportation Planning,
Design & Projects

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