

THE CORPORATION OF THE TOWN OF GEORGINA

REPORT NO. OI-2024-0013

**FOR THE CONSIDERATION OF
COUNCIL**

November 20, 2024

SUBJECT: UPDATE ON THE LAKE DRIVE IMPROVEMENT PROJECT – PHASE 1

1. RECOMMENDATION:

- 1. That Council receive Report No. OI-2024-0013 prepared by the Capital Delivery Division, Operations & Infrastructure Department, providing an update on the Lake Drive Improvements Project – Phase 1 and summarizing the preliminary design;**
- 2. That the business case and associated funding request for construction of the first phase of improvements to Lake Drive be considered during Council’s 2025 budget deliberations (25-CI-OI-14); and,**
- 3. That staff provide an update report at the time of tendering which will serve to launch a public communication and education campaign regarding the Phase 1 seasonal reconfiguration of Lake Drive.**

2. PURPOSE:

To provide an update on the progress of work to implement the first phase of improvements to Lake Drive, summarize the preliminary design and outline next steps in the project.

3. BACKGROUND:

Lake Drive is a popular corridor in the Town of Georgina, attracting pedestrians, cyclists, and vehicle drivers who use it for both recreational purposes and local drives. Its stunning views of Lake Simcoe and access to various community amenities and public parks make Lake Drive a popular location for residents and tourists alike.

However, concerns have long been expressed regarding the configuration of portions of Lake Drive that pose problems for the mixed use of pedestrians, cyclists, and vehicular traffic. Various plans that included community surveys such as the Active Transportation Masterplan (2014), Safe Streets Committee recommendations, Council recommendations, the Waterfront Parks Masterplan (2024) propose general support for exploring solutions regarding this configuration.

To examine ways to address these concerns, staff were requested to undertake a study of Lake Drive as described in capital initiative business case 22-CI-OI-11. Commencing in February 2023, the Town carried out the “*Lake Drive Functional Assessment*” planning study (“Study”). The primary objective of the Study was to assess how best to enhance the safety and recreational use of Lake Drive for all users by addressing the known long-term problems through opportunities for traffic calming and traffic management while supporting active transportation, enjoyment of the waterfront and economic development.

In November 2023 the Study was completed. For reference, complete project documentation of the prior Study can be accessed online at Georgina.ca/Study.

Based on the results of the Study, it was proposed that the first phase of improvements to Lake Drive should include a single, one-way (west to east), general purpose vehicular lane and a bi-directional, multi-use pathway for pedestrians and cyclists (see **Figure 1**) along a portion of Lake Drive. This new configuration would be implemented seasonally, during only the summer months which historically experiences peak recreational traffic. Lake Drive would then be returned to standard two-way vehicular traffic during the remainder of the year.



Figure 1 – Conceptual Rendering of Seasonal Configuration

The limits of the proposed seasonal one-way vehicular traffic configuration were defined as encompassing 11.2 km of Lake Drive extending from Varney Road/Metro Road to near Dalton Road (see **Figure 2**).



Figure 2 – Proposed Location of Project

In its 2024 budget, Council approved business case 24-CI-OI-24, directing staff to proceed with design of the first phase of Lake Drive improvements. Staff developed and conducted a competitive procurement process to engage a well-qualified engineering consultant to provide the following services:

- Overall project management, project administration and communications management;
- Pre-design activities including: background review, investigations, communications planning, analyses of various preliminary design options, preparation and submission of technical memos, stakeholder engagement and a pre-design report describing the preliminary design to carry forward into detailed design;
- Detailed design activities including: preparation and submission of 60% and 100% design packages;
- Tendering support;
- Construction phase project activities (Provisional); and,
- Post-construction warranty support (Provisional).

The following were emphasized as key success factors for the project:

- Minimize adverse impacts on firefighting and emergency paramedic response travel times;
- Continued efficient vehicular traffic access to residential and commercial properties;

- Clear, unambiguous signage and other user directional features;
- Stakeholder engagement and communications;
- Safe integration of the planned seasonal lane re-configuration with driveways, intersections, other crossings and transition zones;
- Implementation of local traffic calming measures where beneficial;
- Coordination with on-going development of related Town projects; and,
- Establishment of an efficient and cost-effective method for seasonal transitions of the lane re-configurations.

The scope length (11.2 km), number of conflict points and amount of public interest has required heavy emphasis on the pre-design activities ensuring existing services, consultations, feasibilities, response times and conflict point resolution (intersections) are considered prior to finalizing the detailed design.

4. **ANALYSIS:**

In the competitive procurement process, Chisholm Fleming & Associates (“CFA”) achieved the highest overall evaluated score taking into account qualifications, technical and financial criteria. In June 2024, the Town awarded CFA the project to provide engineering services for the “Lake Drive Improvements Project – Phase 1”. The following briefly summarizes the progress of work achieved and major outcomes arrived at to this point in the project.

Tasks Completed to Date

As of the date of this report, CFA has completed the following tasks:

- Background information review and reporting including all relevant previous studies, drawings, surveys, records of complaints/floods/work orders and relevant design guidelines (TAC, OTM etc);
- Development of a communications management plan;
- Various investigations and reporting including:
 - Site inspections/observations and field measurements;
 - New traffic data acquisition
 - Compilation and analysis of updated traffic data;
- Pre-design assessments including:
 - Potential impacts of road re-configuration on emergency response with identification and consideration of potential mitigating alternatives;
 - Lane separation options;
 - Traffic calming options;
 - Two-way to one-way transition zone options;
 - Potential impacts on traffic movements for various types of vehicle road users;
 - Potential impacts on local residents in terms of school bus pick-ups, waste collection and postal delivery;
 - Parking impacts and needs;
 - Town operational impacts and needs;
- Preparation and submission of a draft technical memo documenting: analyses, evaluation and identification of preferred options; and,

- Conduct design-focused workshop discussions with key stakeholder groups to receive feedback and help finalize the preferred options to carry forward into detailed design.

Key Outcomes

The following summarizes some of the major outcomes resulting from completion of the above tasks:

Emergency response assessment:

- Emergency response travel times are affected by available routes, speeds, and traffic congestion among many other factors.
 - With the exception of Metro Road, all other roads in the area are low speed, lower volume local roads. Metro Road provides a higher speed, higher volume arterial as a by-pass to Lake Drive.
 - In the western portion between Varney Road and Civic Center Road, Lake Drive has total of 12 intersecting cross-streets, 6 of which outlet to Metro Road or other alternate routes.
 - In the eastern portion between Civic Centre Road and Dalton Road, Lake Drive has a total of 25 intersecting cross-streets, 14 of which outlet to Metro Road or other alternate routes.
 - Traffic calming is essential to the success of limiting speeds within the project limits. Traffic calming could have an impact on emergency services response times, but will be implemented to ensure this impact is reduced or eliminated.
 - Multi-use path separation strategies could impact congestion around an emergency response scene. Internal operational changes may be required to increase awareness of this possibility.
 - Theoretical modeled response times from station Keswick 1-4 showed no change from the creation of an east-bound one-way on Lake Drive. Theoretical modeled response times from Sutton 1-6 showed some impact, and consequently, modelling and assessment of response travel times in this report focused on station Sutton 1-6.
- **Figure 3.1** represents theoretical modelled emergency response travel times (in minutes) from station Sutton 1-6 based on the current “as-is” two-way configuration of Lake Drive (limited max speed 60kmh).

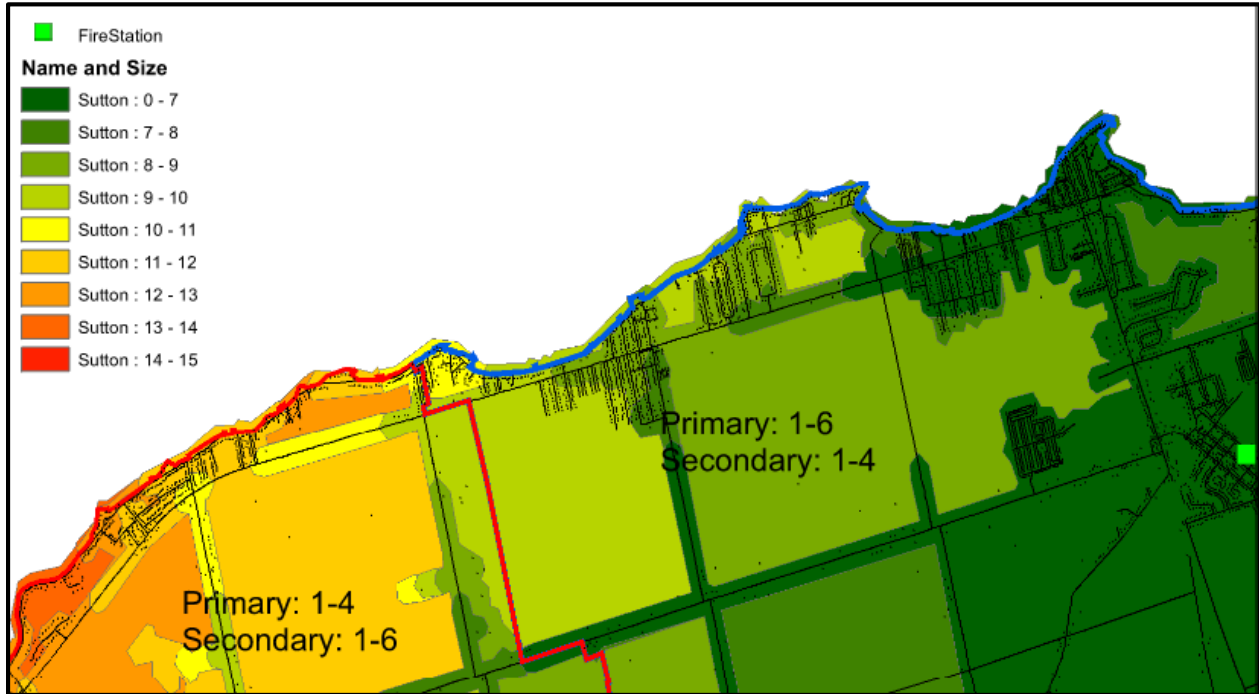


Figure 3.1 – Modelled Emergency Response Travel Times – Current Two-way Configuration

- **Figure 3.2** shows results of the same theoretical modelling applied to the proposed 11.2 km east-bound, single lane one-way segment of Lake Drive from Varney Road to Dalton Road. This model reveals projected minor increases in emergency response travel times from Sutton 1-6 in some areas.

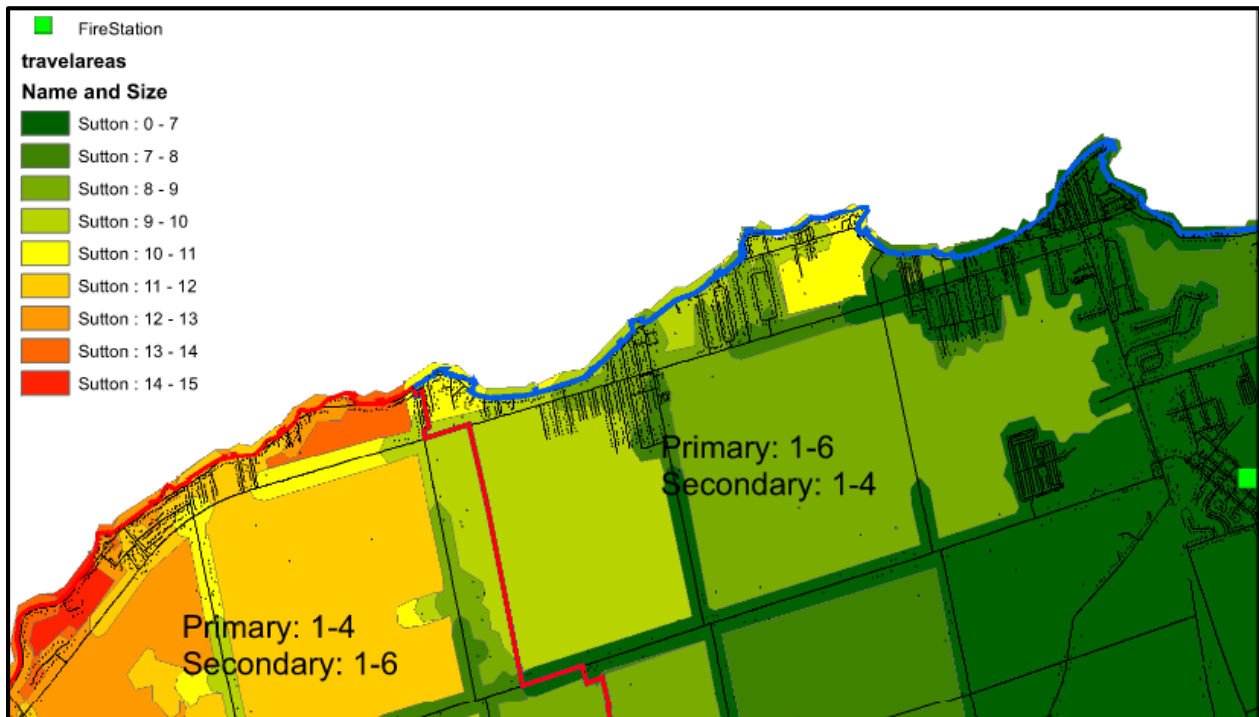


Figure 3.2 – Modelled Emergency Response Travel Times – Seasonal One-way Configuration

- Options to mitigate emergency response travel time impacts were identified and qualified, including:
 1. Establishing a By-Law allowing emergency vehicles to travel within the multi-use path (common in other jurisdictions);
 2. Create emergency vehicle only access points; and,
 3. Revise the phase 1 one-way segment length, start, direction and end locations to reduce impact to emergency response times.
- **Figure 4.1** - derived from Station 1-6 theoretical response time model data - identifies the areas (red polygons) where response travel time impacts are projected to occur, along with explanation of the specific mitigation options that are available.

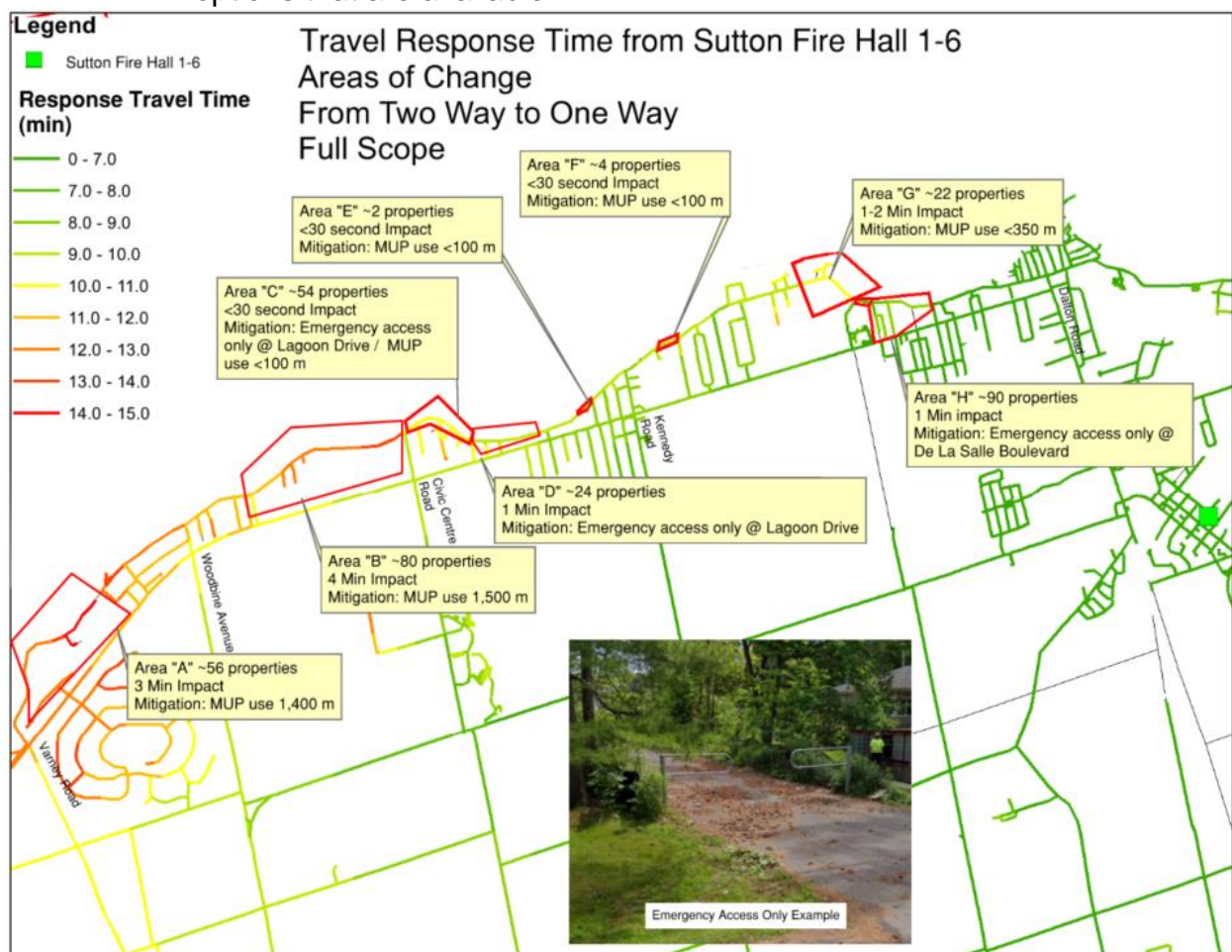


Figure 4.1 – Travel Response Time Impact Areas and Mitigations

- Below is a summary of the impacts associated with the 11.2 km one-way MUP scenario, and how the mitigation strategies reduce or eliminate travel time impacts. It is noted that there are approximately 1,377 properties in the assessed area, being Varney Road in west, Metro Road in south, Dalton Road in east, and Lake Simcoe to the north):

1. West of Civic Centre Road:
 - Primary Fire response is from Keswick Fire Hall 1-4.
 - Implementation of one-way has minor impacts from primary response.
 - Approximately 136 properties (10.0%) have impacts to secondary response up to 4 minutes with a one-way implementation. These properties are located west of Civic Centre Road.
 - Available mitigations include allowing fire trucks to drive in the multi-use-path (MUP), and / or construction of an emergency access only extension at Trivett's Road.
 - These mitigations provide only limited reduction in response travel times.
 - These mitigations require longer travel time in MUP (up to 1,500 m, no direct line-of-sight along travel path) and have a cost-prohibitive capital cost to extend Trivett's Road (approximately 250 m of road construction).
2. East of Civic Centre Road:
 - Primary Fire response is from Sutton Fire Hall 1-6.
 - Approximately 196 properties (14%) would be impacted from primary response.
 - Approximately 60 (4.3%) of properties would be impacted by less than 30 seconds
 - Approximately 114 (8.3%) properties would be impacted by up to 1 minute.
 - Approximately 22 (1.6%) properties would be impacted up to 2 minutes.
 - Available mitigation is to allow fire trucks to drive in the MUP and/or construction of new emergency only access points at Lagoon Drive and De La Salle Boulevard.
 - These mitigations require short driving distances in the MUP (less than 350 m, available line-of-sight along travel path) and have low capital costs to construct emergency vehicle only access points (approximately 10 m of road construction).
- **Attachment 1** provides a tabular summary of the analysis of the locations where a difference of theoretical response times (between two-way and one-way travel) exists and the mitigation measures required to address these impacts.
- The emergency response travel time assessment demonstrates the following:
 1. Fewer response travel time impacts (~10% of properties) are expected west of Civic Centre Road, however increases in this area are larger (4 mins) than east of Civic Centre Road.

2. Slightly more response travel time impacts (~14% of properties) are expected east of Civic Centre Road, however these increases are projected to be relatively smaller (2min or less).
 3. Application of mitigation options to the proposed one-way in the area west of Civic Centre Road would have a very limited effect in reducing any increased travel times, are less practical (long-distance MUP travel) and more costly.
 4. Application of available mitigation options in the area east of Civic Centre Road dramatically reduce emergency response travel time impacts, are practical to implement and are low cost.
- Based on the emergency response travel time assessment, the preliminary design approach has been revised to incorporate a combination of mitigation options (see **Figure 4.2**) applied at various points along the scoped length, including:
 1. Amending the originally conceptualized phase 1 one-way segment to now begin from Civic Centre Road to Dalton Road (6.4 km) eastward;
 2. Maintain two-way shared roadway by implementing a local bikeway¹ on the existing two-way segment from Varney Road to Civic Centre Road (4.8 km); and,
 3. Establishment of emergency-only accesses at Lagoon Drive and at De La Salle Boulevard.
 - This combination of options was found to dramatically reduce the travel time impacts for emergency responders and provide the greatest overall benefit to the Town in terms of lower costs, enhancing safety for recreational users of Lake Drive and ensuring continuity of the [Lake-to-Lake Trail](#). The 6.4 Km Multi-use path will be AAA (all ages and abilities) designed.
 - Future connection through signage and markings can connect the beginning of the one-way route to the ROC campus; linking the recreational amenities.
 - Revising the direction of one-way travel at various points within the scoped length was evaluated and found to provide no substantial emergency response time benefit and was not considered further.

¹ *Local bikeway: A street where cyclists share the roadway with motor vehicles. Traffic-calming elements limit motor vehicle speeds and volumes. Bicycle priority measures facilitate cyclists' safe crossing of streets and limit stops and delays. The facility includes measures to improve cyclist comfort: smooth surfaces; street lighting; wayfinding signage and pavement markings; and consistent paving material and colour. (The Can-BICS Classification System)*

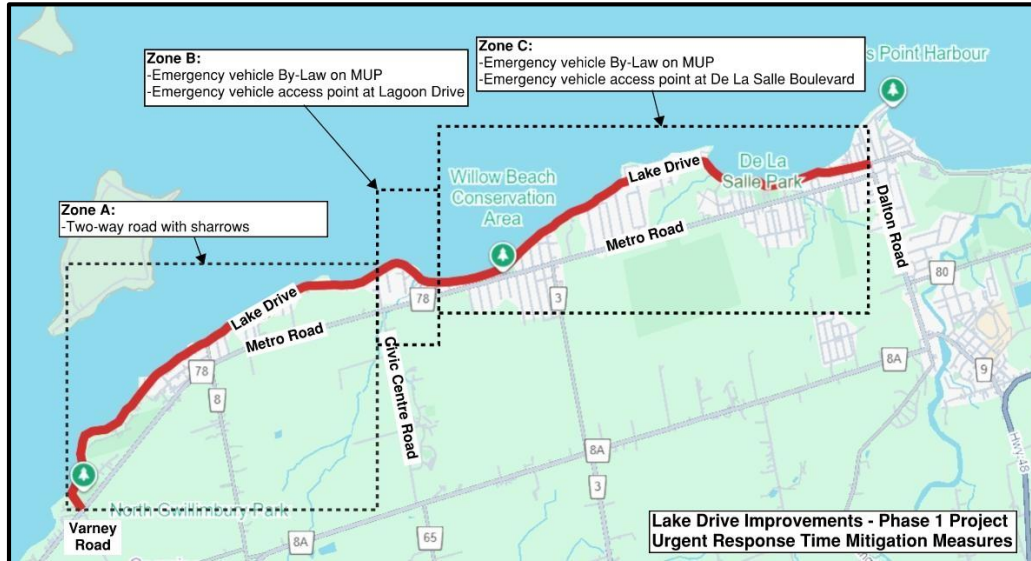


Figure 4.2 – Modification to Phase 1 Configuration

- *Seasonal lane configuration:*
 - The existing paved road width (ranging from approximately 6.0 to 7.0 m) will remain as-is. No additional land or widening is required as part of this project.
 - The seasonal multi-use path (Zone B & C) will occupy approximately 3.0 m of the existing westbound lane, thus limiting the number of conflict points along the route, and an additional 0.3 m centre buffer zone will be established to separate the multi-use path from the vehicle lane (see **Figure 5**).
 - Sharrows increase awareness of the need to share the road between vehicular users and cyclists, thereby enhancing safety. “Sharrows” (see **Figure 6.1, 6.2**) will be used in the two-way portions of phase 1;
 - in the east transition zone from South Drive to Dalton Road and
 - in the west segment from Varney Road to Civic Centre Road (Zone A).
 - Separation of pedestrians/cyclists from vehicular traffic is a key aspect of enhancing safety on Lake Drive. Various separation options were considered both independent and in combinations, including:
 - Painted buffers, parking lane, flex bollards, planters, pre-cast concrete curbs, rubber curbs, concrete barrier walls, guide rails, and mountable curbs;
 - Criteria applied to qualitatively evaluate these options included: degree of protection from vehicles, practicality of implementation and operation, compatibility with pedestrian use, capital costs, maintenance costs, applicable speed zones, and appearance/aesthetics;
 - It was concluded that flex bollard delineators combined with painted buffers offer the optimal combination of safety, practicality in terms of the seasonal nature of the lane re-configurations and

compatibility with the Lake Drive traffic speeds and volumes. Some areas may require alternative options for separation based upon roadside environment (ie. Driveways)

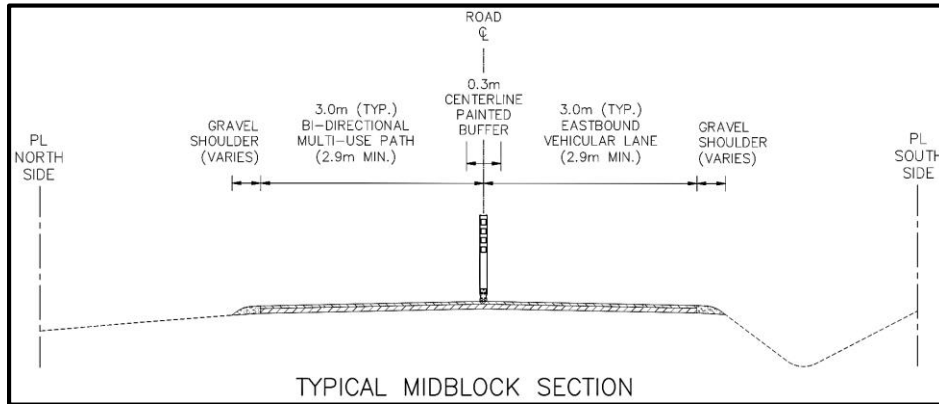


Figure 5 – Typical Seasonal Lane Configuration

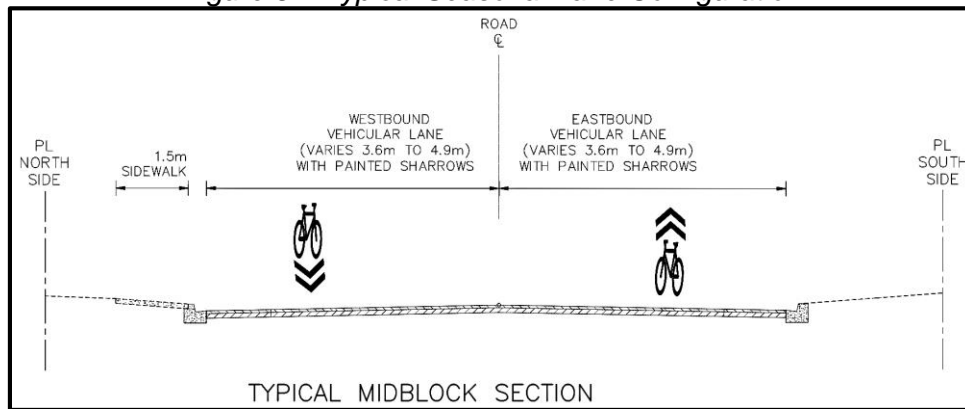


Figure 6.1 – Typical Use of Sharrows (South dr., eastward)

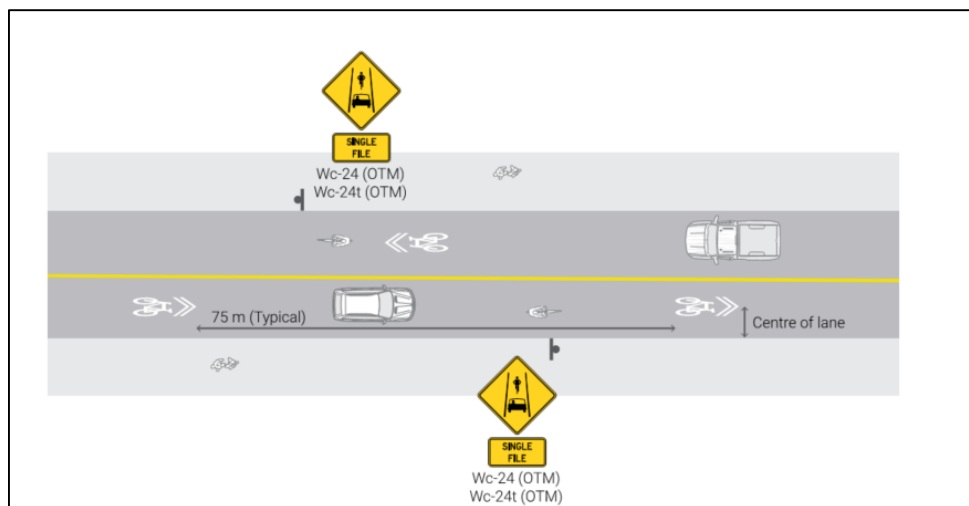


Figure 6.2 – Typical Use of Sharrows (single, narrow lane)

- *Intersections and transition zone:*
 - Typical treatments for driveways and intersections were developed to integrate with the seasonal road configuration (see preliminary alignments in **Figures 7.1, 7.2, 7.3 and 7.4**).
 - Spacing and positioning of lane separation flex bollards is adjusted at driveway to avoid interference with vehicle entrance/exit movements.
 - Signage and pavement markings will be used to enhance crossing locations

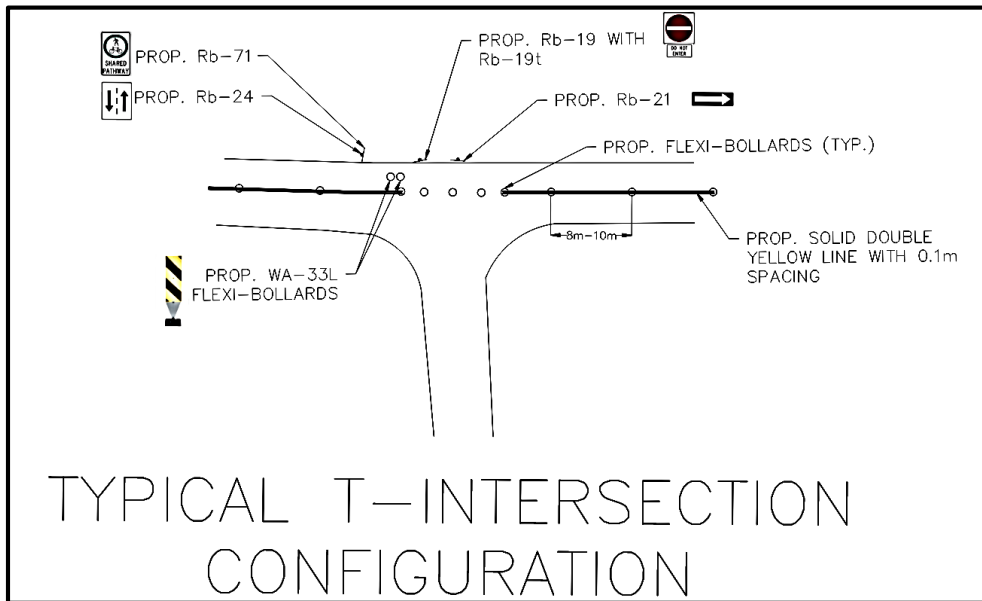


Figure 7.1 – Typical T-Intersection Treatment (South approach)

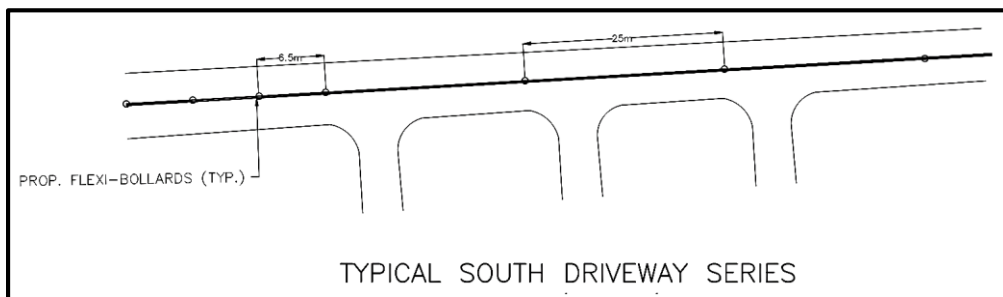


Figure 7.2 – Typical Bollard Layout (South Driveway Entrance)

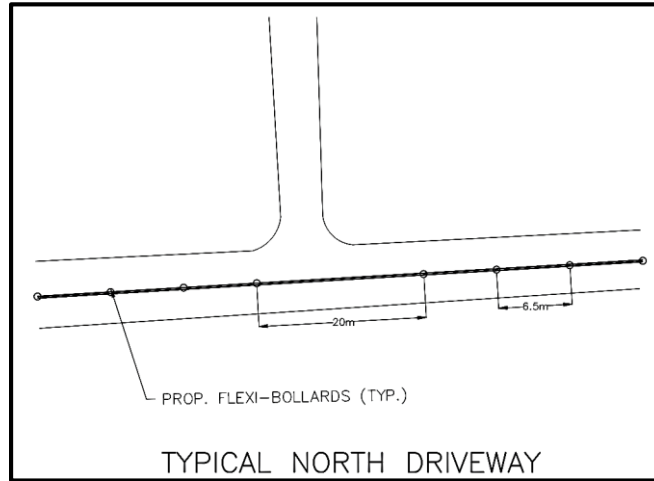


Figure 7.3 – Typical Bollard Layout (North Driveway Entrance)

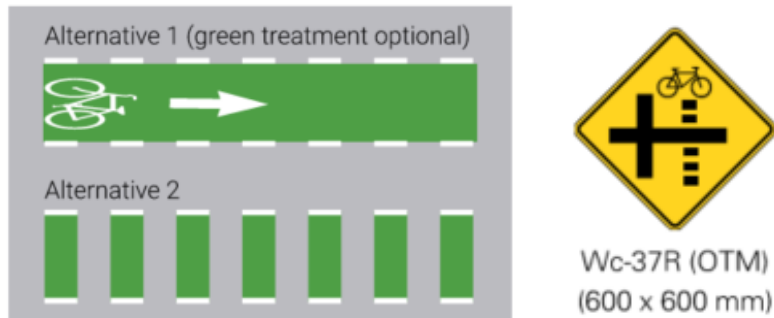


Figure 7.4 – Typical Intersection Crossing Markings and Signage (North Intersection Conflict)

- Two options were considered for creation of the zone to transition from one-way to two-way traffic: Ravenswood Drive to Dalton, or, South Drive to Dalton Road. The South Drive option was selected as it provides an outlet to Metro Road and allows shifting of pedestrian/cyclist traffic from the multi-use path to an extension of the existing sidewalk on the north side of Lake Drive. The transition zone (see **Figure 8**) will include:
 - Signage on Dalton Road and Lake Drive providing advance indications of the upcoming one-way.
 - Sharrows in the two-way lanes between South Drive and Dalton Road.
 - Stop controls to prevent vehicles from proceeding the wrong way.
 - Extension of the existing sidewalk on the north side of Lake Drive to meet the end of the multi-use path.
 - Flex bollard delineators directing west-bound vehicles onto South Drive.
 - A strategy to reduce overall AADT on South Drive (Review option to prevent eastbound traffic to turn south on South Drive)



Figure 8 – Transition zone conceptual design (South Drive)

- **Traffic and local resident impacts:**
 - Potential impacts of the seasonal configuration on traffic movements and local residents were assessed.
 - Impacts to commercial businesses that operate on the north side of Lake Drive were mitigated with the above modification due to emergency response travel times
 - With the exception of emergency response travel time impacts discussed above, it was found that adverse traffic impacts of the seasonal road configuration would be minimal and focused primarily on larger service vehicles such as: garbage collection trucks, school buses, high-reach hydro utility trucks, and Canada Post delivery vehicles.
 - In addition to the emergency response travel time measures discussed above, the following measures will address remaining traffic impact concerns during the seasonal road configuration period:
 - Garbage collection will remain uninterrupted. Collection operators will be required to continue normal collection of materials from the addresses along the north side of the road. Staff, the design engineer and our contractor have been engaged in solutions to ensure service continuity.
 - The use of Canada Post community mail boxes is expected to be largely unaffected
 - The need for improved pedestrian connectivity between the south and north sides of Lake Drive was identified, particularly during the summer months.
 - Six formal pedestrian crossings will be established. Configuration of the planned pedestrian crossings will vary somewhat based on location but will generally be based on typical standards specified in the Ontario Traffic Manual Book 15 & 18 (see **Figure 9**).

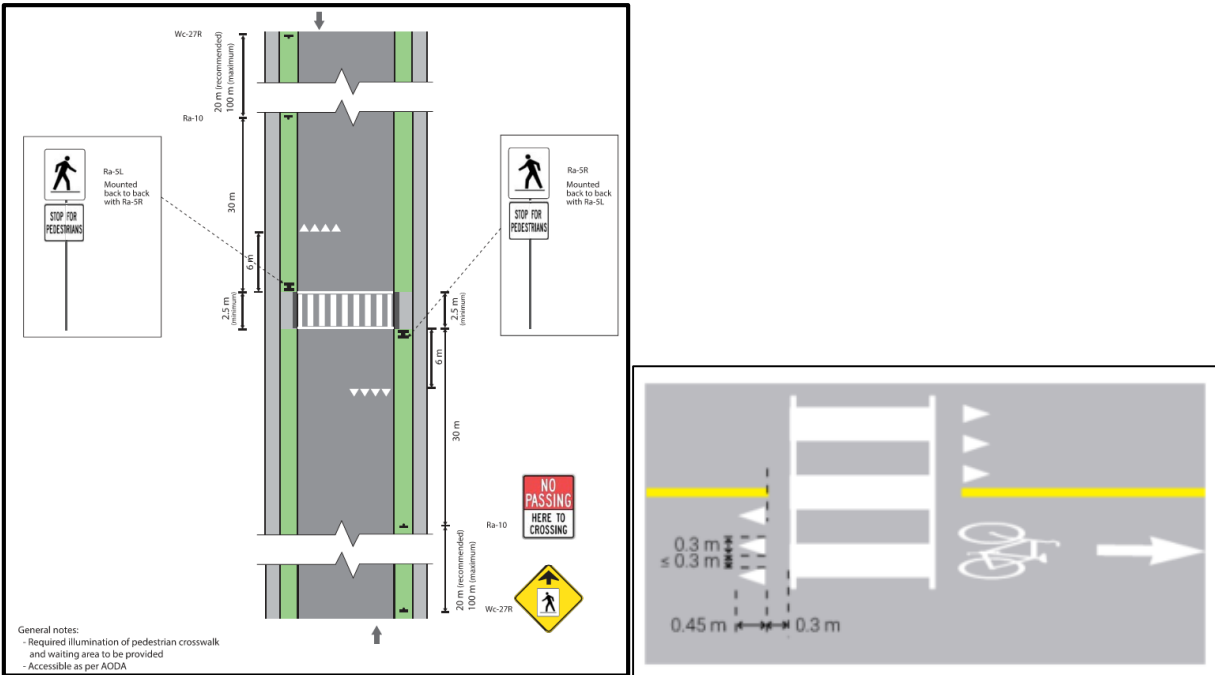


Figure 9 – Typical Standard Pedestrian Crossings

- **Traffic calming:**
 - Various traffic calming options to promote compliance with speed limits were considered, evaluated and coordinated with programs currently being implemented by the Town (i.e. additional speed humps and automated speed enforcement.)
 - The following traffic calming measures will be incorporated into the Lake Drive Improvements Project – Phase 1:
 - Coordination with the Town’s Automated Speed Enforcement program including photo radar locations planned for Lake Drive.
 - Continuation with the Town’s current speed-hump installation program (4 existing locations plus 8 new locations) within the Phase 1 Lake Drive segment.
 - Installation of 8 additional speed hump locations associated with pedestrian crossings and as supplementary additions to the Town’s current planned installations.
 - Installation of up to four stop-controlled intersections at major intersections.
 - At regular intervals of areas lacking other measures, pavement markings and road narrowing will be used to ensure speed compliance.
 - Implementation of additional traffic calming measures on South Drive and Hardwood Drive to reduce unnecessary volumes and ensure speed compliance

- **Parking:**
 - The current parking management framework consisting of designated parking areas and spaces near attraction areas, combined with “no parking” and “no stopping” zones and enforcement to dissuade parking on Lake Drive, was found to be largely compatible with the Lake Drive Improvements Project - Phase 1.
 - Enhancements may be required to the “no stopping” enforcement in the future, including additional by-laws if required
 - The Waterfront Parks Master Plan considers future provisions of additional parking spaces in proximity to many of the destination parks
- **Town operations:**
 - Town staff will be responsible for set-up, removal, maintenance and storage of flex bollards and some signage seasonally each year. Until a design is finalized, costs associated with this are unknown.
 - Components of the seasonal configuration have been selected taking into account the need for these seasonal operations.
 - The first year implementation and removal will be included in the capital business case funding. Future years’ funding will be through the annual budget process.

Figure 10 presents a graphical schematic summarizing the components of the Lake Drive Improvement Project – Phase 1 that will be carried forward in the detailed design.

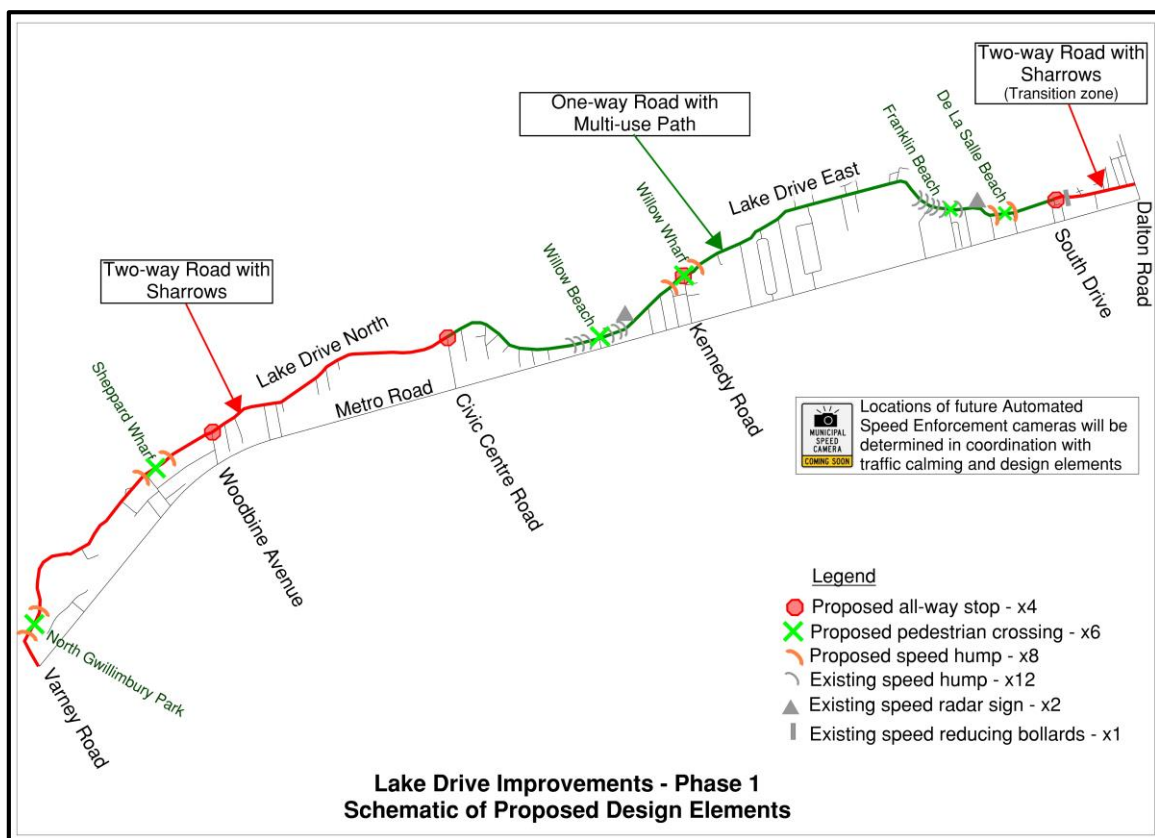


Figure 10 - Summary of Design Approach

Next Steps

The following outlines the next steps in the design of the Lake Drive Improvements Project – Phase 1 (see **Figure 11**):

- Finalize documentation of the preferred options to carry forward into detailed design (Q4-2024);
- Prepare the 60% design review package (Q4-2024);
- Prepare the 100% tender-ready package (Q1-2025);
- Subject to Council approval of the 2025 business case:
 - Proceed with tendering of implementation work (Q1 – 2025);
 - Carry out implementation construction (Q2 – 2025, pre-summer); and,
 - Post-construction activities (Q3-2025+).

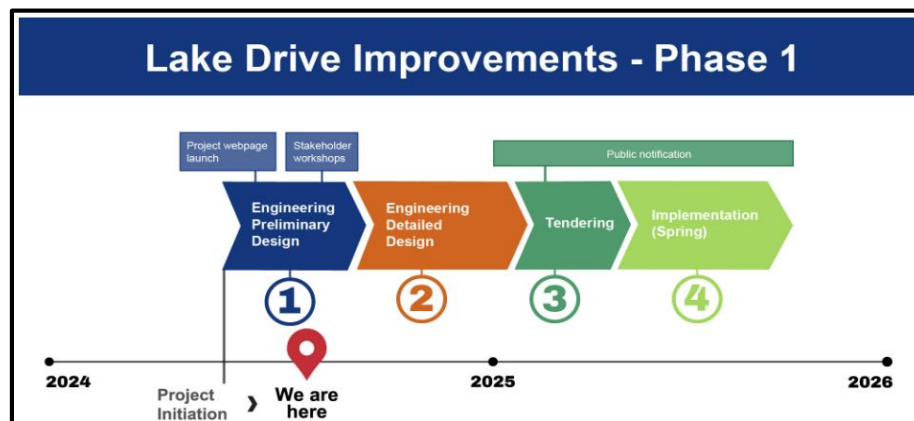


Figure 11 – Project Timeline

Introduced Provincial Legislation

The Province of Ontario recently introduced Bill 212, the *Reducing Gridlock, Saving You Time Act, 2024*, on October 21, 2024 and further refined on October 31, 2024, amending a number of Acts including the Highway Traffic Act, focused on keeping people and businesses moving in Ontario. A number of objectives are outlined in the Bill, and amongst these objectives is language that looks to require *prescribed* municipalities to seek provincial approval where a bike lane is proposed to remove a vehicular traffic lane. There are a number of unknowns associated with Bill 212 including;

- What Municipalities and/or specific roads are included in the requirement (for example; min population requirement, GTHA, etc)
- What criteria must be met in order to require approval (for example; minimum AADT, permanent or seasonal change, road class, etc.)
- What is included in the review process to obtain approval (do you require an environmental assessment, traffic data, studies, service standards etc.)

With these unknowns still to be defined, it is too early to determine whether, or not, the proposed legislation would apply to the seasonal lane configuration outlined in this report. Further, the introduced legislation outlines that should a Municipality already be under a contract to implement a bike lane where a vehicular traffic lane exists today, such projects would *not* be subject to provincial approval, but could require a review to be undertaken in the future.

There is general consensus in the industry, that this proposal is targeted at high volume, arterial/collector roads in large Municipalities that look to, or have had lanes reduced permanently, which tends to align with the underlying goal of ‘keeping drivers and businesses moving’.

The comment period is open until November 20, 2024 on the Environmental Registry of Ontario. The introduced legislation is currently at second reading (as of November 7, 2024) and has been referred to the Standing Committee on Heritage, Infrastructure and Cultural Policy. It is unknown when, or if, this will receive royal assent.

5. RELATIONSHIP TO STRATEGIC PLAN:

“Creating a Vibrant, Healthy and Safe Community for All” – Support a safe, healthy and inclusive community.

“Delivering Service Excellence” – Proactively manage infrastructure and assets to ensure service continuity.

6. FINANCIAL AND BUDGETARY IMPACT:

Financial and budgetary impacts are presented in business case 25-CI-OI-14 “*Lake Drive Improvements Project, Phase 1 – Construction*” included in the 2025 draft budget.

The matters discussed herein are focused on refinement of the design approach and are not expected to impact the financial aspects of the project presented in the business case.

The detailed design for the Lake Drive Improvements – Phase 1 project will be used as part of the Town’s submission to York Region’s Pedestrian and Cycling Partnership Program grant intake in spring of 2025, which if successful, could offset project costs up to 33%.

7. PUBLIC CONSULTATION AND NOTICE REQUIREMENTS:

Various engagements over many years, including most recently the Waterfront Parks Masterplan (2024) and the Lake Drive Functional Assessment (2023), have garnered feedback from Georgina Residents.

In detail, extensive wide-spread consultation was conducted to solicit valuable stakeholder feedback which shaped the outcomes of the “*Lake Drive Functional Assessment*” planning study. Consultation was conducted in three stages and included:

- Problem Statement and Background Review stage:
 - Project web page

- Public and Council surveys
- Project notice mailers
- Technical advisory committee meetings
- Councillor 1:1 meetings
- Identification and High-Level Evaluation of Alternatives stage:
 - Virtual workshop open to residents, all stakeholders and the public
 - Public online survey
 - Beach pop-up information booths
- Detailed Evaluation of Alternatives stage:
 - Advance notification and conduct Public Information Centre
 - Circulation of final preferred concept to Technical Advisory Committee and stakeholders
 - Presentation to Council
 - Preparation of a record of consultation
 - Notification of Study Completion
 - Posting of study documentation

The following communication and engagement activities are included in the current design stage of the Lake Drive Improvements Project – Phase 1:

- Development of a communication strategy (complete)
- Creation and update of project website (complete and ongoing)
- Conduct several workshops with discrete stakeholder groups to solicit feedback on the planned design (underway)
- Issue public notifications of key project activities (ongoing)
- Update Council on work progress at key milestones (ongoing)
- Conduct public communication and education in advance of seasonal reconfiguration of Lake Drive (TBD)

Town staff and consultant are conducting the design focused workshops with key project stakeholders. Important feedback received from stakeholders contributes to the preliminary design approach presented herein and the detailed design going forward.

8. CONCLUSION:

Progress achieved to date on the Lake Drive Improvements Project – Phase 1 allows the Town to continue to complete the detailed design and proceed with construction as planned in 2025.

APPROVALS

Prepared By: Owen Sanders P.Eng., Senior Project Manager

Reviewed By: Neil MacDonald P.Eng., Manager, Capital Delivery
Ron Jenkins, Fire Chief/Director of Emergency Services

Recommended By: Michael Vos, Director, Operations & Infrastructure

Approved By: Ryan Cronsberry, Chief Administrative Officer

Attachments: Summary of impacts table v2

Analysis of Impacted Properties and Mitigation Strategies

Area		Approx No. of Impacted Properties	Primary Fire Hall	Primary Response Impact	Secondary Response Impact	Mitigation	Comment on Mitigation
A	Eastbourne Drive	56	Keswick Fire Hall 1-4	Negligible	3 minutes	1,400 m drive in MUP	Long distance to drive in MUP, some secondary response impacts remain
B	West of Civic Centre Road	80	Keswick Fire Hall 1-4	Negligible	3-4 minutes	1,500 m drive in MUP	Long distance to drive in MUP, some secondary response impacts remain
C	Paradise Beach	54	Sutton Fire Hall 1-6	< 30 seconds	Negligible	Emergency access only at Lagoon Drive and <100 m drive in MUP	Mitigation will result in negligible or improved impact from primary response
D	West of Willow Beach	24	Sutton Fire Hall 1-6	1 minute	Negligible	Emergency access only at Lagoon Drive	Mitigation will result in negligible or improved impact from primary response
E	West of Rockaway Road	2	Sutton Fire Hall 1-6	<30 seconds	Negligible	None, or <100 m drive in MUP	Mitigation will result in negligible impact from primary response
F	West of Montsell Avenue	4	Sutton Fire Hall 1-6	<30 seconds	Negligible	None, or <100 m drive in MUP	Mitigation will result in negligible impact from primary response
G	Land's End / west of Salvation Army Road	22	Sutton Fire Hall 1-6	1-2 minutes	Negligible	350 m drive in MUP	Mitigation will result in reduced impact from primary response
H	Franklin Beach Road / De La Salle Boulevard	90	Sutton Fire Hall 1-6	1 minute impact	Negligible	Emergency access only at De La Salle Boulevard	Mitigation will result in negligible or improved impact from primary response
Total impacted properties west of Civic Centre Road		136					
Total impacted properties east of Civic Centre Road		196					