

Kariya Drive Extension

Schedule B Municipal Class Environmental Assessment

PROJECT FILE (DRAFT)

March 2020

Prepared for: City of Mississauga

Prepared by: WSP

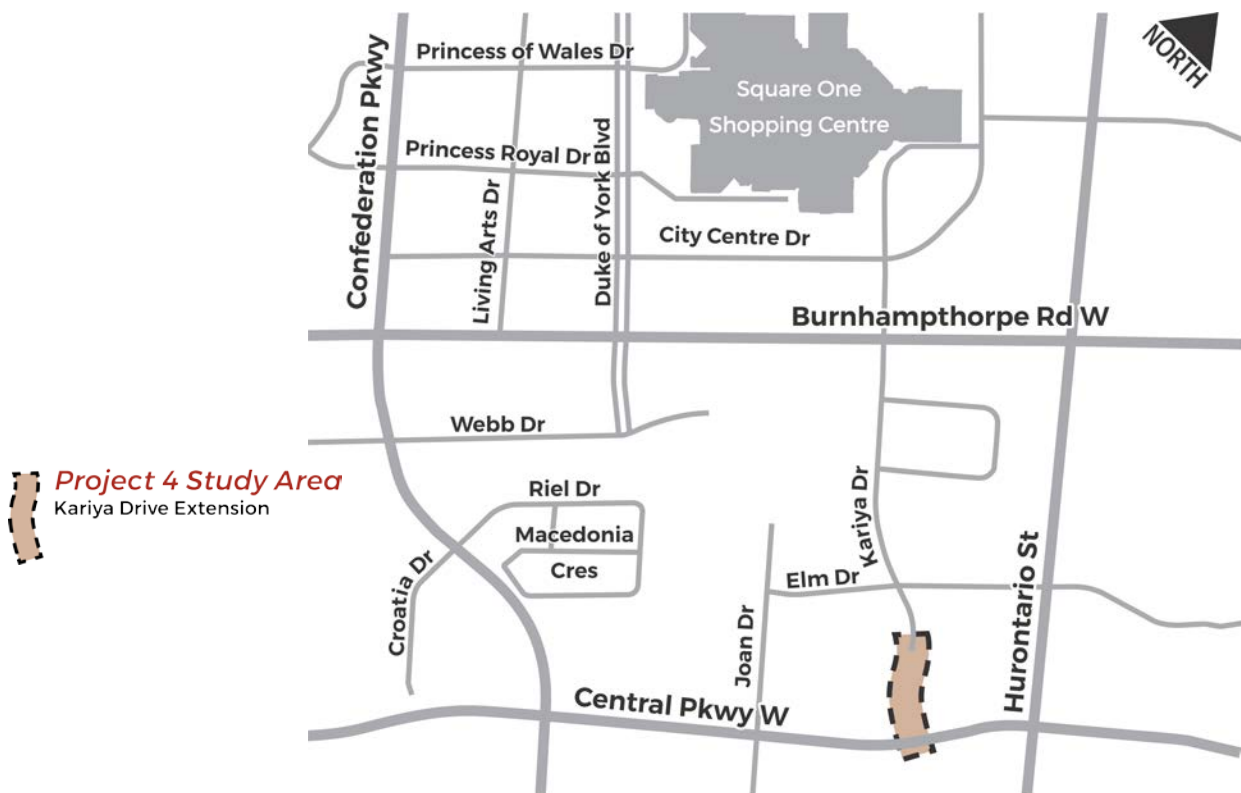
Executive Summary

Introduction

The City of Mississauga has completed a Municipal Class Environmental Assessment (Class EA) study to evaluate the need to extend Kariya Drive from south of Elm Drive to Central Parkway West, a distance of approximately 150 m. The study was carried out as a Schedule B project in accordance with the Municipal Class EA document (2000, as amended in 2015), as approved under the Ontario Environmental Assessment Act.

The Kariya Drive Class EA study area is generally situated between Hurontario Street to the east and Confederation Parkway to the west (Exhibit ES-1), within the Peel District School Board (PDSB) property that is currently the site of the Adult Education Centre. The City of Mississauga has recently approved the redevelopment of the property to be the site of the future Elm Drive Public School (Site Plan Approval File No. 18-107-W7).

Exhibit ES-1: Study Area



Planning Context

The planning and policy framework applicable to the Kariya Drive Class EA Study was reviewed. The planning and policy framework guides infrastructure planning, land use planning, and strategic investment decisions to support Provincial, Regional and Local objectives in growth and transportation. Plans and policies reviewed and documented included:

- A Place to Grow - Growth Plan for the Greater Golden Horseshoe (2019)
- Provincial Policy Statement (2014)
- City of Mississauga Strategic Plan
- City of Mississauga Official Plan (2016)
- Mississauga Transportation Master Plan (2019)
- City of Mississauga Cycling Master Plan (2018)
- Peel District School Board Site Plan SP 18-107-W7 (approved 2020)

Existing Conditions

Land Use

The proposed Kariya Drive extension will be entirely situated on lands currently owned by the Peel District School Board (PDSB). Property for the Kariya Drive extension right-of-way will be conveyed by PDSB to the City.

Land use in the surrounding area contains a mix of low density older residential enclaves (e.g. Walford Court, Achill Crescent) and high-density condominium communities primarily along the east side of Kariya Drive and along Elm Drive, east of Kariya Drive. The existing portion of Kariya Drive, south of Elm Drive, provides for access to two condominium communities.

Cultural Heritage

A Cultural Heritage Assessment was conducted in support of the Kariya Drive Class EA. Based on this work, there are no built heritage resources or cultural heritage landscapes that will be impacted by the Kariya Drive extension.

A Stage 1 Archeological Assessment was conducted in support of the Kariya Drive Class EA (**Appendix A**). The assessment was carried by Archaeological Research

Associates Ltd (ARA) in accordance with the *Ministry of Tourism, Culture and Sport (MTCS) Standards and Guidelines for Consultant Archaeologists* (2011). The findings indicate that a portion of the Kariya Drive Class EA study area may have archaeological potential and should be subject to a Stage 2 Archaeological Assessment.

Natural Environment

A Natural Heritage assessment was conducted in support of the Kariya Drive Class EA. The review confirmed that there are no natural environmental features within the Kariya Drive Class EA study area.

Drainage and Stormwater

There are no surface water features or areas regulated under Credit Valley Conservation Authority Regulation 160/06, in the Kariya Drive Class EA study area.

A series of rain gardens are located along the north edge of the PDSB property fronting on to Elm Drive. Rain gardens are one of a variety of Low Impact Development (LID) measures designed to reduce stormwater runoff quantity and flows entering the sewer system and reduce pollutant load of runoff from impervious urban areas.

Storm runoff from the new section of Kariya Drive will likely be conveyed via storm sewer to the existing sewer system. LID measures may be considered during detailed design however, opportunities may be limited by property.

Transportation

Existing Transportation Network

Kariya Drive currently exists as a 2-lane north-south roadway between Burnhamthorpe Road (in the north) and just south of Elm Drive (in the South). The existing road links a variety of land uses including commercial/hotel in the north, older low-density residential enclaves and newer condominium communities and provides access to Kariya Park and the PDSB Adult Education Centre.

Other key transportation links in the immediate area include: Hurontario Street and Central Parkway West.

Traffic and Transportation Assessment

An assessment of existing (2018) traffic conditions was undertaken to assess the overall transportation network performance which incorporated the study areas of all four EA studies (Redmond Road, Webb Drive, The Exchange and Kariya Drive). The micro-simulation assessment included an analysis of existing conditions and operational performance for the area bounded by Elora Drive, Webb Drive / Central Parkway West, Hurontario Street, as well as Burnhamthorpe Road West / City Centre Drive.

Results from the future (2031) traffic analysis indicated that without the Kariya Drive extension from south of Elm Drive to Central Parkway West, north-south traffic could only travel along Joan Drive and Hurontario Street, which will result in heavy delays. During AM peak hour, the northbound traffic on both parallel corridors is expected to operate at LOS F with queues backing up to the upstream intersections (e.g. LOS F for the northbound movements at Elm Drive and Joan Drive intersection, and for the northbound left movements along Burnhamthorpe Road).

Traffic modeling indicates that the proposed Kariya Drive extension would enhance north-south minor collector road access and connectivity within the community, considering existing neighbourhoods, new condominium communities and the new Elm Drive Public School.

Problems and Opportunities

Based on a review of the planning context and policy, the following problems and opportunities have been identified:

- ▶ There is an opportunity for the City to protect a right-of-way for the future at extension of Kariya Drive i.e. Completion of about 150 m of new road to connect the current terminus south of Elm Drive, with Central Parkway West;
- ▶ The extension of Kariya Drive will contribute to the key objectives of the City's Official Plan related to creating complete communities that have a compact urban form, are walkable and provide convenient access to a variety of land uses and public transit;
- ▶ A new roadway will provide additional routing in the downtown and make for more pedestrian-friendly environment;

- ▶ The extended roadway will integrate with the approved school redevelopment and with the planned community park at Elm Drive;
- ▶ There is an opportunity to expand MiWay service on Kariya Drive;
- ▶ The design will create safe pedestrian and cycling zones for all users, and in special consideration of school children;
- ▶ The design will plan for a smooth transition between the on-road cycling lanes to the north of Elm Drive, and the proposed multi-use trail south of Elm Drive.

Problem and Opportunity Statement:

The City has an opportunity to protect a road right-of-way for a future extension of Kariya Drive as part of the Peel District School Board's proposed redevelopment of the Adult Education Centre.

The extension of Kariya Drive allows the City of Mississauga to continue to enhance the downtown collector road system, contributing to a finer-grid street network and expanding opportunities for walking and cycling. A context-sensitive design approach will ensure that the new road fits well with its surroundings including the new school site, existing low-density neighbourhoods and new high-density condominium blocks.

The Kariya Drive extension will support the City's vision for Downtown Mississauga that includes: a high-density, dynamic urban core with smaller block sizes, fine-grained street network with a high-quality public realm and a range of transportation choices.

Alternative Solutions

Phase 1 of the Municipal Class EA process involves the identification of the transportation problems and opportunities to be addressed by the study and Phase 2 involves the identification and evaluation of a range of possible solutions or 'planning alternatives'. The following Alternative Solutions are being considered to address the Problems and Opportunities:

1. Do Nothing: Maintain existing transportation system within the study area.
2. Manage Transportation Demand: Improve access within the downtown by: discouraging single-occupant vehicles and encouraging carpooling; shifting travel demand to off-peak hours; and encouraging walking, cycling and transit use.

3. Improve Other North-South Routes: Upgrade parallel roads to meet transportation needs.
4. Extend Kariya Drive: Kariya Drive as a 2-lane road from south of Elm Drive to Central Parkway West.

The alternative planning solutions were assessed in their ability to reasonably address the problems and opportunities. Criteria were developed to guide the assessment process so that transportation planning, technical and environmental (socio-economic, community and cultural / heritage) conditions were all factored into the recommendation.

The assessment of alternatives employed a reasoned argument approach which assesses the potential impacts of each alternative and then compares the relative significance of the impacts among the alternatives to select the recommended solution. A summary is provided in Exhibit ES-2.

Exhibit ES-2: Summary of the Evaluation of Alternative Planning Solutions

Preferred Planning Solution

Based on the results of the evaluation, Alternative 4, Extension of Kariya Drive, is preferred because it fully addresses the Problems and Opportunities by:

- ▶ Supporting the creation of an urban neighbourhood environment that meets planning objectives for multi-modal mobility;
- ▶ Expanding the minor collector road network to provide enhanced connectivity for all modes of travel;
- ▶ Providing redundancy in the road network for all vehicles; and
- ▶ Creating smaller, more walkable blocks that enhance pedestrian access to transit.

Alternative 1 does not address any of the Problems and Opportunities. Alternatives 2 and 3 only partially address the Problems and Opportunities and do not contribute to a fine-grained street network that supports community growth, improved pedestrian options and access to transit.

Future Transportation Conditions

Traffic modeling indicates that the proposed Kariya Drive extension would enhance north-south access and connectivity within the community, considering existing neighbourhoods, new condominium communities and the new school.

It is important to note that the City's objectives of the Official Plan are to prioritize the development of a complete community with a compact urban form that is walkable and convenient to public transit and the cycling network.

MiWay Transit currently operates on the road network around the study area. MiWay will have the flexibility to extend transit service on Kariya Drive and connect with Central Parkway West.

The cycling network will be expanded to include a new multi-use trail on the west side of Kariya Drive.

Road Design Concept

A design concept was developed for the Preferred Planning Solution to extend Kariya Drive by about 150 m, from its existing terminus located south of Elm Drive, to a new

intersection at Central Parkway West. The design concept was developed for illustrative purposes only and is subject to refinement during future preliminary and detailed design phases.

Exhibit ES-3 depicts the proposed typical road cross-section, which is based on the City's Standard City Centre Cross-Section. Exhibit ES-4 depicts the road alignment concept.

The following design aspects will be of particular interest:

- ▶ The use of the City of Mississauga Standard City Centre Road Cross-Section will ensure appropriate space is available for underground utilities, multi-use trail and sidewalk. However, some details of the road cross-section may be subject to minor adjustments during the design phase; and
- ▶ Traffic operations including the new intersection of Central Parkway West and Kariya Drive.

Streetscape depiction on ES-3 is conceptual only. Green areas are identified for future streetscape design and do not imply the presence of sod. Location of streetscape is subject to further design and integration with the school site, utilities and municipal services.

Potential Property Requirements

Based on the concept design, it appears that one residential property at 3470 Omeath Court may be directly impacted. A very small portion of the backyard (~15 m²) may be required for the daylighting triangle for the intersection of Central Parkway West and Kariya Drive. The work would involve regrading and replacement of the fence (replacement as a noise barrier). It may be possible to minimize or avoid the property through the design process. Confirming the potential for property impacts and engagement of the property owner will be a priority during the preliminary design phase.

Exhibit ES-3: Kariya Drive Cross-Section

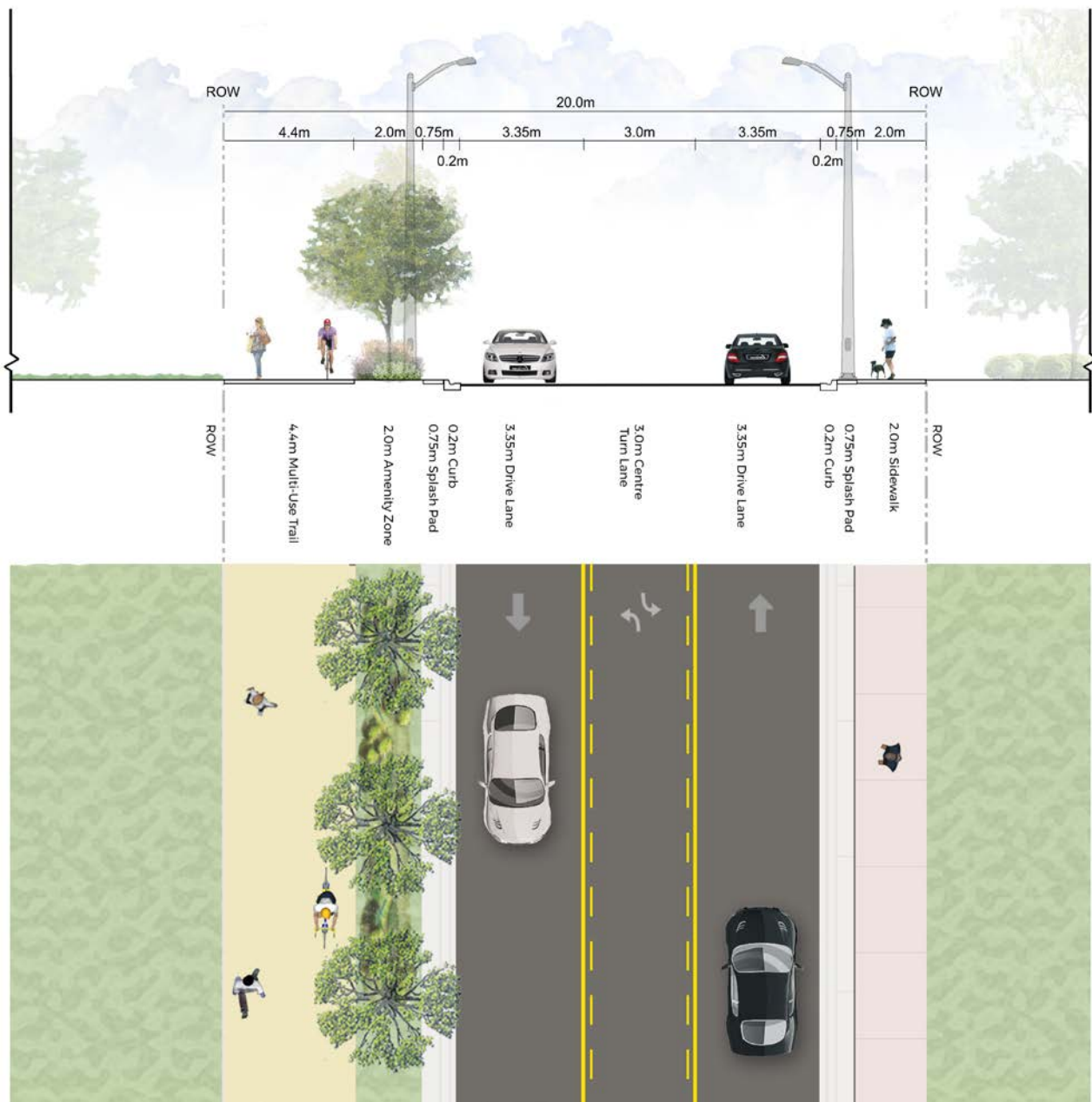


Exhibit ES-4: Kariya Drive Design Concept

Consultation

Key Points of Contact

External agencies, utilities, emergency service providers, and residents and business owners were contacted directly at key points during the study and requested to provide input to the study and feedback on the decision-making process. The key points of contact are listed in Exhibit ES-5.

A direct mailing list of residents and businesses, within the defined catchment area, agencies and utilities was developed at the outset of the study. The catchment area for property owners was defined as approximately 300 m around the proposed Kariya Drive extension. The mailing list continued to be updated based on feedback received through the study.

Members of the general public were made aware of the study through notifications in the local newspapers and invited to contact the project team to join the project mailing list. Members of the public requesting to be on the mailing list received direct notification of subsequent study milestones at the key points of contact.

A dedicated website and email address were established through the City of Mississauga's website at the outset of the study.

Various Public Information Centre (PIC) materials were made available on the website (e.g. Notices, display material and comment sheets). All notices and study materials contained the dedicated project team email address to facilitate direct contact from interested members of the public.

The potential need for formal Indigenous community engagement was explored with the Ministry of Environment, Conservation and Parks (MECP). In correspondence dated January 18, 2019, MECP confirmed that, given the urban downtown setting, the absence of natural features and watercourses, Indigenous communities were unlikely to have an interest in the study and direct outreach was not required.

Exhibit ES-5: Key Points of Public Contact

Date	Notification	Purpose
Notice of Study Commencement December 4, 2018	<ul style="list-style-type: none"> - Letter sent to property owners / mailing list – December 4, 2018 - City project website – December 4, 2018 - The Mississauga News – December 6 and December 13, 2018 - Letters and Response Forms sent to agencies and utilities – December 10, 2018 - Letter and Streamlined EA Project Information Form sent to MECP – December 12, 2018 	To introduce and invite participation in the study and to request any preliminary comments or pertinent information.
Public Information Centre June 12, 2019	<ul style="list-style-type: none"> - Postcard notices sent to property owners / mailing list – May 27, 2019 - City project website – May 31, 2019 - City website – June 3, 2019 - The Mississauga News – June 6, 2019 - PIC Display materials posted on City website on June 13, 2019 	To notify and invite interested parties to attend the first Public Information Centre on June 12, 2019 to review information and provide input regarding: the problem and opportunities being addressed, the collection of background information, the evaluation of planning alternatives and early design concepts.
Notice of Study Completion [TO BE COMPLETED]	<ul style="list-style-type: none"> - Letters sent to property owners / mailing list – XX - Letters sent to agencies and utilities – XX - City project website – XX - The Mississauga News – XX 	To announce the completion of the Class EA Study and notify interested parties of the 30-calendar review period for the Environmental Study Report.

Agency Consultation

The list of technical agencies was assembled based on previous City of Mississauga Class Environmental Assessment studies and Ministry of the Environment, Conservation and Parks (MECP) Government Review Team (GRT) list. External ‘agencies’ (including regulatory/review agencies, utilities and emergency service providers) were first notified of this Class EA study through written correspondence

on December 10, 2018 which included a copy of the Notice of Study Commencement and a Response Form. A summary of Agency comments received throughout the study and course of action taken by the Project Team, as appropriate, is provided in Exhibit ES-6.

Exhibit ES-6: Agency Comments

Agency Comment	Course of Action
<p>Ministry of Natural Resources and Forestry Email dated: January 2, 2019 I have received your letter regarding four proposed road extensions in Mississauga. There was no attached notice with a key plan. Please provide.</p>	<p>Notice of Commencement was provided via email.</p>
<p>Ministry of Natural Resources and Forestry Email dated: January 3, 2019 Natural areas to be affected will need to be searched for Butternut trees of all sizes, including seedlings, within 25 metres from proposed works. The woodland areas to be affected will need to be outlined and, if they are at least 0.5 ha averaging at least 30 metres in width with some native oak or maple species, assessed for potential as habitat for endangered bat species (Little Brown Myotis, Northern Myotis, Tri-coloured bat).</p>	<p>An assessment of the natural environment was completed as part of this study.</p>
<p>Ministry of the Environment, Conservation and Parks Letter dated: January 18, 2019 Response to Notice of Commencement providing guidance on consultation with Indigenous Communities.</p>	<p>Given the nature of this project and the existing land uses in the area, separate notification for Indigenous Communities was not required.</p>
<p>Ministry of Natural Resources and Forestry Emailed dated: June 6, 2019 We have received the Notice of Public Information Centre for this project. If you have any questions regarding natural features/systems or impacts on them, please let us know.</p>	<p>No action required.</p>
<p>Region of Peel Public Health Email dated: June 12, 2019 Thank you for sharing the notice of PIC for the environmental assessment process for Redmond Road, Webb Drive, The Exchange and Kariya Drive. We would like to request digital copies of information being shared at tonight's PIC, including the presentation, so that we may review and provide comments.</p>	<p>PIC materials were provided via email on June 17, 2019.</p>

Public Information Centre

A Public Information Centre (PIC) was held on June 12, 2019 from 5:30 pm to 7:30 pm in the Great Hall at the Mississauga Civic Centre, located at 300 City Centre Drive in Mississauga.

The purpose of the PIC was to provide stakeholders and interested members of the public with an opportunity to view study information including project background, the Municipal Class EA process, planning and policy context, assessment and evaluation of alternative planning solutions and the selection of a preliminary preferred solution. A design concept was presented of the preliminary preferred solution, for illustrative purposes.

Twelve people signed in at the PIC. Attendees included local residents / property owners, stakeholders, and staff from the Peel District School Board and City of Mississauga. The PIC materials were made available on the City's website the day after the PIC.

One comment was received via email the day of the PIC. No additional comments were received during the comment period, ending July 5, 2019. The written comment that was received is provided verbatim below, along with the how the feedback was considered in this study. Sensitive information such as names and contact information have been removed.

Exhibit ES-7: Public Feedback Received at the Public Information Centre

Comments	How the feedback has been considered in this study
<p>We are against the Kariya Drive Extension. We have seen added traffic congestion and congestion on Central Parkway over the past years. Drivers speed through between intersections of Hurontario Street & Central Parkway and Joan Drive and Central Parkway. This makes it extremely dangerous for kids playing or anyone even trying to cross the street to go play or jog in the Britannia field. It is hard to pull out of our driveways or cross into incoming traffic.</p> <p>Extending Kariya Drive will disrupt our</p>	<p>The proposed road way extension is consistent with the City of Mississauga Official Plan policies that seek to create a finer-grid street network that improves accessibility and walkability in the downtown, reduces congestion overall, and expands opportunities for active transportation (e.g. cycling), and encourages greater use of transit. These aspects are viewed by the City as complementary to the existing community, proposed Elm Drive Public School, new condominium communities and new parks in the area.</p>

Comments	How the feedback has been considered in this study
<p>neighbourhood and quality of life. There is already too much crime and drug dealing going on at the &Co bar on Kariya across the Kariya Park. Opening extending this drive will just increase traffic, noise, and crime on a 24-hour basis.</p> <p>I suggest using our tax dollars to at least keep the Britannia High School field clean and brought back to life. Currently the City of Mississauga fails to maintain the field. It is rarely mowed, and if it is it is never raked or cleaned.</p> <p>Making this park clean and creating a walkway from Central Parkway through to Elm Drive, would greatly increase our quality of life. We need the field brought back to it's former glory, in order to allow our children to play in a clean and safe environment, we can walk our dogs peacefully, we can go jogging and cycle, play soccer, sunbathe or skate in the winter, etc.</p> <p>The residents of Achill Crescent & Central Parkway West stand firmly against any road extension of Kariya Drive.</p>	<p>The proposed design of the Kariya Drive extension is being coordinated with the Peel District School Board to ensure a safe streetscape is created. 'Crime Prevention Through Environmental Design' principles will be considered to enhance personal safety through lighting and landscaping. Other aspects of community safety will continue to be led by enforcement organizations including Peel Regional Police and community organizations, such as Safe City Mississauga.</p>

Stakeholder Consultation

The proposed Kariya Drive extension is located adjacent to the approved Elm Drive Public School site on Kariya Drive. The extension of Kariya Drive has been previously conceptualized as part of the Elm Drive Public School site plan. As such, the Peel District School Board has a direct stake in the planning for Kariya Drive.

A meeting was held with representatives of the Peel District School Board on May 30, 2019. Minutes of the meeting are on file with City staff. A summary of the meeting is provided below:

- ▶ A meeting was held with Peel District School Board representatives on May 30, 2019, at the City of Mississauga, 201 City Centre Drive.
- ▶ The purpose of the meeting was to introduce the study, review early design concepts, discuss stakeholder questions and concerns, and review next steps.

- ▶ During the meeting it was noted that the design concept was developed to accommodate future function as Elm Drive Public School access, including school bus loop access, safe student drop-off operations, and accessibility via walking and cycling.
- ▶ Following the meeting, the Peel District School Board provided display material for the Public Information Centre (PIC), held on June 12, 2019. The PIC displays included exterior elevations and floor plans for the proposed Elm Drive Public School.

Mitigation and Commitments to Further Work

The Kariya Drive extension will be subject to preliminary and detailed design phases. Construction phasing and potential for coordination with PDSB school construction is not known at this time and will be identified during design.

Property

Confirming the potential for property impacts and engagement of the property owner of 3470 Omeath Court will be a priority during the preliminary design phase.

Drainage and Stormwater Management

The stormwater management design will appropriately manage water quality and quantity per applicable City of Mississauga and Credit Valley Conservation design criteria. A new storm sewer system expansion is already being planned for the area. It is expected that Kariya Drive road runoff will be conveyed via the new sewer.

Utilities

The City will engage with utility companies to determine needs and coordinate design and installation. Ideally this will be done in coordination with the school redevelopment.

Noise and Vibration

A noise assessment was conducted in support of the Kariya Drive Class EA (**Appendix C**). There are a number of noise sensitive areas (NSAs) located along Omeath Court (i.e. private homes) where the backyards are adjacent to the open field associated with the Peel District Adult Education Centre the proposed Kariya Drive right-of-way. A noise assessment was conducted to evaluate the potential increase in noise level for the NSAs as a result of the proposed Kariya Drive extension. This

technical work is based on the Ministry of Transportation (MTO) / Ministry of the Environment, Conservation and Parks (MECP) Noise Protocol, as well as the City of Mississauga's Noise Attenuation Policy (2011).

Noise levels were calculated using STAMSON 5.0 program for the selected receiver locations for the future (2031) with and without roadway extension scenarios. All the representative receivers are warranted for the consideration of noise mitigation, i.e., the increase in noise level as a result of the proposed roadway improvement is 5 dBA or higher, or the absolute noise level is 60 dBA or higher.

The implementation length of noise wall is recommended to protect the representative receiver and extend 2.5 times of the noise wall-receiver distance on both side of the receiver, as per the Ministry of Transportation (MTO) Technical Areas Manual – Noise, 1992. Therefore, the noise wall may extend from the south boundary of 3470 Omeath Court, to the west boundary of 3490 Omeath Court. Additional review will need to be carried out prior to the construction to determine the exact limits the noise wall.

The potential for construction noise issues will be further reviewed during detailed design when construction methodology and schedule is fully developed. Construction activities will conform to the City of Mississauga Noise Control By-Laws.

There is no existing land uses which are considered to be highly sensitive to vibration impact (e.g. sensitive equipment such as electron microscopes, or laboratory with sensitive scientific equipment, etc.).

Once constructed, the main source of vibration from Kariya Drive would be from truck traffic. However, vehicles with pneumatic tires generally do not create significant levels of vibration except at very short distances. This road will function as a minor collector road serving only the local community and truck traffic volumes will be low, as such, vibration levels to the community are not expected to be perceptible or significant.

Some construction activities associated with the road building may at times create vibration levels that are perceptible at nearby land uses. However, the vibration levels produced by the anticipated construction activities will not be large enough to cause structural damage. The potential vibration generated by the building of the road and the surrounding community should be reviewed in detailed design, once construction methodologies and scheduling are developed.

Archaeology

A portion of the proposed Kariya Drive right-of-way that is considered previously undisturbed will require a Stage 2 Archaeological Assessment. Undisturbed areas extend onto areas approved for the new school building. It is recommended that the Stage 2 Archaeological Assessment work be coordinated with PDSB.

The southeastern section of the Kariya Drive extension must be assessed using the test pit survey method. A survey interval of 5 m will be required due to the proximity of the lands to the identified features of archaeological potential. Given the likelihood that the remaining areas of potential have been impacted by past construction activities, a combination of visual inspection and test pit survey should be utilized to confirm the extents of any disturbed areas. This will allow for the empirical evaluation of the integrity of the soils and the depth of any past disturbances.

Air Quality

During construction of the roadway, emissions sources will include construction equipment engines and air borne dust from construction vehicles travelling over exposed soils/unpaved surfaces. These impacts will be temporary, during construction. Due to the temporary nature of construction activities, there are no air quality criteria specific to construction activities. Construction emissions can be mitigated by appropriate maintenance of equipment and proper phasing that minimizes activity on unpaved surfaced.

The Environment Canada “Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities” document provides several mitigation measures for reducing emissions during construction activities. Mitigation techniques discussed in the document include material wetting or use of chemical suppressants to reduce dust, use of wind barriers, and limiting exposed areas which may be a source of dust and equipment washing.

Ministry of Environment, Conservation and Parks (MECP) recommends that non-chloride dust suppressants be applied. MECP also recommends referring to the following publication in developing dust control measures: Cheminfo Services Inc. Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities. Report prepared for Environment Canada. March 2005.

Sustainability

The City's objective is to create a high quality, pedestrian friendly, human scaled environment in the downtown area. The Kariya Drive extension will contribute to this objective by improving multi-modal connectivity among existing and new communities, the new school, and new/existing area parks. The new road will result in smaller scaled blocks, providing routing options for vehicular, transit, pedestrian and cycling movement. The scale of the street is to be narrower with special attention paid to the adjacent school site.