

Mill Pond Park Revitalization Master Plan

March 2024



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1.0 Introduction



Mill Pond, August 27, 2021

1.1 Background

Mill Pond Park is one of the City of Richmond Hill's most valued and cherished parks which includes a remarkable natural landscape integrated within the Mill Pond neighbourhood. The area surrounding the 19 ha. park is considered to be one of five destination parks for the City of Richmond Hill, and a key park serving the village area of the City. The park offers a variety of scenic landscape and programmatic experiences that change with the seasons supporting a year round destination for city residents. The park offers a unique natural character contrasted with its urban location. Through careful planning, design and programming the park also integrates and hosts a range of recreational facilities and four season events that attract a diverse range of uses and people from within the community and the broader regional area.

The scenic qualities of the landscape surrounding the pond is a primary feature of the park, where the seasonal changes, wildlife and natural vegetation create a sense of relief within an urban residential environment.

The community of the Mill Pond neighbourhood exhibits a significant passion to support and maintain the open space as a natural landscape and a place where the quality and longevity of the natural features of the park remain resilient over the long-term.

Since 1970 and the development of the Mill Pond Park Master Plan, the City has invested significant effort to realize the vision of a natural destination park, including significant natural woodland, marsh and valley landscapes as well as more formal parkland spaces that deliver active and passive recreation throughout the park. While there have been many improvements since the Master Plan works, many of the facilities are approaching their "end of life". Strategic systems such as the overall pedestrian trail system requires updating to protect some of the more sensitive natural landscapes and to facilitate a more aligned and legible pathway route that unifies the park from south at Mill Street to north at Stavert Park. The addition of lands at 71 Regent Street is an opportunity to create a more visible and functional entrance at the northern edge of the park.

Ducks resting on Mill Pond's waters edge



The Mill Pond Park Revitalization Master Plan is an important opportunity to create a vision for the park that reflects the community's passion to protect and enjoy the natural landscape within the city and to address the restoration and revitalization of the many key park facilities. The planning and design is an opportunity to position Mill Pond Park for the future and create a more resilient and accessible park, address the open space user requirements, create contemporary facilities and to effectively support events, reinforce the character and identity of the Mill Pond neighbourhood, as well as support the natural and functional infrastructure systems of the park.

The Mill Pond Park Revitalization Master Plan is intended to outline a vision for a phased revitalization of this natural oasis and destination in the heart of Richmond Hill aimed at improving the connectivity of the southern portion of Mill Pond Park with the northern portion of the Park. The vision will focus on using creative placemaking techniques to connect the many disparate elements/sections of the Park into a unified whole. The Revitalization Master Plan provides the framework for how best to deliver the park, trail, naturalization, and habitat enhancements proposed with the implementation of the planned stormwater management upgrades.

1.2 Study Area

Mill Pond Park is one of five destination parks in Richmond Hill. Located at Mill and Trench Streets, the park currently includes a number of natural and park features that contribute to its unique character. This Master Plan includes Mill Pond Park as well as Stavert Park and 71 Regent Street.

The park is home to many amenities and public events, including:

- Playground
- Boardwalk and trail network
- Significant woodland areas and wetland areas
- Picnic areas
- Tennis Courts
- Outdoor skating in winter (weather permitting)
- Winter Carnival
- Concerts in the Park
- Art Gallery

There are also a number of natural and constructed stormwater features, including:

- Mill Pond
- The Heritage Estates stormwater pond
- The Upper East Don River, which runs north-south through the Park.

Figure 1: 3D render of the project scope and context



1.3 Master Plan Objectives

While Mill Pond Park remains a natural oasis and destination in the heart of Richmond Hill across all seasons, a number of the facilities and assets within the Park are approaching end of life. The vision will focus on creative placemaking techniques to connect the many disparate elements and sections of the Park into a unified whole.

The Mill Pond Park Revitalization Master Plan is intended to outline a vision for a phased revitalization of this natural oasis and destination in the heart of Richmond Hill aimed at improving the connectivity of the southern portion of Mill Pond Park with the northern portion of the Park.

The Mill Pond Park Master Plan aims to accomplish the following objectives:

- Provide ecological, landscaping and passive recreational enhancements.
- Provide trail enhancements, including the formalization/establishment of a spine trail between the south and northwest corner of the Park.
- Provide direction for future active or passive park uses for the 71 Regent Street lands, including adding parking spaces.
- Provide revitalized tennis facilities at Stavert Park
- Propose new locations for active facilities within the Park
- Provide creative placemaking strategies for the Park
- Provide direction for the future use of the facility at 314 Mill Street
- Provide recommendations for recreation and cultural events at Mill Pond Park
- Provide a master plan that coordinates with the stormwater rehabilitation works
- Undertake a public consultation process in order to create a master plan that reflects the needs of the community
- Provide phasing and high level cost information for implementation of the Master Plan

1.4 How To Use This Master Plan

The Master Plan is a guide to the proposed revitalization of Mill Pond Park. The Master Plan diagram is a concept design and any imagery is only to be read as concepts or examples. The elements of the Master Plan are subject to further development when each is designed and built. Following the master planning process, detailed design will commence for the sections identified in the Phasing section of this report.

The Master Plan went through an extensive public consultation process to arrive at the Preferred Master Plan. At the start of the project in May 2021, a self guided walking tour and survey was organized to garner feedback from the public. The results of this survey helped to inform the

development of the initial conceptual Master Plan options. Following the development of those options, a virtual open house presentation was available to the public on the project's webpage for viewing from September 27, 2021 until October 15, 2021. The public open house presented two options and feedback was received on the preferred option and on the individual park areas. Following this consultation, the preferred option was developed for the Master Plan and elements from the original option were refined to reflect comments from the public and presented at the EA Open House #2 in June, 2022.

2.0 Mill Pond Park Past and Future



Mill Pond Park, winter activities.

2.1 History and Evolution

Mill Pond Park is located along the Upper East Don River in Richmond Hill. Humans first arrived in the Don River area approximately 12,500 years BP, likely as nomadic hunters. There is little archaeological evidence along the Don River, however settlements likely started to occur around 6000 Before Present (BP). Richmond Hill has been home to different Indigenous groups, namely the Huron Wendat, Haudenosaunee and Anishinaabeg.

The earliest European settlement references to Mill Pond relate to a pond used to power a sawmill operation in the mid 1800's. As the area surrounding Mill Pond developed and Richmond Hill grew, the pond was converted to a reservoir to supply drinking water to the local population. A new dam and pumphouse were constructed at Mill Street in 1921, with water treated by folder beds and stored in a water tower near Trench Street. The Mill Pond water supply system was eventually replaced by a regional groundwater supply system, and the water tower was demolished in

1962. Mill Pond then transitioned to recreational use, with the first Winter Carnival being held in 1969.

As reflected in the 1970's Mill Pond Master Plan, the park had originally dammed the 1200 foot stream to create the Mill Pond and to operate a mill. Much of the existing remaining areas of the park were redeveloped for recreational uses such as swimming, fishing and other community activities. The programming of the park also included winter activities such as skating, winter carnival activities, snow and ice sculpting and nature studies.

The Master Plan acknowledges that the park's ecology is rich in diversity, with a mix of upland, significant swamp wetland and aquatic plant communities. However, as a result of organic debris from human and natural nutrient loading in the system, the environment is deteriorating. As such, the Master Plan seeks to preserve and emphasize the natural park features, while enhancing the connective ecological and social

Figure 2: 1970 Richmond Hill Master plan.



fabric creating a more resilient natural network. The Master Plan aims to prioritize the central promenade along Mill St. that served as a conduit for the parking lot, historic and social uses, and access to the water's edge.

Mill Street, adjacent to the park, was reconstructed in the late 1980's, at which time a new concrete box culvert was installed and the current weir/stop log control structure that regulates water levels in Mill Pond was constructed. The landscaping in the area between Mill Street and Mill Pond was also installed as part of the Mill Street improvement project. In addition, the City acquired lands to the north of the original Master Plan area, adding a stormwater management pond in the late 1980s to the northeast corner through what is often referred to as the "Heritage Estates" subdivision. In the mid 1990s, the gazebo north of Mill Street and the washroom building adjacent to the parking lot on the south side of Mill Street were constructed. This parking lot was rehabilitated in 2010, at which time an oil grit separator was installed to treat runoff from the parking lot. In addition, the City's Community Stewardship Program has implemented a number of projects over the last 15 years to improve the natural heritage system within the Park.

The most recent improvements at Mill Pond Park were in 2014 when the playground at the northwest corner of Mill Street and Wood Lane was replaced and the western parking lot, which was constructed with permeable pavement, was created on the south side of Mill Street. The City acquired the lands at the northwest edge of the

Park (the 71 Regent Street lands) to provide a connection through to Stavert Park. The City has obtained a Record of Site Condition for the 71 Regent Street lands, which are now designated as Parkland. The Master Plan area incorporates both the 71 Regent Street and Stavert Park lands, creating a unified and connected park experience.

The City's 2022 Parks Plan, identifies Mill Pond Park as a destination park. Destination parks like Mill Pond Park attract visitors from across Richmond Hill and beyond for their unique attractions. Public skating remains a popular use of the Pond over the winter season, and the City facilitates this using a seasonal/mobile change hut and rubber mats.

In 2017, the City initiated the Mill Pond Stormwater Rehabilitation Environmental Assessment (EA) to develop a plan for how to rehabilitate the aging stormwater management infrastructure and restore the valleyland areas located in the Park. This Master Plan was prepared in conjunction with the Mill Pond Stormwater Management Rehabilitation EA to determine the best solution to manage stormwater, drainage, and the valleyland systems to improve water quality and reduce flooding and erosion.

2.2 Key Principles for Mill Pond Park

The following key principles serve to guide the development of the Master Plan and provide a framework for the design direction. The principles were developed through a detailed site reconnaissance study of the existing Mill Pond Park site and consultation with the public and City stakeholders. They reflect the success of the existing park and the needs for the Park to develop into the future.

Design Principles



Enhance and protect the natural character and ecology of the site



Create primary active transportation trail between Mill Street and Regent Street



Provide safe access and entry while accommodating cultural and recreational uses



Connect the Stavert Park and 71 Regent Street lands into Mill Pond Park



Resolve art gallery & park facilities



Integrate with the parks stormwater functionality and proposed stormwater infrastructure

3.0 Master Plan Design Approach



***Subject to further study associated with the Environmental Assessment (EA)**

The recommendations that follow are intended as a guide for the detailed design and implementation phasing and construction of the revitalized Mill Pond Park. Each recommendation takes the key principles into consideration, public and stakeholder comments and provides physical design solutions:

3.1 Revitalization Plan Overview

The revitalization plan leverages the existing natural and ecological setting, and proposes an enhanced and integrated forested and swamp landscape within the Upper East Don River system. The community expressed a clear desire to maintain the ecological and scenic character of Mill Pond Park. The Master Plan balances the protection of the natural areas with more urban park spaces supporting diverse recreational facilities connected and accessible walkways and enhanced areas to host active park uses, programs and events.

Enhancing the natural landscape and extent of water's edge experience for park users to experience this scenic and peaceful setting as an important part of a healthy, intensifying community is a key principle of the revitalization approach.

The Master Plan addresses the imbalance of activities and use patterns by integrating the new park lands at 71 Regent Street to establish a new entry point into the park and a strong visible edge and face to the park along Regent Street. New facilities merged with the existing facilities in Stavert Park, and new off- street parking promotes an equalized sense of access and entry, intended to offset some of the intense activity in the Mill Street area.

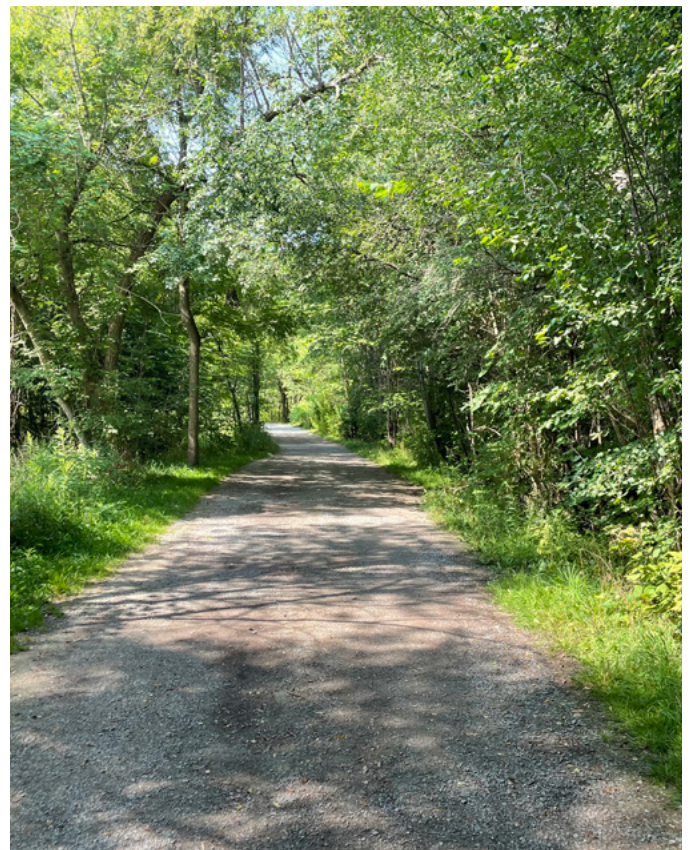
A core theme of the site is the relationship with the water's edge. A newly aligned primary trail spans the length of the park passing by the Mill Pond and the Heritage Estates stormwater pond. A new east-west elevated boardwalk, and a feature bridge at the northern edge of the Mill Pond will also provide new experiences of the water's edge.

The proposed feature bridge on the northern edge of the Mill Pond supports a connected access loop, ensuring the natural areas are better protected through the provision of a dedicated walking loop while adding a unique new water's edge experience to the park.

Promoting multiple accessible points of entry with routes connecting across the park will help to reduce the pressure on the primary spine trail to convey park users between areas within the park.

The Park will promote a socially equitable environment where cycling and pedestrian access, enjoyment of the park, openness to events, welcoming and easily identifiable gateways, an accessible water's edge, and a range of recreational facilities will be important attributes of the Master Plan.

Typical Mill Pond trail



3.2 Trail Network & Hierarchy

The Master Plan for Mill Pond Park creates a revitalized and clearly identifiable trail network and hierarchy that will provide visitors a more connected and clear park experience. This will improve the current trail network's lack of wayfinding and clarity surrounding pedestrian routes and destinations, particularly for people that occasionally visit the park. The Master Plan proposes an improved trail network through the provision of a primary trail running north-south, as well as a formalized secondary trail network running east-west connecting several surrounding streets adjacent to the park. The revitalization of the trail network provides an opportunity to rethink existing trail features by reconnecting divided ecological zones and reinforcing the health of a more continuous natural heritage system.

The primary trail provides expanded connections to the water's edge along Mill Pond so that visitors will have additional opportunities to access the water's edge. It is intended that the primary trail will be an asphalt surface with concrete edging. The detailed design may propose an alternate design for reinforced trail surfacing to accommodate construction equipment for stormwater infrastructure construction.

A new feature bridge and elevated boardwalk are proposed to enhance the secondary trail network in Mill Pond Park. The boardwalk feature replaces the existing east-west trail connection built on fill through the swamp and significant marsh wetlands within the park. The removal of fill, and replacement with an elevated boardwalk will promote a connected and protected ecology in the park. Elevating the trail in this area of the park will take the pressure off the surrounding ecosystem and allow for it to thrive when new habitats have been established post construction. Along this boardwalk, there will be opportunities for educational signage, along with potential memorial features (see Section 4.3). The boardwalk and feature bridge is proposed to be constructed with wood decking and metal framing and railings. These features would be open year round but not maintained. Railings for these structures would be built to keep people safe during the winter months.

Rendering of Mill Pond Boardwalk



Figure 3: Proposed trail network and entrances into Mill Pond Park



Legend

- | | | | |
|---|-----------------|---|---------------------|
|  | Primary Trail |  | Bridge |
|  | Secondary Trail |  | Trail to be removed |
|  | Boardwalk |  | Entry Nodes |

The secondary trail network is connected to the primary trail and provides access to Upper Mill Pond Park, Stavert Park and 71 Regent Street, Mill Street Park and South of Mill Street. The secondary trails also form primary circulation networks within each of the more traditional park spaces. Within these areas of the park, the secondary trail's materiality may consist primarily of limestone screenings with unit paving or concrete surfaces at certain entry points or anticipated areas of higher usage.

The secondary trail networks will connect to entry nodes surrounding the park. There are major and minor entry nodes. The major entry nodes are located at Stavert Park and in the 71 Regent Street lands, at Mill Street Park on Wood Lane and at the intersection of Mill Street and Trench Street, as well as in the South of Mill Street area. The entryway at Mill Street will provide a dedicated pedestrian crossing from the parking facilities located south of Mill Street. Minor entry points are located on residential streets at Theobald Circle, Willett Crescent, Emerald Isle Court, Rumble Avenue, Trench Street and Falkland Place. Entry areas to Mill Pond Park will consist of lawn or lower areas of vegetation in order to transition people into the more forested zones of the park.

At the entry points to the trail network, signage/ public art gateways should be considered as part of the wayfinding system to direct visitors through the park. Both the primary and secondary trail network will provide regular seating along the trail at points of interest.

A proposed feature bridge across the north end of the Mill Pond is a new focal point within the park. The bridge crosses over the northern portion of Mill Pond and provides vistas and viewpoints on either side effectively increasing the pond edge experience. The bridge connects from the primary trail along the eastern edge of the pond and strategically connects the underutilized area leading to Upper Mill Pond Park to the west and ultimately up to Stavert Park and the 71 Regent Street lands. The bridge will be an opportunity to include educational signage in order for visitors to engage with the natural environment and what they see from the bridge. The bridge will be an exciting new iconic feature and destination within the revitalized Mill Pond Park. Placemaking

Example of interpretive trail display



Rendering of feature bridge and trail fork



opportunities to reflect the industrial heritage of the Mill Pond may be incorporated into the bridge railing designs.

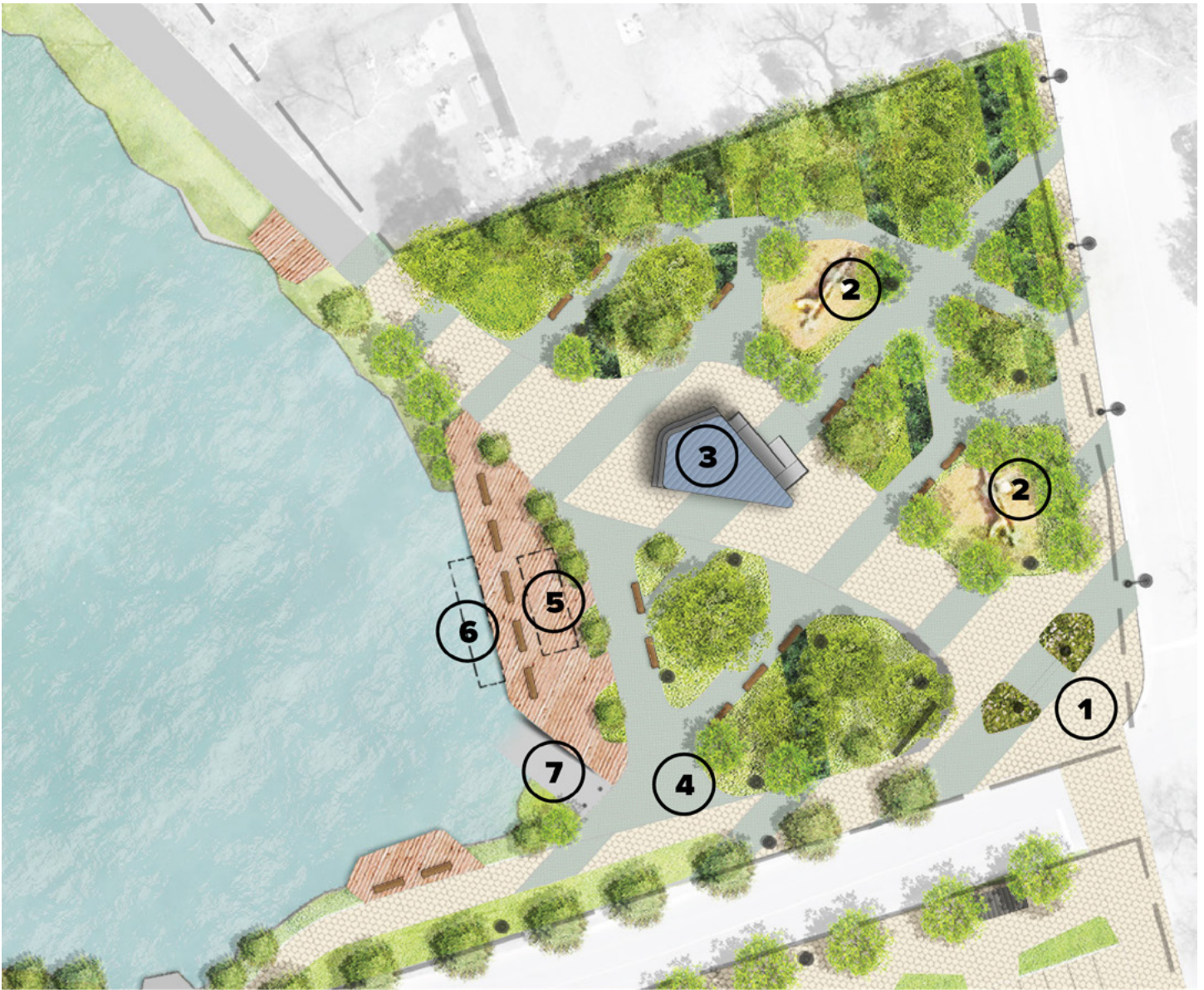
The Master Plan proposes a consistent wayfinding system that will help people navigate upon entry into the park and at significant junctions of the trail network. This approach will consist of a hierarchy of signage. Key gateway locations will include sculptural signage and large wayfinding maps. Internally, at various trail junctions and entrances to different park areas, there will also be wayfinding signs. Smaller wayfinding signs will also be placed at different points along the trail network to ensure that directionality is legible within the park. Additionally, educational signage will be located along different points on the trail network and at significant points such as along the bridge and boardwalk. Educational signage will consist of information about natural elements in the park, Indigenous knowledge of the land, information about appropriate wildlife/human interactions and the industrial heritage of the site. All wayfinding and signage will be unified through a consistent design and style to ensure continuity throughout the park. All signage will provide accessibility features.

As part of the overall park design, placemaking will be integrated not just through the proposed wayfinding and signage but also through the design elements. Placemaking may draw upon include the industrial history of the site, the indigenous knowledge of the land and the natural heritage. For example, the industrial history of the site as a sawmill could be drawn upon to integrate industrial materiality into the architecture of the new park centre proposed as part of the South of Mill Street section of the park, the renovated gazebo, the gateway signage and public art, as well as through the materiality of the proposed bridge and boardwalks.

Examples of a hierarchy of wayfinding signage



3.3 Mill Street Entry



- | | |
|--|--|
| 1 Gateway Entrance with Public Art, Seating + Wayfinding Map | 5 Temporary Skate Change and Operations Access |
| 2 Playground | 6 Ramp for Skating |
| 3 Gazebo/Stage/Pavilion* | 7 Operations Ramp |
| 4 Infiltration Paving + Bioswales* | |

*Conceptual location, subject to further study to confirm ultimate location

Mill Street and the Mill Street Entry are an important gateway to Mill Pond Park. The revitalization of this section of the park will include a new park arrival entrance with a dynamic gateway feature. The gateway feature will serve as a placemaking marker on the site, welcoming people into the main southern entry to the Park as they travel along Mill Street. This entry will also include street crossing enhancements along Mill Street.

The Mill Street Entry will include a balance of landscape and hardscape features. Improved paved zones are proposed for the function of supporting events in this area of the parks. These zones may consist of decorative unit paving or Low Impact Developments (LIDS) technologies. A new stage/gazebo/event space is proposed to support events in this area of the park and improve the role that the existing gazebo currently provides. The design for the gazebo will be updated to reflect the updated park design. The Master Plan suggests a central space for the gazebo, however, this conceptual location is subject to further study to confirm the ultimate location. Lighting will be provided throughout this section of the park in order to support different types of events.

Landscaped areas will complement the hardscape in this section of the park while providing required shading and adequate soil for mature trees to thrive. Locations for bioswales and other LIDs will be incorporated to provide a low impact approach to stormwater management. Infiltration paving

will be located throughout the Mill Street Entry. LIDs will also be considered for areas north of Mill Street Entry on the west side of the residential backing onto the park to address drainage issues. The Master Plan aims to preserve existing mature trees in this area while enhancing the softscape environment through the addition of new plantings.

The existing playground is proposed to be relocated away from the street edge. The playground will be upgraded with separate sections for junior and senior play as well as new play equipment, accessible play features and accessible safety surfacing. There will also be benches placed throughout the plaza in key locations close to shading and around the playground.

The Master Plan also proposes a seasonal skate change area overlooking the pond. This will include benches for skate change and a ramp to access the pond for skating during the winter. This area also proposes operation access for maintenance operations across all seasons.

A number of key lookout are proposed along the edge of Mill Pond as the primary trail moves northward from the Mill Street Entry. These lookout will create a scenic seating terrace for visitors to stop at as they walk along the trail. The lookouts will provide visitors with visual access and views to Mill Pond as they travel along the primary trail.

Rendering of Mill Pond Park Entrance Feature on Mill St and Wood Lane



3.4 South of Mill Street and Park Centre



- | | |
|--|--|
| 1 Existing Parking Lot | 4 Updated Bridge + Trail |
| 2 Existing Parking Lot | 5 Park Centre, Gallery, Washroom, Café, Operations* |
| 3 Sculpture + Feature Pollinator Garden | |

*Conceptual location, subject to further study to confirm ultimate location

The South of Mill Street and Park Centre area will provide parking facilities, a new park centre, and trail connections running through naturalized areas. A combined park centre will centralize many of the built functions and requirements of the park into one efficient facility. The park centre will provide gallery space functions replacing 314 Mill Street, a lower level space for operations facilities, an indoor and outdoor cafe as well as expanded public washroom facilities accessible from the exterior. The park centre will be designed to be elevated and protected from any future flooding in the area. Architecturally, the style of the proposed centre could take on an industrial style that would reflect the history of the site as a sawmill. Currently, the Master Plan locates the proposed centre adjacent to the east parking lot and accessible from the street. The Master Plan demonstrates this as the ideal location for the proposed park centre, however additional studies are required to confirm the program, size and adherence to regulatory requirements.

An updated bridge is proposed to replace the existing timber bridge and continue to connect the trails across the Upper Don River. The trail will meet on either side of the bridge and take visitors from the parking lot at Trench Street to the proposed sculpture and pollinator garden on Mill Street on the west side of the park. The trail will provide connections to the sidewalk on Mill and Trench Street, connections to the parking lots and pedestrian crossings on Mill Street to get

to the north side of the park and the larger trail network. The existing parking lots will remain on the site and will be connected to new and existing amenities to serve the larger Mill Pond Park.

Within the South of Mill Street area, some existing features will be enhanced and expanded while other new attractions will be added. The existing Millennium Garden will be expanded. The Millennium Garden will be improved with the support and participation of the community. The existing pollinator garden at the north west corner of the site will also be expanded. The pollinator garden will be enhanced and expanded with native pollinator species so that it continues to thrive as a space for plant diversity and provides opportunities for pollinator species to thrive. Additionally in the north west corner of the site there is a sculpture garden proposed. This sculpture garden is a reference to the existing art gallery that is situated in the current site of South of Mill Street. The sculpture garden will be home to permanent and rotating public art.

Toronto Sculpture Garden



Example of a pollinator garden



3.5 Upper Mill Pond Park



- 1 Park Entrances with Seating + Wayfinding Map
- 2 Feature Bridge
- 3 Trail Boardwalk
- 4 Trail Improvements

- 5 Fitness Equipment Circuit
- 6 Green Lawn Space
- 7 Picnic Pavilion
- 8 Naturalized Channel Location*

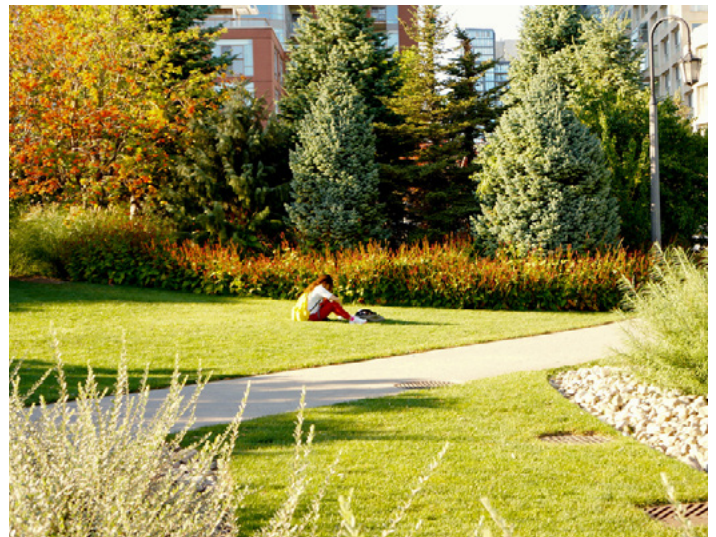
*Subject to further study associated with the EA

Upper Mill Pond Park will remain as an open park setting with passive seating areas. This area of the park is centered around open green lawn spaces, a picnic pavilion and trails. Surrounding this space a main circuit trail along the perimeter of the space is proposed as an updated alignment. The trail provides connections to the local sidewalk network along Willett Crescent. Upper Mill Pond Park provides secondary trail connections that lead to the proposed boardwalk and bridge and ultimately connect with the rest of Mill Pond Park. This trail is intended for passive use but will also provide outdoor fitness stations

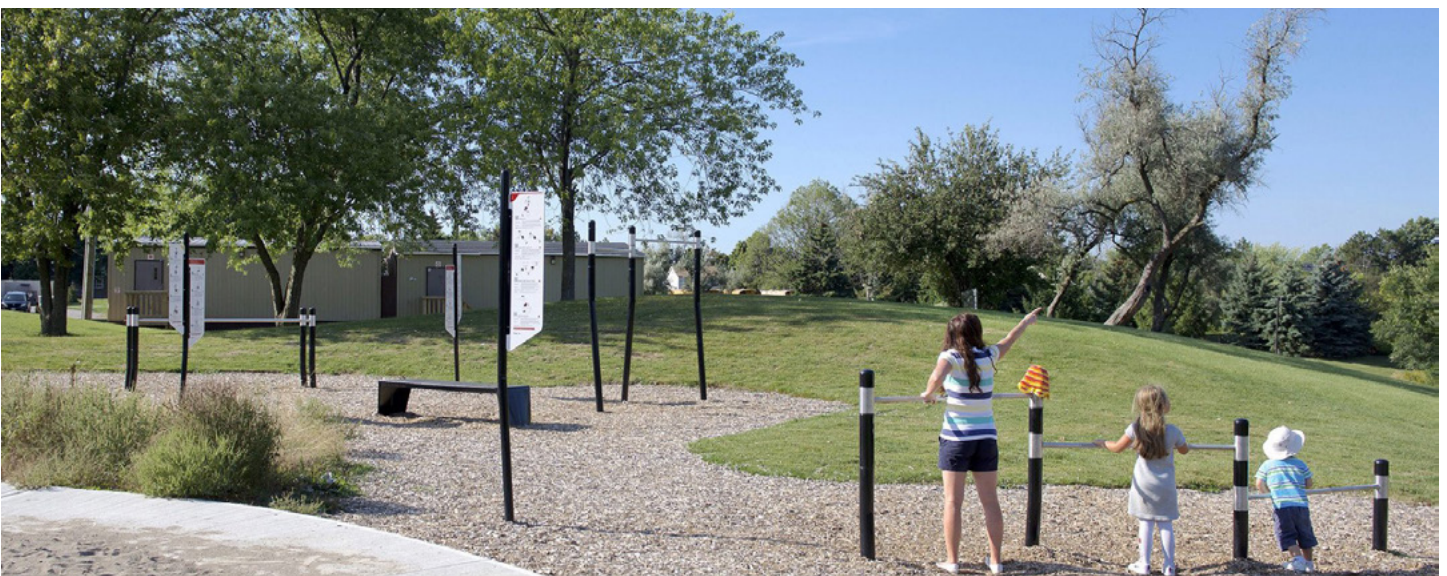
and benches for both active and passive use of this park space. The existing picnic pavilions in this section of the park will be retained or replaced depending on their condition at the time of construction.

During the pond dredging, the area of Upper Mill Pond Park may accommodate some of the dredged material from Mill Pond.

Passive park space examples



Example of outdoor fitness equipment implemented in Lake Wabukayne Park, Mississauga



3.6 Stavert Park and 71 Regent Street



- | | |
|--|-------------------------|
| 1 Gateway Entrance with Public Art, Seating + Wayfinding Map | 7 Promenade |
| 2 Playground | 8 Informal Skating Rink |
| 3 Lit Tennis Courts | 9 Adventure Slide |
| 4 Lit Pickleball Courts | 10 Naturalized Planting |
| 5 Washroom Building | 11 Bioswales* |
| 6 Parking Lot | 12 Infiltration Paving* |

*Conceptual location, subject to further study to confirm ultimate location

Stavert Park and the lands at 71 Regent Street will be integrated with Mill Pond Park to create a northern gateway to the park. The gateway entrance will include public art, a seating area and a park wayfinding map, helping to define the northern entry into the park.

Using the existing parking lot footprint at 71 Regent Street, the Master Plan proposes a new parking lot to serve the revitalized Stavert Park and 71 Regent Street lands. This parking lot would provide alternative parking to the lots located south of Mill Street, support access to the park from the north, and assist with balancing access in the south end of the park. The parking lot would also be updated to include bioswales and permeable paving, providing for a more sustainable parking solution.

New and improved active recreation facilities are proposed in Stavert Park. The existing playground will be updated with expanded play facilities, better walkways around the play facilities with connections to other parts of the park and the trail network as well as expanded and improved seating around the playground area. Improvements to the existing three lit tennis courts and the addition of two new lit pickleball courts are also proposed. The pickleball courts are proposed at a lower point in the topography to reduce the noise associated with the sport. Adjacent to the new parking facility there is a temporary seasonal skating rink. This skating rink would provide a natural surface in the winter months and would be open lawn during the rest of the year. This skating area would be informal and as such not refrigerated or lit. Finally, an adventure slide could be considered within the 71 Regent lands that will utilize the topography to provide a play facility that is integrated with the trail network proposed for the site. This slide would have a landing surface with connected formal walkways to bring people back up to the top of the slide.

Utilizing existing servicing infrastructure, a building that would house washrooms, an information kiosk and operations centers is proposed at the mid-point between Stavert Park and the 71 Regent Street lands. This facility will help provide operations storage and visitor support for this portion of Mill Pond Park

The Master Plan proposes a promenade walkway that runs from west to east along the top of the hill and overlooks the proposed naturalized area. This promenade will include shaded areas for seating, lookout points and wayfinding signage. A secondary trail will connect Stavert Park to the rest of the trail network through this promenade and the proposed primary trail. The secondary trail that comes off of the promenade will run through the proposed naturalized space and transition to more forested areas as it connects to the larger trail network. The proposed naturalized planting area will introduce native species that will enhance and diversify the existing landscape ecology. This area will aim to provide habitat for pollinator species and visual interest in this part of the park.

Metal slide at Teardrop Park in New York City



3.7 Significant Woodland, Marsh and Swamp Restoration and Invasive Species Management

Through the design proposed in the Master Plan, there is an opportunity to restore valuable elements of Mill Pond's natural ecosystem. These elements include important significant woodlands as well as marsh and swamp areas.

Currently, the existing vegetation communities within Mill Pond park include:

- **Dry-Fresh Exotic Deciduous Forest (FODM4-12)**, which currently contains species of exotic or invasive nature
- **Mixed Plantation (TAGM2)**, which originated as a cultural plantation
- **Coniferous Plantation (TAGM1)**, which originated as a cultural plantation
- **Dry - Fresh White Ash - Hardwood Deciduous Forest (FODm4-12)**, which is susceptible to or affected by pests and disease
- **Dry - Fresh Sugar Maple - Black Cherry Deciduous**, which is susceptible to or affected by pests and disease

Invasive species have been identified as a concern at Mill Pond Park through the background environmental studies and the public consultation process. Invasive species are organisms (including plants, animals, insects and pathogens) that are not native to an ecosystem and can harm the environment. They have the ability to out-compete native species for resources and space. Invasive species often lack their natural predators or population controls, which allows them to reproduce and spread rapidly. They can be very adaptable and have the ability to transform entire ecosystems.

Due to the current and historical human influence at Mill Pond Park, there are many invasive species found within the natural plant communities. Some of these invasive species include, but are not limited to, common reed (*Phragmites australis ssp. australis*), black locust (*Robinia pseudoacacia*), garlic mustard (*Alliaria petiolata*) and common buckthorn (*Rhamnus cathartica*). These species can pose a variety

of environmental, social and economic impacts. For instance, common reed (also known as *Phragmites*) can negatively affect the natural function of a significant wetland by impacting nesting bird populations, altering water levels and flood attenuation capabilities; dense black locust and buckthorn thickets can pose a risk or hazard to the community by blocking sight lines.

The City takes a Plant Health Care (PHC) approach to protecting the Urban Forest and Natural Heritage System; PHC is an approach to care for all trees, shrubs and herbaceous plants with a goal of improving and maintaining their health. Integrated Pest Management (IPM) is a component of the PHC philosophy and the ideal method for addressing invasive species. Integrated Pest Management (IPM) incorporates a variety of control considerations such as cultural, chemical, mechanical and biological measures to contain an invasive or undesirable pest at a manageable level.

The revitalization Master Plan identifies an opportunity to manage some of these invasive plant populations in areas where they pose an impact to infrastructure and/or newly planted material, and to improve the overall biodiversity of the natural features within the park. Identifying the purpose and objectives of the invasive species management will be important to ensuring a successful restoration program. For example, should the naturalized channel outlined in the EA options be implemented, there is an opportunity to enhance the marsh habitat by removing the existing invasive species. Similarly, significant woodland restoration plan(s) could be prepared that aim to regenerate the native vegetation communities.

An invasive species control and restoration program should incorporate a number of strategies, for this reason, the following factors should be considered at the detailed design and implementation stages of the Mill Pond Park Revitalization Master Plan process:

- Conduct a phased approach consistent with the Park Revitalization Master Plan and subsequent detailed restoration plan(s) that identifies abundance and extent of invasive species within Mill Pond Park; this will help to identify priority invasive species and priority areas for control as well as identify additional opportunities for restoration and ecological enhancements
- Incorporate IPM principles where feasible and utilize provincially recognized species-specific best management practices to provide effective means of controlling invasive species within certain environments
- Reduce the spread and introduction of invasive species through the construction phase by utilizing the Clean Equipment Protocol and staging invasive species control and restoration work throughout the phased stages of the park plan implementation
- Develop a communications plan to engage with park users to educate them on the importance of resilient healthy natural communities and how to prevent the introduction and spread of new and existing invasive species. Future opportunities to involve community members in citizen science to help monitor the success of restoration programs should be considered, as well as investigating opportunities to incorporate elements of the existing park in environmental education, such as the local art gallery and artistic community.
- Re-evaluate the phased approach as the City develops its Invasive Species Management Strategy/Action Plan.

Common reed (*Phragmites australis* ssp)



Black locust (*Robinia pseudoacacia*)



Garlic mustard (*alliaria petiolata*)



3.8 Parking Facilities

Existing Parking

The existing parking reflects a minimal footprint within Mill Pond Park. Presently there are two

Municipal lots located along the south side of Mill Street with a combined supply of 50 parking spots. They are actively used at peak and nonpeak times. The purchase of 71 Regent Street by the City, provides potential for additional parking to be introduced at the north end of the Park. This lot would increase the amount of off-street parking by approximately 40 spaces. While most major events are currently located on the southern end of Mill Pond, Additional programming is planned near Stavert Park as part of the Master Plan and

an additional off-street parking facility on the Park's north side would be beneficial.

Beyond the existing facilities it is important to note, many of the surrounding streets within the stable neighbourhood provide on-street parking to the park. Based on the parking study there are approximately 141 on-street parking spaces near the park.

Existing parking facilities located at Mill Street and Trench Street



Parking Operations

No major parking concerns were observed during the Concerts in the Park events or during weekend (Saturday) operations. System wide parking demands remained well below a target utilization of 90%. That said, once the Mill Pond Park Revitalization Master Plan is implemented, an increase in parking demand could be expected. To help offset potential increases in parking demand, an additional 40 parking spaces are envisioned (as part of the Mill Pond Park Revitalization Master Plan) near Stavert Park.

According to the observations made during the Concerts in the Park events and on the weekend, on-street parking in Zone 1 was more frequently utilized during the Concerts in the Park events, while on-street parking in Zone 2 was more

popular (specifically on Willet Crescent) during the weekend. Theobalds Crescent and Bridewell Crescent in Zone 2 was underutilized. Increased awareness of the availability of parking in this area may help to spread out the on-street parking demand.

The park currently has two accessible parking spaces in east lot and another two accessible parking spaces in the west lot which is adequate for small parking lots. Further, based on current demand in the area, it is suggested that 2% of parking spaces be designated for electric or hybrid vehicles. This would result in one EV parking space being provided between both the east and west lot.

Parking Study Conclusions

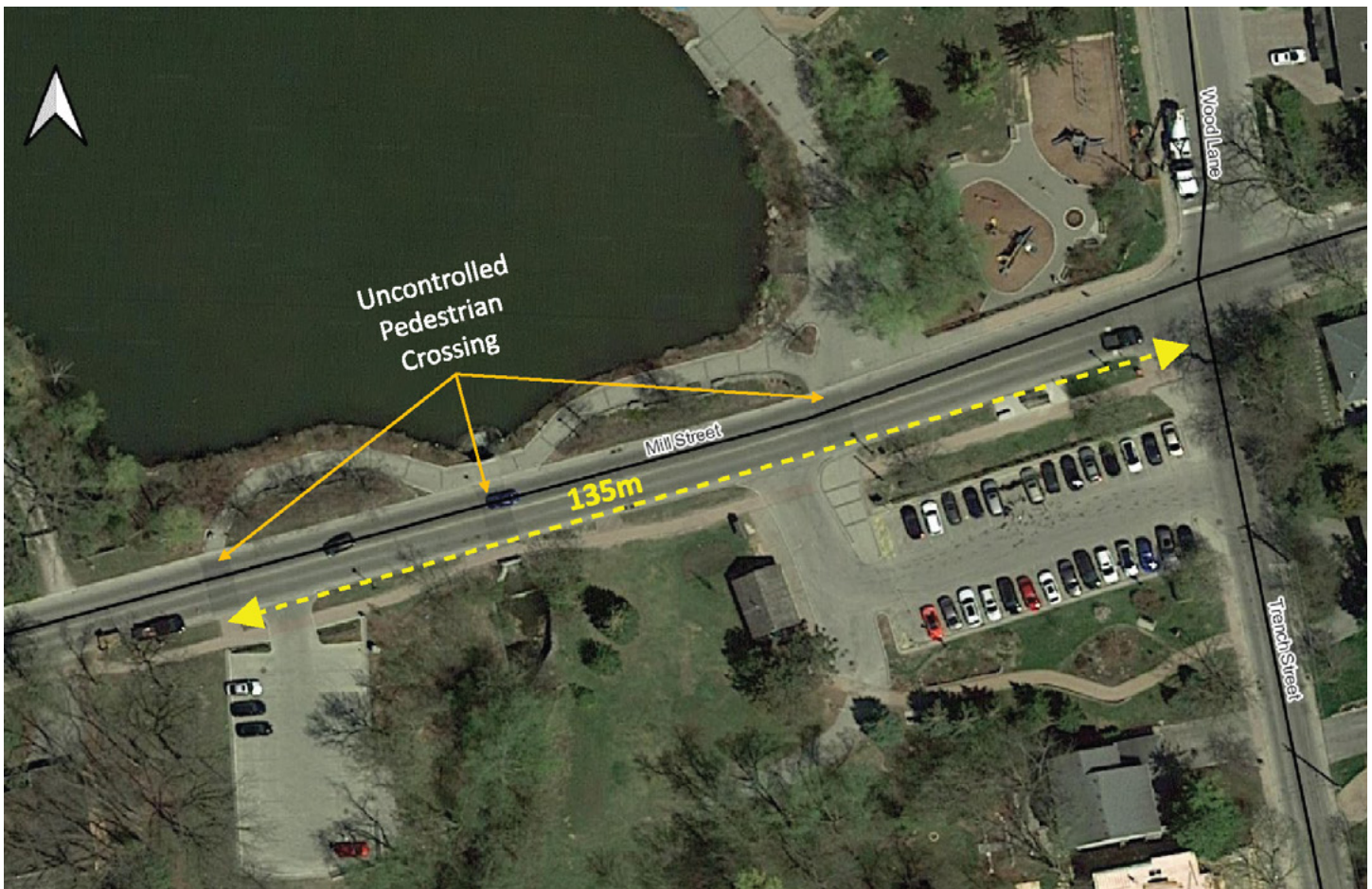


Traffic Operations

A full assessment of the need for a pedestrian crossover (PXO) at the evaluated location was not possible due to a lack of pedestrian volume data. The site was still evaluated using the guidance in Ontario Traffic Manual Book 15. According to the decision support tool in OTM Book 15, the site did not meet the requirements for a PXO due to its proximity to another traffic control device. However, it is observed that pedestrians are crossing Regent Street at this trail location, regardless of the nearby controlled crossing. Curb extensions at the trail location, and in advance of it, can help reduce the speeds of vehicles before they reach the trail location.

There were higher numbers of pedestrian crossings on Mill Street during a long weekend (1,289 crossings) compared to a typical weekend day (859 crossings). The majority of pedestrians crossed at the textured crossings which are closest to the east parking lot, while the western most crossing was the least utilized. The “Safety in Numbers” phenomenon, which suggests that pedestrian safety is correlated with increased pedestrian traffic, may apply to this area due to the high pedestrian presence. Speed data indicates that 85th percentile speeds are 51 km/h and may decrease when pedestrian presence is high.

Figure 4: View of Pedestrian Crossing on Mill Street



Parking Study Recommendations

- It is recommended that the City of Richmond Hill regularly monitor parking demand in the vicinity of Mill Pond Park. If parking demands approach capacity in the future, additional strategies should be considered.
- Increase parking enforcement in the east parking lot during the 'Concerts in the Park' events to prevent parking in undesignated parking spaces.
- Consider measures to increase awareness of parking opportunities to the north and west (i.e., Theobalds Circle, Willet Crescent), especially considering the changes envisioned in the Mill Pond Park Revitalization Master Plan which will enhance connectivity to these areas.
- Relocate PLAYGROUND AHEAD (Wc-3) sign on Regent Street to be a minimum of 100 metres in advance of Stavert Park for westbound motorists.
- Consider installing curb extensions (localized road narrowing where pavement width is reduced by extending the curb onto the roadway) at the proposed pedestrian crossing on Regent Street (provided sufficient space exists), and/or in advance of it, between Bridewell Crescent and Ellsworth Avenue.
- The City should continue the bicycle valet service during the Concerts in the Park event.
- Consider raised crossings, where the crosswalk is elevated from the adjacent roadway, at the conceptual crossings on Mill Street, between Leisure Lane and Trench Street / Wood Lane. This recommendation may be deferred until the full corridor assessment has been undertaken.
- Consider providing illumination at the crossing location on Regent Street, Leisure Lane and Trench Street / Wood Lane to improve conspicuity of pedestrians during nighttime conditions.
- It is suggested to provide one green parking space between the east and west lots. Further, the use of these EV spaces is suggested to be regularly monitored and evaluated to determine if the number of green parking spaces should be increased in the future.

Refer to Mill Pond Revitalization Parking and Traffic Study for more detail.

4.0 Implementation

4.1 Suggested Project Phasing

Phasing of Mill Pond Park Revitalization is necessary to minimize disruption to new and existing facilities and align implementation with capital funding availability. The construction works recommended by both this Master Plan and the EA study are suggested to move forward with the following phasing.

The following diagrams outline a suggested phasing strategy, for the works recommended as part of the stormwater EA and the Park Master Plan study. The cost estimate can be found in Section 4.2 This phasing strategy should be reviewed as part of the development of full construction plans in Phase 1.

Phase 1

(Design in 2025-2026
with construction in
2027-2029) *

- 1 Soil Filling (Subject to confirmation through EA)
- 2 Trails and Crossings (Excluding Feature Bridge, 71 Regent Street lands and Upper Mill Pond area)
- 3 Heritage Estates Pond Dredging
- 4 Mill Pond Dredging
- 5 Mill Pond Outlet Structure
- 6 Mill Street Entry



* Pending Council approval of Capital Budget funding

Phase 2

(Design in 2025-2026
with construction in
2027-2029) *

- 1 Stavert Park and 71 Regent Street

- 2 Upper Mill Pond Park



Phase 3

(Design in 2025-2026
with construction in
2030-2031) *

- 1 Feature Bridge
(Park circulation
may be limited
while construction is
underway)

- 2 South of Mill Street

- 3 Gabion Wall Replacement



4.2 Cost Plan

The costs outlined below are only related to the park amenities outlined in the Master Plan. There are additional stormwater- related costs that are outlined in the Environmental Assessment (EA) document (and therefore not included in this estimate).

CBC Strategy By-Law Items	Cost
Stavert Park	
Wayfinding and Signage (Placemaking + Interpretation)	\$ 50,000.00
Gateway Feature/Public Art	\$ 60,000.00
Total	\$ 110,000.00
71 Regent Street	
Wayfinding and Signage (Placemaking + Interpretation)	\$ 50,000.00
Total	\$ 50,000.00
Upper Mill Pond Park	
Wayfinding and Signage (Placemaking + Interpretation)	\$ 20,000.00
Total	\$ 20,000.00
Mill Street Park	
Wayfinding and Signage (Placemaking + Interpretation)	\$ 100,000.00
Gateway Feature/Public Art	\$ 80,000.00
Gazebo Buidling/Park Stage	\$ 350,000.00
Total	\$ 530,000.00
South of Mill Street	
Wayfinding and Signage (Placemaking + Interpretation)	\$ 95,000.00
Public Art/Sculpture Garden	\$ 50,000.00
New Building (Operations, New Café, Art Gallery, Washrooms)	\$ 3,000,000.00
Total	\$ 3,145,000.00
Trail System	
Wayfinding and Signage (Placemaking + Interpretation)	\$ 100,000.00
Public Art	\$ 50,000.00
Retain Dedication + Memorial Benches +Trees	\$ 50,000.00
Total	\$ 200,000.00
Total all items	\$ 4,055,000.00

DC By-Law Items	Cost
Stavert Park	
Playground Equipment	\$ 150,000.00
Total	\$ 150,000.00
71 Regent Street	
Permits & Mobilization	\$ 35,000.00
Demolition	\$ 69,500.00
Earthworks	\$ 132,000.00
Site Servicing	\$ 288,000.00
Electrical	\$ 269,000.00
Landscape (Planting)	\$ 81,000.00
Landscape (Hardscape)	\$ 575,250.00
Miscellaneous Site Furnishing	\$ 19,100.00
Wayfinding and Signage (Placemaking + Interpretation)	\$ 45,000.00
Pickleball Courts	\$ 300,000.00
Ice Skating Rink	\$ 25,000.00
Washroom Building	\$ 800,000.00
LIDs	\$ 500,000.00
Total	\$ 3,138,850.00
Upper Mill Pond Park	
Fitness Equipment	\$ 70,000.00
Total	\$ 70,000.00

DC By-Law Items	Cost
Mill Street Park	
Sr. Playground Equipment	\$ 150,000.00
Jr. Playground Equipment	\$ 100,000.00
LIDs	\$ 500,000.00
Total	\$ 750,000.00
South of Mill Street	
New Bridge	\$ 110,000.00
Trail	\$ 195,000.00
Total	\$ 305,000.00
Trail System	
Boardwalk Trail + Rest Areas	\$ 400,000.00
Primary Trail	\$ 1,050,000.00
Secondary Trail	\$ 500,000.00
Feature Pedestrian Pond Bridge	\$ 2,000,000.00
Restoration Planting	\$ 252,000.00
Total	\$ 4,202,000.00
Total all items	\$ 8,615,850.00

The Mill Pond Preferred Option Cost Estimate is estimated in 2023 Canadian Dollars. Cost of living adjustments and inflation will be incorporated in the relevant Capital Budget and Capital Plan forecast over the lifespan of the project.

4.3 Community involvement

The Master Plan is intended to set a framework for the revitalization of Mill Pond Park that responds to the needs of the community. Throughout the revitalization process, community involvement and partnerships will be key in achieving the type of public space that the community will continue to cherish.

Community involvement and partnerships may involve:

- Seeking stakeholders input as the detailed design for the phased implementation of the park are developed.
- The retention and organization to highlight memorial benches and plaques as well as the introduction of other creative dedication opportunities such as engraving on the boardwalk.
- Involvement in the Millennium Garden, and the pollinator garden south of Mill Street, and other areas of soft landscape in partnership with local horticultural groups.
- Seeking input on educational and themed signage. Input from the community.
- Working with the City's different cultural groups to organize events and exhibitions in Mill Pond Park, especially within the area south of Mill Street Park and the Entry area.
- Community involvement in the programming for the gallery space and cafe within the South of Mill Pond area.

Mill Pond Concerts in the Park



Educational and Themed signage



Example of Boardwalk engravings



Appendix A - Master Plan Process

Master Plan Process

The Mill Pond Park Master Plan process was designed to provide comprehensive input, analysis and oversight with the intention of meeting the community's needs at present and into the future:

STAGE 1: Opportunities and Constraints

A key component of Stage 1 is to assess the opportunities and constraints of the existing park landscape through meaningful community engagement. This stage of work involves review from technical teams and review of existing background documents. Additionally, various opportunities for engagement with stakeholders including the Toronto and Region Conservation Authority (TRCA), Councilor West, Mill Pond Gallery (and the arts community), local environmental advocacy and representation from the York District School Board provides part of the analysis.

A self guided walking tour and participatory online survey provided the public with opportunity to give input on the opportunities and constraints during Stage 1. This information along with the technical background report provided guidance for the development of two (2) options in Stage 2.

STAGE 2: Options Development

Stage 2 of the Master Plan involved the development of two (2) options. These options built upon the background information presented as part of Stage 1. As part of the option development, ideas, principles and options were presented to and reviewed by the Technical Advisory Team (TAT), which is composed of senior members of City departments involved in park design and operations, recreation and cultural services and transportation. The team provided ongoing coordination with the Stormwater Rehabilitation EA team. Additional meetings were held with the TRCA to discuss potential strategies for addressing connections through the watershed and natural heritage features.

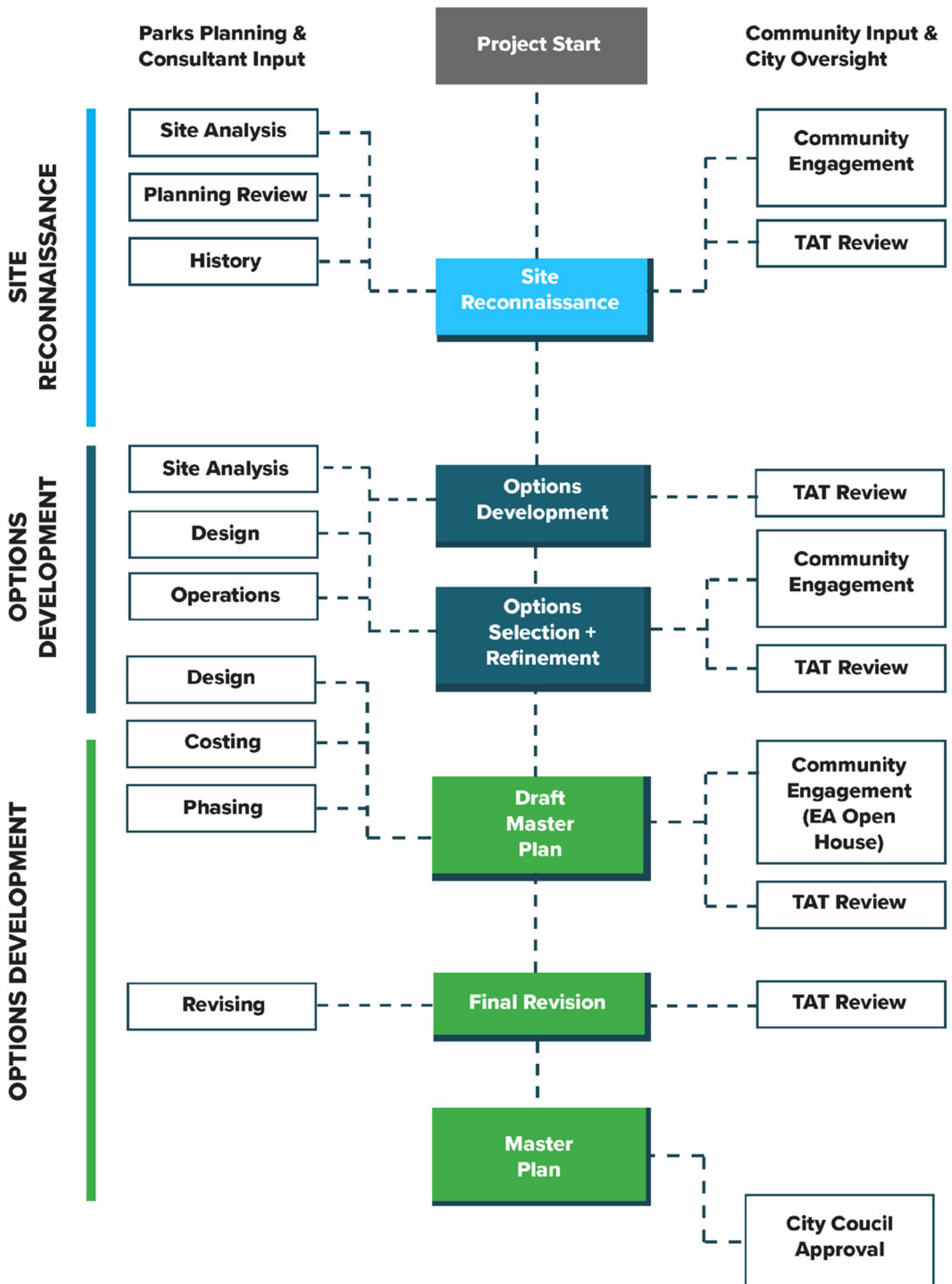
Stage 2 also involved the presentation of the two design options at a Virtual Open House. Feedback was received from the public through an online survey. This feedback was summarized and consolidated in order to help inform Stage 3, preferred option development.

STAGE 3: Master Plan

Stage 3 took the comments heard following the Virtual Public Open House and selected a final preferred option to become the Master Plan for the Mill Pond Park revitalization. Additionally, comments received on the individual areas of the park were worked into the development of the preferred concept in order to achieve a Master Plan that responds to the needs of the surrounding community.

As part of Stage 3, a joint Public Open House was held with the Stormwater Rehabilitation EA team. As part of this open house, the preferred option was presented to the public alongside the feedback that had been received to demonstrate the changes.

The Draft Master Plan will be reviewed by the TAT and Richmond Hill City Council. It will be posted for final review and comment by the public on the City's website. Revision based on feedback from the community, Council and the TAT will be incorporated into the final Master Plan. Upon final review and approval by Council the final Mill Pond Park Master Plan will be released.



Appendix B - Site Analysis



Mill Pond Park, winter activities.

Background Review

As part of Stage 1, an extensive review of the background policy and documentation work as it relates to the parks development and direction of the City of Richmond Hill was completed. This review integrates the City's Official Plan, Parks Plan, Implementation Plan, the 1970 Mill Pond Park Master Plan, and supporting documentation.

The **City of Richmond Hill 2010 Official Plan – Building a New Kind of Urban** defines parks as “spaces that help build complete communities, support connectivity and mobility within neighbourhoods, create special places for people, provide economic benefits, and protect the environment”.

The Official Plan conveys specific Parkland provisions that holistically seek to tie the development of park and urban open spaces as part of the city's Greenway System and the continuity of providing a network of focal points and linkages. The City of Richmond Hill's Official Plan significantly focuses on the development of it's Greenway System, envisioned as a legacy of environmental, agricultural and urban open space lands that will be protected, enhanced, and actively managed over the long term. The system has a wealth of natural features and functions that are part of the larger Regional Greenlands System which includes portions of the Oak Ridges Moraine (ORM) Conservation Plan Area, the Greenbelt Plan Area, and the Parkway Belt West Plan Area. The importance of understanding the City's parks system through a natural heritage lens caters to the conservation of key natural heritage and hydrological features, the redirection of development away from sensitive surface water and groundwater features and the protection of associated minimum vegetation zone(s).

On a social and cultural level, the parkland provisions seek to continue developing and enhancing a parks network that is within walking distance to all dwellings within any neighbourhood. The City also has a strong focus on land acquisition for parks or other public recreational purposes as a condition of development. Ultimately, the Official Plan vision for parkland and recreational services focuses on:

- Providing safe and accessible parks and recreation services.
- Providing a diverse range of parks and recreation services that enables choice and meets diversity standards
- Celebrating and building upon the existing fabric of parks and open spaces while addressing the transforming needs, growth patterns, and towards a more urban community
- Integrating parks and trails with the urban open space system as a component of the Town's Greenway System
- Creating more vibrant and interesting communities through planning and design
- Enhancing the function of parks as focal points and landmarks within the community.
- And involving the community in the design of parks and the planning of recreation services.

Conversely, the purpose of the **City of Richmond Hill Park's Plan** extends to 2031, and intends to; understand the park needs of the city, develop park investment recommendations, review the role and function of the city's park types, and develop a decision making methodology for park development and revitalization. The Plan acknowledges the importance of parks for developing complete communities and especially in urban and intensified areas, for a growing Richmond Hill cultural population. The guiding principles also advocate for developing park planning on a per capita basis and promote parkland provisions.

Mill Pond Park is both a Destination and Neighbourhood park, as part of the City's Plan. The City's Parkland Needs Analysis demonstrates that Destination Parks are an obvious draw for people across the Town, to participate in organized sports, to take part in recreation programs or to visit splash pads. While residents tend to specifically use the Neighbourhood Parks that are closest to their homes, they all use Neighbourhood Parks whether they live in suburban neighbourhoods. And this speaks directly to Mill Pond Park as a central focal node servicing residents to walk their dogs, as an “oasis” of green within the context of the urban landscape, and as

spaces for outdoor playgrounds and recreation facilities close to where people live. Enhancement, repair and repurposing of parks are critical action items to re-establish a strong park relationship with a growing Richmond Hill population. Park redevelopment projects, like Mill Pond, may include standard facility replacements, changes to facility types within the park, reconfiguration of elements within the park (e.g., changing the location of facilities, re-grading and/or re-alignment of pathways), and redesign of passive spaces within the park. When establishing the level of priority for park redevelopment projects, the City seeks to establish public support and demand for the project, and overall improvement of the park as a function of strengthening neighborhood connection.

The Park's Plan guidelines align with the guiding principles of the Town's Official Plan to ensure that the Town's park system contributes to achieving the overall land-use planning vision for "building a new kind of urban." The City aims to ensure that individual parks continue to respond to the transforming needs of the people using them, especially those constructed 20 to 30 years ago. Overall, the Park's Plan stipulates 5 key direction for developing strong Park Systems including;

- Improvement of design standards and quality of outdoor recreational spaces
- Increasing the comfort, convenience, and safety of Richmond Hill's Parks
- Fostering inclusivity
- Promoting better opportunities for the Town's park and outdoor recreational facilities
- Enhancing the City's park system connectivity

Both these policy documents place a universal importance of parks within the overall urban context. The increasingly parks are playing a more complex function to our Cities. Balancing the role and expectation of Mill Pond Park within the local and regional context will need to be captured as part of the Master Plan.

Mill Pond Park Master Plan (1970)

The original 1970 Mill Pond Park Master Plan reflects on the park's history, where it's 1200 feet stream was originally dammed in order to create Mill Pond and the area used to operate a Mill. Many remaining parts of the park were used to recreate, swim, fish and other community activities strongly tied to its ecological prominence. The Plan acknowledges the diversity of the Park's ecology from the rich mix of upland, swamp lowland and aquatic plant communities that serve a breadth of ecological services for both flora and fauna. Yet, the difficulties and deterioration of the lake environment have been clear, as a result of organic debris from human and natural nutrient loading in the system.

The Park challenged the legacy to revitalize and establish Mill Pond as a connective ecological and social tissue of the Town of Richmond Hill. The Plan set out to; preserve and emphasize the natural park features, unite the park with other park systems and develop its robust access network, develop part of the park as a water oriented recreation area, and preserve the socially historic features of the site. The plan set out to prioritize the central promenade along Broad St. that served as a conduit for the parking lot, historic and social uses, and access to the water's edge in the form of a beach area for water activities. The original plan speaks of controlled pedestrian access points in the Conversation Zone through the use of Barrier Planting and the integration of an elevated observation Tower to allow views of the natural heritage.

The 1970 Master Plan also programs the park for winter uses for activities such as skating on the Pond, winter carnival activities, snow & ice sculpting, and nature studies. A silt basin was also planned for the collection of excess silt, in front of the mouth of the stream to the island where an underwater berm will form the front of the container for the silt. Specific nature educational opportunities are considered such a wild bird area for observation and ecological programming.

The construction of the Plan first considered earthwork through; the dredging of the lake to remove plant and deposited material to deepen it's base, removal of organic matter from the swampland forest, the filling of the promenade area, the enlargement of an island, and filling parts of the dying forest at the time. The plan goes on to consider a second stage where the storm drainage system is installed and initial planting program to establish successional ecologies. The Plan further

reflects on the high level of maintenance that the park required and control mechanisms, such specific access nodes, use of indigenous plant materials that require little care, and promoting respect of the natural setting.

And as late as 2003, Mill Pond Park has experienced Beaver damming issues impacting its stormwater drainage structural systems, requiring a humane and effective wildlife management policy for responding to the conflict.

Figure B-1: 1970 Richmond Hill Masterplan.





Mill Pond Park Richmond Hill

Mill Pond parking lot →
South Pond Area →
Dunnell Hill Rd →

← Mill Pond Rd
← Upper Mill Pond Park
← Lower Mill Pond



Augmented reality testing of Mill Pond Park signage at the park entrance.

Site Review and Analysis

On December 4th, 2020, the core project team assembled at Mill Pond Park to conduct an extensive site review. In keeping with COVID 19 health regulations for outdoor meetings, only 10 team members were permitted to attend. Health and safety protocols were met and risk assessed based upon site conditions and COVID were identified as low.

This 2 hour site review started from the main parking lot at the south west corner of Mill Street and Trench Street. At this rallying point the group discussed several places of interest within the Park and local context that should be examined. Dillon's team also exhibited photo recording and augmented reality (AR) technology which will be utilized during the analysis and inform development of options. The site review and analysis followed the map below. Areas of particular interest included:

1. Southern Pedestrian Bridge
2. New Parking Lot (West of East Don River)
3. Mill Pond Gallery
4. Mill Street Weir Structure
5. Park Main Entry and Gazebo
6. Educational Lookout
7. Swan House
8. Trail Network North along Forest and Fescue
9. North Pond
10. ANSI Approaching Regent Street
11. 71 Regent Street & Stavart Park
12. Upper Mill Pond Park
13. Lower Valley Trail
14. Rumble Avenue Gateway
15. Main Parking/Washroom Facilities

This extensive tour showcased many of the features which gives Mill Pond its strong identity within the community. Its landscape ranges from maintained parkland and amenities to quiet and tranquil naturalized zones within the City. It resembles a dynamic urban park which has evolved dramatically over time.

Despite many of its community strengths, Mill Pond also contains several areas which are in need of revitalization and improvements. In many of these instances park features have simply reached their lifecycle and need to be updated. Well used elements such as the boardwalk, trails, and furnishings are inconsistent and in need of replacement. Overall the Park could also use a more specific review of its programme and a strategy for wayfinding/signage. City staff outlined many of the challenges posed by events and growing usership of the park on a daily basis. Based upon trends in established parkland within many of our intensifying cities, the demand will only continue to grow creating further stress on the existing facilities, as particularly observed during the pandemic.

This engagement event also allowed us to showcase new tools of 3D visualization and AR in real time. Through geo-referencing upgraded and preset elements such as signage and community facilities, we were able test suggestive improvements to the Park through scaled features. As a tool to assist visualization, our discussion revolved around the use of these tools as a part of conveying the ultimate concept to stakeholders and the public, particularly during this challenging time of COVID 19 restrictions that may lead to online consultation events.

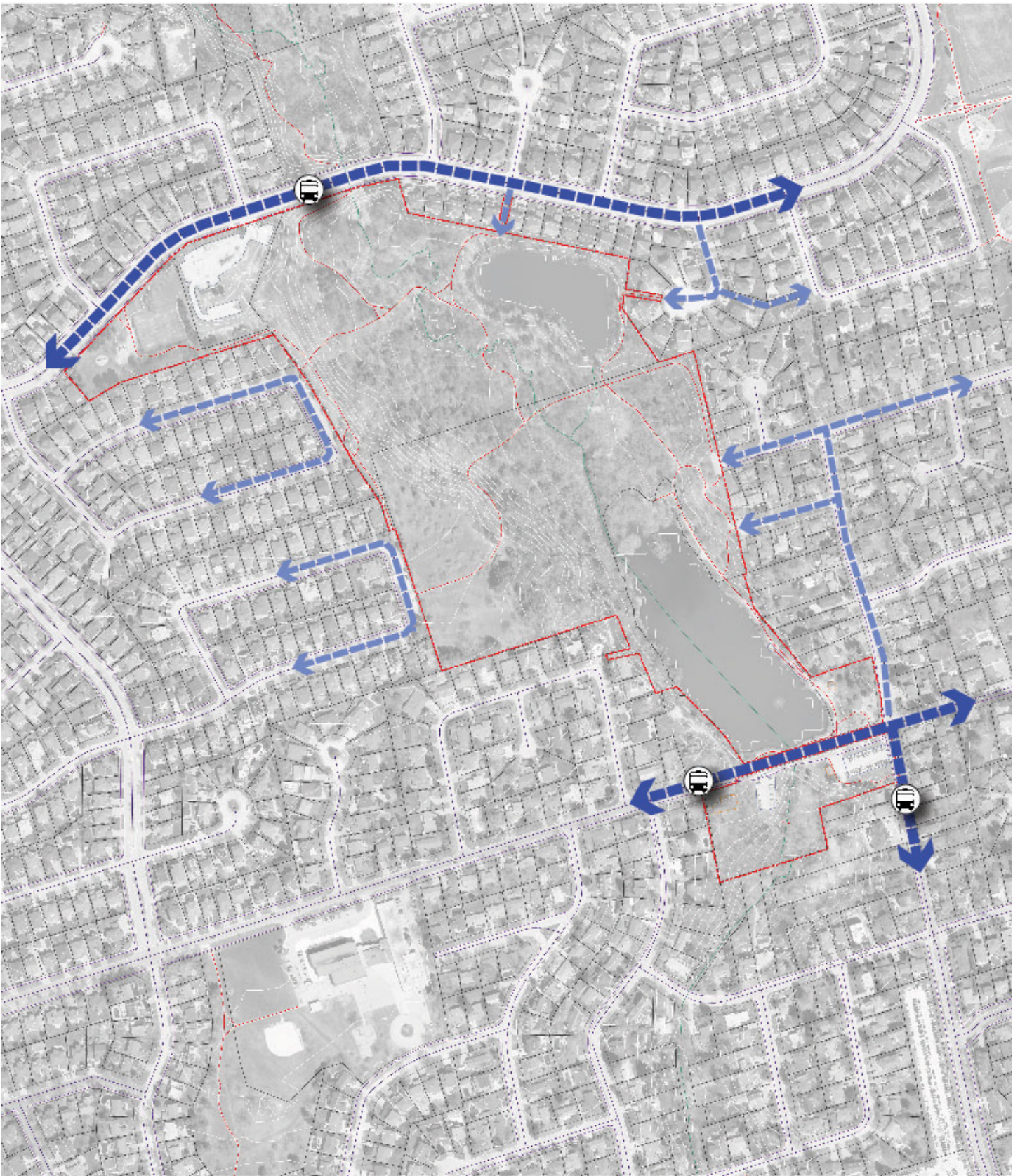


Mill Pond Park boardwalk overlooking the pond area.

Existing Conditions

The following mapping series documents existing conditions and analysis which has been verified by our background and site review as part of Stage 1 of the Master Plan. Each of the topics being reviewed have been layered in order to better understand the points of intersection between each item studied and how they contribute to the overall experience of the Park today. The following maps have helped to inform our opportunities and constraints analysis.

Figure B-2: Contextual site circulation.



Contextual Movement

Mill Pond Park is situated in an established neighbourhood. Built over several periods of urbanization, the surrounding context is entirely stable residential, thereby situating the park directly into the community rather than fronting upon major streets or arterial roads. Similar parks facing a more neighbourhood oriented context often serve a more localized function, however Mill Pond Park has historically been a regional draw, which puts particular stress upon its surrounding road infrastructure.

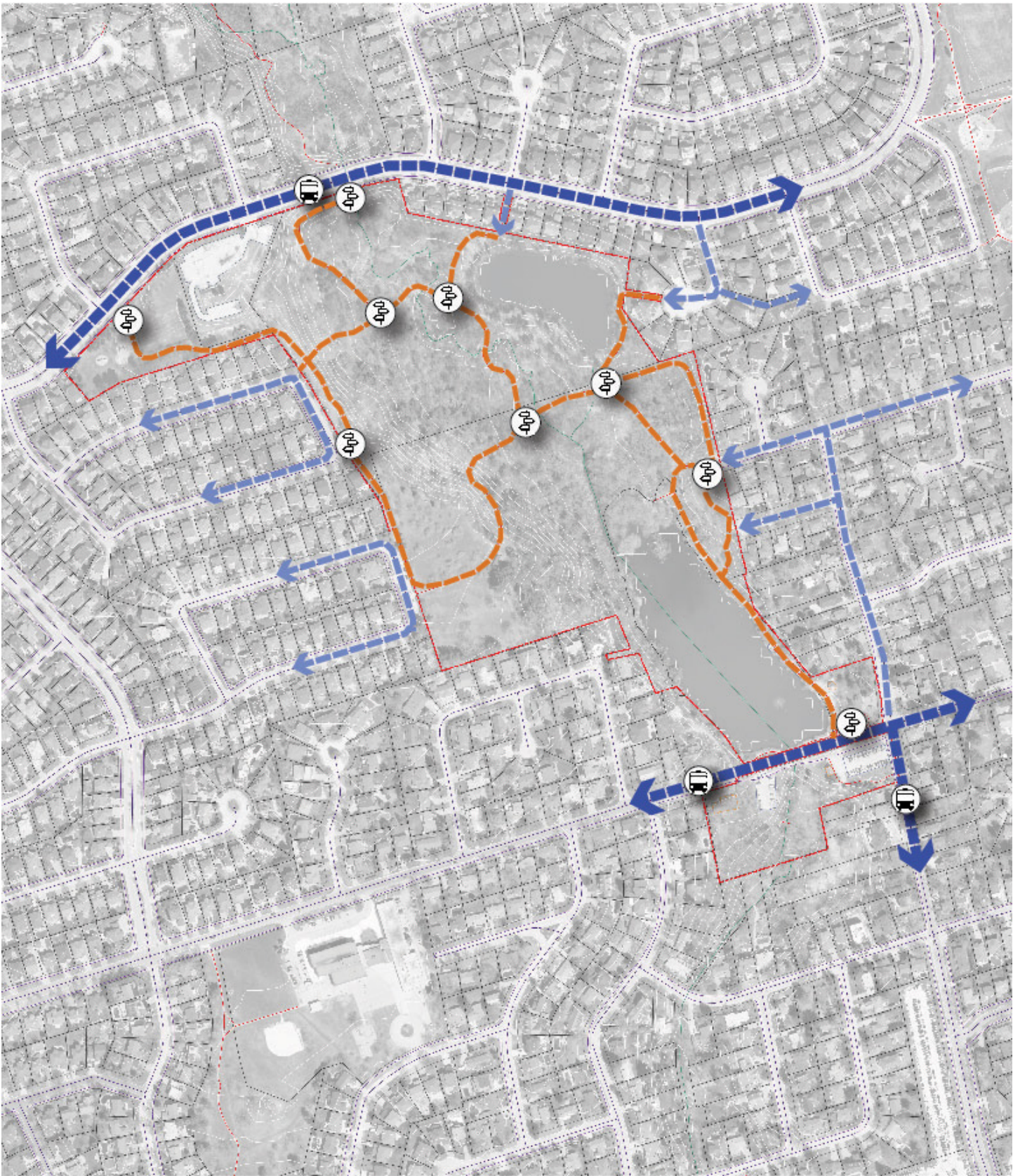
Interestingly the park is bound by collector roads, carrying public transit routes through the neighbourhoods, further emphasising the Park as a regional destination. Beyond Regent and Mill Street's east/west connections over the East Don watershed, the park is void of any further road connections leaving many local streets to end or surround the park.

Currently Mill Street provides the most pronounced entry into the Park. The Pond and most intense public gather spaces presently front Mill Street, creating the centre of activity for the park. Amenities such as washrooms, parking, playground, bus stops, gazebo, and site furnishings all have direct relationships with Mill Street. In addition the Mill Pond Gallery (located at 314 Mill Street) also provides a significant cultural amenity that is anchored upon the Park. Mill Street presents a key opportunity to heighten the overall sense of place and arrival to Mill Pond Park. Rethinking the streetscape as a dynamic public space will help further establish this point as the main gateway into the Park.

Mill Street view



Figure B-3: Park trail networks and potential opportunities for wayfinding and signage.



Trail Networks and Wayfinding

The existing trail network shows a diverse circulation pattern which has evolved through the park's history. Established trails and boardwalks that are maintained by the City are outlined in this figure. Many of the trails are guided by topographical limitations. Trail alignments also are spatially constrained in some locations. Revising some of the trail alignments can help ensure that safer and accessible routes are considered as part of the options development. Also many of the existing trails have a significant environmental footprint within ecologically sensitive areas, particularly within the valley. New trail connections should consider less impactful methods of connectivity throughout the park. The use of more boardwalks, permeable paving/materials, and bridges should be considered. A revised trail network should also consider a trail hierarchy, which can identify a primary and secondary network. This could help reduce redundant trail spurs and minimize the overall footprint of trails through the park.

The lack of wayfinding and signage is a significant concern for people visiting the park, especially for irregular users. The trail network should consider a consistent wayfinding system that helps navigate people upon entry into the park, and at significant junctions of the trail network. A design approach to establishing the hierarchy to the trail network will also support a wayfinding system. In particular, a determined North/South and East/West trail connection will provide a clear way to navigate through the Park and reduce disturbance to the natural heritage features.

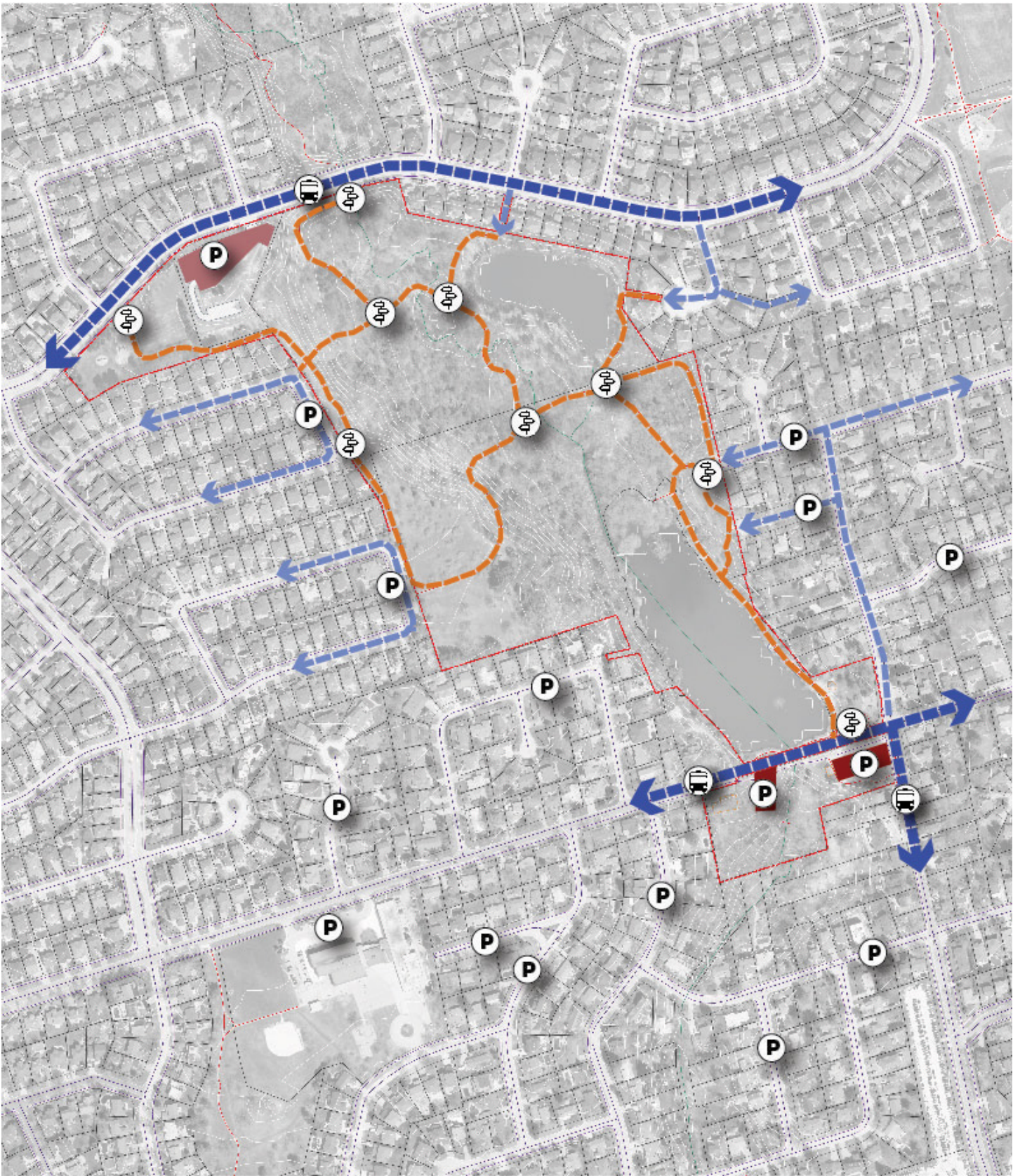
Central trail into Mill Pond Park and newly developed boardwalk.



Forested trail pathway through the park's natural heritage areas.



Figure B-4: Mill Pond Park site map outlining parking locations.

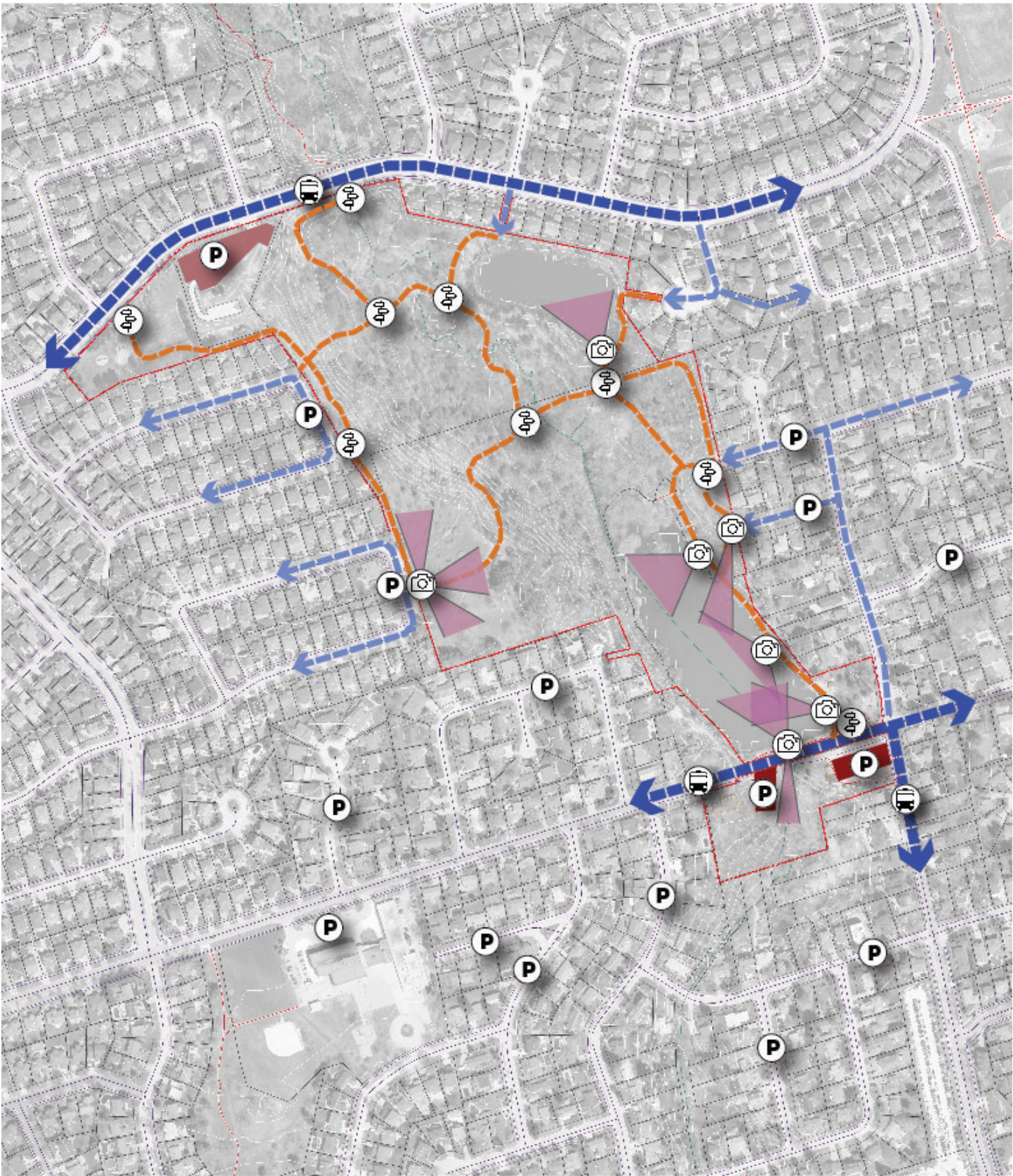


Parking

The existing parking reflects a minimal footprint within Mill Pond Park. Presently there are two municipal lots located along the south side of Mill Street. They are actively used at peak and non-peak times. The purchase of 71 Regent Street by the City, provides potential for additional parking to be introduced at the north end of the Park, however it is important to note that its significant distance from the areas presently designated major events. Beyond the existing facilities it is important to note, many of the surrounding streets within the stable neighbourhood provide on-street parking to the park. The parking lot at Pleasantville Public School also acts as an overflow parking lot to the Park during events.

Parking is a point of contention within the local constituency. It is also important to note that traffic generated by events creates significant congestion along neighbourhood streets and can have several other adverse impacts. In particular, Mill Street and Trench Street is an EMS route to Mackenzie Health (Mackenzie Richmond Hill Hospital) and congestion could create emergency service delays. Alleviating traffic from events is also directly tied to providing parking supply. If suitable parking and traffic mitigation can not be made within the immediate study area for times of major events, alternative approaches should be considered, including providing shuttle service to municipal parking lots nearby. This is a common practice used in other places, and can help reduce the need to build parking just for peak events. Another precedent to consider is to charge for parked cars for general users. Not only will this help reduce general vehicular congestion in the community and create more users to environmentally friendly modes of travel (active transportation/transit), paid parking can also become part of the revenue stream for the Park. Study of how this has been implemented in other Parks throughout the City will help determine the benefits of such a plan.

Figure B-5: Areas for opportune site views along the trail network.

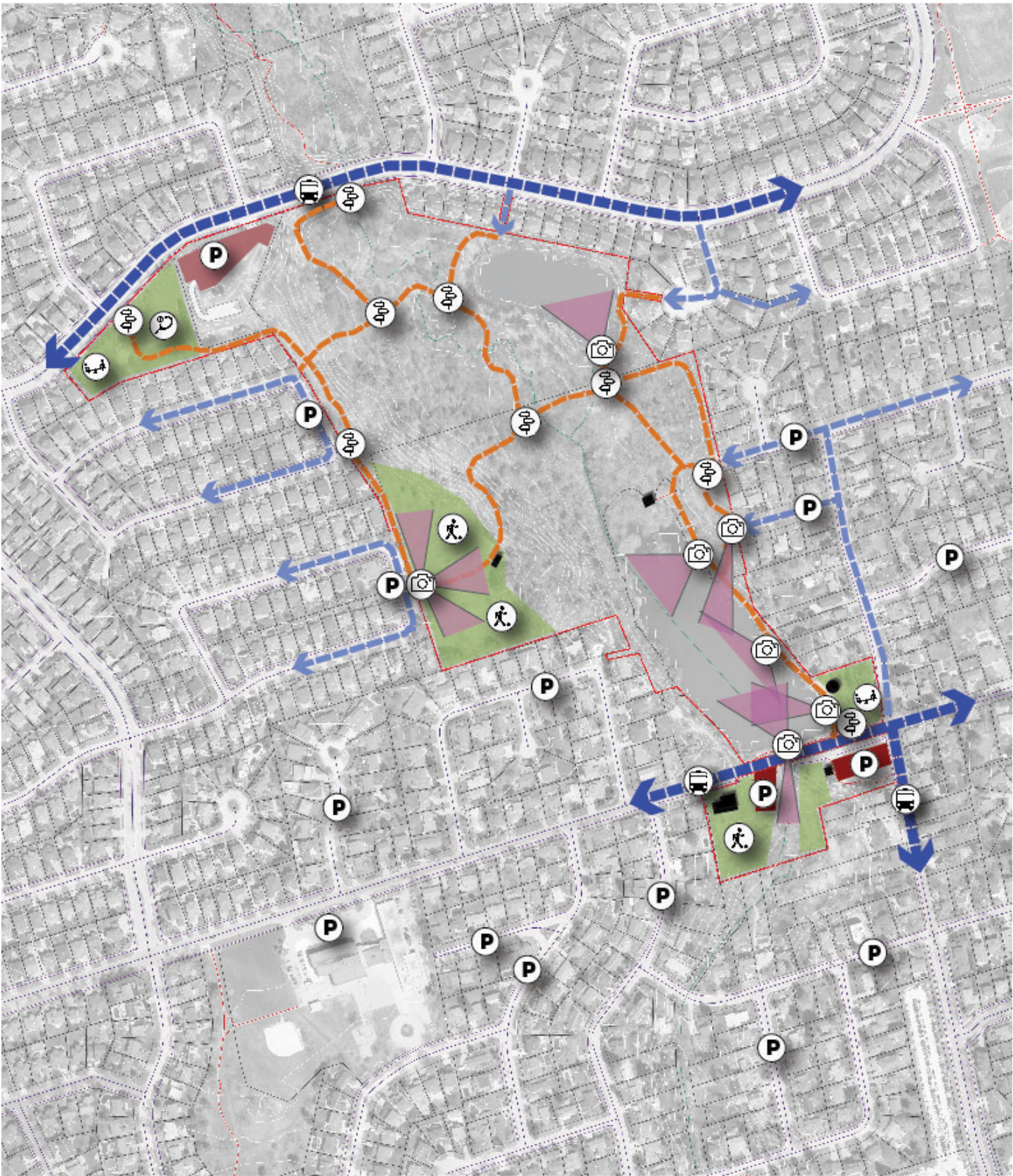


5.3 Important Views

The picturesque qualities of Mill Pond Park also make it a major destination. The public spaces along the shoreline of Mill Pond is a particularly popular space for photographers, as are some of the pastoral spaces within Park. These areas constitute a network of view points throughout the Park. These views really do provide an important part of the experience of Mill Pond Park and should be maintained and enhanced where possible.

The specific relationship to water and the waterfront is largely regarded as the major draw to the Park. Therefore it would be suggested that anyway to improve the relation people have with the water should be considered as part of the options development. In addition increasing the opportunity to bring people to the water's edge also can have an important impact on the future of the Park. Options should always consider the implications of bringing people to the water's edge, along with safety and ecology, shoreline and water quality management. More formalized access to these spaces would help achieve the overall goals of environmental sustainability, and improve the overall user experience of the Park.

Figure B-6: Mill Pond map showing maintained and programmed recreational park spaces.



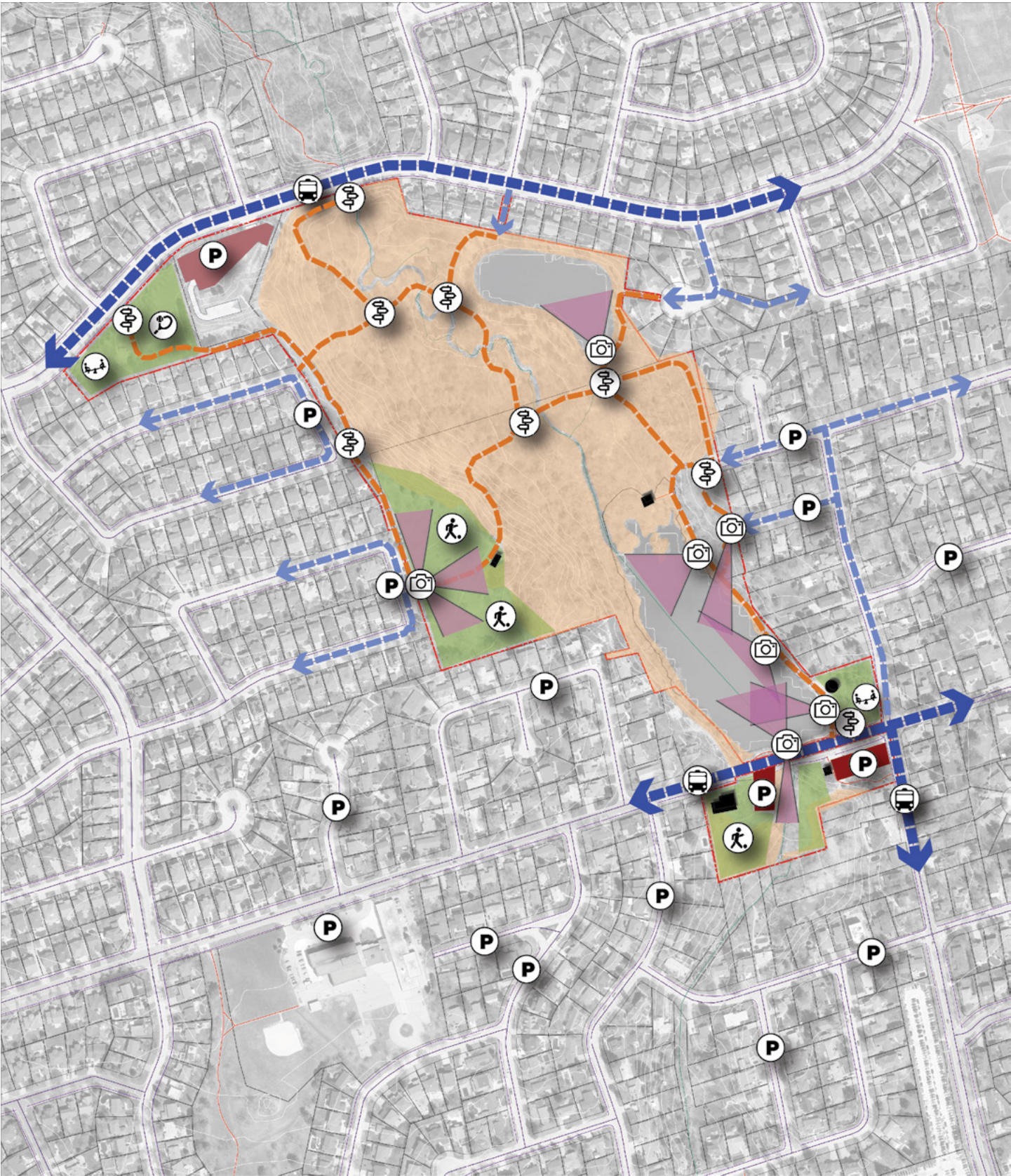
Programmed Park Spaces

Maintained & Programmable

Despite the overall size of Mill Pond Park, it is important to recognize that much of the study area is regarded as part of the natural heritage system. This has left various pockets of programmable area throughout the Park. These pockets differ in size and composition. In total there is approximately 5.25 hectares of parkland dedicated to maintained community function. These areas are more formalized gathering spaces and contain amenities such as seating, playgrounds, shelters and parking. They provide a mix of hardscape and manicured lawn, and are the primary focus of social and organized gross motor activities.

Although these areas constitute a significant draw to the Park, it is understood that the footprint of these areas should not grow at the expense of the natural environment. Therefore, through the Master Plan, options should consider how these spaces can be designed and organized to better handle growing usership and community events. This will require a more detailed look at the various zones within the park and the intensity of each to users and to the surrounding context. These spaces should also consider flexibility in and surrounding areas, thereby allowing for possible expansion during events.

Figure B-7: Natural heritage footprint of the Park area outlined in orange.



 Natural Heritage Footprint

Naturalized and Watershed Parkland Footprint

As previously mentioned, much Mill Pond Park resembles a more naturalized parkland. Presently the Park provides a significant forest canopy and mature plantation of significant woodland. The Park is also an important part of the East Don River watershed and contains significant wetland plant mix and supporting natural landscapes. Presently the natural heritage footprint is approximately 10.9 hectares. The Master Plan should maintain this footprint and improve the health of the natural heritage composition within the Park.

The overall health of the natural heritage features are good, and can easily be strengthened through the results of the Master Plan. This is particularly important as the natural features, along with the ponds, do provide a heightened sense of place, a green “oasis” within the City.

Figure B-8: Mill Pond Park ecological land classifications and areas of restoration need, outlined in red.



The most important findings from the review recommend the Master Plan encourage:

- Ecological shoreline restoration of watercourse and waterbodies;
- Removal of invasive species;
- Focused Significant Woodland Management Plans that emphasis successful regeneration and sustainability of desirable indigenous vegetation for communities characterized as:
 - Containing species of exotic or invasive nature
 - Dry - Fresh Exotic Deciduous Forest (FODM4-12)
 - Originating as a cultural plantation
 - Mixed Plantation (FODM12)
 - Coniferous Plantation (FOCM6)
 - Susceptible to or affected by pests and disease
 - Dry - Fresh White Ash -Hardwood Deciduous Forest (FODM4-12)
 - Dry – Fresh Sugar Maple –Black Cherry Deciduous Forest (FODM5-7)



Site walk through and engagement with City of Richmond Hill Staff.

Engagement Summary

As outlined in the project scope, the Master Plan is supported by a comprehensive engagement plan: Mill Pond Engagement Plan. This plan outlines the steps required to engage with both stakeholders and the public. A clear description of the decision making process, as well as tools and techniques employed are provided in the Engagement Plan.

Stage 1's engagement summary includes several important components that will help establish the stage for Options Development in Stage 2. The following provides a summary of engagement activities provided as part of Stage 1.

a. Technical Advisory Team Meeting

On Friday January 29, 2021, City and Dillon led the first Technical Advisory Team meeting. This meeting included members of various City departments, as well as members of TRCA's team and TMIG (consultants leading the Mill Pond Stormwater Management EA). This first meeting provided an introduction of the wider team, City's intended scope of the Master Plan, background analysis to date, discussion surrounding sediment control, draft communications plan and next steps.

b. Coordination with Stormwater Rehabilitation EA

Regular meetings have also been scheduled with the Stormwater Rehabilitation EA Team to discuss coordination of each of the concurrent studies. There have been three (3) meetings held throughout the Stage 1 schedule.

These meetings provide transparency to both project teams and discuss important analysis findings along with design strategies. Key points of discussion raised as part of these meetings have included:

- Challenges of existing stormwater management and ecological impacts
- Review of preliminary stormwater pond redesign and bypass channel options
- Discussion of TRCA review of preliminary stormwater redesign
- Stakeholder interview results
- Background analysis
- Preliminary circulation concepts
- ELC findings

There will be ongoing coordination meetings throughout the life of Master Plan. Dillon's core team has led both the 2nd and 3rd coordination meeting and provided a presentation for discussion.

c. Stakeholder Interviews Summary

Throughout February 2021, the project team conducted a series of interviews with key stakeholders. The discussions provided general and area focused discussion surrounding the revitalization of Mill Pond Park. Each interview provided a broad overview of the purpose of this project and general timelines. Our team also gave insight to how the information provided would impact our work and influence decision-making for the future vision and design of the Master Plan.

Five key stakeholders were identified, however due to limitations of the stakeholders only three stakeholder groups were represented through the interview process. The following provides a summary of stakeholder's input.

Table B-1: Stakeholder and organizational interest in Mill Pond Park.

Organization	Stakeholder	Interest Focus/Potential Issues
Local Councillor	David West - Ward 4 Councillor	• Pond changing its footprint – will be strongly debated • Natural landscape is what gives the Park its character • Intersection plays an important part to experiencing the Park • Playgrounds are possibly not the best use in the Park • Maintaining the pastoral landscape along Regent Street • Design options should be progressive and build upon each other • No sharp contrast between options • Heritage and history should be very important and integrated into the design... Think about it being the industrial part of the Town... How can the Design exhibit that legacy • South of Mill Street is under programmed
Richmond Hill Group of Artists	Andrea End Cultural Leadership Council - Town of Richmond Hill Richmond Hill Group of Artists	• RH Group of Artists enjoy being able to leverage park space and plan around the events • People celebrate how natural the park is and will appreciate it remaining the same • It would be good to ask the public whether or not they would value an educational emphasis at the park. It would be interesting to know where the waterways come from and where they go. • Haven't heard of a desire for more events Plan for sustainable, low-impact park features such as intimate small light installations, painted rain barrels, rose project, etc.
Pleasantville High School	Annette Livi (Principal of Pleasantville High School)	• People enjoy all the passive opportunities, dog walking, skating, sitting in the gazebo, attending concerts • The public will want to know what is being considered for changes • Outdoor learning would be great for the students who frequent this park for educational activities or after school • The neighbourhood is tight knit, they organize their own community events • Mill Street doesn't have speed bumps or stop signs because of the emergency vehicle needs • We have a school council meeting every 6 weeks. Happy to spread information with them.

d. Public Walking Tour Summary

A public walking tour was scheduled as part of the Stage 1 scope of the Master Plan. Due to COVID 19 restrictions the format of this event has been altered, to allow for a self-guided tour and survey. Information will be provided through the City's project website, with instructions, tour map, and digital survey which will pose specific questions surrounding improvements to the Park to participants. The results of the survey will help document initial public responses to existing conditions, as well as thoughts on how Mill Pond Park can be improved through the design and implementation of the Master Plan.

Due to additional COVID 19 restrictions imposed by the Province in March, a public stay at home order has been in place for an undefined period. Once deemed to be safe, the City of Richmond Hill will circulate the survey and walking tour materials. As a result the results of the walking tour and survey will not inform the results of the Stage 1 work for the Master Plan, however will help inform the Stage 2 work surrounding the development of options.



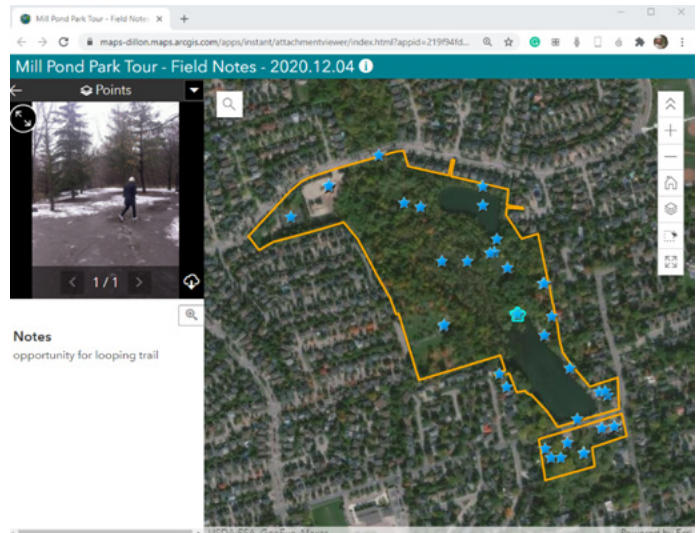
Digital model of the Mill Pond Park site.

Next Steps

Stage 2 of the Master Plan will include the development of three (3) options. These options will build upon the background information presented as part of this document. Ongoing coordination will continue with the project core team, as well as with the Stormwater Rehabilitation EA team. Additional meetings are scheduled with TRCA to discuss potential strategies at addressing connections through the watershed and natural heritage features.

Currently, Stage 2 is expected to be completed by August 2021 and will also provide high level costing of the options. These options will be part of the discussion at the upcoming June Technical Advisory Team meeting and with Project Management Teams at the City of Richmond Hill. Part of Stage 2 will also coordinate a joint PIC with the Stormwater Rehabilitation EA project team. This event will provide the public and stakeholders with an update to both projects and help sequester meaningful input to the possible preferred vision and design direction for the Master Plan. Stage 2 will conclude by summarizing “what we heard” surrounding the options. It is expected that consensus building will reveal a preferred approach to the Master Plan which will be further defined as part of Stage 3.

Mill Pond Park webplatform GIS mapping of significant landmarks.



Mill Pond Park 3D site analysis overlays.



Appendix C - Conceptual Master Plan Options

Conceptual Master Plan Options

The Master Plan concept diagram illustrates the proposed elements of the redesigned Mill Pond Park. These elements are intended to embody the key principles outlined and reflect the needs of the community, the operational needs of the park and the ecological needs that were studied through the site reconnaissance phase of this project.

This Master Plan design and layout was achieved through careful analysis of existing conditions, background documentation, stakeholder input and public consultation. During the options phase of this project, two options, Option A and Option B, were presented to the public through a Virtual Open House.

Option A is entitled “Adapting Landscape” and it is a light touch on the design of the existing park. This option revitalizes the main park components in their current location. This option also provides an overall improved circulation pattern through primary trail alignment and improves the secondary trail network. There is also a modest parking lot and supportive programming provided by a new gateway feature and entrance into the park by way of 71 Regent Street.

Feedback on Option A Plan

The main elements that respondents liked about Option A were:

- Elevated boardwalk (over valleyland)
- Re-designed primary trail/lookouts
- The new entrance to the park/the corner entryway
- The east-west bridge crossing
- Update to existing washrooms and art gallery
- Addition of pollinator gardens
- Skating area
- Additional parking provided
- Additional pathways
- Washroom facilities
- New playground amenities

Option B is entitled “Pond Destination Landscape”. Similar to Option A, it protects and enhances the existing natural heritage footprint, however, it also anticipates an increase in park users with intensified uses centered on the three park zones. There are spatial changes to some of the park facilities, introduction of new park facilities, new lookouts and park connections. This includes a proposed new feature bridge linking the primary trail at the north end of Mill Pond to a secondary trail up to Upper Mill Pond Park.

A public survey was open between September 27, 2021 and October 15, 2021. There were 397 respondents and 85% of the respondents lived close to the park while 50% were regular users of the park, trails and facilities. Option B was preferred by 72% of respondents while Option A was preferred by 23% of respondents. 5% respondents preferred neither option. Feedback received from this virtual open house was then used to prepare the preferred conceptual option for the Master Plan. Below is a summary of the feedback received that led to the current configuration of the Master Plan.

The main elements that respondents disliked or felt was missing from Option A were:

- Some dislike the boardwalk and would prefer to keep it the way it is (or maintained with additional gravel)
- Lack of washrooms, specifically close to picnic tables
- Traffic: Mill Street (at Trench) is a busy intersection that can be unsafe with cars, this may become a greater issue if it is opened up as an entrance as proposed. Make it more pedestrian friendly/safe. Perhaps consider closing Mill Street in the park zone to vehicular traffic or traffic calming measures
- Concern for children’s safety with the removal of the fence around the playground
- Too much construction/build-up for a natural landscape (too urban)
- Insufficient parking

- The park/area south of Mill Street is underutilized – is there a way to better connect this space
- Some respondents felt that additional sports/recreational amenities are missing: ie. basketball court, more tennis courts, volleyball court, or a water feature/splash pad
- The separation of the gallery and washroom facilities (some feel that combining them is a better use of space)
- Location of washroom kiosk too far away from the playground and courts in Stavert Park
- Some feel that Option A does not really offer anything new (no significant changes)
- Seems status quo (not ambitious enough/no significant changes)
- Generally liked by respondents, but felt like there is not enough change – misses an opportunity to do something special

Figure C-1: Option A: Adapting Landscape Master Plan



The last question in Part 2 of the survey asked respondents to provide any additional comments related to the Revitalization Master Plan. The following are the most commonly heard comments:

- Support for Option B
- Preference to not make too many changes to the park. Keeping more nature/natural landscapes, preserving wilderness and wildlife. Leaving it as natural as possible
- The lack of parking in the presented options (particularly in Option B)
- Addressing the existing parking and safety issues is needed, regardless of which option is selected
- Some like certain elements from each option, rather than one completely over the other.

- Some like the park that way it is and just want upgrades where necessary
- Consideration for how the park/trails and amenities can be used in winter months
- Consideration for the impact to residents on side streets (such as Willett and Theobalds)
- Some respondents are curious about the cost differences between the two options – they may affect preferences
- Including more garbage cans along the trails
- Ensure accessibility of new trails

The following details the pros and items for further thought as identified by the public through the virtual open house survey. These comments refer to the individual areas of the preferred option, Option B.

Area	Pros of the Option B Plan	Items for Further Thought
Mill Street Park + South of Mill Street	• Centralized Facilities for art gallery, cafe, washrooms and operations • Expanded Pollinator Garden • New Gazebo • Mill Street Upgrades	• Additional Parking • Safety for children • Traffic Congestion and Speed • Increase in Garbage • Reduction of Natural Space • Outdoor Seating • Better use of South of Mill Street Lands
Upper Mill Pond Park + Trail Network	• Bridge over North Mill Pond • Fitness Stations • Increased Connectivity (circuit) • Elevated Boardwalks (over valleyland) and Lookouts	• Increase in Garbage • Could more activity bring more disturbance to the natural environment? • Increase in Pedestrian Traffic • Lack of Washrooms
Stavert Park + 71 Regent Street	• Skating Rink • Adventure Play Station • Washrooms • New Playground • Better Connections	• Lack of Parking • Reduction of Tennis Courts • More Lighting • Additional Sports and Activities • Bring Washrooms/Kiosk closer to Playground and Courts

Figure C-2: Option B: Pond Destination Landscape Master Plan



Appendix D - Community Engagement

City of Richmond Hill

Mill Pond Park Revitalization Master Plan

Engagement and Communications Plan



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1.0 Background

Our approach to this project is founded on the principle of creating a master plan that recognizes the unique place that the Mill Pond Park holds in the core of the Richmond Hill community. The successful master plan will reflect the character and requirements of this unique site, and will lead to community support, enthusiasm, and momentum to go forward with the plan. In response, we believe that a highly engaged approach that assembles and understands the interests of the many groups and stakeholders responsible for the operation and enjoyment of the park will provide a broad and comprehensive understanding to create a truly responsive master plan. We are already partly familiar with the many competing interests and operating requirements of this park oasis in the City, and **propose to work closely with the City and core stakeholders early in the process** to ensure an approach that resolves issues, takes advantage of the many unique opportunities offered by this site, and creates a plan that “fits the character and requirements” of Richmond Hill.

Vital to the success of this master plan is understanding the site and its role within the City’s park system. As a destination park, Mill Pond offers a diverse range of activities, programs, amenities and recreational uses that offers visitors a unique experience, making it a significant cultural and natural resource for the City, and for its users alike. It also serves many purposes, and means different things to different people. While it attracts visitors from across Richmond Hill and neighbouring municipalities, it is also a residential community that people call home. While it is a recreational playground, it is also rich in environmental and natural heritage that needs to be protected.

We understand the complexity of Mill Pond’s landscape and uses, and the need to consider these different identities and experiences throughout the design and consultation process. Our methodology incorporates a significant effort that is focused on the community, stakeholders, and the residents that live nearby and use the parkland extensively. We recognize the significant and various interests inherent in the park from both private ownership as well as the public realm. It is clear that understanding these different interests and requirements, and evolving a plan that is sensitive and responsive to the community in all of its diversity is essential for success. As such, **the development and implementation of a comprehensive and equitable engagement plan directly connected to the plan development process is a core component of our approach.**

1.1. Overall Engagement Plan

The primary objective of this consultation program is to obtain insights from stakeholders and the community at critical moments in the process that will be most useful to decision-making in a meaningful way.

This document outlines the engagement plan to achieve this overall goal.

1.2. Decision Process Steps

The following table lays out the framework of project decision points and the objectives of engagement at each associated engagement phase.

Decision Step and Timeline	Decision-making focus & engagement objective	Community Engagement Phase
Stage 1: Opportunities and Constraints Mapping and Background Memo January – May 2021	Development of communications and engagement strategy, stakeholder issues research and learning. Identify issues, local needs and what people hope for the park. Consult – Seek input from stakeholders on engagement opportunities and issues.	Pre-engagement interviews, TAC Meeting #1, walking tour with survey, reporting
Stage 2: Creation of Draft Park Revitalization Options for Mill Pond Park May 2021 - August 2021	Inform – Make a broad audience aware of the design and development of a new park and build interest and excitement. Consult - Seek input from stakeholders on draft concepts. Collect feedback and other ideas for the park design from stakeholders and the public at a public meeting and workshop event. Document public input and shared with the technical team and participants/public via email, website and/or social media.	TAC Meeting #2, Community workshop, DIY Kit, Reporting
Stage 3: Draft Mill Pond Revitalization Master Plan August 2021 - December 2021	Technical team to consider public feedback and reflect aspects of public feedback in park design. Finalise concepts.	Interactive Mapping, Reporting, Stormwater Rehabilitation EA PIC

2.0 Summary of Stakeholder Interviews

The following table provides a summary of the pre-engagement interviews that were completed to develop the team's understanding of local issues or interest areas. The Dillon team reached out to 5 key stakeholders, only 3 of which were able to be completed in time for this document.

Organization	Stakeholder	Interest Focus/Potential Issues
Local Councilor	David West	• Pond changing its footprint – will be strongly debated • Natural landscape is what gives the Park its character • Intersection plays an important part to experiencing the Park • Playgrounds are possibly not the best use in the Park • Maintaining the pastoral landscape along Regent Street • Design options should be progressive and build upon each other • No sharp contrast between options • Heritage and history should be very important and integrated into the design... Think about it being the industrial part of the Town... How can the Design exhibit that legacy • South of Mill Street is under programmed
Richmond Hill Group of Artists	Andrea End	• RH Group of Artists enjoy being able to leverage park space and plan around the events • People celebrate how natural the park is and will appreciate it remaining the same • It would be good to ask the public whether or not they would value an educational emphasis at the park. It would be interesting to know where the waterways come from and where they go. • Haven't heard of a desire for more events • Plan for sustainable, low-impact park features such as intimate small light installations, painted rain barrels, rose project, etc.
Pleasantville High School	Annette Livi	• People enjoy all the passive opportunities, dog walking, skating, sitting in the gazebo, attending concerts • The public will want to know what is being considered for changes • Outdoor learning would be great for the students who frequent this park for educational activities or after school

Organization	Stakeholder	Interest Focus/Potential Issues
		• The neighbourhood is tight knit, they organize their own community events • Mill Street doesn't have speed bumps or stop signs because of the emergency vehicle needs • We have a school council meeting every 6 weeks. Happy to spread information with them.

3.0 Our Public Engagement Principles

The following principles will guide our process and will inform the public engagement objectives and techniques at each decision step.

- **Equity and Diversity:** This Park will welcome everyone. We will work diligently to provide digital and non-digital engagement tactics so that all those impacted and affected by this project can participate. We will work to remove or reduce barriers, the best that we can, to ensure that all voices are heard throughout this engagement process. This includes people who live adjacent to the park or in the broader community, who may have ranging interests, and have different ages, ethnicities/cultures and socioeconomic standings.
- **Meaningful Involvement:** Our approach allows the team to co-create solutions with community members that are relevant and beneficial for the community they intend to serve. By co-creating with Richmond Hill residents, businesses, City staff and key stakeholder groups, we will enable new ideas to emerge, navigate differing opinions, strike the right balance between uses to create a public space that everyone will be able to access and enjoy.
- **Accessible Communications, Visual Engagement:** People need to understand the process, why it matters and how their feedback will be used and what the opportunities are to provide input. With an in-house design team and visual engagement expertise, we are equipped to utilize graphic design, 3D technologies, video, infographics, and clear, purposeful visual communications to present complex project information in a format that supports understanding and ignites interest. Materials we develop will meet AODA requirements.
- **Professionally Facilitated Dialogue:** We understand that stakeholder meetings and workshops are key times where more technical and in-depth conversations will occur with very informed and knowledgeable leaders. These meetings demand

thoughtful facilitation when held in-person and even more attention to detail when held virtually. Our team has led virtual conversations with several other clients, stakeholder groups and have developed our own internal set of best practices. We will work with the City to ensure meetings are productive and run smoothly by producing contact lists, interview guides, key messages, meeting design and detailed agendas.

- Identifying Risks and Being Prepared:** Being prepared is an important part of engagement programs and something we include in the development of all our engagement and communication plans. The table below highlights just a few of the potential engagement risks and issues for this project along with ideas for addressing them. Additional project and engagement risks and mitigation tactics will be explored at the project kick-off meeting and through the development of the final engagement strategy.

Potential Risk	Proposed Mitigation
Challenges associated with engaging people on-site due to social distancing	We are confident that with a combination of virtual engagement tools and carefully planned in-person gatherings that meet and exceed local public health guidelines, we can achieve a meaningful engagement process for this project.
Uneven participation across Richmond Hill	We will intentionally seek to engage diverse populations across Richmond Hill with dedicated strategies for specific segments of the community. We will invite a range of attendees to the virtual public meeting and encourage that these individuals share information within their respective networks. With large Chinese, Russian, Iranian and South Asian populations we may also want to consider publicizing project-related materials in those languages (not included in budget/scope).
Managing dominant voices of adjacent property owners	Strategic virtual engagement, intentionally broad outreach strategies, multi-interest dialogues, and experienced facilitation will be used to manage this risk. At the outset of meetings - virtual or not - we speak to ground rules for open communication, empathy and creating spaces for people to voice their opinions. We will also provide other avenues for participants to share their thoughts for the project team's consideration (e.g., web-based, email or telephone communications).

4.0 Tools and Techniques

The following section describes the tools/techniques that will be used to achieve the engagement and communications objectives. These tools and techniques are referenced in **Section 7** throughout the implementation plan.

4.1. Engagement Tools & Deliverables

- **Key Stakeholder Interviews (Stage 1):** A series of short telephone interviews (Up to five 30-minute interviews) with internal and external key informants that represent diverse perspectives on the project. These interviews will help us develop an understanding of stakeholder interests and refine our approach to engagement by seeking input from participants themselves in designing how they would like to be involved. E.g. we will meet with the Operations group to understand infrastructure constraints. Additional groups to engage may include local councillor, Mayor, parks and recreation staff, and event organizers.

Some questions we might consider asking stakeholders could include:

- What is important to you as we go forward with this master plan?
- What information do you think people will need to get engaged and provide meaningful input?
- What is the perceived value of the pond in the area and how open is the local population to changes? - CW + APO
- Is there a desire to see more events, passive recreation or both? - CW + APO
- How can the artist gallery/community expand its presence + programming into the park? - GI
- How can the park play a role in the educational programming of the park? - SC
- Who else should be actively involved in the decision making process? *ask this at the end of the interview*

Deliverable: meeting summary notes documenting the discussions with stakeholders.

- **Walking Tour (Stage 1):** Led by members of the project team. People will be able to sign up for the walking tour in advance of the event via Eventbrite. We will map out the route, prepare a written script for the guides, encourage that participants review materials in advance, and schedule extra time for pausing at key locations for open discussion or thoughtful reflection. Due to COVID-19 and unpredictable government restrictions, we propose more walking tours with fewer participants in each group (e.g., five tours with 5-10 participants each) in addition to providing walking tour packages available online for individuals to participate on their own. This project kick-off and walking tour will be accompanied by an online survey or other digital input/ideation tool to solicit feedback on opportunities, constraints, and vision for the part from the general public.

Deliverables: Digital walking tour package, Eventbrite event page text, and an online survey to solicit feedback on opportunities and constraints.

- **Community Workshop to select Draft Park Revitalization Vision (Stage 2):** To provide the community and key stakeholders with an opportunity to review the draft options and engage with the project team and other stakeholders in a productive dialogue about which option or which components of each option best articulates the vision for revitalizing Mill Pond Park, our team will develop an in-person community workshop and a parallel digital engagement opportunity. The specific format of the in-person workshop will depend on current public health guidelines and more effort can be shifted to digital and other remote engagement opportunities, should face-to-face meetings be overly restricted during this stage of the project. The community workshop event will present important contextual information required for meaningful participation and will leverage the 3D renderings and interactive visualizations produced for each of the three options. Paired with the digital experience, we will offer a do-it-yourself (DIY) at home workbook to allow participants to explore the options and provide the kind of feedback our project team will need to refine the options and develop the final master plan.

Deliverables: community workshop event plans and presentation/visual materials, DIY workbooks to be posted online

- **Digital Mapping Tool (Stage 3):** Through the use of Social Pinpoint, we can obtain location-specific comments received from the public and provide valuable insights into the opportunities, concerns and areas of improvement from the public's experiences and perspectives. By asking strategic questions and colour-coding responses, we will develop a map that visually represents what members of the public love about Mill Pond, what needs improving, areas of concern, or any other ideas people would like to share.

4.2. Communication Tools & Techniques

- **Mail-outs (Stage 1):** The mail-out or flyer will include key messages, a brief overview of the project, and calls-to-action to participate, such as visiting the project webpage. The mail-out may be sent in tandem with the Stormwater Management EA team. Mail-outs are a useful tool for reaching people who do not have the time to engage in an in-depth conversation on the spot – they can take the information with them and learn more about the project on their own time.
- **Website (Stage 3):** We will work with your team to incorporate engaging graphics and text. In addition to providing “information out” through project updates, there will also be opportunities for participation with the option of a survey or interactive mapping tool. An email address will also be provided for anyone who may not be able to participate but wishes to get in touch with the project team about other ways to provide feedback.

With the ongoing COVID-19 pandemic, this website will be an even more integral part of the engagement program and function as a central place for decision-making in Stage 3.

- **Summary Reports (Ongoing):** A summary of engagement activities that took place and a summary of the input will be shared with the public in What We Heard summaries at the end of each Stage. These will be made available to the public through the City’s website.

5.0 Implementation Planning

In advance of each Phase, an implementation plan will be developed to keep the team on track and on budget. The implementation plan will describe corresponding tactics and timing, and provides an overview of roles and responsibilities. Where necessary, a more detailed event plan can be developed ahead of time.

5.1. Resources

Consultant resources dedicated to community engagement and the communications strategy include:

Dillon Consulting Engagement Staff:

- Karla Kolli, Engagement Lead
- Daniel Hoang, Engagement Team
- Junior Engagement Support Team members, as required
- Administrative Support
- Technical team support wherever required

5.2. Comment Management, Analysis and Response Protocols

- Emails will be sent to the public through a City account.
- Sign-up sheets will be available at all events and the City will be responsible for updating email listserv.
- Project email and social media accounts will be solely managed by the City.
- Dillon to offer support (by phone or email) if there are technical responses required.
- A guaranteed response time of 2 business days is critical for project reliability and relations with participants.
- All communications, comments and responses will be forwarded to the consultant team.
- The consultant team will track consultation feedback, engagement activities, incorporate into the decision-making process and use it as the basis for reporting back to participants (“what we heard”).

6.0 Evaluation Plan

Our evaluation will answer the following questions on an ongoing basis after each outreach tactic, engagement event, at the close of each “round” of engagement and at the end of the project:

1. **Has the engagement initiative succeeded?** E.g., met objectives, and resulted in other achievements.
2. **Has the process for engaging the audience worked?** E.g., what happened, what worked well, and lessons learned.
3. **What impact has the engagement process had?** E.g., on participants, on the community, on decision-making.

Mill Pond Park Open House Survey

Survey Results

To support the first public open house for the Stormwater Environmental Assessment (EA) and Mill Pond Park Revitalization Master Plan, a survey was launched to gather the public's feedback on some of the design options being considered for Mill Pond Park. The survey was available online from September 20 to October 18, 2021 and was completed by 397 respondents. Of those respondents, 85% live nearby Mill Pond Park, while more than half use the park/trail/facilities in the study area.

The following is a summary of the results collected from the Open House Survey.

Note: The comments are generally listed in order of frequency (i.e. the more common a response or comment was, the earlier it is listed)

Part 1: Stormwater Management

As part of the revitalization of Mill Pond Park, the City is undertaking a Stormwater Environmental Assessment which will evaluate a number of options to improve water quality, reduce erosion and prevent flooding in this area. Questions were asked based around the EA and alternative solutions.

Do you have any comments or concerns on the existing conditions of stormwater management in the park?

- Many of the comments indicated that the Stormwater Management EA presentation identified the appropriate issues and captured the existing conditions. It successfully paints the picture of the existing conditions, and the types of upgrades needed. However, there were a few common concerns that were noted:
 - Blockage/Overflow/flooding of paths and trails (often after heavy rain) causing muddy and unusable conditions (particularly in the north)
 - Stagnant water
 - The unpleasant smell of the pond

Do you have any comments or concerns about the Alternative Solutions presented for the Heritage Estates Stormwater Facility? Are there elements of the different Alternative Solutions that you like or dislike?

- There was general support for the Alternative Solutions addressing the flooding issues through removing sediment, dredging, deepening the ponds, and creating a new overflow route to Mill Pond.
- Some common concerns and considerations for the project team that were raised:
 - It was noted that consideration for the impact of the solutions on flora and fauna/wildlife was missing
 - Consideration for selecting the most long-term, cost-effective option
 - Keeping it as natural and non-invasive as possible
 - Concern for the loss of some erosion control benefits

Do you have any comments or concerns about the Alternative Solutions presented for Mill Pond? Are there elements of the different Alternative Solutions that you like or dislike?

- The respondents are supportive of the proposed alternative solutions for Mill Pond. In particular, many positive comments were received about:
 - The focus on better water quality and removal of sediment
 - The proposal for a new entrance from the corner of Mill Street and Trench
 - The Mill Street-Regent Street main trail
 - The pedestrian bridge in Option B

Overall, more respondents prefer Option B over Option A.

- Some concerns that were raised include:
 - Wanting to keep the pond as natural as possible. Some were opposed to the urbanization/modernization of the Pond (option B), which they felt would remove its charm as a natural, quiet oasis.
 - The loss of children's play area/playground at Mill Street and Wood Lane in Option B.
 - Ensuring that there is adequate parking provided, for whichever option is selected.

Do you have any comments or concerns about the Alternative Solutions presented for the Trail and River? Are there elements of the different Alternative Solutions that you like or dislike?

Overall, there was support for both Alternative Solutions proposed. However, Option B was preferred more than Option A.

The main elements that respondents liked were:

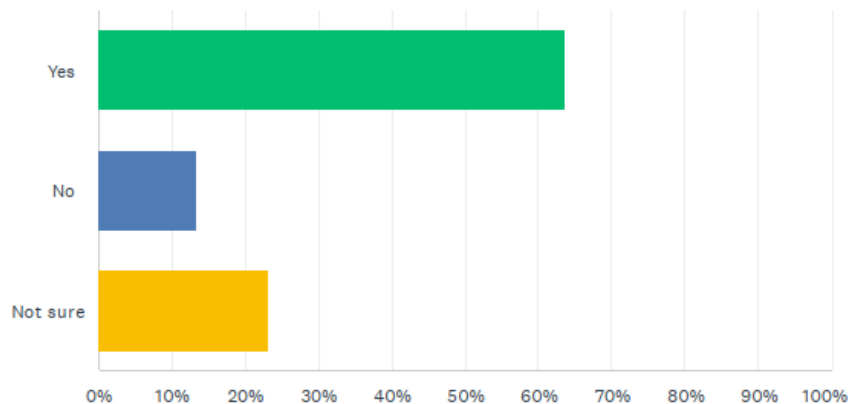
- Raised/Elevated boardwalk trail
- The east-west bridge crossing
- Expansion of trails
- Realigning and reconstructing the trail system (and minimizing the number of river crossings)
- Rebuilding the art gallery and addition of a café.

The main concerns raised by respondents were:

- Consideration for the impact that the east-west bridge will have on wildlife passageways (disruption to waterfowl landing and nesting areas)
- Concerns for the use of wood as main path/boardwalk surface – can be slippery and unsafe when wet and in winter months
- Compromising the natural beauty of the park with too many unnatural walkways and boardwalks
- A desire to keep the area/solutions as natural and simple as possible

Would the park area benefit from additional stormwater educational elements explaining the function/operation of the various natural heritage and stormwater management features within the study area?

64% of respondents believe that the park area would benefit from additional stormwater educational elements.



The last question in Part 1 of the survey asked respondents to share any additional ideas or suggestions for the Stormwater Management EA. The following are the most commonly heard ideas or suggestions:

- More garbage receptacles and greater maintenance removal of garbage build-up
- Closing Mill Street down (or a segment of it) to vehicular traffic – keeping the area pedestrian only.
- There is a disconnect between Upper Mill Pond Park and Pill Pond, due to limited connections. Consider opportunities to forge linkages between these two points to create a continuous park.
- Consider extending the trail south from Mill Pond to connect to the trails behind the hospital.

Part 2: Park Revitalization Master Plan

Together with the EA, the Park Revitalization Master Plan project will guide the phased revitalization of the park. The following is what we heard from the survey questions based around the Park Revitalization Master Plan.

Please describe any comments or concerns you have with Option A – Town Square, providing details of elements that you like or dislike or that may be missing.

The main elements that respondents liked about Option A – Town Square were:

- The new entrance to the park/the corner entryway
- The east-west bridge crossing
- Update to existing washrooms and art gallery
- Addition of pollinator gardens

The main elements that respondents disliked or felt was missing from Option A – Town Square were:

- Traffic: Mill Street (at Trench) is a busy intersection that can be unsafe with cars, this may become a greater issue if it is opened up as an entrance as proposed. Make it more pedestrian friendly/safe. Perhaps consider closing Mill Street in the park zone to vehicular traffic or traffic calming measures
 - Speeding cars
 - Increase of vehicle traffic on Mill Street
- Concern for children's safety with the removal of the fence around the playground
- Too much construction/build-up for a natural landscape (too urban)

- Insufficient parking
- Concern for children's safety with the removal of the fence around the playground
- Some feel that Option A does not really offer anything new (no significant changes)
- The separation of the gallery and washroom facilities (some feel that combining them is a better use of space)
- The park/area south of Mill Street is underutilized – is there a way to better connect this space or make it more attractive?

Please describe any comments or concerns you have with Option A – Village Green, providing details of elements that you like or dislike or that may be missing.

The main elements that respondents liked about Option A – Village Green were:

- Elevated boardwalk
- Re-designed primary trail/lookouts

The main elements that respondents disliked or felt was missing from Option A – Village Green were:

- Material of the boardwalks (they should be easy to maintain, safe in all weather conditions and accessible for those who use mobility devices)
- Some dislike the boardwalk and would prefer to keep it the way it is (or maintained with additional gravel)
- Lack of washrooms, specifically close to picnic tables
- Seems status quo (not ambitious enough/no significant changes)
- Not the best area for picnics, as the area is sloped, there is a lack of grass, and a Canada geese problem

Please describe any comments or concerns you have with Option A – Country Side Grounds, providing details of elements that you like or dislike or that may be missing.

The main elements that respondents liked about Option A – Village Green were:

- Skating area
- Additional parking provided
- Additional pathways
- Washroom facilities
- New playground amenities

The main elements that respondents disliked or felt was missing from Option A – Village Green were:

- The removal of tennis court (there are already long waits)
- More lighting needed
- Some respondents felt like additional sports/recreational amenities are missing: basketball court, more tennis courts, volleyball court, or a water feature/splash pad
- Generally liked by respondents, but felt like there is not enough change – misses an opportunity to do something special
- Location of washroom kiosk too far away from the playground and courts

Please describe any comments or concerns you have with Option B – Town Square, providing details of elements that you like or dislike or that may be missing.

The main elements that respondents liked about Option B – Town Square were:

- Centralized/integrated facility for art gallery, café, washrooms and operations
- The café
- Sculpture pollinator garden
- New gazebo
- Mill Street streetscape upgrades

The main elements that respondents disliked or felt was missing from Option B – Town Square were:

- This option does not seem to address the parking issues. There is a need for expanded parking, as the proposed changes would attract more users of the park
- Mill Street and Trench (where entrance is proposed) is a busy corner, can be dangerous for pedestrian crossing
 - Concerns for the increased traffic congestion
- Concerns for the additional garbage/litter that will come with a café
- Too “developed” and urbanized for a natural space which takes away from the natural beauty of the park
- Concerns for the loss of space for events, performances and Concerts in the Park
- Lack of outdoor seating areas

Please describe any comments or concerns you have with Option B – Village Green, providing details of elements that you like or dislike or that may be missing.

The main elements that respondents liked about Option B – Village Green were:

- North bridge
- Fitness stations
- Increased connectivity (trail circuit)
- Elevated boardwalks and lookouts

The main elements that respondents disliked or felt was missing from Option B – Village Green were:

- Expansion of facilities (noise and litter, some do not see a need to have to change what is existing, some feel that it will distract from the natural beauty and quiet of the park, desire to keep it natural)
- Fitness stations are not necessary and will take away from the charm of the park
- Some feel the bridge negatively impacts the natural landscape, will drive away wildlife from the area, distract the view from Mill Street, and/or result in more litter being thrown in the water.
- Concerns with the increased traffic that this option will bring
- Concerns with the forest canopy – removes too much grass/green space
- Lack of washroom facility

Please describe any comments or concerns you have with Option B – Countryside Grounds, providing details of elements that you like or dislike or that may be missing.

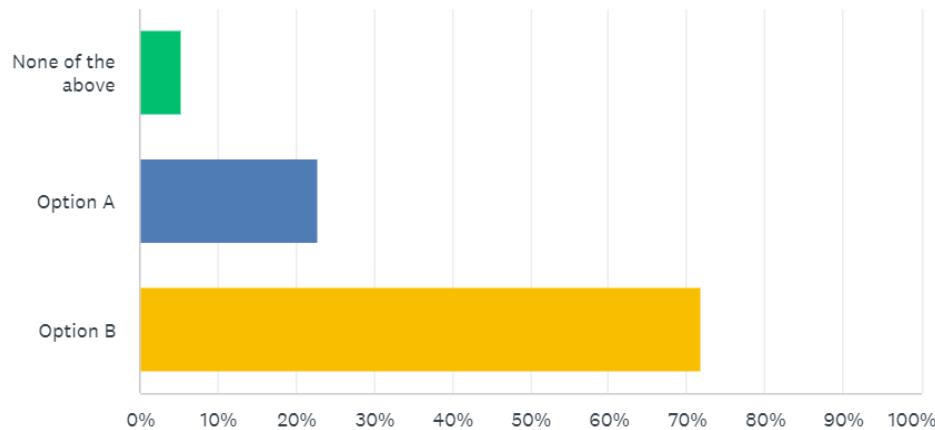
The main elements that respondents liked about Option B – Village Green were:

- Skating rink
- Adventure play station
- Washrooms

The main elements that respondents disliked or felt was missing from Option B – Village Green were:

- Lack of parking (and/or dislike for on-street parking)
- Reduction of tennis courts (pickle ball courts should be additional to the tennis courts, rather than a replacement)

Overall, do you have a preference for Option A or B?



None of the above (5%); Option A (23%); Option B (72%)

The last question in Part 2 of the survey asked respondents to provide any additional comments related to the Revitalization Master Plan. The following are the most commonly heard comments:

- Support for Option B
- Preference to not make too many changes to the park. Keeping more nature/natural landscapes, preserving wilderness and wildlife. Leaving it as natural as possible
- The lack of parking in the presented options (particularly in Option B)
 - Addressing the existing parking and safety issues is needed, regardless of which option is selected
- Some like certain elements from each option, rather than one completely over the other.
- Some like the park that way it is and just want upgrades where necessary
- Consideration for how the park/trails and amenities can be used in winter months
- Consideration for the impact to residents on side streets (such as Willett and Theobalds)
- Some respondents are curious about the cost differences between the two options – they may affect preferences
- Including more garbage cans along the trails
- Ensure accessibility of new trails

Appendix E - Cost Estimate

Mill Pond Preferred Option Cost Estimate

Cost

Stavert Park

Permits & Mobilization	\$ 30,000.00
Demolition	\$ 45,500.00
Earthworks	\$ 100,000.00
Site Servicing	\$ 144,000.00
Electrical	\$ 95,000.00
Landscape (Planting)	\$ 32,000.00
Landscape (Hardscape)	\$ 464,750.00
Miscellaneous Site Furnishing	\$ 94,100.00
Wayfinding and Signage (Placemaking + Interpretation)	\$ 50,000.00
Gateway Feature/Public Art	\$ 60,000.00
Playground Equipment	\$ 150,000.00
Total	\$ 1,265,350.00

71 Regent Street

Permits & Mobilization	\$ 35,000.00
Demolition	\$ 69,500.00
Earthworks	\$ 132,000.00
Site Servicing	\$ 288,000.00
Electrical	\$ 269,000.00
Landscape (Planting)	\$ 81,000.00
Landscape (Hardscape)	\$ 575,250.00
Miscellaneous Site Furnishing	\$ 19,100.00
Wayfinding and Signage (Placemaking + Interpretation)	\$ 50,000.00
Pickleball Courts	\$ 300,000.00
Ice Skating Rink	\$ 25,000.00
LIDs	\$ 500,000.00
Sub-total (Landscape)	\$ 2,343,850.00
Washroom Building	\$ 800,000.00
Total	\$ 3,143,850.00

Mill Pond Preferred Option Cost Estimate

Cost

Upper Mill Pond Park

Permits & Mobilization	\$ 38,750.00
Demolition	\$ 32,200.00
Earthworks	\$ 140,000.00
Site Servicing	\$ 150,000.00
Electrical	\$ 152,000.00
Landscape (Planting)	\$ 84,500.00
Landscape (Hardscape)	\$ 380,000.00
Miscellaneous Site Furnishing	\$ 22,700.00
Wayfinding and Signage (Placemaking + Interpretation)	\$ 20,000.00
Fitness Equipment	\$ 70,000.00
Total	\$ 1,090,150.00

Mill Street Park

Permits & Mobilization	\$ 31,250.00
Demolition	\$ 70,500.00
Earthworks	\$ 190,000.00
Site Servicing	\$ 84,000.00
Electrical	\$ 145,000.00
Landscape (Planting)	\$ 392,000.00
Landscape (Hardscape)	\$ 1,166,500.00
Miscellaneous Site Furnishing	\$ 69,200.00
Wayfinding and Signage (Placemaking + Interpretation)	\$ 100,000.00
Gateway Feature/Public Art	\$ 80,000.00
Senior Playground Equipment	\$ 150,000.00
Junior Playground Equipment	\$ 100,000.00
LIDs	\$ 500,000.00
Sub-total (Landscape)	\$ 3,078,450.00
Gazebo Building/Park Stage	\$ 350,000.00
Total	\$ 3,428,450.00

Mill Pond Preferred Option Cost Estimate

Cost

South of Mill Street	
Permits & Mobilization	\$ 30,000.00
Demolition	\$ 88,000.00
Earthworks	\$ 360,000.00
Site Servicing	\$ 216,000.00
Electrical	\$ 286,000.00
Landscape (Planting)	\$ 426,000.00
Landscape (Hardscape)	\$ 126,800.00
Miscellaneous Site Furnishing	\$ 33,200.00
Wayfinding and Signage (Placemaking + Interpretation)	\$ 95,000.00
Public Art/Sculpture Garden	\$ 50,000.00
New Bridge	\$ 110,000.00
Primary Trail	\$ 195,000.00
Sub-total (Landscape)	\$ 2,016,000.00
New Building (Operations, New Café, Art Gallery, Washrooms)	\$ 3,000,000.00
Total	\$ 5,016,000.00

Mill Pond Preferred Option Cost Estimate

Cost

Trail System	
Permits & Mobilization	\$ 45,000.00
Demolition	\$ 62,000.00
Earthworks	\$ 50,000.00
Site Servicing	\$ 60,000.00
Electrical	\$ 964,000.00
Landscape (Planting)	\$ 207,500.00
Landscape (Hardscape)	\$ 190,000.00
Misc. Site Furnishing	\$ 187,000.00
Wayfinding and Signage (Placemaking + Interpretation)	\$ 100,000.00
Public Art	\$ 50,000.00
Retain Dedication + Memorial Benches + Trees	\$15,000.00
Boardwalk Trail + Rest Areas	\$ 400,000.00
Primary Trail	\$ 1,050,000.00
Secondary Trail	\$ 500,000.00
Restoration Planting	\$ 252,000.00
Subtotal (Landscape)	\$ 4,132,500.00
Feature Pedestrian Pond Bridge	\$ 2,000,000.00
Total	\$ 6,132,500.00

Mill Pond Sub-total	\$ 20,076,300.00
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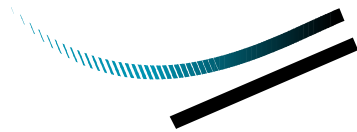
20% Contingency	\$ 4,015,260.00
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Total - Not including H.S.T.	\$ 24,091,560.00
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The Total only reflects construction costs and does not include softcosts such as consultant fees, site investigations etc.

The Mill Pond Preferred Option Cost Estimate is estimated in 2023 Canadian Dollars. Cost of living adjustments and inflation will be incorporated in the relevant Capital Budget and Capital Plan forecast over the lifespan of the project.

Appendix F - Parking and Traffic Study



DILLON
CONSULTING

City Of Richmond Hill

Mill Pond Park Revitalization, Richmond Hill, ON

Parking and Traffic Study

May 2023 — 20-3855



May 12, 2023

City of Richmond Hill
225 East Beaver Creek Road
Richmond Hill, ON
L4B 3P4

Attention: Attila Hertel, P. Eng.

Mill Pond Park Revitalization, Richmond Hill, Ontario

Parking and Traffic Study

Dear Attila Hertel:

Please find enclosed a copy of the parking and traffic study prepared for the revitalization master planning project for the Mill Pond Park.

Should you have any questions or wish to discuss our findings, please contact me at (416) 229-4647, extension 2376, or at mwalters@dillon.ca.

Yours sincerely,

Dillon Consulting Limited

A handwritten signature in black ink, appearing to read "Mike Walters".

Mike Walters, P. Eng.
Project Manager

MW:SA:jmt

Our File: 20-3855

235 Yorkland
Blvd.
Suite 800
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416.229.4646
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**Dillon
Consulting
Limited**

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1.0 Introduction

Dillon Consulting Limited (Dillon) has been retained by the City of Richmond Hill to prepare a parking and traffic study as part of the ongoing Mill Pond Park Revitalization Master Plan. Mill Pond Park is located at the northwest corner of Mill Street and Trench Street / Wood Lane and is under the jurisdiction of the City of Richmond Hill. It is a popular attraction for outdoor recreation and entertainment, including playgrounds and trails. During winter, the pond is used for ice skating. The park also provides washrooms and parking.

Several events are held at the park throughout the year including 'Concerts in the Park', which are held during the summer months of July and August. The 'Concerts in the Park' events attract many visitors to the park to enjoy live music performances on Thursday evenings between the hours of 7:00 PM and 9:00 PM. On-site parking is limited; however, there is free on-street parking available within walking distance of the park and valet bicycle parking service is available during Concerts in the Park events.

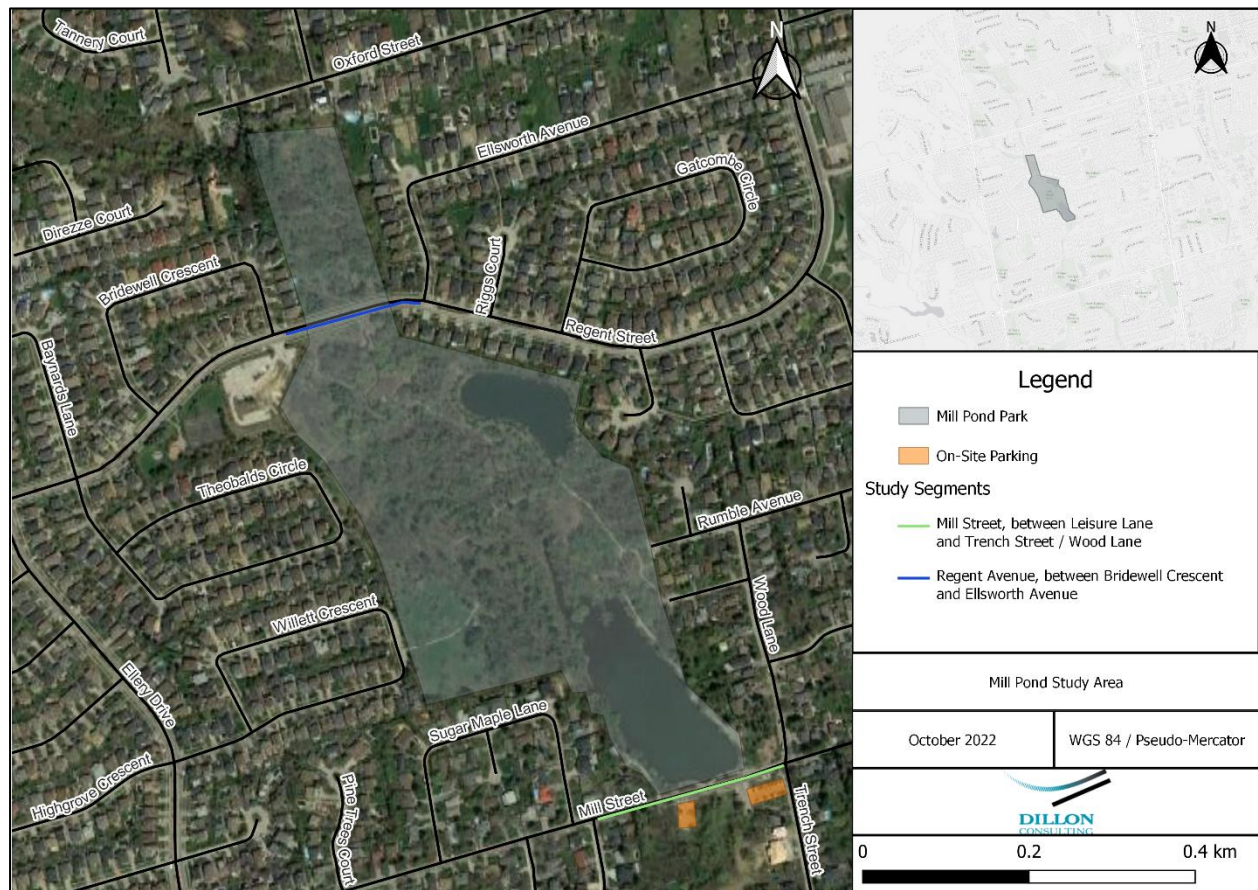
There are several points of access into the park. On-street parking may be utilized around these access points. The connectivity of the Mill Pond Trail system was also assessed at a specific uncontrolled crossing located on Regent Street, approximately 100 metres east of Bridewell Crescent. Further, the main access to the park located on Mill Street, between Leisure Lane and Trench Street / Wood Lane, consists of a high pedestrian presence during weekends and other park events.

The purpose of this study was as follows:

- Evaluate the parking demands associated with the Mill Pond Park versus the available supply for sufficiency, including both on-street and off-street parking;
- Evaluate the need for a pedestrian crossover (PXO) or traffic calming measures on Regent Avenue, between the eastern Bridewell Crescent intersection and Ellsworth Avenue;
- Evaluate the need for traffic calming on Mill Street, between Leisure Lane and Trench Street / Wood Lane.

The study area is shown in **Figure 1**.

Figure 1: Study Area



1.1 Mill Pond Revitalization Master Plan

The Mill Pond Park Revitalization Master Plan is a proposal to revitalize and improve the connectivity of Mill Pond Park in Richmond Hill. The plan focuses on enhancing the park's natural and ecological setting, while also providing urban park spaces and diverse recreational facilities.

The plan aims to address imbalances in activity and use patterns and to create a more accessible and pedestrian equitable environment for all members of the community. Key features of the plan include a feature bridge on the northern edge of the Mill Pond, east-west trails, and a main walkway promenade with lookouts and seating areas. The theme of the park's relationship with water is central to the plan, with the main walkway connecting to various water features throughout the site.

The recommended plan also includes reducing the number of uncontrolled pedestrian crossings on Mill Street from three to two and adding parking at Stavert Park, located north of Mill Pond Park.

2.0 Parking Operations

The parking component of this study involved quantifying the supply and demand of off-street and on-street parking near the park. Surveys were conducted to gain an understanding of the existing parking demands at the park. These counts quantified both parking occupancy and turnover in the area. The park has two (2) dedicated on-site parking lots, which are free for visitors. There is also available free on-street parking surrounding the park on local roads, and where trail access to the park is provided.

Valet bicycle parking service is available during Concerts in the Park events. This service has been well received by attendees and is planned to be continued in the future.

The surveys were conducted at the on-site parking lots as well as selected nearby local roads where parking is permitted.

The off-street parking supply mainly comprises the two (2) parking lots on the south side of Mill Street, between Leisure Lane and Trench Street / Wood Lane. The on-street parking assessed in this study included the following roadways:

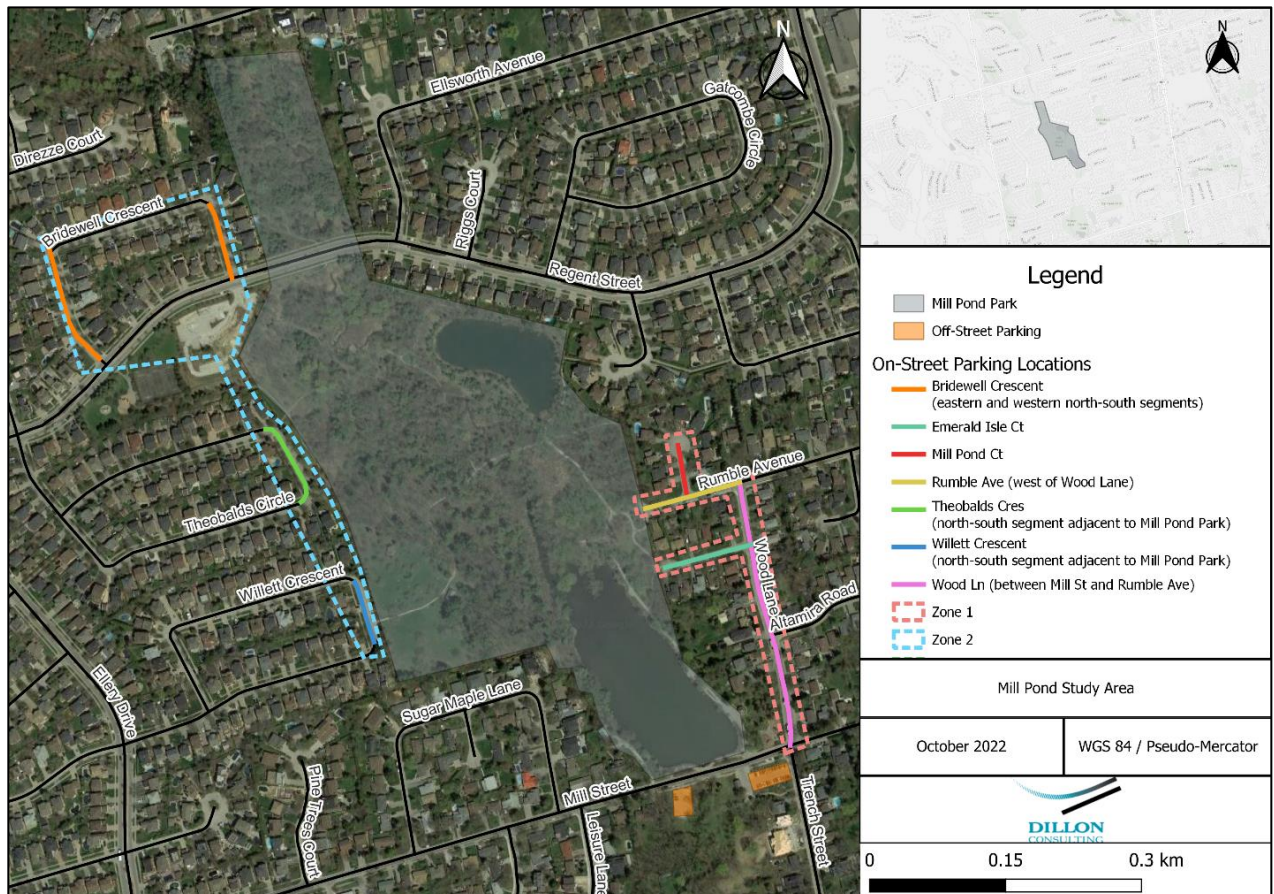
- Wood Lane (between Mill Street and Rumble Avenue);
- Rumble Avenue (west of Wood Lane);
- Emerald Isle Court;
- Millpond Court;
- Willett Crescent (the north-south segment adjacent to Mill Pond Park);
- Theobalds Crescent (the north-south segment adjacent to Mill Pond Park); and,
- Bridewell Crescent (the eastern and western north-south segments).

The local roads were grouped into zones based on the proximity of the local roads to each other. Zone 1 consists of Wood Lane, Rumble Avenue, Emerald Isle Court, and Millpond Court. Zone 2 consists of Willett Crescent, Theobalds Crescent, and Bridewell Crescent. A view of the on-street and off-street parking locations and zones is provided in **Figure 2**.

During concerts at the park, temporary parking restrictions are implemented on the surrounding local streets. The following roadways have temporary no parking signs in place during these concerts:

- Emerald Isle Court;
- Altamira Road;
- Sugar Maple Lane;
- Mill Street;
- Starlight Crescent;
- Leisure Lane; and,
- Richmond Street.

Figure 2: Parking Locations



Parking occupancy and turnover surveys were conducted by Ontario Traffic Inc. on a typical summer weekend, a summer long-weekend, and during the two 'Concerts in the Park' events. The data was collected on the following dates and times:

- Thursday, July 14, 2022 between the hours of 5:00 PM and 10:00 PM (during the 'Concerts in the Park' event);
- Thursday, July 28, 2022 between the hours of 5:00 PM and 10:00 PM (during the 'Concerts in the Park' event);
- Saturday, July 30, 2022 between the hours of 10:00 AM and 6:00 PM (Civic Holiday long weekend); and
- Saturday, August 20, 2022 between the hours of 10:00 AM and 6:00 PM (typical weekend);

2.1 Parking Capacity

The capacity of the two (2) on-site parking lots was determined by counting the marked spaces. The capacity of on-street parking on the local roadways was calculated geospatially, using GIS software, by measuring approximately 7.5 metres (the length of a typical parking space). Local roads were also checked against the City's parking by-laws to verify any parking restrictions. No restrictions were noted during the hours of the parking surveys; however, the City does place temporary 'no parking' signs during the Concerts in the Park events on the following streets:

- Altamira Road (north side between Wood Lane and Libby Boulevard);
- Emerald Isle Court (both sides, just west of Wood Lane);
- Sugar Maple Lane (outside edge of the street);
- Leisure Lane (both sides between Mill Street and Richmond Street);
- Richmond Street (south side between Leisure Lane and Knollside Drive); and
- Mill Street (south side near Sugar Maple Lane, and north side to the east of Wood Lane).

The parking capacity is provided in **Table 1**.

Table 1: Parking Capacity

Parking Facility		Description	Capacity
On-Street			
Zone 1	Wood Lane	The segment between Mill Street and Rumble Avenue.	46
	Rumble Avenue	The segment west of Wood Lane.	20
	Emerald Isle	Emerald Isle Court west of Wood Lane.	15
	Mill Pond Court	Millpond Court north of Rumble Avenue.	9
Zone 1 Total			90
Zone 2	Willett Crescent	The north-south segment adjacent to Mill Pond Park.	8
	Theobalds Crescent	The north-south segment adjacent to Mill Pond Park.	11
	Bridewell Crescent	The eastern and western north-south segments.	32
Zone 2 Total			51
Off-Street			
West Parking Lot		The on-site parking lot situated to the west along Mill Street.	20
East Parking Lot		The on-site parking lot situated to the east along on Mill Street.	30
Off-Street Total			50
System Total			191

As part of the Mill Pond Revitalization Master Plan, a parking lot located adjacent to Stavert Park is being considered. That parking lot may provide an additional 40 parking spaces, with the final number to be confirmed during the detailed design process.

Accessible Parking Spaces

The Accessibility for Ontarians with Disabilities Act (AODA) sets requirements for the provision of disabled parking spaces in Ontario. Under the AODA, the percentage of parking spaces that must be designated for disabled individuals depends on the size and type of the facility.

For small parking lots with fewer than 50 parking spaces, at least 2% of the spaces must be designated for disabled individuals. For larger parking lots with 50 or more spaces, at least 4% of the spaces must be designated for disabled individuals. The park currently has two accessible parking spaces in east lot and another two accessible parking spaces in the west lot which is adequate for small parking lots.

Green Parking Spaces

It does not appear that Ontario provides specific guidance on the provision of green parking spaces, which are parking spaces designated for electric or hybrid vehicles, at public parks. Instead, it is up to individual municipalities and organizations to determine the appropriate number and location of green parking spaces based on their specific needs and the needs of their communities.

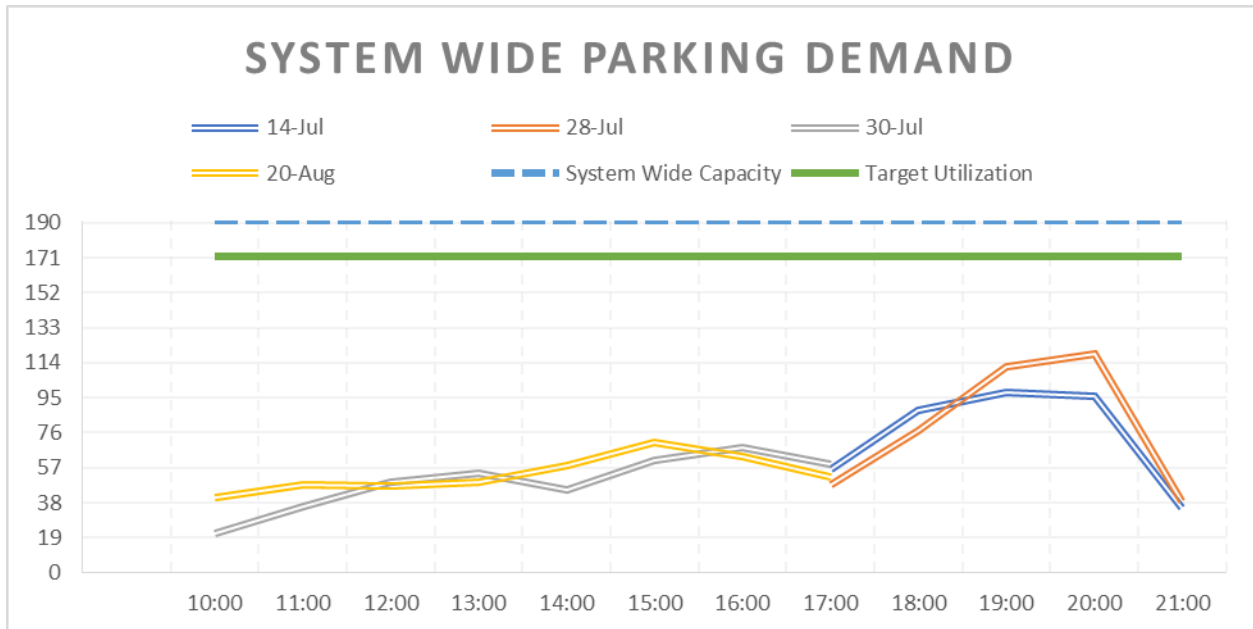
Based on current demand in the area, it is suggested that 2% of parking spaces be designated for electric or hybrid vehicles. This would result in one EV parking space being provided between both the east and west lot. It is suggested that the use of these EV spaces be regularly monitored and evaluated to determine if the number of green parking spaces should be increased in the future. This will help ensure that the needs of green vehicle owners are being met and that the parking facilities at the public park are equitable and accessible to all members of the community.

2.2 Parking Utilization Results

The parking utilization results are shown system wide for all data collection days and is also provided separately for the 'Concerts in the Park' events and for weekend operations. The maximum desirable parking utilization target is 90% for the purposes of this study. The results are provided in the following sections.

2.2.1 System Wide Parking Demand

The demand for system-wide parking varied between the Concerts in the Park events and weekend days. There are approximately 191 parking spaces available throughout the system and **Figure 3** presents the overall demand for parking, system wide, during the data collection period.

Figure 3: System Wide Parking Demand

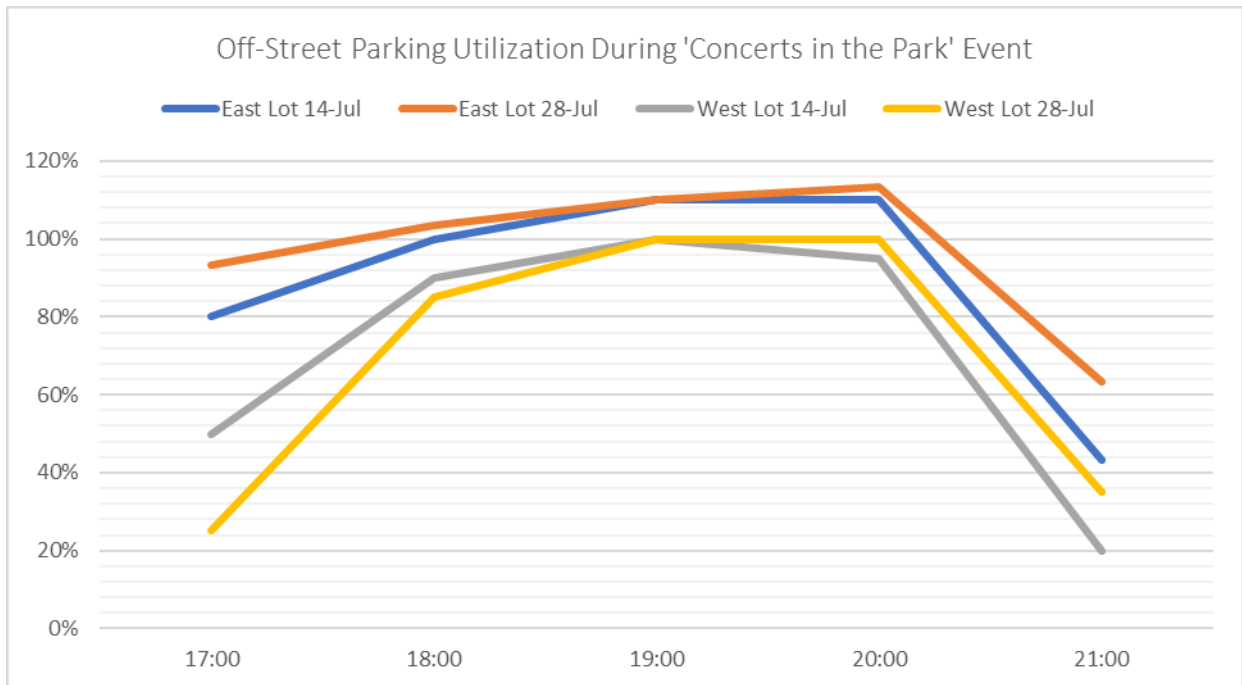
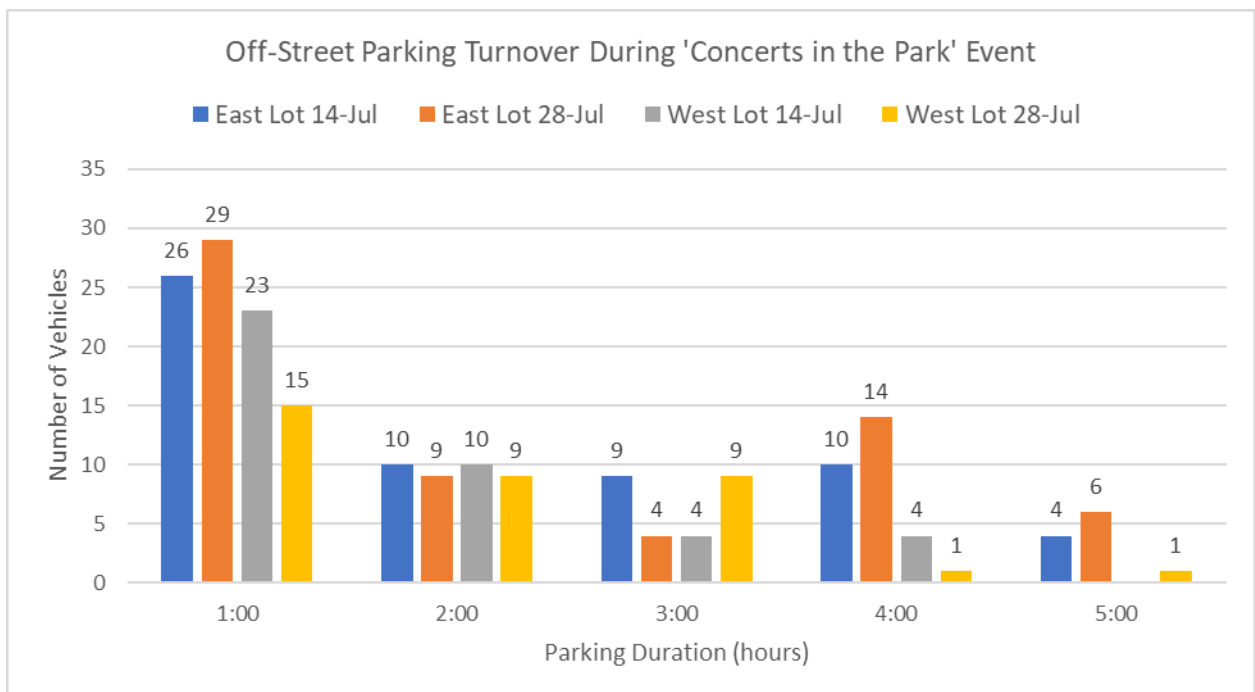
The data shows that there is sufficient parking available in the area surrounding the park, and the demand for parking never exceeds the combined supply of off-street and on-street parking and also remains below the target utilization of 90%. The subsequent sections of this report analyze the parking operations separately between on-street and off-street parking during the Concerts in the Park events, as well as during weekends.

2.2.2 'Concerts in the Park' Events Parking Operations

The 'Concerts in the Park' events take place on Thursday evenings between the hours of 7:00 PM and 9:00 PM during the summer months of July and August. Parking surveys were conducted on two (2) concert event dates, on July 14, 2022 and on July 28, 2022. These dates / events were identified by City staff as having the potential for the greatest attendance.

2.2.2.1 Off-Street Parking

The parking utilization of the off-street parking is provided in **Figure 4** and parking turnover is provided in **Figure 5**.

Figure 4: Off-Street Parking Utilization During 'Concerts in the Park' Events**Figure 5: Off-Street Parking Turnover during 'Concerts in the Park' Events**

The analysis of the data revealed that both parking lots exceeded the target utilization rate of 90%. The east lot experienced utilization rates above 100% during the concerts, suggesting that some visitors were parking in areas not designated for parking within that lot. The west lot reached maximum utilization of 100% on both days. The parking turnover data indicated that the majority of visitors stayed for between one and two hours in both lots. It was also noted that approximately 50% of the designated parking spaces in the east lot were occupied for more than four hours by an estimated 14 to 20 vehicles.

On-Street Parking

The on-street parking data was grouped into zones, based on their relative proximity, and analyzed. **Figure 6** and **Figure 7** show the parking utilization rates for on-street parking in Zones 1 and 2, respectively, on July 28, 2022, the date with the highest parking usage according to the collected data.

Figure 6: On-Street Parking Utilization in Zone 1 During the Concerts in the Park Event on July 28, 2022

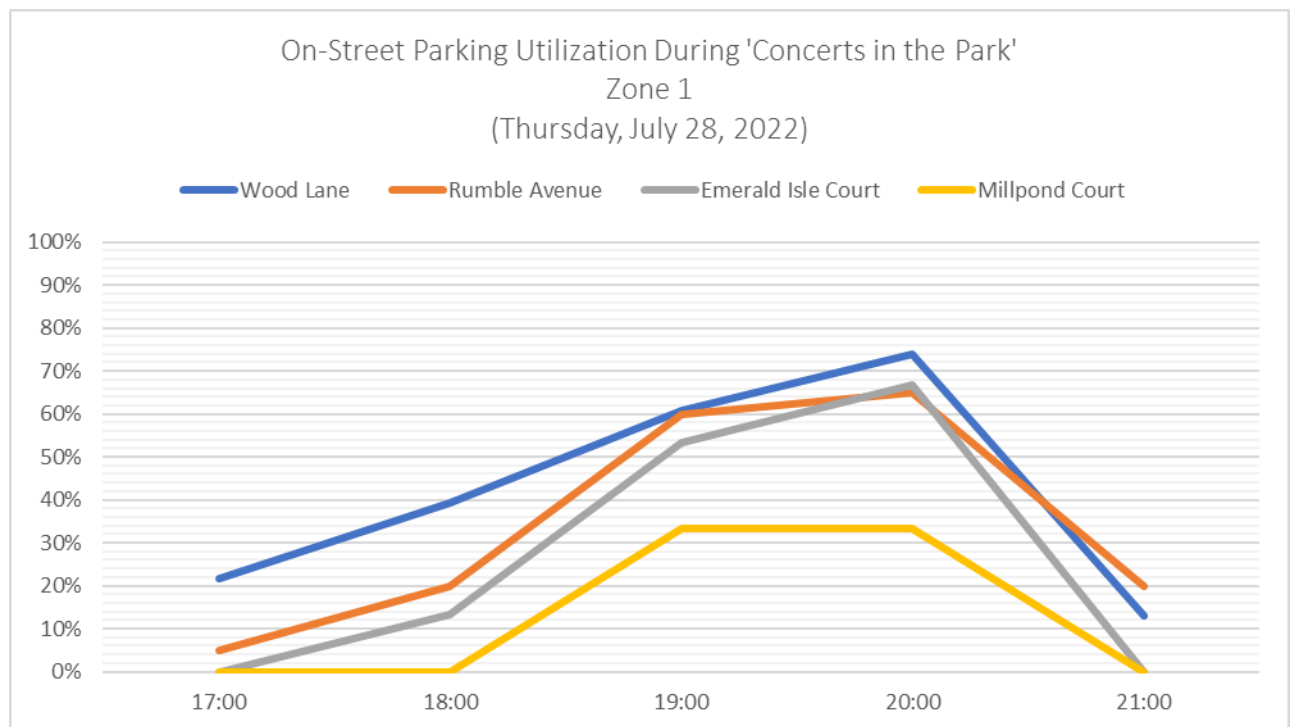
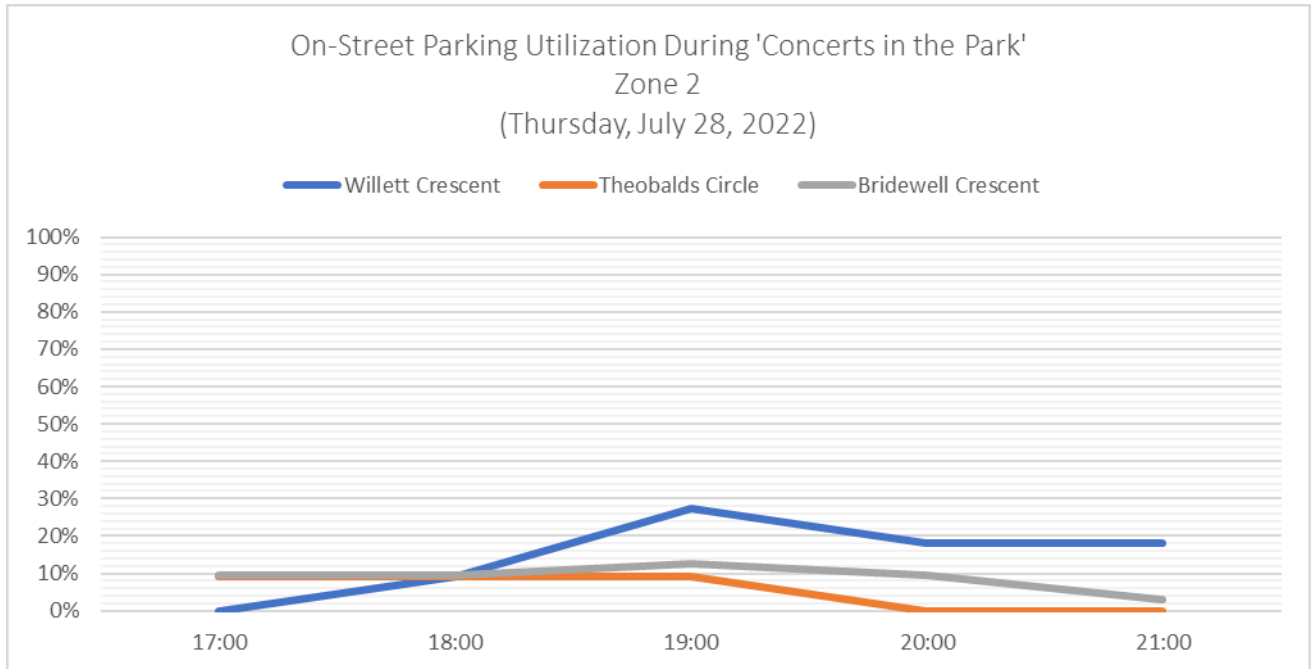


Figure 7: On-Street Parking Utilization in Zone 2 During the Concerts in the Park Event on July 28, 2022



The on-street parking utilization in Zones 1 and 2 remained below the target utilization rate of 90%. Zone 2 had lower utilization than Zone 1 during the Concerts in the Park event. Among the streets in Zone 1, Mill Pond Court had the lowest utilization compared to Wood Lane, Rumble Avenue, and Emerald Isle Court. According to the data, there were no parking supply constraints on-street.

2.2.2.2

'Concerts in the Park' Parking Operations Summary

The following conclusions can be drawn from the 'Concerts in the Park' event parking survey analysis:

- Off-street parking:
 - The peak parking utilization exceeded the 90% target within both parking lots.
 - Approximately 50% of the designated parking spaces (i.e., 14 to 20 vehicles) in the east lot were occupied for durations greater than four (4) hours.
 - The parking lots were full between 7:00 PM and 8:00 PM.

- On-street parking:
 - The peak parking utilization for on-street parking remained below the target utilization of 90%.
 - The majority of visitors parked in Zone 1 with a peak utilization of 74%.
 - Minimal visitors parked in Zone 2 during the concert events, with parking utilization below 40%.
 - In comparison, Zone 1 served an average of 95 vehicles and Zone 2 served 9 vehicles between 5:00 PM to 10:00 PM, during the Concerts in the Park events.

During the peak parking period, between 8:00 PM and 9:00 PM, the following observations were made:

- A maximum of 54 vehicles parked off-street, in the east and west lot, which has a combined capacity of 50 vehicles;
- A maximum of 60 vehicles parked in Zone 1 which has a combined capacity of 90 vehicles;
- A maximum of 5 vehicles parked in Zone 2 which has a combined capacity of 54 vehicles.

A maximum of 119 parking spaces out of a total of approximately 191 available spaces were occupied at any given time throughout the survey period system wide. This translates to a system wide utilization of 62%, and provides a general sense of the overall parking demand during the Concerts in the Park events. It is recognized that not all vehicles utilizing on-street parking within the study area would have been visitors to the park.

Based on the foregoing analysis, the current number of parking spaces appears to be sufficient to meet the current peak demands of the park. However, as the implementation of the Mill Pond Park Revitalization Master Plan progresses, an increase in parking demand could be expected. To help offset potential increases in parking demand, an additional 40 parking spaces could be realized near Stavert Park (as envisioned in the Mill Pond Park Revitalization Master Plan).

Nonetheless, it is recommended that the parking demand be regularly monitored to determine whether additional measures/strategies may need to be implemented.

The following potential solutions should be considered by the City of Richmond Hill in the future:

- Continue the bicycle valet parking program during peak times (e.g., Concerts in the Park events).
- Measures to increase awareness of parking spaces in Zone 2, such as those spaces on Willett Crescent, which are currently underutilized (due to a current lack of park interconnectivity, but will be rectified during the Revitalization Master Plan through a new pedestrian bridge connection).

2.2.3 Weekend Parking Operations

Parking surveys were conducted on one (1) typical summer weekend day and one (1) summer long weekend day for an 8-hour period between the hours of 10:00 AM and 6:00 PM, inclusively. The long weekend date was Saturday, July 30, 2022 and the typical weekend date was Saturday, August 20, 2022.

2.2.3.1 Off-Street Parking

The off-street parking utilization is provided in **Figure 8** and the off-street parking turnover is summarized in **Figure 9**.

Figure 8: Off-Street Parking Utilization during Weekends

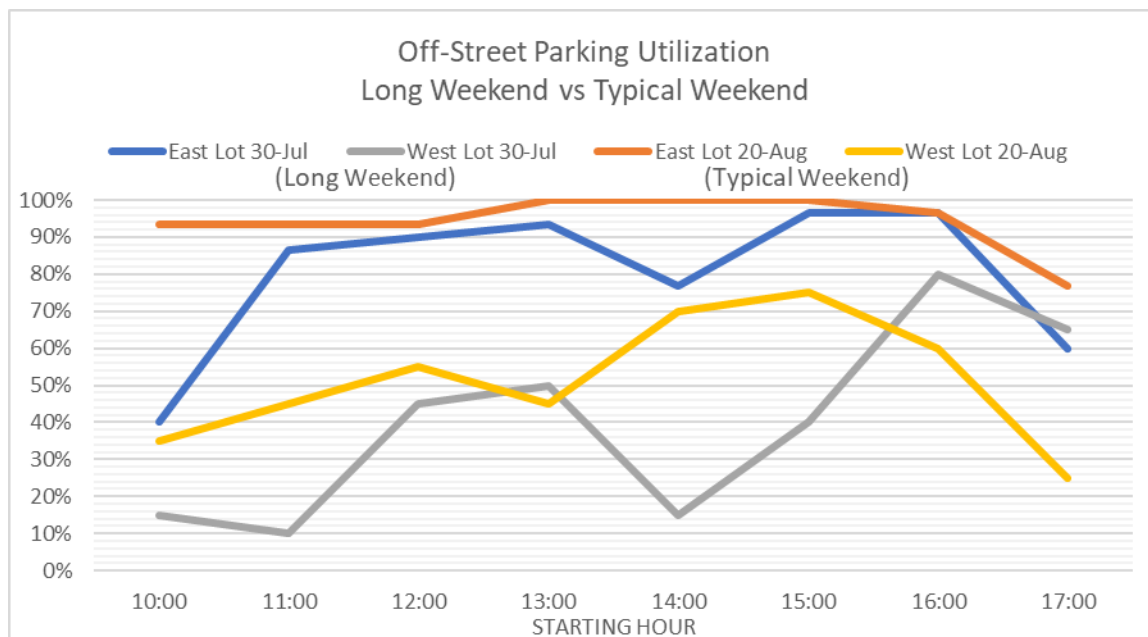
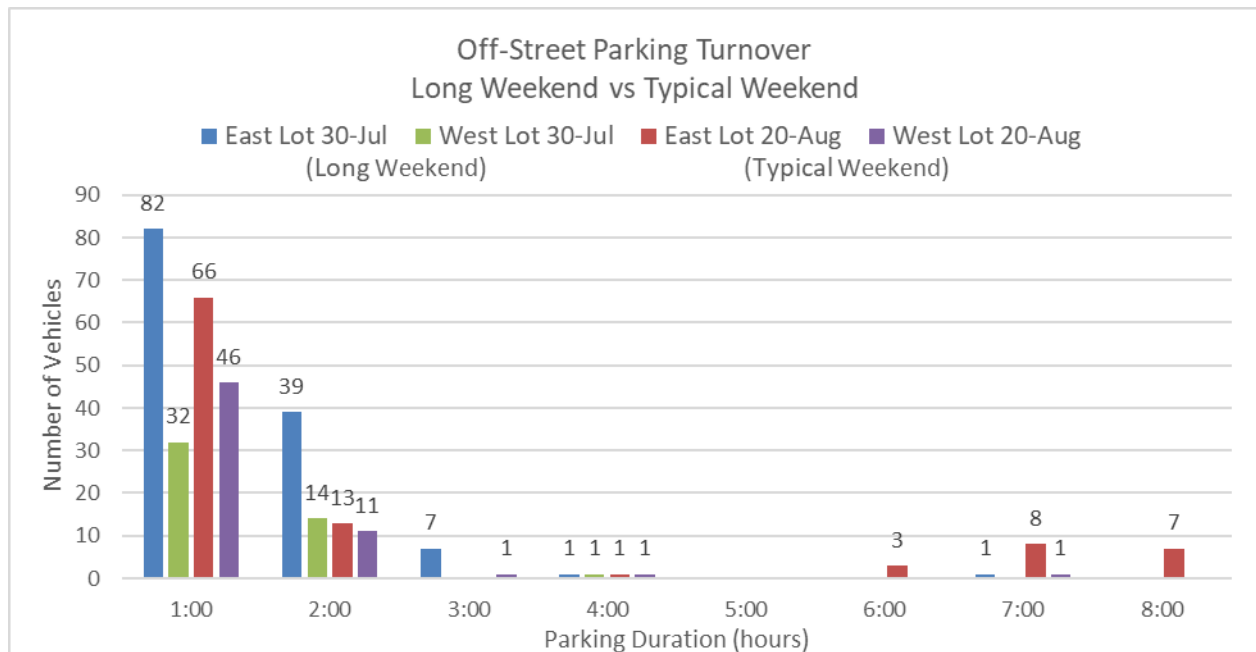


Figure 9: Off-Street Parking Turnover during Weekends

Based on the data, the east lot had the highest utilization, reaching a maximum of 100%. The west lot had a peak utilization of 80%. The parking duration in both lots was generally between one to two hours, although 15 vehicles, representing 50% of the parking spaces in the east lot, were parked for more than seven hours on the typical weekend day.

2.2.3.2

On-Street Parking

The typical weekend data revealed that the utilization of on-street parking on Willett Crescent peaked at 100% later in the afternoon. Aside from Willett Crescent, the utilization of most on-street parking was 40% or less. For a typical weekend, on-street parking utilization for Zone 1 and Zone 2 are provided in **Figure 10** and **Figure 11**, respectively. Parking turnover characteristics are presented in **Figure 12** and **Figure 13**, for Zone 1 and Zone 2, respectively.

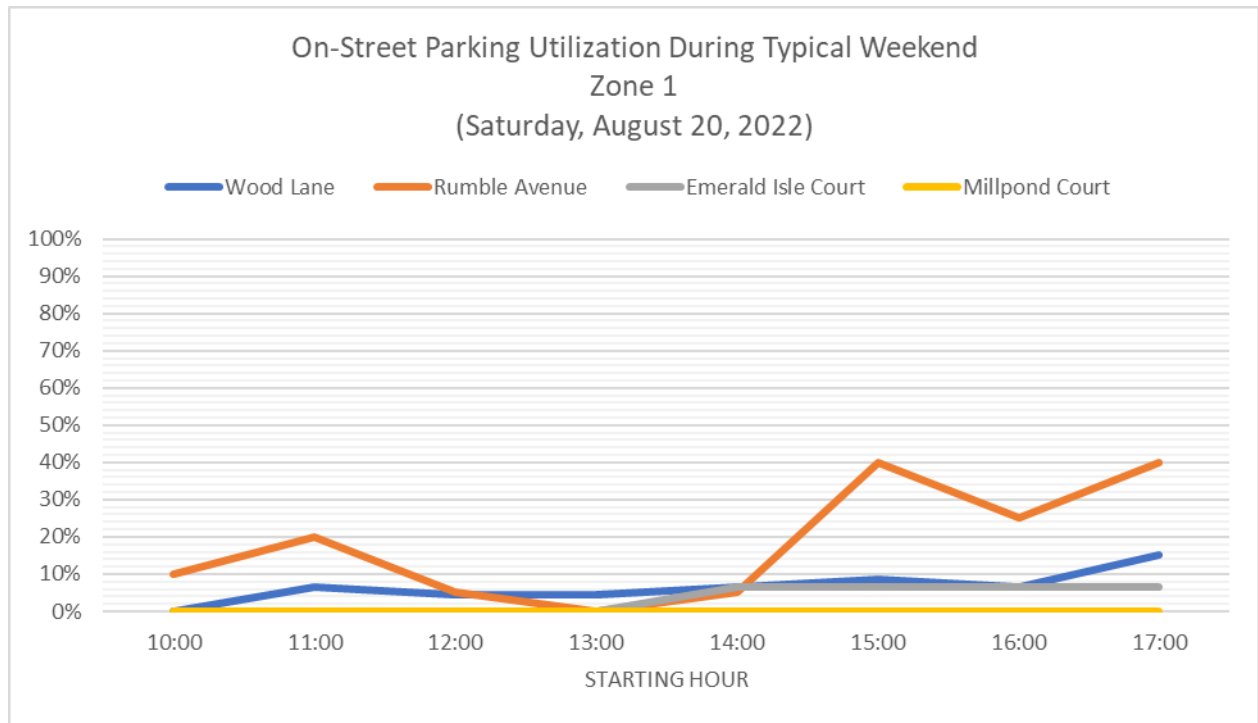
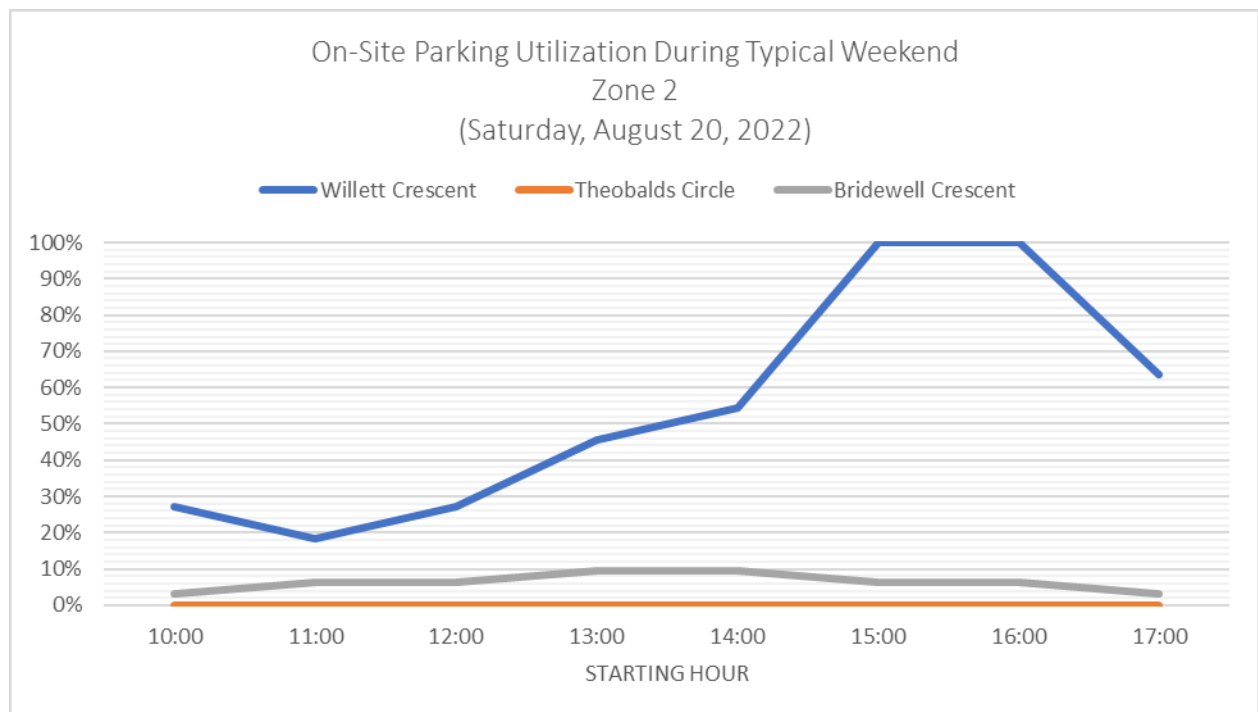
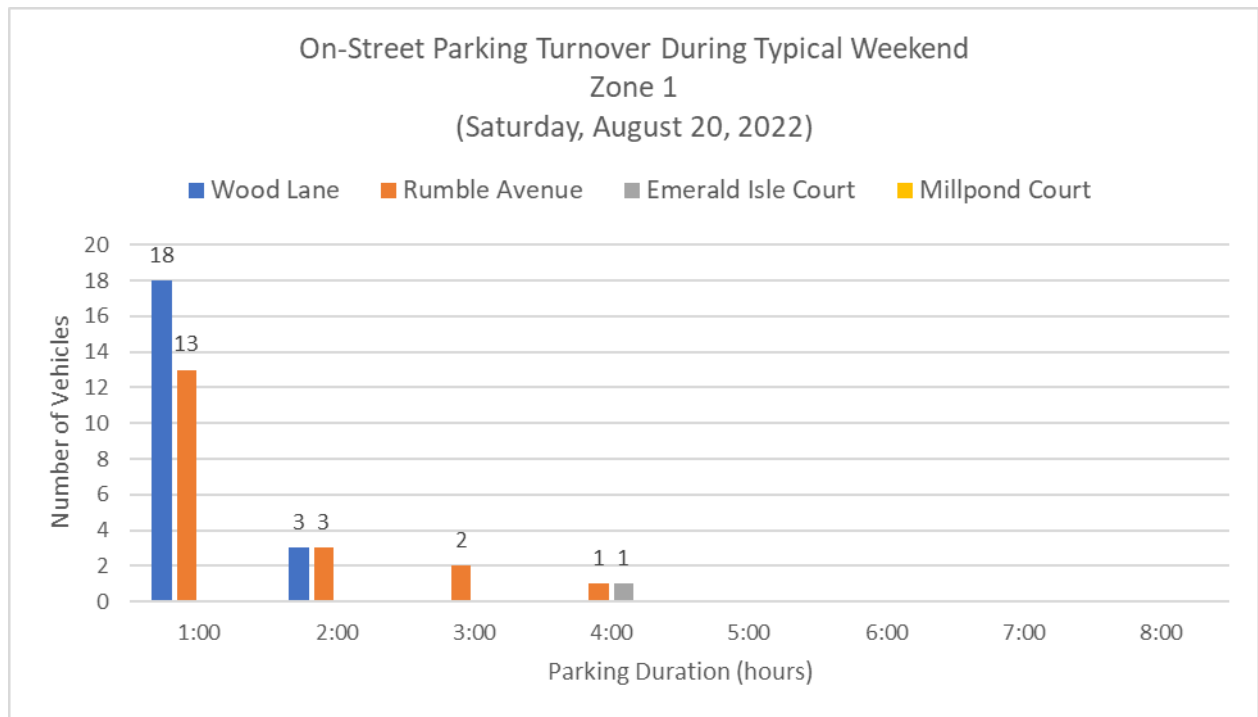
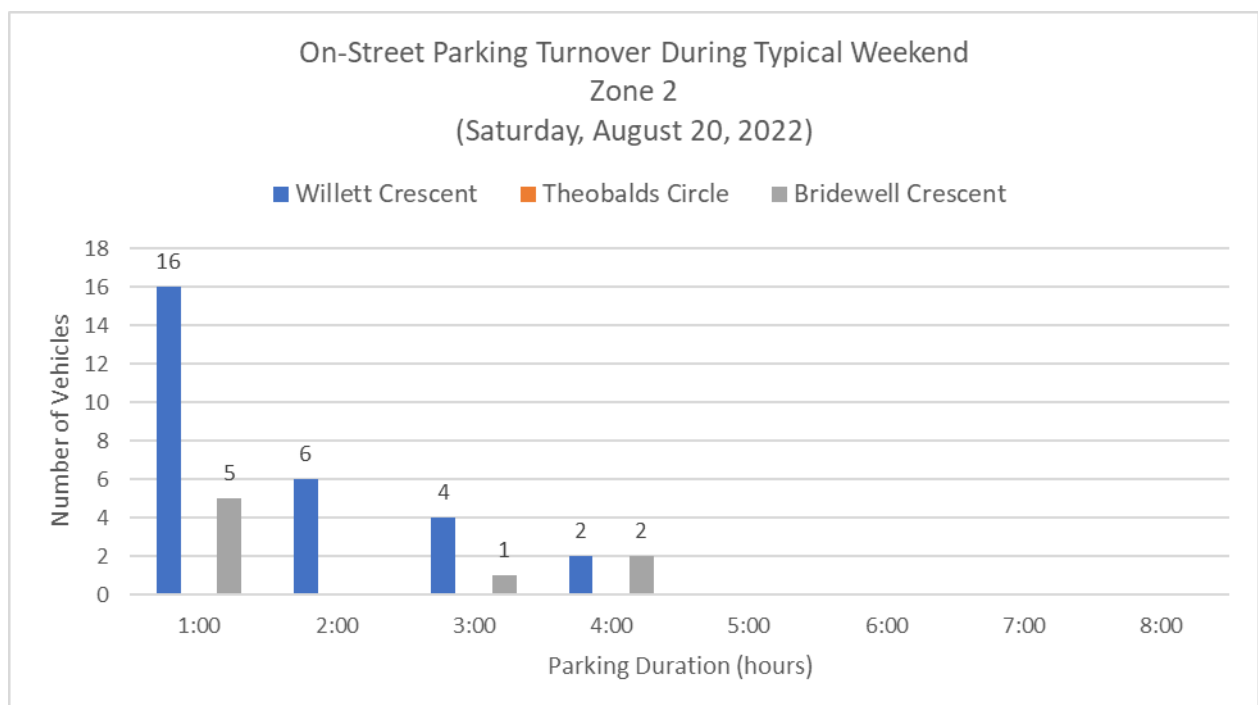
Figure 10: On-Street (Zone 1) Parking Utilization during Typical Weekend Day**Figure 11: On-Street (Zone 2) Parking Utilization during Typical Weekend Day**

Figure 12: On-Street (Zone 1) Parking Turnover during Typical Weekend Day**Figure 13: On-Street (Zone 2) Parking Turnover during Typical Weekend Day**

According to the data, there were no significant parking issues over the weekend. The maximum parking utilization in Zone 1 was 40%, while Willett Crescent in Zone 2 reached full capacity at 100%. However, Theobalds Circle and Bridewell Crescent in Zone 2 had a low utilization rate (only 10%). It is possible that increased awareness of available parking at Theobalds Circle and Bridewell Crescent could lead to a better utilization of parking in this area.

2.2.3.3

Weekend Parking Operations Summary

The following conclusions can be drawn from the parking survey analysis:

- Off-street parking:
 - On a typical weekend day, the east lot experienced over 90% utilization throughout the day, and the west lot utilization peaked at under 80%.
 - The majority of visitors park for a duration between one (1) to two (2) hours.
 - Approximately 50% of the designated parking spaces (i.e., 15 vehicles) in the east lot were parked for greater than seven (7) hours on a typical weekend day.
 - No major parking concerns were observed.
- On-street parking:
 - In Zone 1, the peak utilization of on-street parking utilization was under 40% on a typical weekend day.
 - In Zone 2, Willett Crescent is highly utilized, and reached a 100% utilization on a typical weekend day; however, Theobalds Circle and Bridewell Crescent had a utilization of approximately 10%.
 - No major parking concerns were observed; however, it is possible that increased awareness of available parking at Theobalds Circle and on Bridewell Crescent could lead to better utilization of parking spaces in this area.

A maximum of 71 parking spaces were occupied at any given time throughout the weekend day survey period, system wide. This translates to a system wide utilization of 37%. It is recognized that not all vehicles utilizing on-street parking were visitors to the park.

The following potential solutions are may be considered by the City of Richmond Hill if parking demands on weekend days increase following the implementation of the Revitalization Master Plan:

- Increasing awareness of available on-street parking in Zone 2 which is currently underutilized.

3.0 Traffic Operations

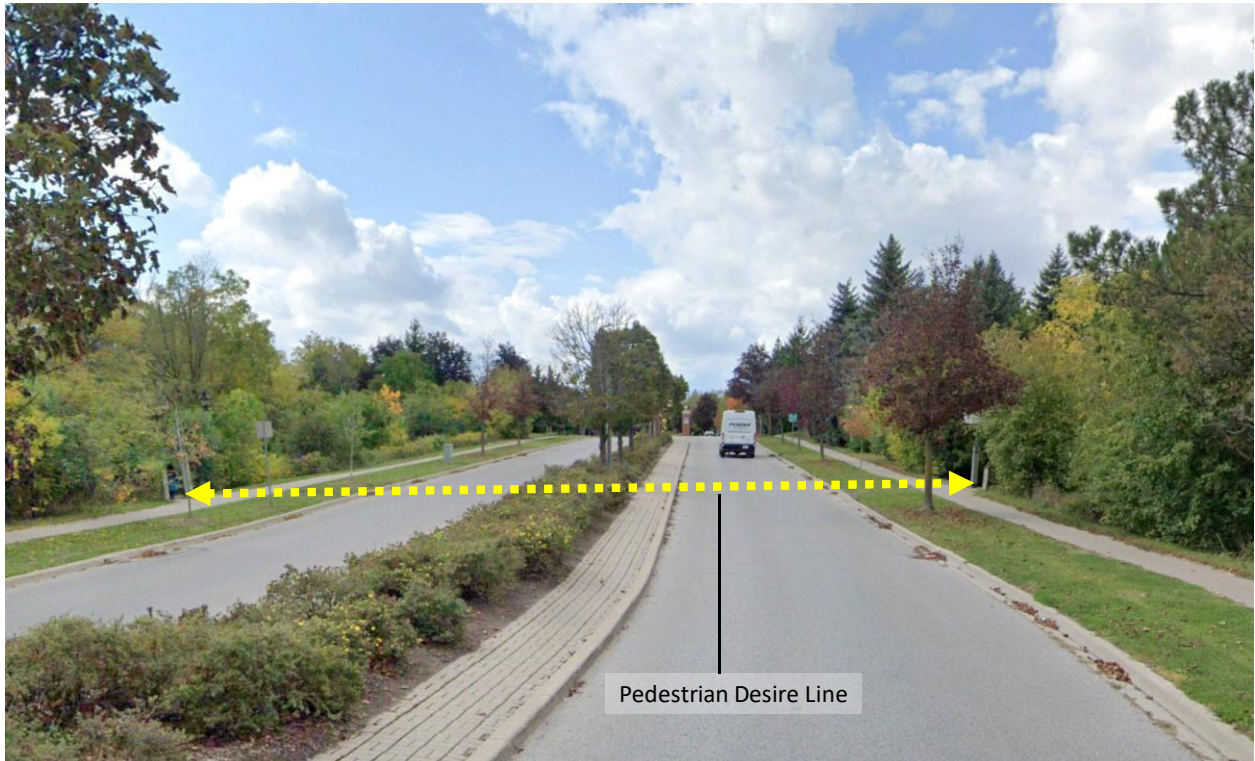
This section of the report details the traffic operations analysis portion of the study. The scope of the analysis is as follows:

- Evaluate the need for a pedestrian crossover or traffic calming measures on Regent Avenue, between the eastern Bridewell Crescent intersection and Ellsworth Avenue; and
- Evaluate the need for traffic calming measures on Mill Street, between Leisure Lane and Trench Street / Wood Lane.

3.1 Regent Street, between Bridewell Crescent and Ellsworth Avenue

Regent Street is a collector roadway with a posted speed limit of 40 km per hour (km/h) and features a raised centre median island. There are pedestrian desire lines present on the section of the roadway between Bridewell Crescent and Ellsworth Avenue, where park trails intersect with Regent Street. A view of the crossing is provided in **Figure 14**.

Figure 14: View Facing West on Regent Street

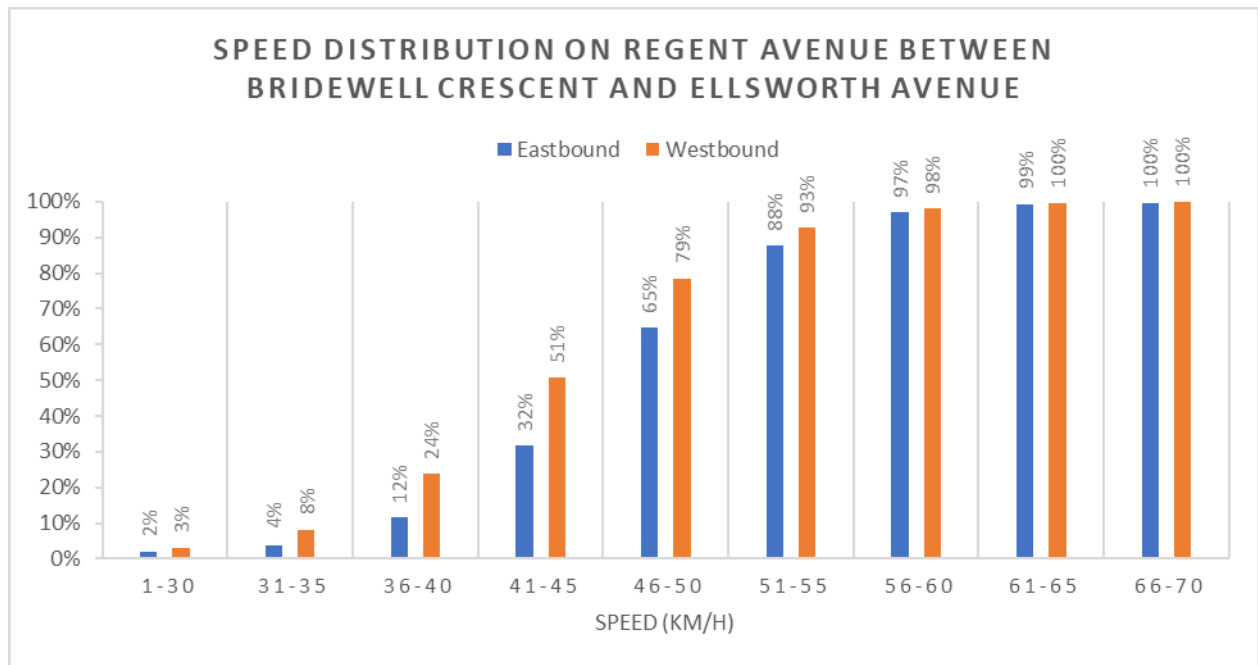
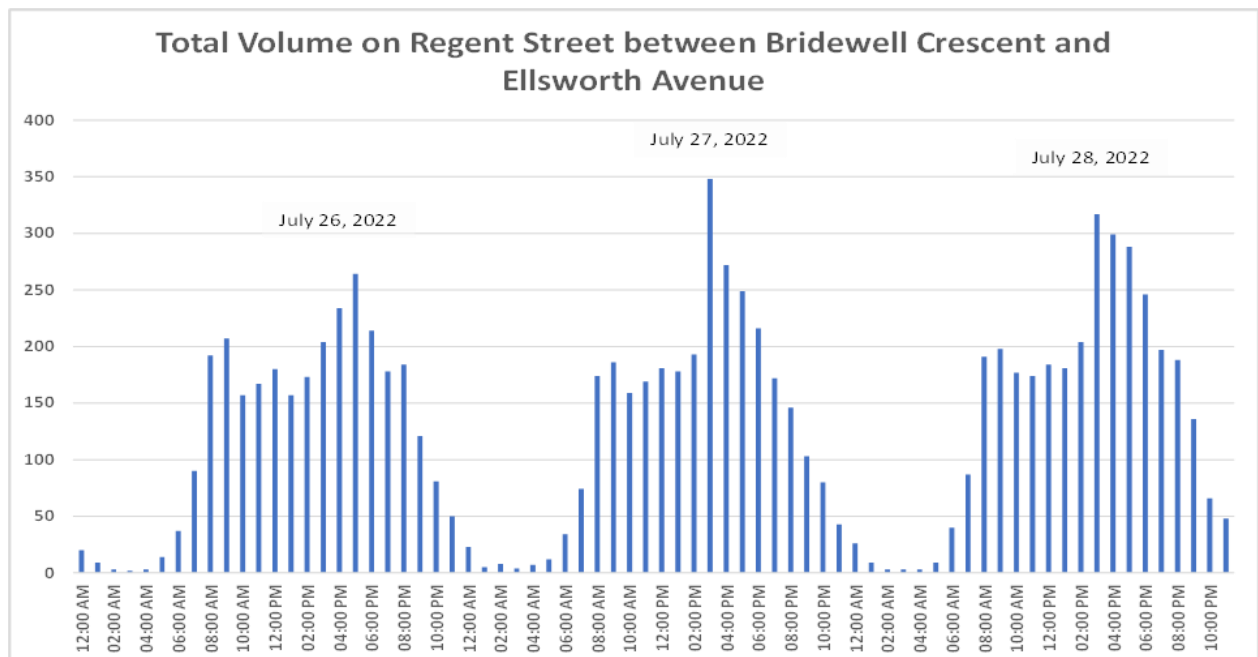


The center raised median on Regent Street narrows the width of the travel lanes and allows for a two-stage pedestrian crossing, which offers operational and safety advantages. The travel lanes were measured to be approximately 5 metres in each direction. No depressed curbs or pedestrian storage areas were observed, and there is no existing illumination or pedestrian warning signs or traffic calming measures in place. As shown in **Figure 15**, pedestrian desire lines are present across Regent Street.

Figure 15: View Facing East on Regent Street at Pedestrian Desire Line Location



Traffic volume and speed data was collected between July 26, 2022 and July 28, 2022 for this roadway segment, inclusively. This data was used to gain an understanding of the traffic operations in the vicinity of the crossing location and to evaluate the need for a pedestrian crossover and / or traffic calming measures. **Figure 16** shows a summary of the speed data and **Figure 17** shows an overview of the traffic volumes on Regent Street.

Figure 16: Regent Street Cumulative Speed Distribution**Figure 17: Regent Street Volume Data**

The data indicates that the majority of motorists drive above 45 km/h, and the 85th and 95th percentile speeds fall within the 51-55 km/h bin and the 56-60 km/h bin, respectively. It was also observed that westbound vehicles generally travel faster than eastbound vehicles. The average daily volume observed on this segment of Regent Street was approximately 3,080 vehicles.

A full assessment of the need for a pedestrian crossover (PXO) at this location was not possible due to a lack of pedestrian volume data. The first step in evaluating a potential PXO site is to determine if the requirements for a signal warrant are met. Without 8-hour pedestrian counts, it is not possible to conduct a signal warrant analysis.

Even though a signal warrant analysis could not be conducted, the trail location was still evaluated to determine if it is a potential candidate for a pedestrian crossover (PXO) using the guidance provided in the *Ontario Traffic Manual (OTM) Book 15*. Based on the decision support tool within OTM Book 15, the key determining factor is whether the crossing location is within 200 metres of another traffic control device. Given the fact that the intersection of Regent Street and Ellsworth Avenue has all-way STOP control (AWSC), and is situated less than 85 metres from the pedestrian desire line (which coincides with the trail location), a PXO is not warranted. However, it is observed that pedestrians are crossing Regent Street at this trail location, regardless of the nearby controlled crossing.

The City of Richmond Hill may consider curb extensions at the trail location (provided sufficient space exists to practically narrow the travel lanes), and in advance of it, to help reduce the speeds of vehicles before they reach the trail location. The advantage of curb extensions are that they provide additional pedestrian storage space, help to reduce speeds and increase pedestrian visibility.

According to the Transportation Association of Canada (TAC) traffic calming guidelines, there are several reasons why curb extensions may be impactful as a traffic calming measure:

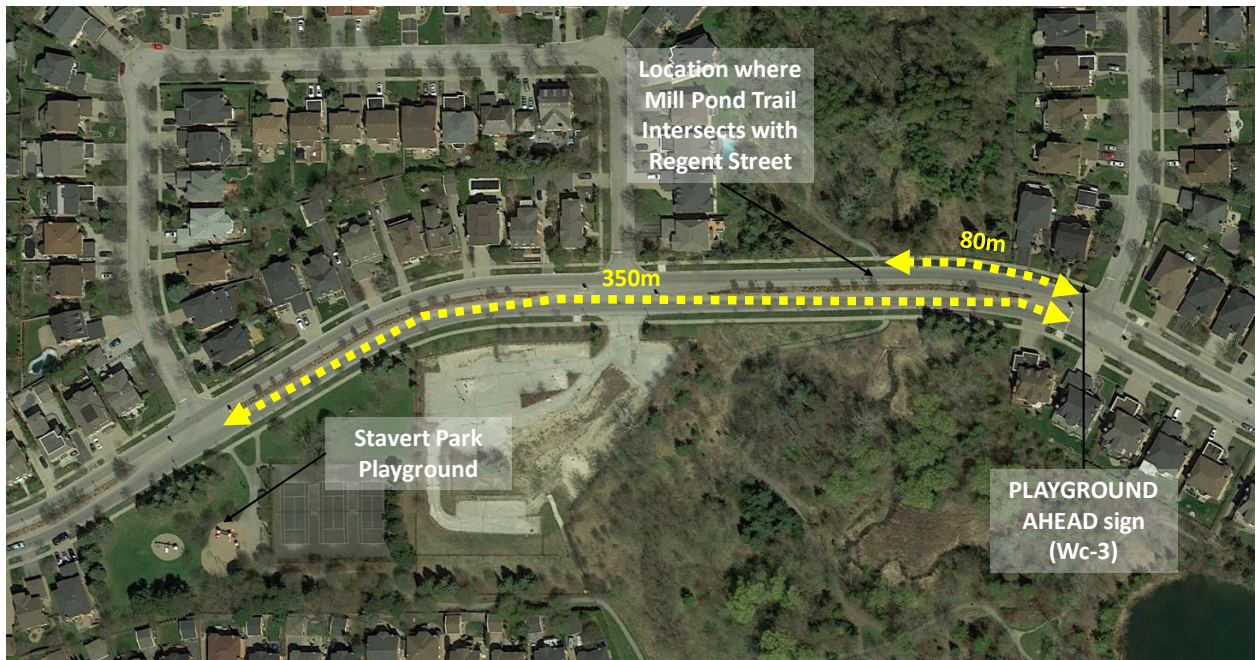
1. Improved pedestrian safety: Curb extensions can help to improve pedestrian safety by reducing the distance that pedestrians need to cross the roadway, making it easier for them to be seen by drivers. They can also help to slow down vehicles and reduce the risk of pedestrian-vehicle conflicts.

2. Enhanced pedestrian accessibility: Curb extensions can also improve accessibility for pedestrians, particularly those with disabilities, by providing a shorter and more direct route to the sidewalk.
3. Reduced vehicle speeds: Curb extensions can help to reduce vehicle speeds by narrowing the roadway and creating a more visual barrier between pedestrians and vehicles. This can help to create a safer and more pedestrian-friendly environment.
4. Improved intersection safety: At intersections, curb extensions can help to improve safety by increasing visibility for pedestrians and drivers, and by reducing the width of the crossing for pedestrians.
5. Enhanced pedestrian facilities: Curb extensions can also provide additional space for pedestrian facilities such as benches, bike racks, and other amenities, helping to create a more pedestrian-friendly environment.

Overall, the TAC traffic calming guidelines recommend curb extensions as an effective measure for improving pedestrian safety, accessibility, and overall traffic calming in a variety of settings.

Lastly, a review of warning signs along this section of Regent Street revealed that a 'Playground Ahead' (Wc-3) sign was present on the northwest corner of the intersection of Regent Street and Ellsworth Avenue, as shown in **Figure 18**. The sign in question is located approximately 350 meters to the east of playground. As per the guidelines specified in OTM Book 6 (Warning Signs), the sign should be placed at a minimum distance of 100 meters from the playground for motorists heading westbound, considering the posted speed limit of 40 km/h. An existing 'Playground Ahead' (Wc-3) is present in for eastbound motorists at approximately 120 metres west of the playground. No relocation is required for this sign.

Figure 18: Aerial View Mill Pond Trail and Regent Street



3.2

Mill Street between Leisure Lane and Trench Street / Wood Lane

Mill Street is a collector roadway and has a posted speed limit of 40 km/h. There are three (3) existing uncontrolled pedestrian crossings on Mill Street situated between Leisure Lane and Trench Street / Wood Lane. The crossings (denoted by textured pavement) connect the off-street parking lots to the park. This segment of Mill Street was assessed to quantify pedestrian crossing activity and determine if traffic calming measures would be appropriate. A view of the crossings is provided in **Figure 19**.

Figure 19: View of Pedestrian Crossings on Mill Street

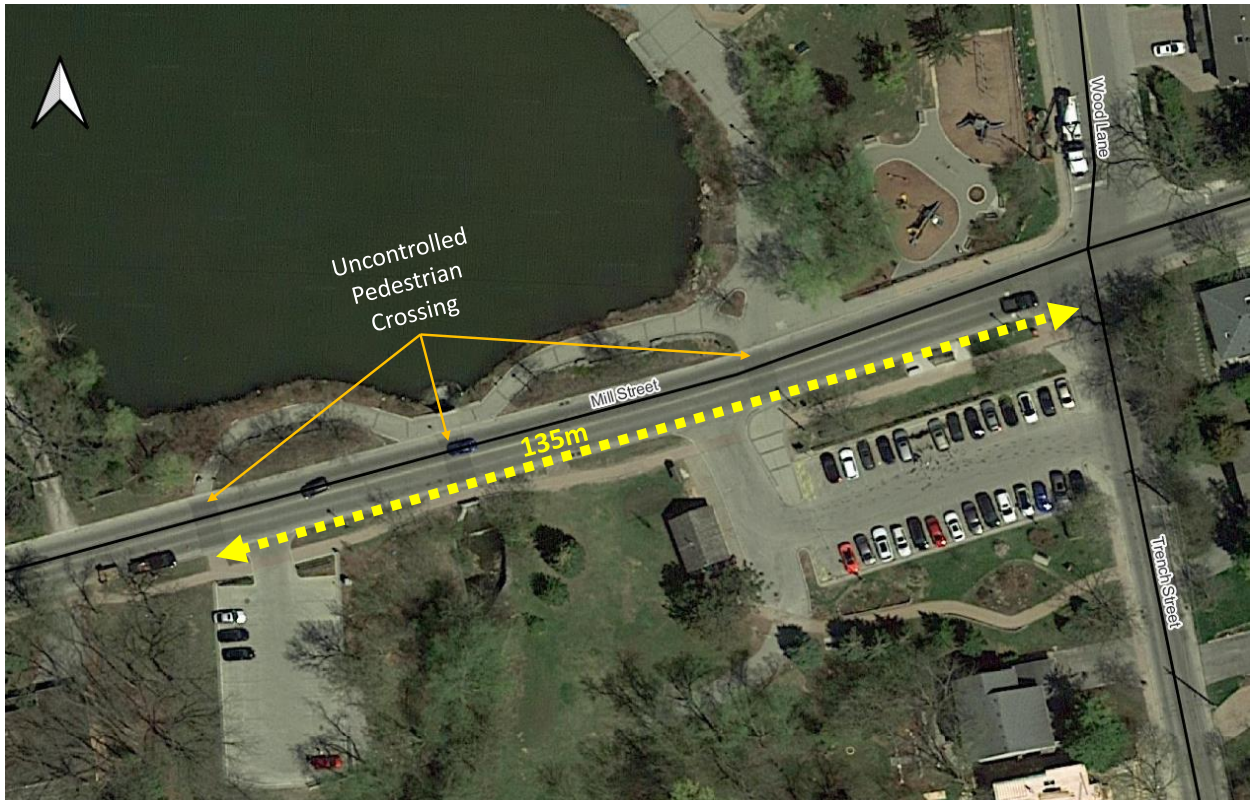


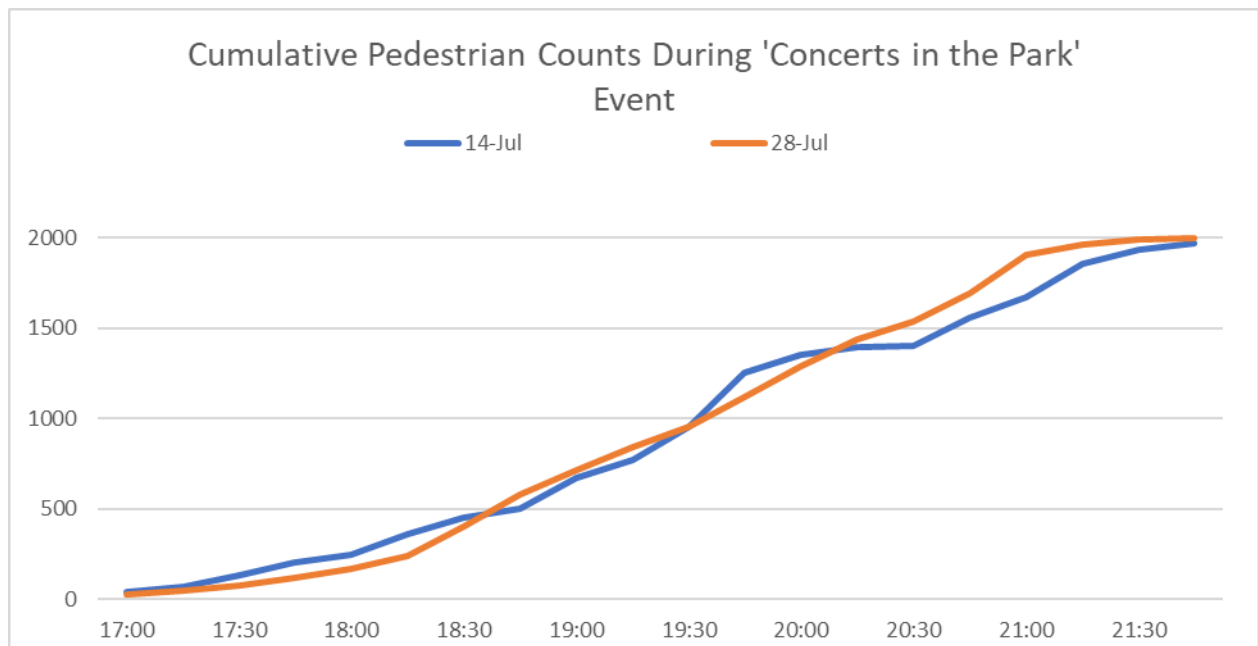
Table 2 summarizes the speed and volume data which was provided by the City of Richmond Hill for the section of Mill Street between Leisure and Trench Street/Wood Lane. The data was provided in a summarized format for Mill Street, as opposed to Regent Street (where the data was provided in greater detail). The average mean speed was 42 km/h and the average 85th percentile speed was 51 km/h.

Table 2: Mill Street Speed and Volume Data

Survey Dates	ADT (vehicles)	Mean Speed (km/h)	85 th Percentile Speed (km/h)
August 9, 2016 to August 10, 2016	5056	41	50
October 5, 2016 to October 6, 2016	5570	42	51
August 13, 2019 to August 14, 2019	5776	44	53
June 16, 2020 to June 17, 2020	4055	39	48
Average	5114	42	51

Pedestrian counts for the subject section were undertaken during the 'Concerts in the Park' events and during the weekend day surveys to quantify pedestrian activity.

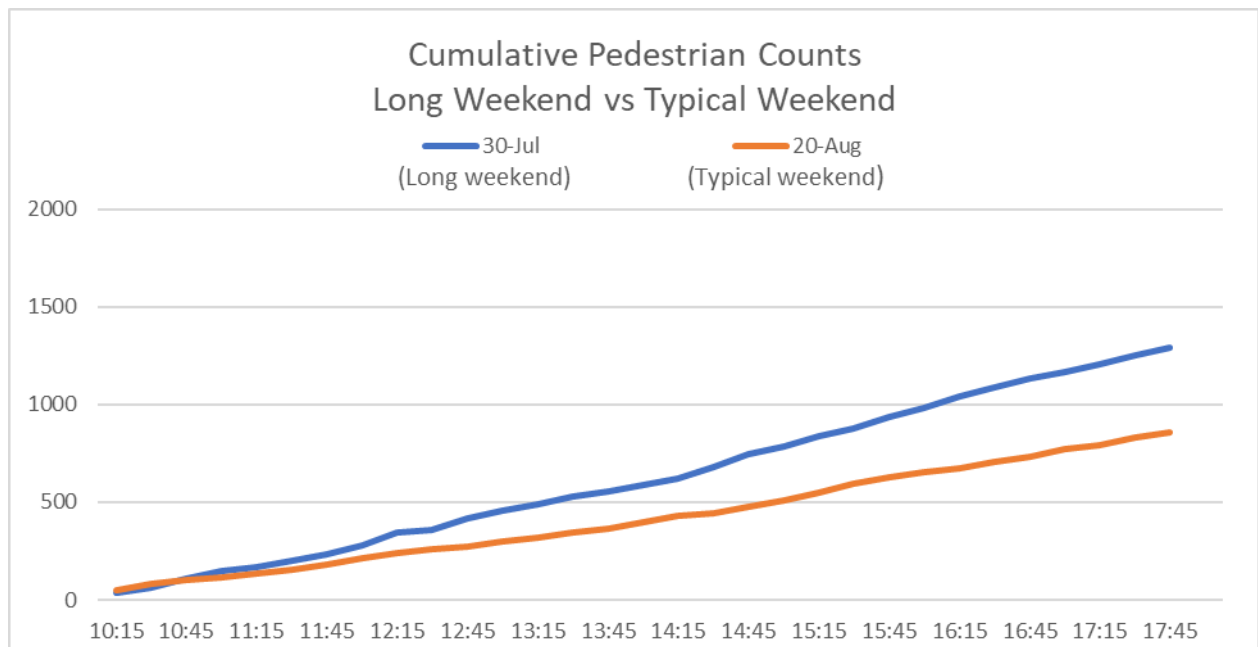
Figure 20 illustrates the cumulative pedestrian volumes during the 'Concerts in the Park' events.

Figure 20: Mill Street Pedestrian Counts during 'Concerts in the Park' Events

Considerable pedestrian presence was observed during the ‘Concerts in the Park’ events with approximately 2,000 pedestrian activities observed over a five (5) hour period.

Figure 21 shows the cumulative pedestrian volumes during a long weekend day and a typical weekend day.

Figure 21: Mill Street Pedestrian Counts during Long Weekend Day and Typical Weekend Day



Over the eight (8) hour count period, there were 1,289 pedestrian crossings observed on the Saturday of long weekend (July 30, 2022) and 859 pedestrian crossings on the typical weekend day (August 20, 2022). Pedestrians crossed Mill Street steadily throughout the day from 10:00 AM to 6:00 PM. The majority of pedestrians utilized the crossing just east of the main (east) parking lot, followed by the pedestrian crossing west of the main (east) parking lot entrance. The westernmost crossing was the least utilized.

The large pedestrian presence along Mill Street between Leisure Lane and Trench Street / Wood Lane will benefit from the ‘Safety in Numbers’ phenomenon, which refers to the observable effect that pedestrian safety is positively correlated with increased pedestrian traffic in a given area. The significant pedestrian presence on Mill Street

gives cues to motorists to remain vigilant and aware of pedestrians on the road. The speed data also indicates that 85th percentile speeds are at 51 km/h through this segment of Mill Street and will likely decrease when the pedestrian presence is high, such as on weekends or during the 'Concerts in the Park' events. Illumination should be considered at the crossing locations to improve conspicuity of pedestrians during nighttime conditions.

According to the design concepts being considered in the Mill Pond Revitalization Master Plan, there are planned changes for this section of Mill Street. The emerging preferred concept drawings for this segment of Mill Street include two crossings, as opposed to the three existing crossings.

As a traffic calming measure, raised crossings may be considered at one or more of the pedestrian crossings on Mill Street. Raised crossings are a traffic calming measure that reduce vehicle speeds and improve pedestrian and bicyclist safety. They are typically installed on residential streets or in areas with high pedestrian traffic. They work by requiring motorists to slow down as they pass over the crossing. According to the Transportation Association of Canada's **Canadian Guide to Traffic Calming**, raised crossings are most effective at reducing speeds between 40-55 km/h and in areas with moderate to high traffic volumes. They also reduce noise and air pollution by encouraging slower speeds. Overall, raised crossings are a cost-effective way to improve safety and reduce vehicle speeds in residential and pedestrian-heavy areas.

Before making a decision regarding vertical traffic calming measures along this segment of Mill Street, a thorough evaluation of the entire corridor should be completed by the City of Richmond Hill, to ensure that the impacts on all road users (including emergency service vehicles) can be considered.

4.0 Conclusions

Parking Operations

No major parking concerns were observed during the Concerts in the Park events or during weekend (Saturday) operations. System-wide parking demands remained well below a target utilization of 90% which looked at on-street parking on the surrounding road network as well as the parks' two off-street parking facilities. That said, once the Mill Pond Park Revitalization Master Plan is implemented, an increase in parking demand could be expected. To help offset potential increases in parking demand, an additional 40 parking spaces are envisioned (as part of the Mill Pond Park Revitalization Master Plan) near Stavert Park.

According to the observations made during the Concerts in the Park events and on the weekend, on-street parking in Zone 1 was more frequently utilized during the Concerts in the Park events, while on-street parking in Zone 2 was more popular (specifically on Willett Crescent) during the weekend. Theobalds Crescent and Bridewell Crescent in Zone 2 were both underutilized. Pedestrian presence was observed to be higher during the long weekend which could signify higher auto occupancies during the long weekends as compared to regular weekends. Increased awareness of the availability of parking in this area may help to spread out the on-street parking demand.

The park currently has two accessible parking spaces in east lot and another two accessible parking spaces in the west lot which is adequate for small parking lots. Further, based on current demand in the area, it is suggested that 2% of parking spaces could be designated for electric or hybrid vehicles. This would result in one EV parking space being provided between both the east and west lot.

Traffic Operations

A full assessment of the need for a pedestrian crossover (PXO) at the trail location on Regent Street was not possible due to a lack of pedestrian volume data. The site was still evaluated using the guidance in Ontario Traffic Manual Book 15. According to the decision support tool in OTM Book 15, the site did not meet the requirements for a PXO due to its proximity to another traffic control device. However, it is observed that

pedestrians are crossing Regent Street at this trail location, regardless of the nearby controlled crossing. Curb extensions at the trail location, and in advance of it, can help reduce the speeds of vehicles before they reach the trail location.

There were higher numbers of pedestrian crossings on Mill Street during a long weekend (1,289 crossings) compared to a typical weekend day (859 crossings). The majority of pedestrians crossed at the textured crossings which are closest to the east parking lot, while the westernmost crossing was the least utilized. The “Safety in Numbers” phenomenon, which suggests that pedestrian safety is correlated with increased pedestrian traffic, may apply to this area due to the high pedestrian presence. Speed data indicates that 85th percentile speeds are 51 km/h and may decrease when pedestrian presence is high.

The emerging preferred concept for this segment of Mill Street in the Mill Pond Revitalization Master Plan includes two crossings rather than three.

5.0 Recommendations

Parking Recommendations

The envisioned parking operations for Mill Pond Park include implementing paid parking operations in all off-street parking lots for non-Richmond Hill residents, restricting on-street parking on nearby residential streets to local residents only, and improving parking wayfinding for drivers through signage and a pay-by-app solution. Longer term parking would need to be in the on-site parking areas due to the 3-hour parking limit set by the local parking by-laws. Non-residents will be required to pay for parking, while residents will be able to register for free parking at Mill Pond.

The following recommendations relate to parking:

- Regularly monitor parking demand in the vicinity of Mill Pond Park. If parking demands approach capacity in the future, additional strategies should be considered (including the addition of off-street parking spaces near Stavert Park, as envisioned in the Mill Pond Park Revitalization Master Plan).
- Increase parking enforcement in the east parking lot during the ‘Concerts in the Park’ events to prevent parking in undesignated parking spaces.

- Consider measures to increase awareness of parking opportunities to the north and west (i.e., Theobalds Circle, Willett Crescent), especially considering the changes envisioned in the Mill Pond Park Revitalization Master Plan which will enhance connectivity to these areas.
- Continue the bicycle valet service during the Concerts in the Park event.
- Consider raised crossings, where the crosswalk is elevated from the adjacent roadway, at the conceptual crossings on Mill Street, between Leisure Lane and Trench Street / Wood Lane. This recommendation may be deferred until the full corridor assessment has been undertaken.
- Consider providing illumination at the crossing location on Regent Street, Leisure Lane and Trench Street / Wood Lane to improve conspicuity of pedestrians during nighttime conditions.
- Provide one green parking space between the east and west lots. Further, the use of these EV spaces is suggested to be regularly monitored and evaluated to determine if the number of green parking spaces should be increased in the future.
- Promote awareness of underutilized parking facilities by employing strategies such as informative signage, updating the City's park website to show the locations where parking is available, leveraging social media, and incorporating digital maps to guide visitors to available parking options using the pay-by-app solution.
- Develop a parking monitoring plan to monitor demand as the Mill Pond Master Plan is implemented to help determine the optimal timing for parking improvements.
- The recommendations formed as part of this study should be added to the Mill Pond Master Plan implementation plan.

In addition to the above parking recommendations, as the demand for parking grows at Mill Pond Park (with the Master Plan's implementation), it is recommended that the City adopt paid parking operations to help manage the parking demand, and to generate the funding necessary for self-sufficient operations. The timing of the paid parking operations will be informed by the recommended parking monitoring plan (noted above). Based on the successful practices established at Lake Wilcox, it is recommended that the City implement paid parking operations as outlined below.

(Details related to the price of parking and the dates in effect will require further refinement)

- Implement paid parking operations in all off-street parking lots for non-Richmond Hill residents:
 - Require non-Richmond Hill residents to pay for parking between 7:00 AM and 11:30 PM every day from April 1 until September 30.
 - Richmond Hill residents will be able to register for free parking at Mill Pond by visiting a City facility or registering through the AIMS parking control software system.
 - Set the price of parking at \$5.00 per hour, as a starting point.
 - Undertake a market assessment to identify a preferred paid parking management vendor.
- Restrict on-street parking on nearby residential streets:
 - Restrict on-street parking to “local residents only” within 500 metres of Mill Pond Park from April 1 to September 30 on weekends and Statutory Holidays.
 - Distribute residential parking permits to the affected local residents granting them an exception to the new parking restriction. Note that residents will still be subjected to current parking regulations (e.g., 3-hour maximum on-street parking and no overnight parking).
- Improve parking wayfinding for drivers:
 - Implement parking wayfinding signage on the road network surrounding Mill Pond Park directing drivers to nearby parking lots.
 - Select a paid parking management vendor that includes a pay-by-app solution. These apps improve wayfinding by showing users the locations of nearby parking lots.

Traffic Recommendations

- Relocate ‘Playground Ahead’ (Wc-3) sign on Regent Street to be a minimum of 100 metres in advance of Stavert Park for westbound motorists.
- Consider installing curb extensions (localized road narrowing where the pavement width is reduced by extending the curb onto the roadway) at the

proposed pedestrian crossing on Regent Street (provided sufficient space exists), and/or in advance of it, between Bridewell Crescent and Ellsworth Avenue.

- To determine if a pedestrian crossover (PXO) is necessary at the Regent Street trail crossing location:
- collect pedestrian data on a typical weekday and weekend during warm weather. The data collection should occur between the hours of 8:00 AM and 9:00 PM.
- If the pedestrian crossing data does not support a PXO:
- consider installing an uncontrolled crossing with curb ramps and 'Wait For Gap' signage for pedestrians.