

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 16, 2021

Item 2, Report No. 51, of the Committee of the Whole (Working Session), which was adopted, as amended, by the Council of the City of Vaughan on November 16, 2021, as follows:

By receiving the following Communications:

- C14. Mathew Halo on behalf of Sandra Patano, Weston Consulting, Millway Avenue, Vaughan, dated November 15, 2021;***
- C15. Mathew Halo on behalf of Sandra Patano, Weston Consulting, Millway Avenue, Vaughan, dated November 15, 2021;***
- C16. Ryan Guetter and Mark N. Emery, Weston Consulting, Millway Avenue, Vaughan, dated November 15, 2021; and***
- C19. Lisa La Civita, Armland Group, Dufferin Street, Concord, dated November 15, 2021.***

2. VAUGHAN MILLS CENTRE PUBLIC REALM AND STREETSCAPE PLAN

The Committee of the Whole (Working Session) recommends:

- 1) That the recommendation contained in the following report of the Deputy City Manager, Planning and Growth Management, dated November 3, 2021, be approved; and**
- 2) That the presentation by Chris Veres, DTAH, Park Road, Toronto, and Communication C2, presentation material, entitled, “*Vaughan Mills Public Realm and Streetscape Master Plan*”, be received.**

Recommendations

- 1. THAT the Vaughan Mills Centre Public Realm and Streetscape Plan BE APPROVED.**

Committee of the Whole (Working Session) Report

DATE: Wednesday, November 3, 2021

WARD(S): 3 4

TITLE: VAUGHAN MILLS CENTRE PUBLIC REALM AND
STREETSCAPE PLAN

FROM:

Haiping Xu, Deputy City Manager, Planning and Growth Management

ACTION: DECISION

Purpose

The purpose of this report is to seek Council approval on the Vaughan Mills Centre Public Realm and Streetscape Plan (hereafter referred to as the “Study”), enabling staff and the development industry to use this as a toolkit in the design and review of applications and capital projects within the Vaughan Mills Centre Secondary Plan area.

Report Highlights

- The Study will serve as a comprehensive toolkit to provide design guidance for public realm and streetscapes within Vaughan Mills Centre based on the Vaughan Mills Centre Secondary Plan policy framework.
- The Study provides a design framework to inform and coordinate public realm investment and to guide future development proposals.
- The Study provides preliminary construction costing that will be considered as part of the upcoming Development Charge Background Study update

Recommendations

1. THAT the Vaughan Mills Centre Public Realm and Streetscape Plan BE APPROVED.

Background

The Study was developed in phases and included a comprehensive communication and engagement plan

The Study commenced in February 2020 and was developed in four phases of work, including:

- Phase 1: Background Review and Analysis (March-July 2020)
- Phases 2 & 3: Design Guidelines and Public Realm Framework/Streetscape Plan (August 2020-March 2021)
- Phase 4: Implementation and Phasing Strategy (April-August 2021)

As part of the project, a comprehensive communication and engagement plan was followed to ensure the appropriate input and feedback was received, including:

- Two workshops were held with the Vaughan Design Review Panel
- Four meetings were held with the Technical Advisory Committee, including internal departments, such as Transportation Planning and Engineering, Policy Planning and Environmental Sustainability, Parks Infrastructure Planning and Development, Parks Forestry and Horticulture Operations, Roads Operations, as well as the partnering agencies such as York Region, York Region Transit, Toronto and Region Conservation Authority, and Ministry of Transportation Ontario
- Three meetings were held with the Stakeholders Group, including Weston Downs Ratepayers' Association, and various landowners within the area
- Three virtual public open houses were held in July 2020, February 2021 and June 2021.

The following is a summary of some of the key concerns and feedback received from Stakeholders' meetings and public open houses.

- While overall, many participants identified that the proposed changes to the street design make it more likely for them to walk and cycle, some concerns were raised about the large parking lots of the mall that are difficult to navigate and unpleasant to walk through; members of the public wanted these parking areas to be addressed as part of this study even though the Vaughan Mills Mall is excluded from the Secondary Plan and is subject to a separate Tertiary Plan; as a result the Study recommends connectivity improvements within the Vaughan Mills malls parking subject to future coordination with the Ivanhoe Cambridge (landowner).

- Another concern that was raised by stakeholders was narrowing the Fishermen's Way from 4-lane to 2-lane (proposed by the Secondary Plan) and potential traffic congestion; as a result the Study proposes an alternative 3-lane option subject to further transportation detail design and analysis at the Tertiary Plan.

In addition to the above meetings, a dedicated project website was created to provide regular updates on the Study:

https://www.vaughan.ca/projects/policy_planning_projects/VMC-Public-Realm-and-Streetscape-Plan/Pages/default.aspx

Previous Reports/Authority

Not applicable.

Analysis and Options

The Study will serve as a comprehensive toolkit to guide the public realm and streetscapes within Vaughan Mills Centre based on the Vaughan Mills Centre Secondary Plan policy framework

Building upon the vision and policies of the Vaughan Mills Centre Secondary Plan, the Study supports the transition of Vaughan Mills Centre from an auto-oriented area into a greener, walkable, multi modal, urban center. It provides implementation strategies to guide the transition of parks, open spaces, and the streets within the context. The Vaughan Mills Centre Public Realm and Streetscape Plan implements design principles to create a safe, vibrant, and pedestrian/cyclist-oriented environment that provides a high level of active transportation and walkability. Also, the Study provides a complete street design framework for future engineering, and urban design capital projects.

The Study provides an integrated design solution to enhance the pedestrian/cyclist experience and to achieve the larger vision and objectives of the Secondary Plan. City departments will reference the Streetscape Plan chapter of the document to inform and coordinate their future respective capital projects for streets within Vaughan Mills Center and for future applications to the regional partnership funding program for Rutherford Road, Jane Street and Weston Road design and construction.

City departments and the development industry will reference the Public Realm Guidelines chapter to inform the design of parks and open spaces and design and location of privately owned publicly accessible spaces (POPS) within the context.

Implementation, phasing and ongoing operations and maintenance have also been considered throughout the design process to deliver a design and phasing strategy that captures both short term opportunities and longer-term strategic investments to facilitate social, environmental, and economic prosperity.

The Study has three main components: The Public Realm Guidelines, the Streetscape Plan and the Implementation and Phasing Strategy

The Public Realm Guidelines is structured to be a high-level illustrative tool, outlining the urban design vision for each of the public realm elements to supplement the existing policies of the Vaughan Mills Secondary Plan. The Public Realm Framework is a long-term vision for the Vaughan Mills Centre; it is intended to provide a coherent structure for the incremental build out of the Centre over many years and with many stakeholders involved.

The Streetscape Plan provides vision and schematic design for the streetscape with the broad objective of developing exemplary sustainable streets in Vaughan Mills Centre. The Streetscape Plan is developed with the Complete Street Approach (streets for movement, streets as destinations, and streets as green infrastructure) in mind and expands upon the proposed street hierarchy, street rights-of-ways (ROWs) and transportation plans in the Vaughan Mills Centre Secondary Plan.

The Implementation and Phasing Strategy builds upon the Vaughan Mills Centre Secondary Plan, the City-Wide Streetscape Implementation Manual and Financial Strategy and other key reports that speak to the quality and the character of the parks and streets in Vaughan Mills specifically and Vaughan in general.

The Implementation Strategy prioritizes the projects and actions based on the following principles: Focus Funding and Improvements on Concentrated Areas, Build Synergies with Parallel Initiatives, Work in an Interdisciplinary Way, and Consider Life-Cycle Cost Benefit Analysis. Based on the above principles, a priority project matrix is included for the City to use identifying short/medium-term and long-term initiatives. The identified short/medium-term projects will be considered as part of the upcoming Development Charge Background Study update.

Financial Impact

The total preliminary construction cost per linear meter of the streets within Vaughan Mills Centre are outlined in the following table. The table is developed based on the construction cost of Bass Pro Mills extension to Jane Street, the Construction Assumption Matrix within 2014 Council approved City-wide Streetscape Implementation Manual and Financial Strategy document and inflation rates since 2014.

Street Type	Boulevard LOS	Boulevard Cost (\$/m)	ROW Width (m)	Total Cost (\$/m)
Local Street, 22 m ROW	Standard Urban	\$1,198	22	\$5,299
Neighbourhood Connector, 23 m ROW w/ Active Trans.	Standard Urban	\$1,198	23	\$6,612
Neighbourhood Connector, 23 m ROW w/o Active Trans.	Standard Urban	\$1,198	23	\$6,003
Minor Employment Connector, 23 m ROW w/ Active Trans.	Standard Urban	\$1,198	23	\$6,612
Minor Employment Connector, 23 m ROW w/o Active Trans.	Standard Urban	\$1,198	23	\$6,003
Major Employment Connector, 26 m ROW w/ Active Trans.	Standard Urban	\$1,198	26	\$7,310
Major Employment Connector, 30 m ROW w/ Active Trans.	Standard Urban	\$1,198	30	\$8,955
Emerald Necklace, 26 m ROW, 2 lanes + parking w/ Active Trans.	Enhanced	\$2,283	26	\$8,238
Emerald Necklace, 26 m ROW, 3 lanes w/ Active Trans.	Enhanced	\$2,283	26	\$8,829
Emerald Necklace, Black Creek Interface	Enhanced	\$2,283	30	\$8,238
Bass Pro Mills Major Collector, 30 m ROW	Enhanced	\$2,283	30	\$11,051
Adaptable / Flex Corridor	Premium	\$2,860	20	\$6,517

The following table summarizes the future Operating Budget impact based on the preliminary costed streetscape works. Funds for annual repair, maintenance and operations are included in the total cost, and are consistent with the Operations and Maintenance Assumption Matrix within the 2014 Council approved City-wide Streetscape Implementation Manual and Financial Strategy document and inflation rates since 2014.

Street Type	Boulevard LOS	Boulevard Cost (\$/m)	ROW Width (m)	Total Cost (\$/m)
Local Street, 22 m ROW	Standard Urban	\$123	22	\$231
Neighbourhood Connector, 23 m ROW w/ Active Trans.	Standard Urban	\$123	23	\$266
Neighbourhood Connector, 23 m ROW w/o Active Trans.	Standard Urban	\$123	23	\$249
Minor Employment Connector, 23 m ROW w/ Active Trans.	Standard Urban	\$123	23	\$266

Minor Employment Connector, 23 m ROW w/o Active Trans.	Standard Urban	\$123	23	\$249
Major Employment Connector, 26 m ROW w/ Active Trans.	Standard Urban	\$123	26	\$285
Major Employment Connector, 30 m ROW w/ Active Trans.	Standard Urban	\$123	30	\$328
Emerald Necklace, 26 m ROW, 2 lanes + parking w/ Active Trans.	Enhanced	\$187	26	\$345
Emerald Necklace, 26 m ROW, 3 lanes w/ Active Trans.	Enhanced	\$187	26	\$361
Emerald Necklace, Black Creek Interface	Enhanced	\$187	30	\$345
Bass Pro Mills Major Collector, 30 m ROW	Enhanced	\$187	30	\$418
Adaptable / Flex Corridor	Premium	\$206	20	\$303

Broader Regional Impacts/Considerations

York Region has participated as a stakeholder throughout the Study process, providing design review of Rutherford Road, Jane Street and Weston Road Streetscape Design. Further consultation with the Region will be required for implementation of the Streetscape Design through the detailed design process.

Through the Study, City staff also consulted with York Region Transit (YRT) to coordinate improvements to Vaughan Mills bus terminal; however, YRT has indicated that they only have an operation agreement with Ivanhoe Cambridge (landowner) and any improvement to the Vaughan Mills bus terminal should be discussed and coordinated with the landowner.

Conclusion

The Vaughan Mills Centre Public Realm and Streetscape Plan provides schematic design guidance for the public realm within the Study area to help achieve the policies of the Vaughan Mills Center Secondary Plan.

The success of the public realm and the unique character of place are important for the long-term social, cultural, and economic prosperity of the Vaughan Mills Centre. As one of the City's primary centers, the Study's ambition is to transform Vaughan Mills into a pedestrian-oriented, multi-modal center with a coherent public realm identity that showcases sustainability and distinct character with well-designed public spaces, connections and amenities that enhance daily life. The Streetscape Design is a long-term framework to coordinate public realm improvements and capital projects, and to inform future private development along the street.

For more information, please contact: Shahrzad Davoudi-Strike, Manager of Urban Design and Cultural Heritage, ext. 8653

Attachments

1. The Vaughan Mills Centre Public Realm and Streetscape Master Plan, November 2021, Final Report.

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VAUGHAN MILLS CENTRE PUBLIC REALM + STREETSCAPE MASTER PLAN

CITY OF VAUGHAN / NOVEMBER 2021 / FINAL REPORT

A detailed architectural rendering of a park plaza. The scene shows a wide, paved walkway with a wooden bench on the left where a woman and a child are sitting. In the center, a group of people are walking, including a man in a wheelchair. To the right, a man is walking with a bicycle. The background is filled with lush green trees and a modern, curved architectural structure. The overall atmosphere is bright and inviting.

dtah

ACKNOWLEDGMENTS

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CHAPTER 1: INTRODUCTION AND BACKGROUND

The Vaughan Mills Centre Public Realm and Streetscape Master Plan seeks to create a pedestrian and cycle friendly place with an inviting, comfortable, and vibrant public realm.

Vaughan Mills Centre is evolving. As the Centre redevelops over time, it becomes increasingly important to ensure high quality public realm infrastructure is in place to provide a safe, accessible, and beautiful environment for those who live, work, visit and play.

1.1. PURPOSE

The purpose of this Study is to establish a comprehensive and integrated public realm and streetscape plan that will direct and guide the future design, implementation and maintenance of a comfortable, convenient, safe and high-quality public realm and street network for Vaughan Mills Centre.

This plan provides the overall vision and strategies for the Centre's public spaces and streets. It includes quantitative and qualitative public realm and streetscape guidelines and outlines a path to implementation that is a logical, incremental process with each step building upon those before it.

The seven Study objectives are illustrated in Fig. 1 to the right.

1.2. BACKGROUND

Vaughan Mills Centre is identified as one of the six Primary Centres in the Official Plan (2010). In 2014, the City adopted the Vaughan Mills Centre Secondary Plan. This public realm and streetscape master plan builds on the Secondary Plan and further articulates the vision of a more compact, walkable and transit supportive Vaughan Mills Centre.

1.3. APPROACH

As Vaughan Mills Centre evolves from a suburban, auto-scaled place towards the more compact and transit focused urban destination envisioned in the Secondary Plan, greater planning and design emphasis is necessary to foster the collective dimensions of a richer, more comfortable and convenient public realm. Each part of the public realm network should contribute to the overall experience and identity of Vaughan Mills Centre. This Master Plan endorses a sustainable public realm and street network that can act as a catalyst for private development.

The project approach in developing this Public Space and Streetscape Master Plan concentrates on creating pedestrian scaled streets and blocks, a connected sequence of legible urban spaces, and a cohesive streetscape and landscape palette of simple yet enduring materials and details. The quality of the public realm relies heavily on the attention given to the design and stewardship of the materials and finishes applied to the tactile area that is closest to the pedestrian.

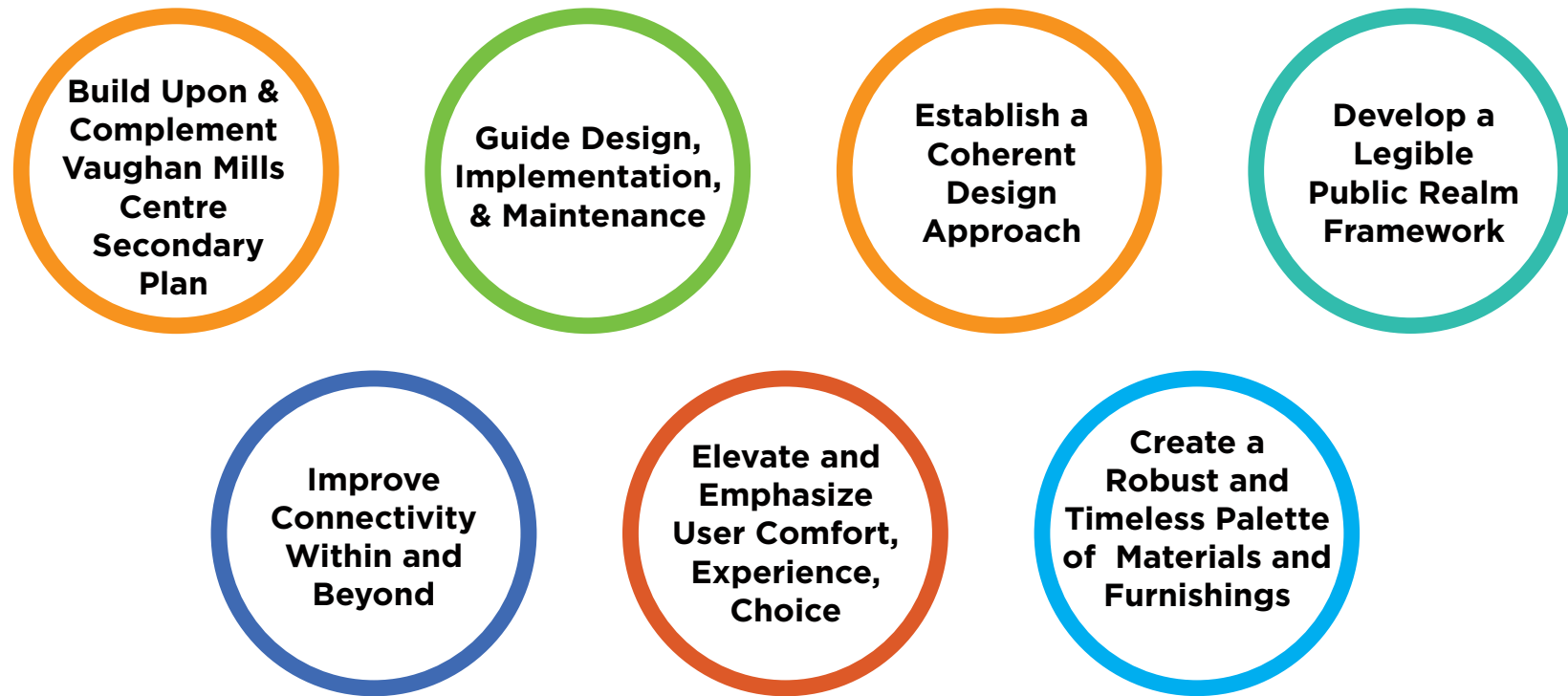


Fig. 1. Seven Study Objectives

1.4. PROCESS

The Public Realm and Streetscape Plan was developed in consultation with the public and various stakeholders. The Study took place over a one and a half year time-frame and organized into the four parts illustrated in Figure 2 to the right.

1.5. STUDY AREA

The Study Area is within the boundary of the Vaughan Mills Secondary Plan, located between Rutherford Road in the north and Bass Pro Mills Drive in the south. It extends from Caldari Road and Jane Street in the east to Weston Road in the west and is approximately 146 hectares (±360 acres). See Figure 3 to the right.



Fig. 2. Study Process



Fig. 3. Study Area

1.6. WHAT WE HEARD

Figure 4 and the narrative below summarize the key messages we heard from stakeholders, staff and the broader public during the development of the plan. Refer to the appendix for a full summary of the public engagement process.

Technical Advisory Committee Meetings (TAC). A TAC meeting was held at each of the four stages during the Study process. TAC included representatives from the Region, Toronto and Region Conservation Authority (TRCA) and City staff involved in street and public realm planning, design and operation. TAC provided input and technical review on the recommendations as they progressed.

Vaughan Design Review Panel (DRP)
The Team presented the progress of the work to date at two DRP meetings. The Phase 01 Existing Conditions Analysis was presented in July 2020. The Draft Public Realm Framework Plan and Streetscape Master Plan was presented in January 2021.

Stakeholder/ Landowner Meetings.

The Design Team met twice with the Stakeholder/Landowner Group to seek feedback on the work as it progressed. The Stakeholder Group included special interest groups, Study Area property owners, rate payers associations, and representatives/ Secondary Plan appellants.

Public Information Centre Meetings (PIC).

Three Public Information Centre meetings were held over the duration of the project. A summary of the key messages is to the right.

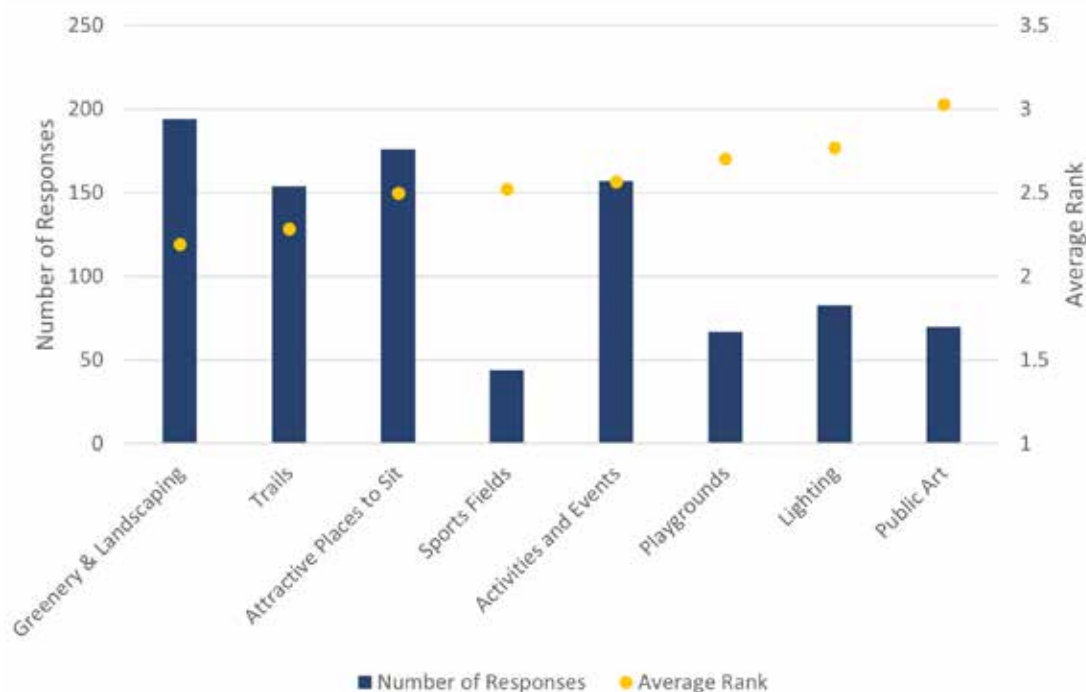


Fig. 4. Greenery and landscaping, trails and places to sit are the top three priorities for the Vaughan Mills Centre Public Realm. (PIC 01, Online Survey)

1/ Public Information Centre 01

(July 21 to August 14, 2020)

An on-line survey was used to gather public and stakeholder thoughts on the existing conditions and how the area should transform. The survey asked questions such as: What does your ideal public space look like? How do you get to and from Vaughan Mills Mall today? What would make your experience visiting this area even better? 618 people participated in the survey.

Key Messages:

- Public places for programs and community events are needed.
- Green spaces are desired for recreation, gathering, and ecosystem health.
- A range of seating options are desired to support individual, small group, and large group gatherings.
- There are concerns about traffic circulation and congestion.
- Safety is paramount. This includes enhancing safety for drivers, pedestrians, and cyclists.
- Participants felt that more pedestrian and cyclists connections, trails and pathways, and improving lighting would help improve safety.

2/ Public Information Centre 02

(February 25, 2021)

A community meeting was held virtually using Zoom during Phase 2 to share and seek input on the guiding principles, the draft Public Realm Framework Plan and the initial streetscape concepts. In total, 27 people attended the meeting.

Following the PIC, an on-line survey was posted on the City's website from February 21 to March 14, 2021. In total, 78 people participated in the survey.

Key Messages:

- Community members were generally in agreement that the principles and the draft designs.
- Beautifying, animating, and improving connections to public spaces were identified as important qualities to attract pedestrians and cyclists.
- Trees, plants, and other vegetation were identified as important elements to include within parks and streets.
- Participants reaffirmed the importance of safety, and the opportunity for Vaughan Mills Centre to become a great destination for residents and visitors.
- Participants reiterated concerns about traffic circulation and congestion through the Centre.

3/ Public Information Centre 03

(June 25, 2021)

A live recorded presentation was posted on the City's project website. The presentation included an overview of the Study process and the key public realm and streetscape recommendations. Community members were invited to provide feedback and comments via the City's project website. In total, 60 people viewed the presentation.

Key Messages:

- Community members were generally in support of the concept of a strong green character for Vaughan Mills Centre.
- Support was shown towards the Black Creek Common 'Big Move.'
- Participants suggested that the following be considered when designing streets: high-quality pavement; attractive light standards; native vegetation such as trees, grasses shrubs and flowers; cycling lanes and pedestrian walkways along streets and through the Vaughan Mills parking lots; and traffic calming.

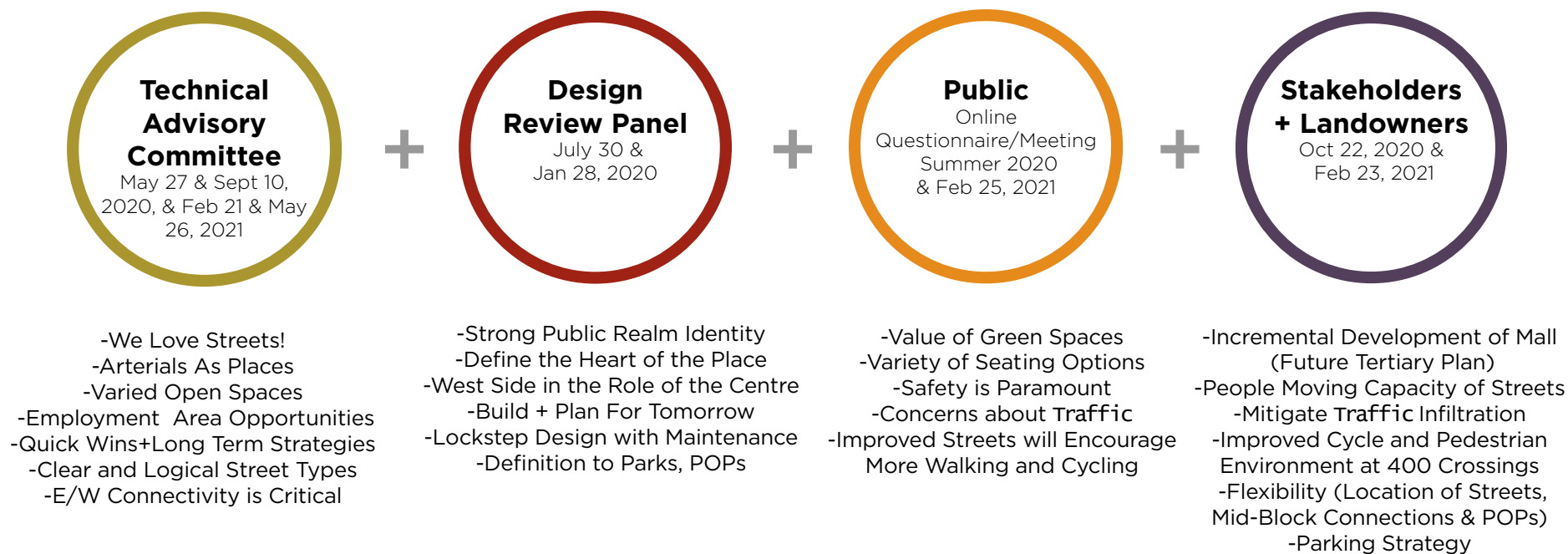


Fig. 5. Summary of key messages.

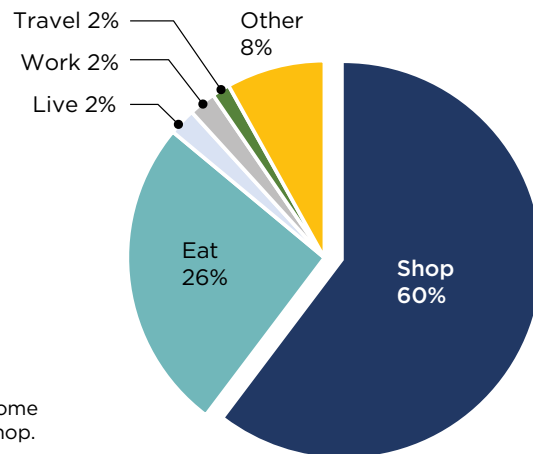


Fig. 6. At present, 60% of respondents said that they come to Vaughan Mills Centre to Shop. (Phase 01 Survey Results)

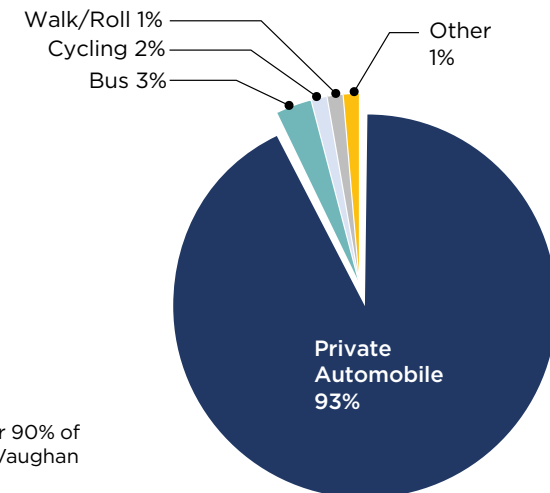


Fig. 7. At present, over 90% of participants come to Vaughan Mills Centre by car. (Phase 01 Survey Results)

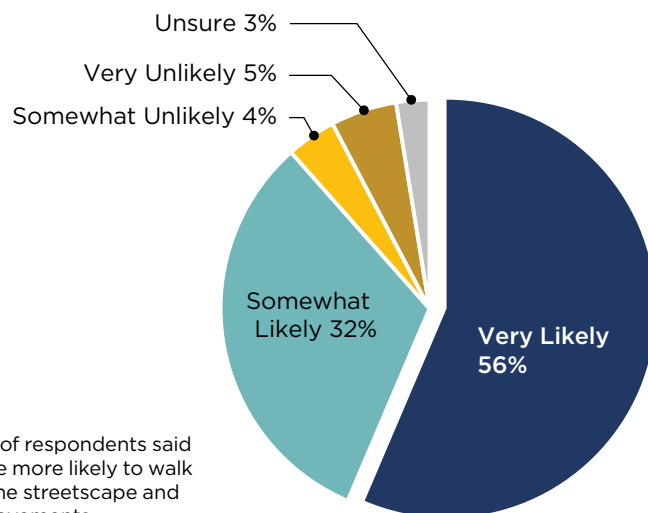


Fig. 8. Over 50% of respondents said that they would be more likely to walk in this area after the streetscape and public realm improvements. (Phase 02 Survey Results)

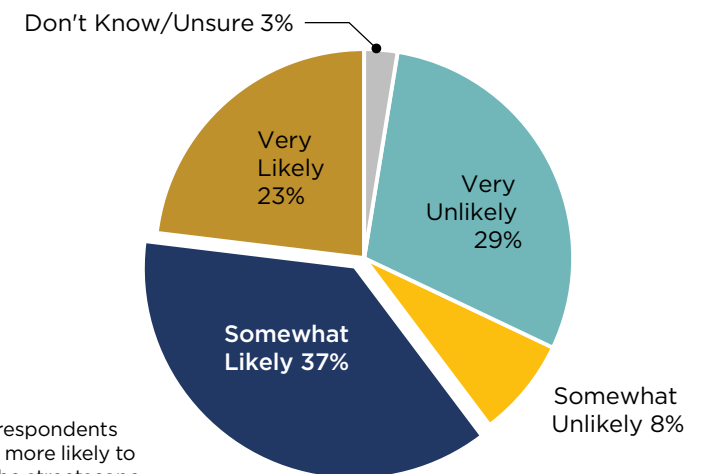


Fig. 9. Almost 40% of respondents said that they would be more likely to cycle in this area after the streetscape and public realm improvements. (Phase 02 Survey Results)

1.7. DESIGN CHARRETTE

A virtual design charrette was held on June 16, 2020 using Microsoft Teams White Board. The charrette included City of Vaughan staff and the project team. The purpose of the charrette was to brainstorm potential streetscape and public realm futures for Vaughan Mills Centre. Seven participants shared their thoughts. The results of the charrette are illustrated in Figure 10 (to the right).



Fig. 10. Design Charrette, June 2020.

Key Outcomes:

- Arterials.** Jane Street, Rutherford Road and Weston Road have opportunities for strong green character through landscape setbacks, greening of the right of way, and plazas where at grade retail is anticipated.
- Bass Pro Mills.** Bass Pro Mills defines the southern edge of Vaughan Mills Centre and has opportunities to link the proposed mixed-use residential neighbourhood to the north with the existing employment lands to the south.
- Fishermens Way.** Fishermens Way is a central feature within the east quadrant and has opportunities to become a green structuring element to link parks, the mall and neighbourhoods.
- Business District.** There are opportunities to develop a network of open spaces to provide supportive amenities and environments for both employment and community uses.
- Black Creek.** Opportunities for an innovative public space and central focal point that combines stormwater management within innovative public realm design.

1.8. DOCUMENT STRUCTURE

This document is organized into seven chapters:

Chapter 01 / Background and Introduction: provides an overview of the study purpose, objectives, process, and key messages from stakeholder and staff engagement.

Chapter 02 / Existing Conditions: reviews the historic evolution, existing conditions and the policy context that has shaped Vaughan Mills Centre.

Chapter 03 / Vision and Guiding Principles: defines the six guiding principles that underpin the Public Realm and Streetscape Master Plan.

Chapter 04 / Public Realm Guidelines: articulates the overall public realm framework vision and addresses in more specific detail the design intent, character for public spaces and privately owned public spaces.

Chapter 05 / Streetscape Master Plan: defines the design intent, character and materials by street type.

Chapter 06 / Materials: defines the materials palette for streetscape and public realm projects in Vaughan Mills Centre.

Chapter 07 / Demonstration Plan: illustrates one possible outcome for how Vaughan Mills Centre could develop by following the intentions and recommendations of this document.

Chapter 08 / Phasing and Implementation Strategy: identifies strategies and discrete actions that the City will carry out to implement the public and street realm vision.





CHAPTER 2: EXISTING CONDITIONS

The historic evolution of this place, the existing conditions of the Study Area, and the planning and policy context have all informed the development of this Plan.

2.1. HISTORIC CONTEXT

Vaughan Mills Centre and its neighbouring lands have a long history of inhabitation and use that pre-dates the present-day built form. The photographic time line on this page highlights key periods in the historic evolution of this place. The landscape within the Vaughan Mills Centre has transformed in recent human history from an agricultural landscape, to the commercial areas that are predominant today.



Fig. 11. Mills such as the Elder's Mill (just east of the site) were often located along Vaughan's many rivers and creeks.



Fig. 12. Many of Vaughan's streets evolved from the original concession grid (1946 historical aerial photo showing Jane Street with Highway 7 at the lower right hand corner).



Fig. 13. Vaughan continued to evolve through the urbanization of its agricultural lands, growing into a suburban municipality from the 1960 onwards.



Fig. 14. Vaughan Mills Mall, constructed in 2000, is one of the newest Malls in the GTHA.



Fig. 15. Recent development, particularly around the intersection of Jane Street and Rutherford Road, is starting to add more people to the area.

2.2. PHYSICAL CONTEXT

The Study Area today is an auto-dominated environment characterized by:

- Buildings generally situated with large surface parking lots or set behind parking.
- Parking lots and orphaned open spaces often dominating the street edge.
- Incomplete or absent pedestrian and cycling infrastructure, such as sidewalks or bicycle lanes.
- Lacking features such as pedestrian lighting, landscaping, street furniture, and sidewalk-related buildings that would contribute to creating a more pedestrian-friendly environment.
- Lacking formal public spaces and trail systems.
- Significant barriers to movement (Highway 400, wide streets and parking lots).

This Master Plan aims to improve public places with new parks, plazas and open spaces that focus on improving the pedestrian and cycling environment and supporting the social cohesion of the community.



Fig. 16. Parking surrounding Vaughan Mills Mall.



Fig. 17. At present the Black Creek runs within a ditch alongside Weston Road. The head of Black Creek is located near the Rutherford Road and Weston Road intersection.



Fig. 18. Little sense of connection or awareness with the West Don River Natural Heritage Area 'back-lands.'



Fig. 19. Existing commercial buildings backing onto Rutherford Road.

2.3. STREETS AND BLOCKS

The existing street and block pattern reflects the Study Area's development in the 1960s-90s. It consists of a limited network of public streets and large irregular blocks designed for auto-oriented uses, but not for pedestrians.

The figure below shows how other urban areas have more streets and approximately twice as many intersections than Vaughan Mills Centre at present. A higher number of streets and mid-block connections means people have greater choice in how they move through an urban setting.

The Vaughan Mills Centre Secondary Plan envisions a connected network of new streets and linkages that will provide more mobility options.

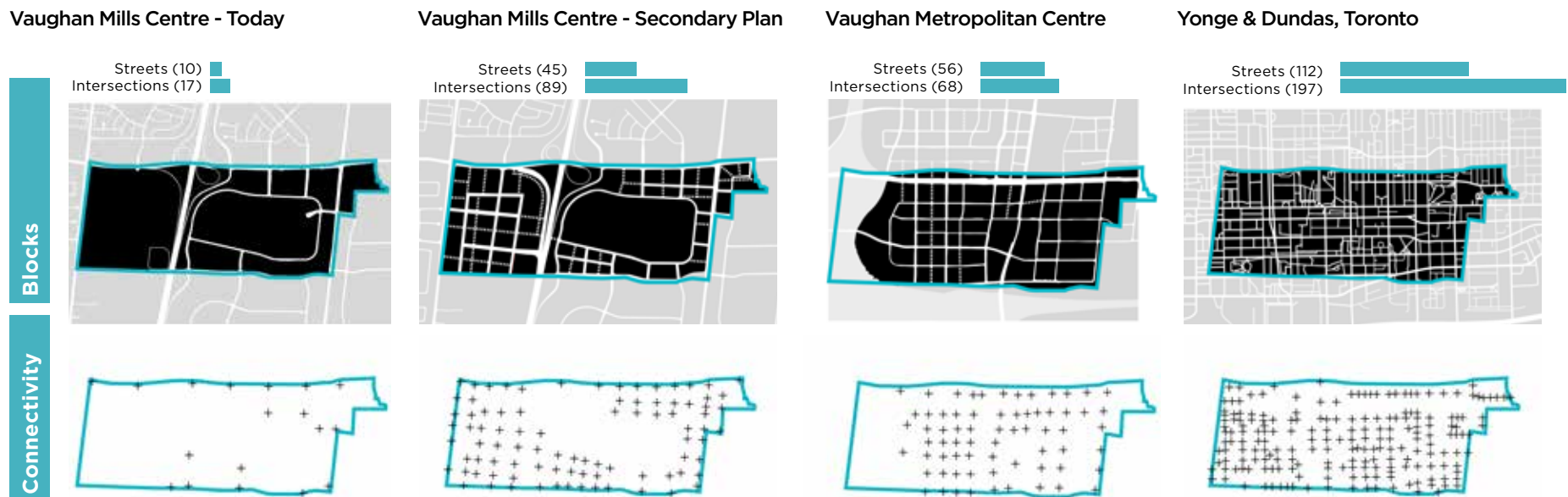


Fig. 20. Streets and blocks analysis

2.4. NATURAL HERITAGE

The Study Area is centered between two significant Natural Heritage Areas and their associated water tributaries: Black Creek and the West Don River.

Currently, there is little sense of connection or awareness with the West Don River Natural Heritage Area and Black Creek. These important Natural Heritage Areas are treated as ‘back-lands.’

Approximately 20% of the east side of Vaughan Mills Centre is green space, where there are trees or landscaped areas and permeable ground. The majority of this green space is ‘left-over’ with poor quality landscaping and lack of programming or pedestrian amenities.

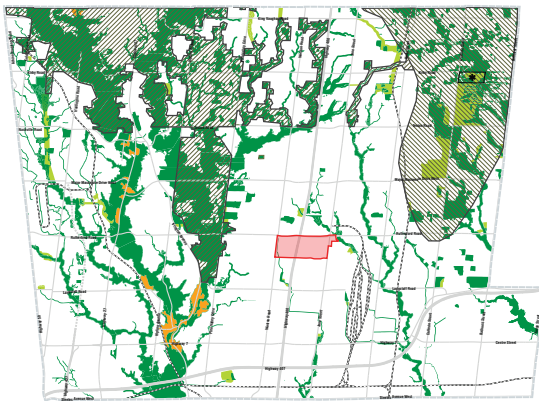


Fig. 21. Vaughan Mills Centre in relation to Vaughan's Natural Heritage Network (From City of Vaughan Official Plan Natural Heritage Network).

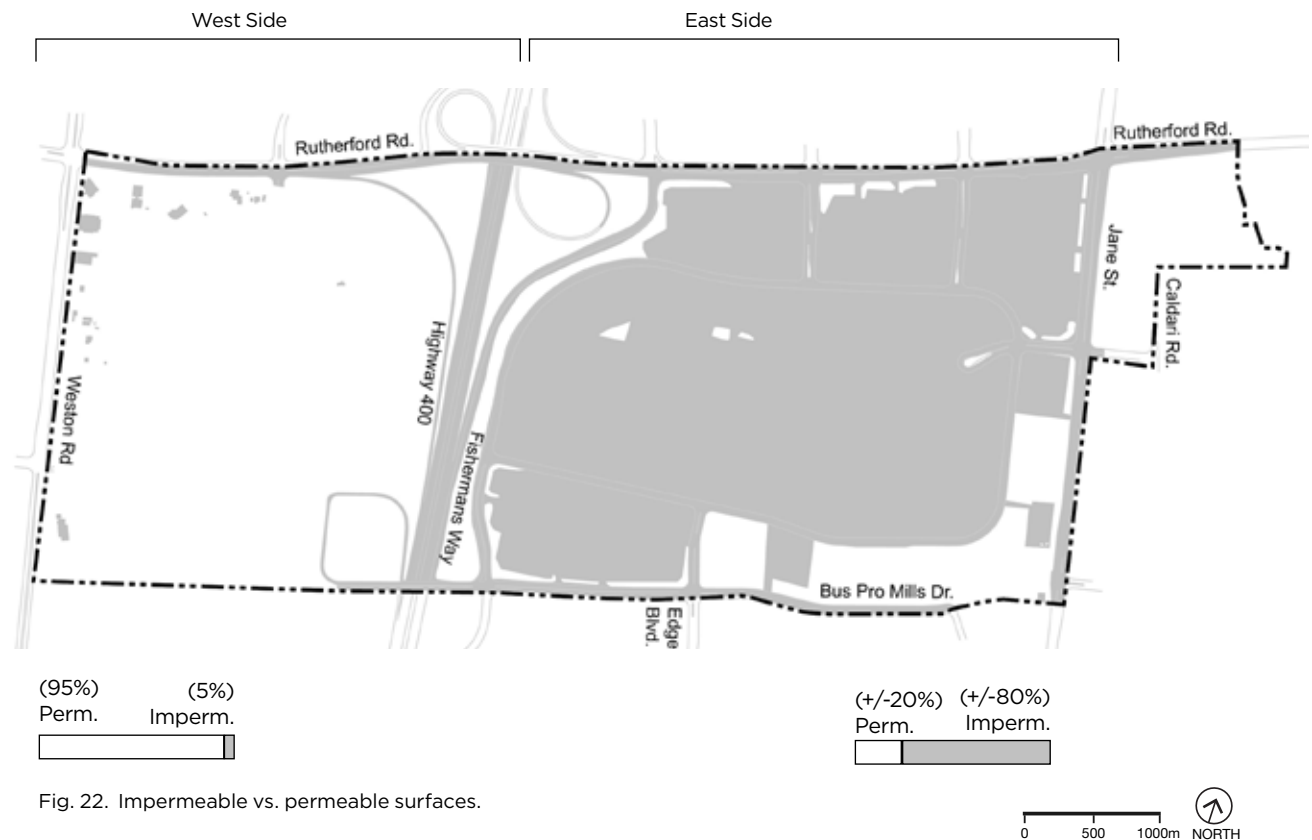


Fig. 22. Impermeable vs. permeable surfaces.

2.5. WATER

Black Creek

The Secondary Plan includes the realignment and enhancement of Black Creek to fully contain the Regional storm flood plain and create a functioning Natural Heritage system.

At present, Black Creek originates where an existing storm sewer outlets on the east side of Weston Road, a short distance south of Rutherford Road. The creek continues in a south to south-easterly direction in a narrow ditch and then transitions to a much wider and naturalized corridor between Westcreek Drive and Creditview Road. Plans had been previously prepared for the north half of the block, including the northward extension of the naturalized Black Creek corridor and stormwater management ponds to treat storm runoff.

The existing pond within the Bass Pro Mills ramp on the west side of Highway 400 was intended to function as one of the stormwater management ponds in the system. Development of the north half of the block did not proceed and the plans for Black Creek and the associated stormwater management systems have lapsed. Future development of these lands will require an update to the previously proposed stormwater management plan in order to meet all applicable provincial, City and TRCA

criteria for water quality, peak flow control, erosion mitigation and water balance. It is expected that this would be achieved through a combination of stormwater management controls within future private development sites as well as new end-of-pipe stormwater management ponds.

Similarly, the previously proposed plans for the realignment and naturalization of Black Creek will need to be updated to conform to provincial, City and TRCA guidelines and criteria. The corridor will need to contain all flooding and erosion hazards and allow for future natural meandering of the Black Creek channel and protect or enhance all other Natural Heritage features in the Study Area, including the connection to the existing protected channel corridor between Westcreek Drive and Creditview Road. Additional technical analyses including ecology, geotechnical, hydrogeology, hydrology and hydraulics will be needed to inform the design of the Black Creek valley corridor and all other protected natural heritage systems in the study area, including the establishment of appropriate buffers to development.

West Don River

The West Don River crosses Rutherford Road to the east of Jane Street. Future development of the lands at the south-east corner of Jane Street and Rutherford Road must protect and provide appropriate

buffers to the greater of the flood plain, stable top-of-bank and vegetation limit associated with the West Don River. Appropriate stormwater management must also be provided for future development and redevelopment of all lands in the Study Area to satisfy all applicable provincial, City and TRCA criteria for water quality, peak flow control, erosion mitigation and water balance.



Fig. 23. The lands east of Highway 400 today.

2.6. UTILITIES

Natural gas, electrical, telecommunications, water, sewer and transit related utilities and services combine to create a complex network of public utilities both above and below ground. The Vaughan Engineering Standards indicates the use of a single utility corridor for public utilities is preferred to minimize conflict with street tree roots found in the amenity/planting zone.

The City Wide Streetscape Manual (2014) includes the following guidance for utility placement in Vaughan Mills Centre:

- Bury hydroelectricity on municipal roads as ground power poles take space in the amenity zone and are not proportionate with the human scale. (4.6.2 The Public Boulevard)
- Street trees are considered of equal importance as utilities. Underground utility placement should be coordinated with street trees and street lights early in the project.
- Utilities coordination should refer to the Vaughan Engineering Standards.

The Vaughan Mills Centre Secondary Plan (2014) calls for the undergrounding of overhead utilities to allow for the healthy growth of street trees.



Fig. 24. Aboveground utilities along Jane Street.



Fig. 25. Aboveground utilities along Rutherford Road.

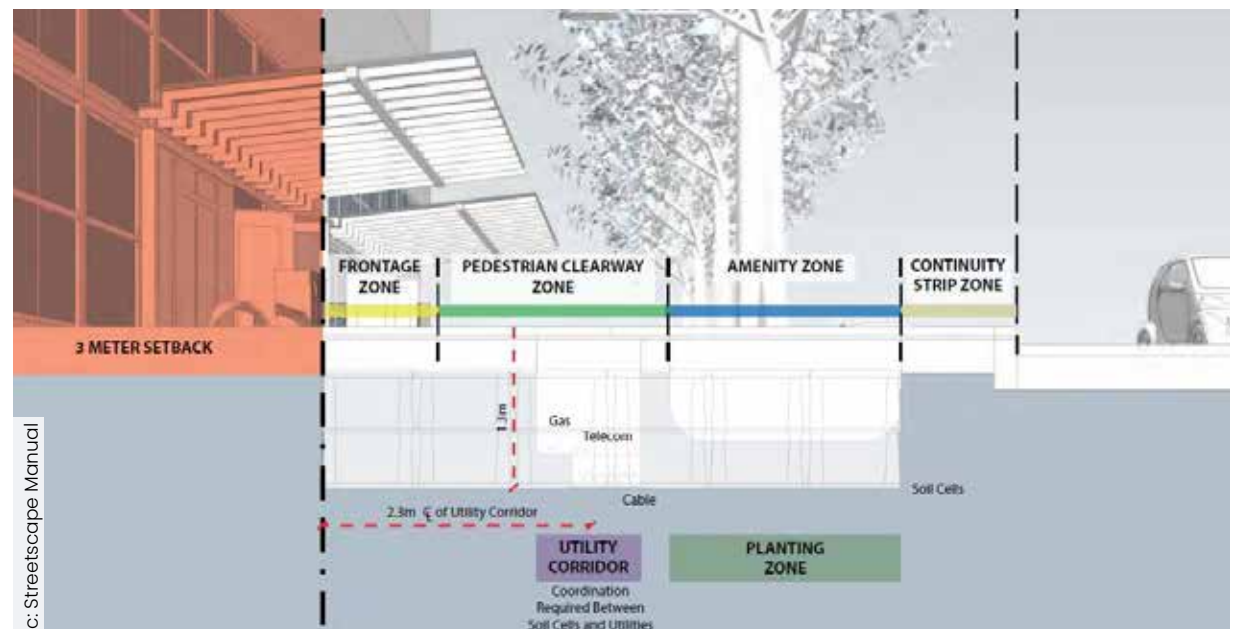


Fig. 26. Vaughan Municipal Utility Standard (City Wide Streetscape Manual).

2.7. DEVELOPMENT CONTEXT

There are a number of recent and/or active private development applications and capital projects within the Vaughan Mills Centre Study Area.

Private development projects are clustered in the north-east part of the Study Area. These new developments, either mid-rise or tall buildings with active ground floor frontages, are adding a new sense of animation to the Study Area. The City is working with these developers to include new Privately Owned Publicly-Accessible Open Space (POPS). Ongoing Development Applications/Projects:

Private Projects

- ① Rutherford Land Development Corp.
- ② Tesmar Holdings Corp.
- ③ Dulcina Investments Inc.
- ④ Granerola Residences Ltd.

Capitol Projects

- ⑤ Rutherford Road Widening
- ⑥ Vaughan Mills Neighbourhood Park
- ⑦ Bass Pro Mills Extension- Built
- ⑧ Bass Pro Mills EA- Ongoing
- ⑨ Weston Road EA- Anticipated 2022 start

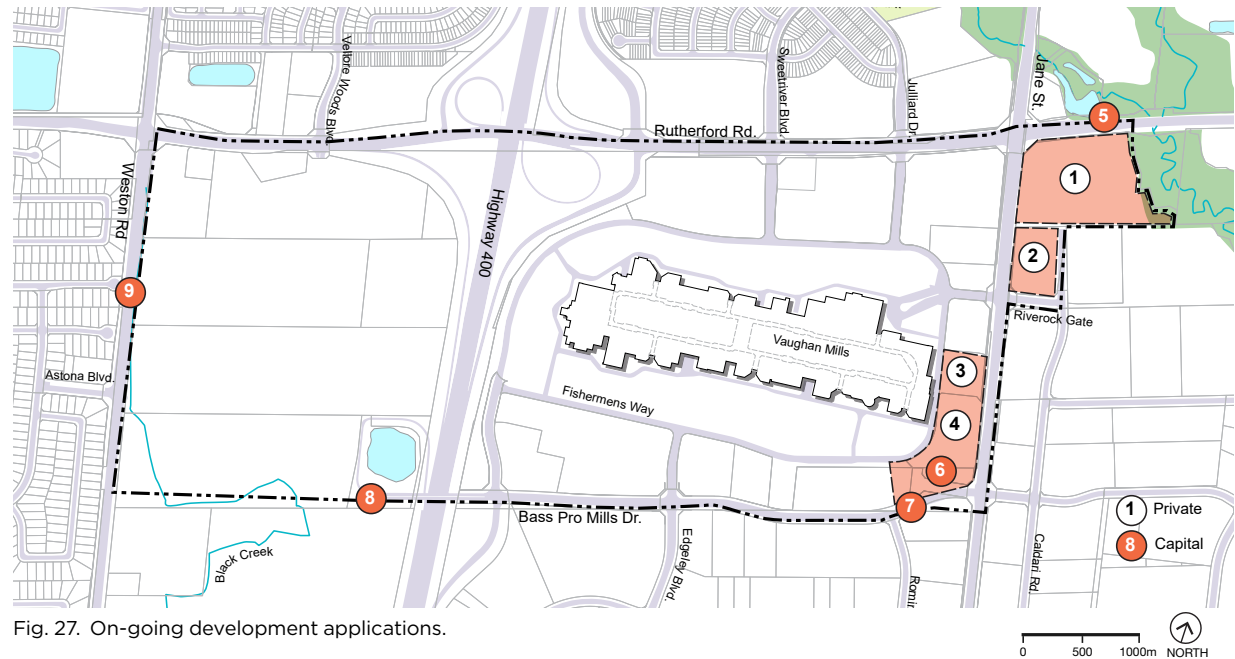


Fig. 27. On-going development applications.



Fig. 28. RLDC - Aerial view showing a network of mid-block connections and POP's connected with a new street.



Fig. 29. RLDC - Aerial view of proposed POP's.

2.8. PLANNING CONTEXT

The planning policy that directs growth and change in Vaughan Mills Centre begins at a high-level (Province) and becomes more focused and detailed as it gets closer to the Vaughan Mills Secondary Plan scale.

All levels of policy have the goal of creating a healthy and unique complete community environment that provides a mix of uses, promotes diversity, encourages walking and accessibility, and builds community identity.

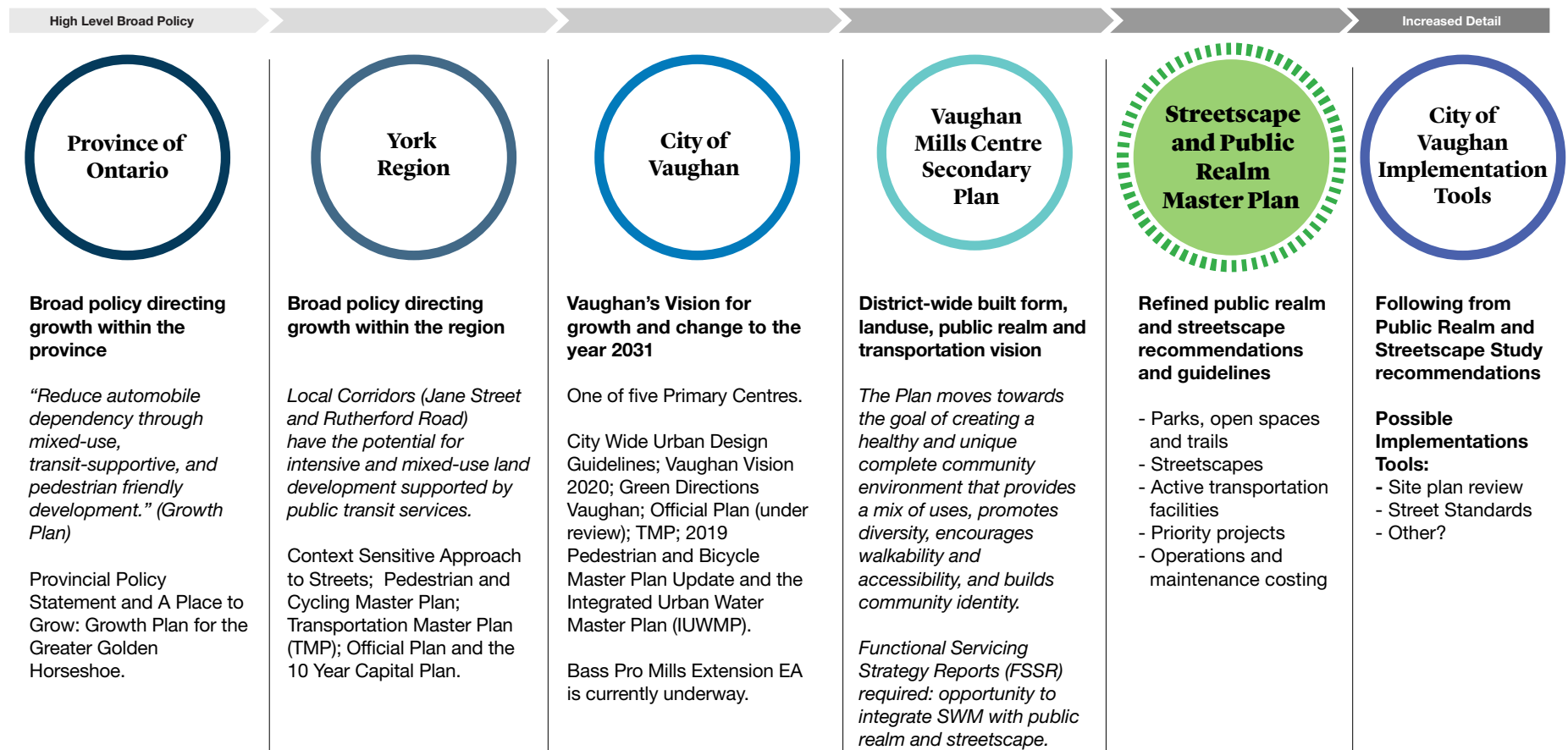


Fig. 30. Policy context overview.

Provincial Policy

A Place to Grow: The Growth Plan for the Greater Golden Horseshoe (Office Consolidation 2020) is a Provincial plan that directs how long-term growth and development should be managed in the Greater Golden Horseshoe. The Plan requires development of compact and transit supportive communities and a vibrant public realm.

Regional Policy

York Region Official Plan (YROP 2010) designates the Study Area as an Urban Area. Urban Areas are places for city building with high standards of urban design and green development. Jane Street is identified as a Regional Rapid Transit Corridor and Rutherford Road is identified a Priority Network Street. Both of these streets are considered “Local Corridors” within the YROP. Local Corridors have the potential for intensive and mixed-use land development supported by public transit services. Local Corridors link Regional and Local Centres and may be identified as routes for transit services and facilities.

York Region’s Transportation Master Plan

(TMP 2016) outlines how the Region will continue to address future growth, respond to emerging trends in transportation, improve options for sustainable travel and manage the road network effectively. The Region is currently undertaking their five-year TMP update.

York Region’s Designing Great Streets

(2019) provides design guidance for the three Regional streets defining the edges of the Study Area — Weston Road, Rutherford Road and Jane Street. York Region’s Road Design Guidelines (June 2020) provides the detailed geometric design guidelines for these streets.



Fig. 31. Examples of the Region and City initiatives, plans and design guidance informing this Study.

York Region Pedestrian and Cycling Planning and Design Guidelines

(2018) guides the implementation of a comprehensive pedestrian system and the on-and-off street cycling network in the Region. In particular, these guidelines directly support the work of York Region's Designing Great Streets Design Manual and policy directions stemming from recent Transportation Master Plan updates.

York Region's 10-Year Roads and Transit Capital Construction Program (2021)

identifies Weston Road construction improvements in 2027 and Rutherford Road (east of the Study Area) for 2021.

City of Vaughan

Vaughan Vision 2020 establishes the City's mission, vision and corporate values. It outlines the City's strategic goals and initiatives.

Green Directions Vaughan 2019 is the City's community sustainability and environmental master plan. It establishes sustainable development principles to achieve a healthy natural environment, vibrant communities, and a strong economy. The document defines sustainability objectives to guide the city's operational and regulatory functions. Specific objectives informing public realm and streetscape recommendations within this Master Plan include:

- (2.1.2) Promote green infrastructure (e.g., street trees, stormwater ponds, LIDs, woodlands, pollinator habitat, etc.) to build resilience and mitigate the effects of climate change.
- Recommended range of woodland cover is 14 to 17%.
- Recommended range of total canopy cover is 25 to 35%.

Vaughan Official Plan (VOP Office

Consolidation 2020) defines the Study Area as one of five Primary Centres. Primary Centres are intended to be areas characterized by a mix of land uses,

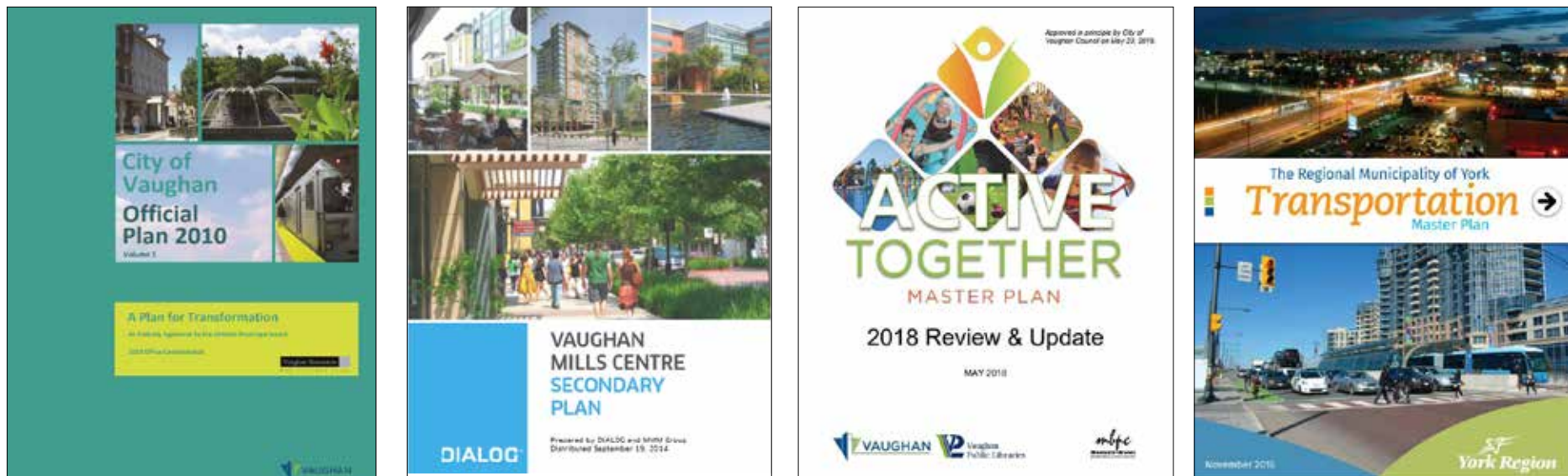


Fig. 32. Examples of the Region and City initiatives, plans and design guidance informing this Study.

higher density development, enhanced pedestrian activity and environment, and a high standard of urban design. Lands within the Study Area west of Highway 400 are Employment Areas. Jane Street and Rutherford Road are Primary Intensification Corridors based on future transit service planned along these roads.

The City of Vaughan Urban Water Master Plan (IUWMP) is updating the City's previous Water, Wastewater and Stormwater Management Master Plans. The IUWMP includes the preparation of Functional Servicing Strategy Reports (FSSR) for a number of Secondary Plan areas, including the Vaughan Mills Centre. This represents an excellent opportunity to integrate the Public Realm Strategy and Streetscape Master Plan, particularly for aligning recommended water and wastewater infrastructure renewal with the envisioned street and pedestrian networks, and taking advantage of low impact development (LID) practices within the streetscape to further enhance stormwater quality and quantity. IUWMP is currently underway.

Vaughan Pedestrian and Bicycle Master Plan (2019) indicates that all arterial and collector roads shall include protected intersections, separated linear active

transportation facilities on both sides of the roadway and consider crossings that will service the multi-use recreational trails system in order to provide the most direct and comfortable route for pedestrians and cyclists. The master plan outlines an All Ages and Abilities (AAA) facility selection and network implementation framework.

The Vaughan Mills Centre Secondary Plan was adopted by the City Vaughan and York Region Council (with modifications) in 2014. The Secondary Plan describes the overall objectives and parameters of development direction regarding public open space, built form, land use, densities, and new infrastructure needed to address transportation, active transportation and transit. This Streetscape and Public Realm Master Plan adds more detail to the street network and public spaces identified in the Secondary Plan.

The Secondary Plan does not anticipate a change in the form or function of Vaughan Mills Shopping Mall over the life of the plan, but does note that if the existing use, form or function is anticipated to change to allow residential development, then the future redevelopment of the mall will require the approval of a Tertiary Plan.

The City-Wide Streetscape Implementation Manual and Financial Strategy (Streetscape Manual 2014) provides an integrated design and financial framework to manage the design and costing of streetscape in Intensification Areas and Heritage Conservation Districts. The Streetscape Manual is a reference tool developed to guide the design and construction of urban streetscapes in Vaughan with consideration of maintenance and operations. The Manual emphasizes the design of the pedestrian realm in an urban context.

City of Vaughan Urban Design Guidelines (UDGs 2016) provides direction for high quality and context-sensitive development within Intensification Areas. The UDGs provides guidance on how privately owned open spaces should be designed to extend a robust and visible landscape character through private open spaces and Privately Owned Publicly-Accessible Spaces (POPS).

The Vaughan City Wide Public Art Program (2016) promotes the integration of public art in significant private sector developments to enhance the public realm. Privately owned art installed in publicly accessible areas is supported by the Vaughan City Wide Public Art Program. Vaughan Mills Centre is one of seven key opportunities in Vaughan where Public Art should be located to optimize both resources and results.

Bass Pro Mills Environmental Assessment

The City of Vaughan has initiated a Municipal Class Environmental Assessment study to extend Bass Pro Mills Drive, from Highway 400 to Weston Road, as recommended in the Vaughan Mills Centre Secondary Plan.

Engineering Design Criteria & Standard Drawings (DCSD). The City is currently updating their engineering standards, which will inform the geometric design of streets within Vaughan Mills Centre. The last update of the Engineering Design Criteria & Standard Drawings (DCSD) was completed in December 2016. The City is also embarking on the development of a Complete Streets policy.



Fig. 33. Ground Floor Frontage Types (Secondary Plan).



Fig. 34. Open Space Network (Secondary Plan).



Fig. 35. Height and Density (Secondary Plan).



Fig. 36. Development Blocks (Secondary Plan).

2.9. BUILDING ON THE SECONDARY PLAN

The Vaughan Mills Centre Public Realm and Streetscape Plan builds on the Secondary Plan to support the evolution of Vaughan Mills Centre to a more compact, walkable and transit supportive place.

The Character Areas (shown in Fig 38 to the right) and their key public realm and streetscape design objectives are defined within the Secondary Plan. Based on the findings from the Phase 1 Existing Conditions Analysis and through discussions with the Technical Advisory Group, two additional character areas—the Highway Landscape and the Weston Street Corridor—are included in this Master Plan.

The primary design objectives for the Highway Landscape is to stitch together the east and west quadrants, further contributing to ‘one centre.’ The Weston Street Corridor is included to provide a sense of transition from Weston Road to the Business District.

2.10. OPPORTUNITIES AND DIRECTIONS

Based on the analysis of the context and feedback from public and stakeholders the needs and opportunities that influenced the Public Realm and Streetscape Master Plan direction are:

- Providing a high quality interconnected network of streets and paths that offer travel options and create adequate space for all futures users and functions.
- Providing direct, convenient and safe pedestrian connections between neighbourhoods, and to transit stops and stations, particularly to higher order transit planned along Jane Street.
- Reinforcing connectivity and awareness of with West Don River Natural Heritage Area and Black Creek. Creating and/or enhancing views and vistas to these features.
- Adding street trees and planting and to increase greening.
- Providing multiple new parks and open spaces of varying sizes to accommodate diverse activities.
- Adding new urban plazas and parks as part of new development.
- Requiring new buildings create a positive relationship to streets and open spaces and contribute to animated, comfortable and safe public places.
- Designing sidewalks and boulevards to provide safe, attractive and comfortable places, including street tree planting, landscaping, lighting, furnishings and other improvements, as well as minimizing the visual impact of utilities.

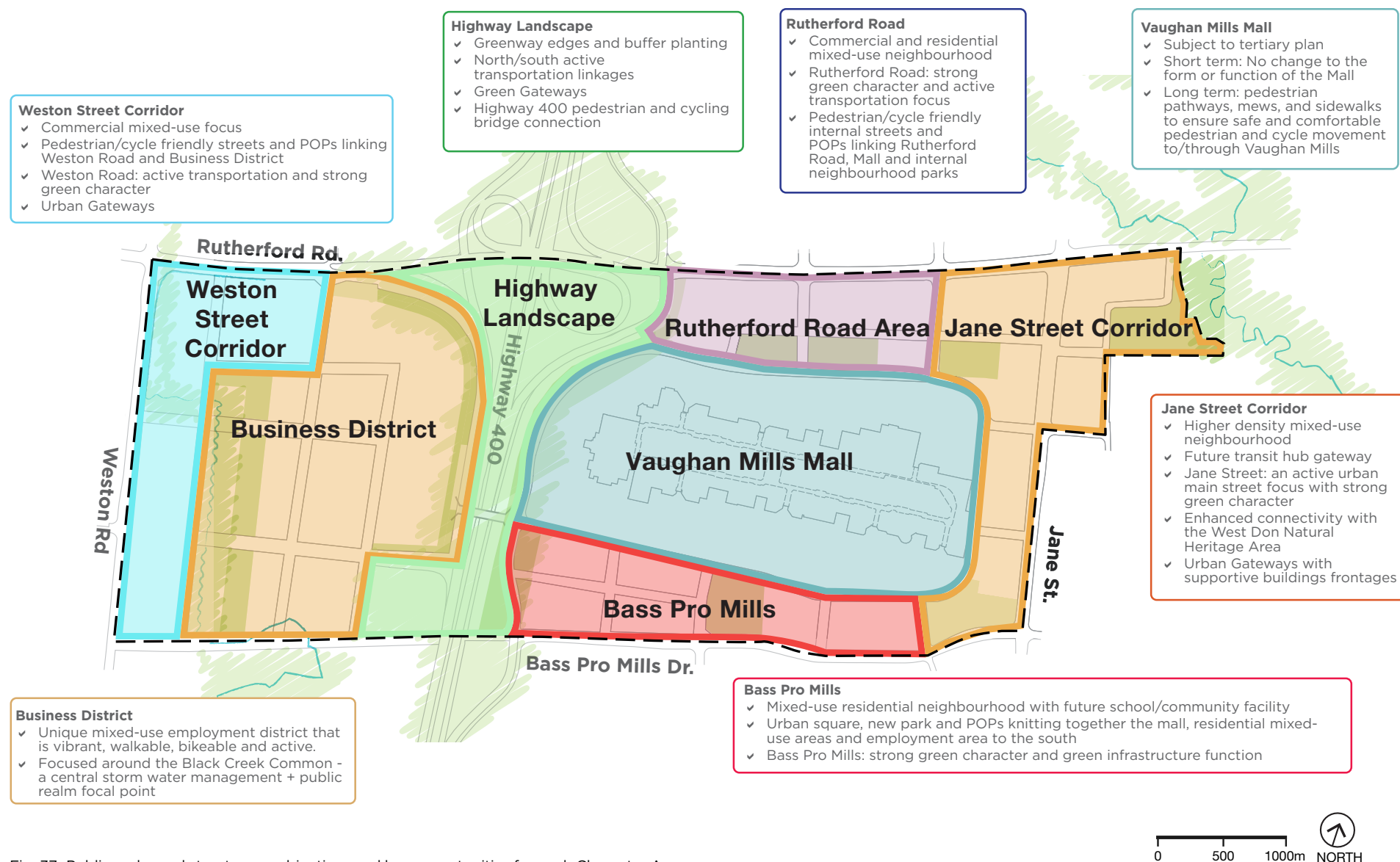


Fig. 37. Public realm and streetscape objectives and key opportunities for each Character Area.





CHAPTER 3: VISION AND GUIDING PRINCIPLES

The vision and guiding principles were informed by public consultation, planning policy and the background analysis conducted during Phase 1. These directed the development of the public realm and streetscape recommendations.

3.1. VISION AND GUIDING PRINCIPLES

The six Guiding Principles underpin the Public Realm and Streetscape Master Plan and build upon the Secondary Plan Vision, Vaughan's Strategic Plan and the City Wide Urban Design Guidelines.

“...The Vision reflects a desired ‘urban village’ character, having a regular pattern of connected streets and blocks, focusing areas of intensification around unique and vibrant pedestrian oriented mixed-use corridors that provide neighbourhood amenity for Vaughan Mills Centre, and function as both local and regional destinations.”

“...The Vision supports a modal shift that accommodates transportation modes such as cycling and walking...”

Vaughan Mills Secondary Plan (2014)



Sense of Place and Identity

- Build on natural heritage and cultural identity.
- Highlight the importance of a pedestrian and bicycle-friendly Centre.
- Create a unified and cohesive character for the Centre, while reinforcing the unique identity of individual character areas.
- Establish strong gateways
- Incorporate a variety of types of public art including independent sculptural, site specific, or integrated.



Green, Attractive and Vibrant

- Provide a variety of parks, plazas and open spaces to create a connected system and support a range of local social and recreational activities
- Improve the urban canopy.
- Incorporate LID and green infrastructure.
- Design POPs to contribute to an animated, coherent and accessible green space system



Connected

- Connect streets, paths and trails with other pedestrian areas to create a linked and connected Vaughan Mills Centre.
- Design streets as complete streets and public spaces to encourage cycling and walking
- Provide pedestrian and cycle connections to transit hubs and stops.
- Integrate wayfinding.



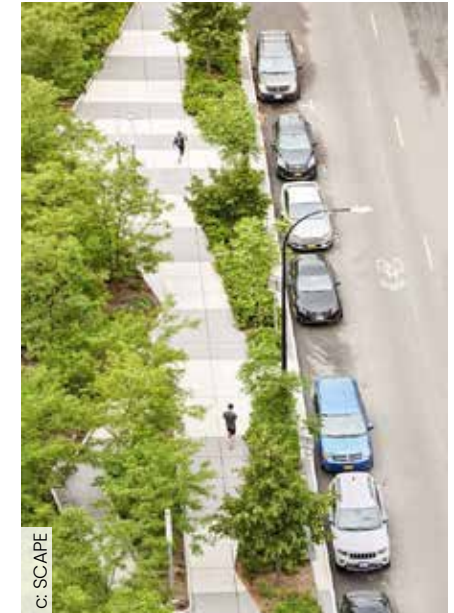
Safe, Healthy and Comfortable

- Frame and animate parks and streets edges and improve pedestrian comfort with supportive, pedestrian scaled buildings.
- Design the public realm as multi-functional, flexible and multi-seasonal.
- Incorporate opportunities to grow food and support associated programming.
- Remove barriers to make parks and open spaces inclusive and equitably accessible to pedestrian and cycling connectivity.



Sustainable and Resilient

- Improve environmental, material, financial and social sustainability and reflect best practices in sustainability in all new open space, landscape and streetscape projects.
- Design the Black Creek Common as a landmark sustainable open space that functions both as storm-water management infrastructure and an innovative public space.



Promote High Quality Design

- Express a sophisticated high quality of design.
- Utilize a restrained and timeless palette of materials and street furniture. Simple is better.
- Plan and design for tomorrow. A commitment to enhanced maintenance practices must be made in concert.





CHAPTER 4: **PUBLIC REALM** **GUIDELINES**

The public realm is a composite of parks, open spaces and streetscape that will contribute to the development of Vaughan Mills Centre over time.

Following are guidelines for each of the public realm elements to inform future projects.

4.1. PUBLIC REALM FRAMEWORK PLAN

The Public Realm Framework Plan is a long-term vision for Vaughan Mills Centre. It is intended to provide a coherent public realm structure for the incremental build out of the Centre over many years and with many players involved.

The Public Realm Framework enables residents, workers, and visitors to appreciate the Centre as a totality while reinforcing the unique qualities of character areas, streets and spaces.

The Framework Plan envisions a fine grain network of streets, paths and trails, identifies a network of public and private open spaces and place-making opportunities that, together, provide an organizing structure for the Centre.

The Public Realm Framework Plan is composed of nine elements described in the following pages.



Fig. 38. Public Realm Framework Plan.



4.2. GREEN FRAME STREETS

The arterial and major collector streets, referred to as ‘Green Frame Streets,’ play a significant role in defining green and welcoming edges to Vaughan Mills Centre. Large, healthy street trees are a defining element.

The Green Frame Streets are composed of Rutherford Road, Weston Road, Jane Street and Bass Pro Mills. They are anticipated to have a higher intensity of uses and users than the other streets, with active ground floors and a greater transportation role. The Green Frame streets are envisioned as promenades and will contain generous public boulevards with pedestrian amenities, and street trees planted with enough non-compacted soil volume to grow to a large and useful size.

Buildings along the Green Frame Streets should include a generous setback for an additional row of trees and plantings in accordance with the City Wide Urban Design Guidelines (UDG's) Performance Standard 6.1.2. Rutherford Road and Jane Street are defined as Green Datum Streets in the UDG's and should be designed to contribute to continuous green corridors connecting the city's Natural Heritage Areas. Refer to Chapter 5 for detailed streetscape guidelines.

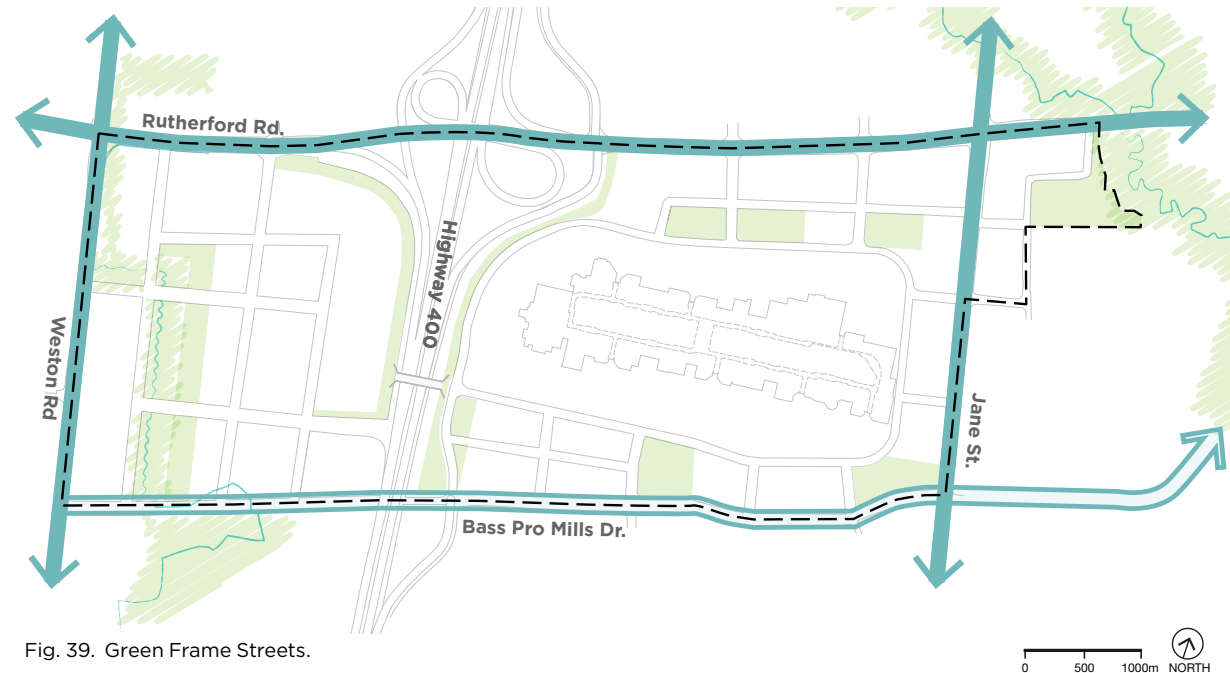


Fig. 39. Green Frame Streets.



Fig. 40. Additional row of trees within the setback.



Fig. 41. Wide sidewalks and street trees.

4.3. EMERALD NECKLACE STREETS

The Emerald Necklace Streets are more intimate ‘main streets’ that link internal parks, natural heritage areas, the mall and character areas. Green Infrastructure is one of the defining elements of these streets.

These streets include Fishermens Way in the mixed-use precinct and the Black Creek Loop in the Employment Area. The Emerald Necklace Streets play a significant role in establishing Green Infrastructure elements such as bio-retention planters, rain gardens or permeable paving at Vaughan Mills Centre.

Green Infrastructure on Emerald Necklace Streets will augment the urban tree canopy, capture and filter run-off, and reinforce an attractive and comfortable pedestrian environment with a green character and pedestrian and cycling focus.

Refer to Chapter 5 for detailed streetscape guidelines.

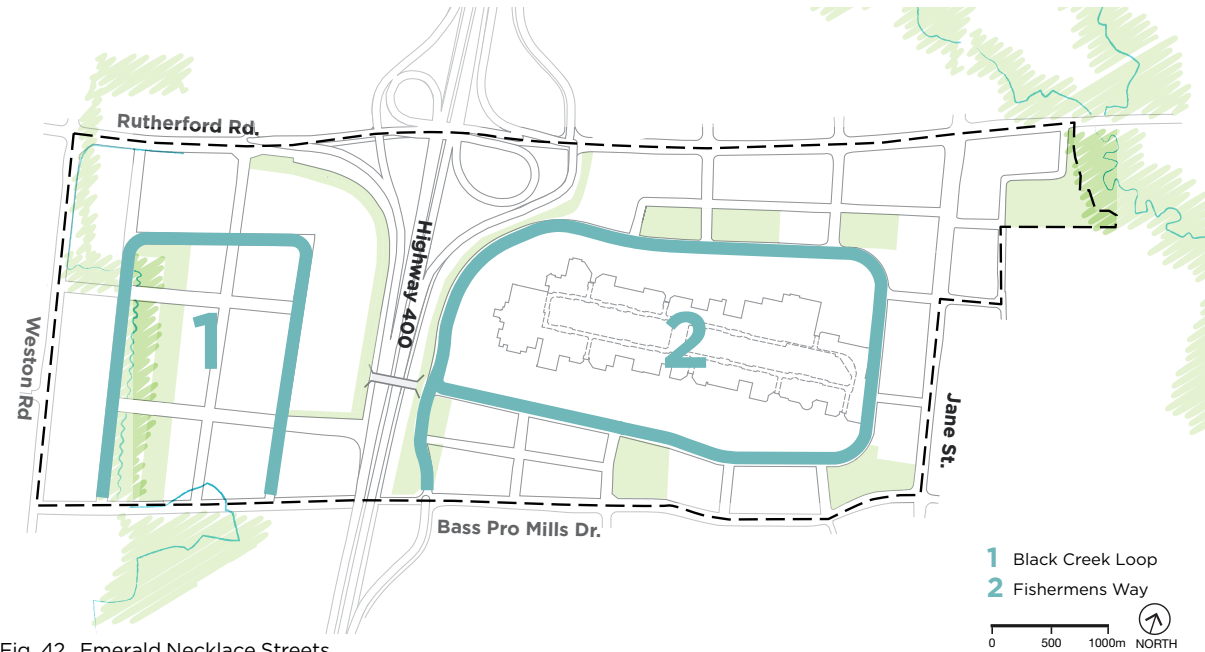


Fig. 42. Emerald Necklace Streets.

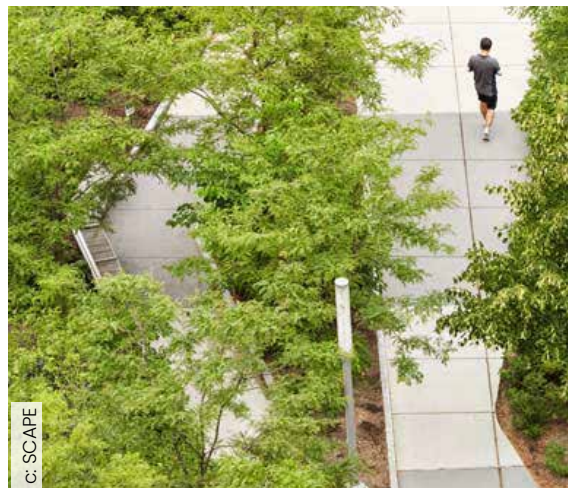


Fig. 43. Green character.



Fig. 44. Bio-retention planter.

4.4. INTERNAL STREETS

A fine grained network of internal streets and mid-block connections will provide choice for how people move around, provide improved physical and visual connections and provide a green and inviting setting for all.

Internal streets will be pedestrian and mixed-use streets with numerous opportunities for activity, crossings, bike facilities, green boulevards and other amenities. Buildings fronting on to them will establish a pedestrian scale and include active uses at grade that may spill out on the boulevard and private/public open spaces.

Between open spaces and on larger blocks, mid-block connections are provided to create safe and direct routes.

No change to the form or function of the Mall are expected over the short term. However, ongoing discussion with the shopping mall managers for the development of improved pedestrian pathways to support the growing local population is encouraged.

Refer to Chapter 5 for detailed streetscape guidelines.



Fig. 45. Internal Streets.



Fig. 46. Example residential street.



Fig. 47. Mid-Block Pedestrian Connection with residential ground floor frontages.



Fig. 48. Mid-Block Pedestrian Connection with commercial ground floor frontages.

4.5. URBAN PARKS AND SQUARES

Urban Parks and Squares within Vaughan Mills Centre are high quality public open spaces that will play a wide variety of roles, allow for a variety of uses, and be distinct yet visually connected through the consistent use of contemporary materials and details.

Urban Parks and Squares will provide additional greening, support community vitality and complement and connect with the Natural Heritage Areas. These spaces should accommodate a range of active and passive uses, and provide recreational opportunities at all times of day, in all seasons, and for people of all ages and abilities.

Urban Parks and Squares include the following typologies: Urban Parks; Squares; Greenways and the Black Creek Common. Guidelines for each open space type are included in the following pages.

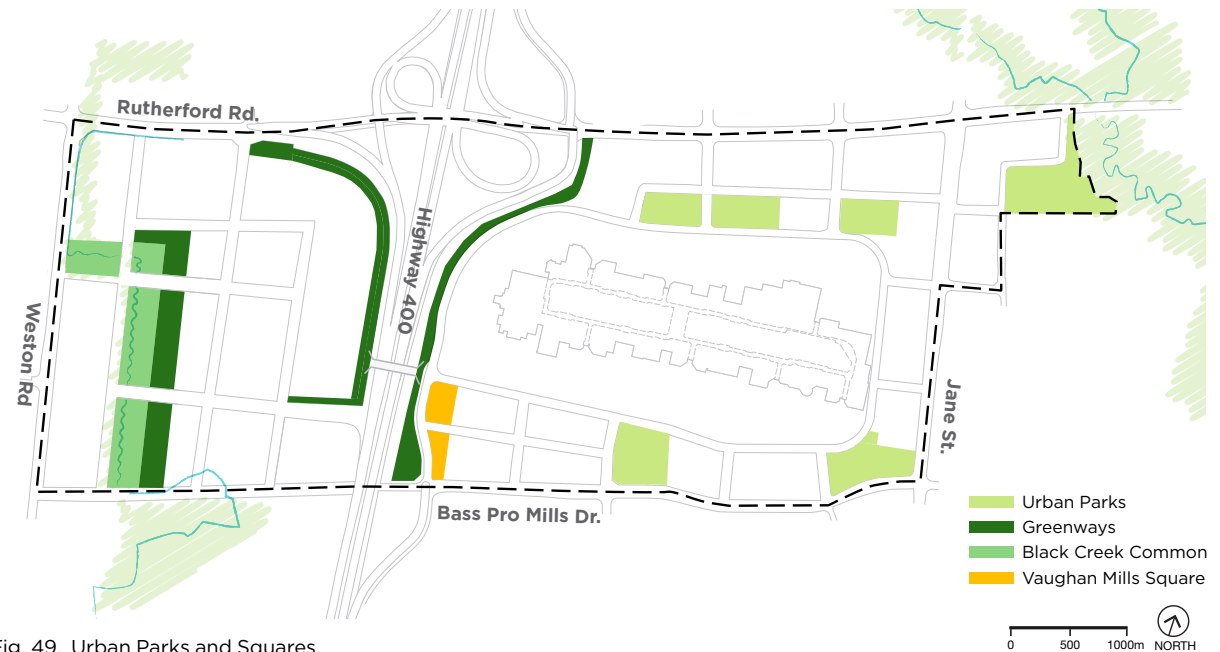


Fig. 49. Urban Parks and Squares.



Fig. 50. Example Urban Park.



Fig. 51. Example Greenway.



Fig. 52. Black Creek Common example.

Urban Parks

Urban Parks are intended for outdoor recreation and leisure opportunities and will be neighbourhood focal points where residents converge and interact on a day-to-day basis. There are five Urban Parks within Vaughan Mills Centre:

(1) The West Don Frontage Park is located within the Jane Street Node, which is envisioned as higher density transit supportive mixed-use neighbourhood. This park is located directly adjacent to the West Don River Natural Heritage Area and will include improved cycle and pedestrian trails connecting the West Don Natural Heritage Area.

(2) Juliard Drive Park is also located within the Jane Street Node and forms a sense of transition to the Rutherford Road Character Area, which is more residential in character.

(3) Sweetriver Blvd Park is the largest of the Urban Parks and is envisioned a focal point within the Rutherford Road Character Area.

(4) Jane Street Park is currently in the detailed design stage. Plans include new play areas, water play, a central lawn, naturalized areas, and multi-use courts. Future phases of the park may include introducing a local off-leash dog area and converting the open lawn to an ice skating loop.

(5) Edgeley Boulevard Park marks the southern entrance to Vaughan Mills Centre

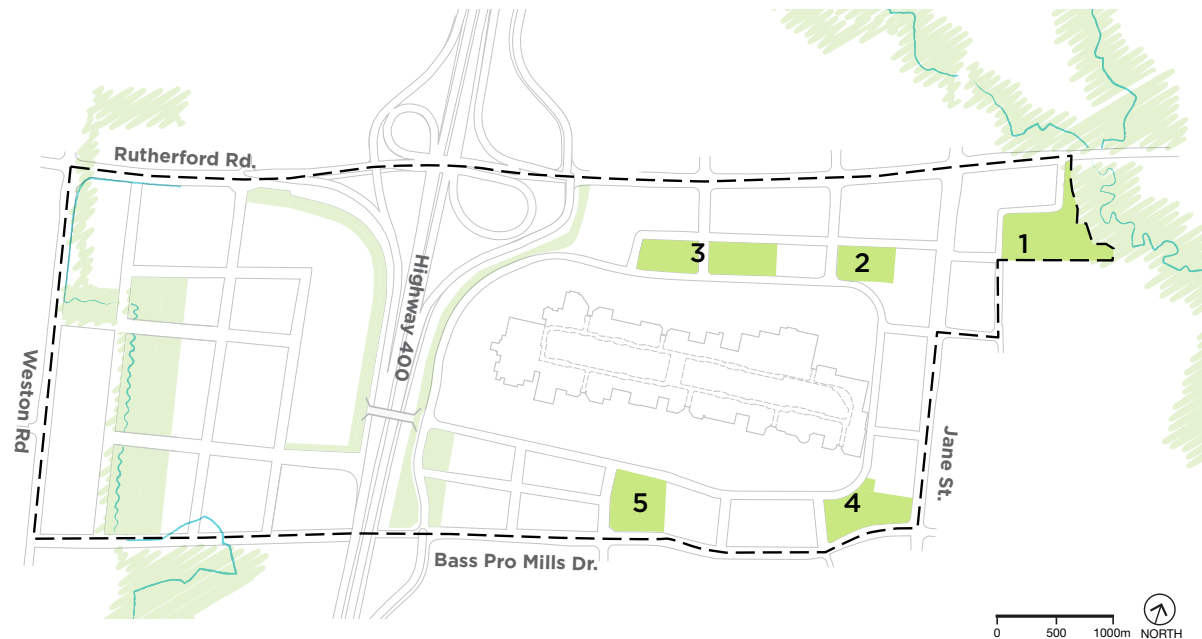


Fig. 53. Urban Parks.

and provides a sense of transition from the Employment Areas south of Bass Pro Mills to the residential mixed-use neighbourhood.

Note: These are not park names and actual park naming will follow the City's park naming policies.

Guidelines:

- R1. Use park as a primary organizing element within the urban fabric with respect to street and block layout and land use.
- R2. Locate new urban parks to connect and extend to existing parks and open spaces, provide for community and individual

recreational use and front onto public streets for visibility, access and safety.

- R3. Create a network and range of urban parks are unique in their own right but related through the use of high-quality materials.
- R4. Coordinate park design with development of adjacent properties to ensure that new buildings are positioned to maximize sunlight exposure, define the shape and function of the park and support the park with active and interesting building elevations. Avoid blank walls associated with servicing and loading, backlotted housing, or housing with the rear property lines against parks.

- R5. The Secondary Plan defines the approximate size and location of Urban Parks. As a rule of thumb all parks should be a 1.2ha minimum size to ensure that the proposed parkland will accommodate a range of programmes and facilities.
- R6. A minimum 3.0m building setback is required for all blocks adjacent to Urban Parks. The design of private setbacks adjoining them should be coordinated and create a cohesive public realm experience.
- R7. All developments over 32.0m (10 storeys) in height are required to undertake modeling to demonstrate shadow impact on parks are minimized.
- R8. Design urban parks to accommodate a wide range of uses and activities, cultures, demographics, ages and abilities. Engage with the local community to determine a range of inclusive spaces that contribute to comfort and social interaction. Consider programming and activities geared to multicultural, racial or ethnic communities, members of the LGBTQ community or refugee and immigrant communities.
- R9. Design urban parks that encourage physical activity, wellness, and informal use to promote spontaneous play and recreation. Opportunities include junior and senior playground facilities; active recreational facilities, passive recreation facilities, play courts or fitness equipment.
- R10. Maximize flexibility and adaptability to promote regular use in all seasons. For example, an ice skating surface in the winter can function as a performance area, ball court or area for skateboarding in the summer.
- R11. Develop logical and legible routes through the urban parks to facilitate pedestrian movement.
- R12. Plant specification should include a variety of native, non-invasive and drought-resistant plant species suitable for Zone 6 climatic conditions. Refer to Chapter 6.
- R13. Introduce the Vaughan Mills Centre Materials Palette within all Urban Parks. Refer to Chapter 6.
- R14. Locate elements such as furnishings, public art, and water features to visually enhance and animate the park and provide for pedestrian comfort and interest.
- R15. Design Urban Parks parks to incorporate sustainable best practices, informed by operations and maintenance practices, including water management.



Fig. 54. Incorporate a range of seating types into park design.



Fig. 55. Water can act as a focal point within Urban Parks.

Vaughan Mills Square

Vaughan Mills Square connects Fishermens Way and Bass Pro Mills and provide a sense of arrival into Vaughan Mills from the south.

Vaughan Mills Square is envisioned as an intensively used space that can accommodate a range of neighbourhood activities and events. The square will knit together a future commercial node along the highway, residential neighbourhoods and the employment area to the south.

A new east/west street through the Square is required to provide address for development. This street should be designed to fit within this revitalized neighbourhood context and act as an extension of the square itself.

Guidelines:

- R16. Design Vaughan Mills Square in accordance with City Wide Urban Design Guidelines Performance Standard No. 6.2.5. Urban Squares.
- R17. Promote a high level of design that reinforces the Square as the 'front door' to Vaughan Mills Centre. This may include decorative planting, public art, special paving, and built elements (i.e. water features, feature walls, etc.).
- R18. Coordinate the design of the Square with its adjacent buildings and provide active at grade uses that reinforce a strong



Fig. 56. Vaughan Mills Square.

synergy with the plaza, and provide opportunities for spill out retail uses, such as cafés, patios, and retail areas.

- R19. The Square should be predominantly hardscaped, to maximize programming flexibility. A variety of paving materials and techniques are encouraged to create variety, and delineate unique sections.
- R20. Include a mix of passive and programmed uses, including opportunities for more formalized programming (i.e. retail stalls, markets, etc.), casual seating and socialization, and event and performance space.

R21. Strategically locate landscaped areas to break up the space, provide opportunities for tree planting, and to accommodate run-off and snow storage.

- R22. Clusters of trees are encouraged throughout, to provide shade and enhance the urban tree canopy.
- R23. Large trees are encouraged at the western edge of the plaza to frame and enclose the space.
- R24. Target an average width to be no less than 40 metres.



Fig. 57. Urban plazas are primarily hardscape public spaces that invite and support urban life and energize places.



Fig. 58. Scott Street (Toronto) is an example of an intimate and shared character street forming the edge of an Urban Square.



Fig. 59. A variety of paving materials and techniques are encouraged to create interest and delineate unique sections.



Fig. 60. Flexible hardscaped areas may be provided to accommodate a range of programming, and to facilitate special community events.



Fig. 61. Public art should enliven and animate the Urban Square.

Greenways

In addition to the Urban Parks and Squares, Greenways can be used throughout Vaughan Mills Centre to provide strategic and seamless links between elements of the open space network, to support active modes of transportation and provide place-making opportunities. While Greenways are encouraged in Vaughan Mills Centre, they are not a replacement for parks.

Greenways are typically located adjacent to key streets or between blocks and buildings. Unlike other parks, Greenways are often experienced while in transition as users move through the site, or for short periods of rest and respite. Given this, there is a unique opportunity to provide a variety of design elements that enhance the experiential and aesthetic quality of the Greenways.

Three Greenways are included within Vaughan Mills Centre:

- 400 Greenways along both sides of Highway 400 to provide a green buffer and north/south active transportation linkages.
- The Black Creek Greenway is located top of bank along the eastern edge of the Black Creek Common to establish public common areas and active transportation pathways.

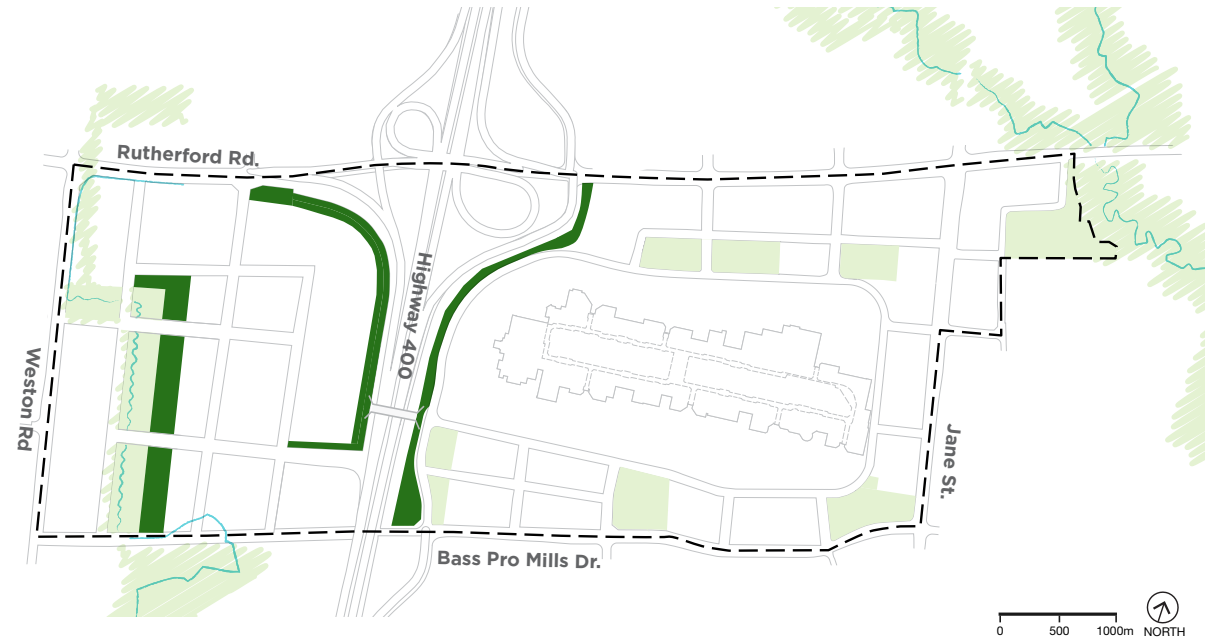


Fig. 62. Greenways.

Guidelines:

- R25. Design Greenways in conjunction with adjacent streets to create additional room for street trees, landscaping, and active transportation connections.
- R26. Incorporate place-making opportunities within Greenways. Opportunities include: outdoor performance areas, gathering areas, seating areas, wayfinding or public art opportunities at junctions with neighbourhood streets and programming for all age groups.
- R27. Locate structural elements outside of 14m buffer adjacent to MTO property line. The

MTO property line and setback should be clearly labeled on plans. MTO approval is required prior to construction being undertaken.

- R28. Design trails in accordance with the Accessibility Design Guidelines for York Regional Forest Trails and City of Vaughan trail details.
- R29. Greenways should be a minimum dimension of 12m to accommodate a trail, with a soft landscape area on either side for drainage, trees and plantings.

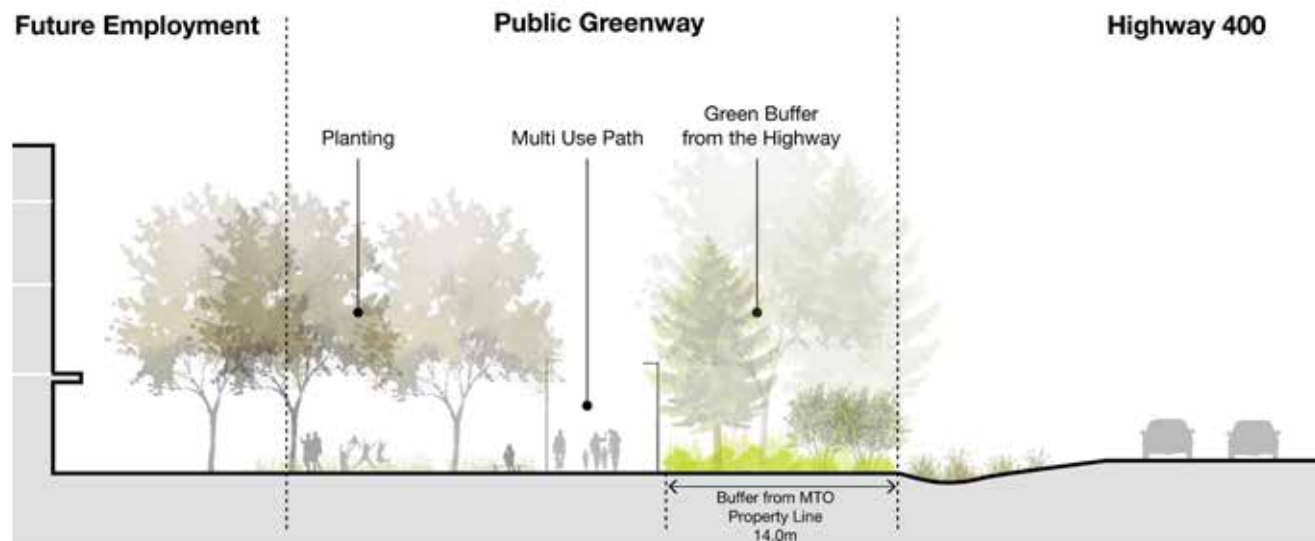


Fig. 63. Indicative cross section of a Greenway adjacent to Highway 400 within the business district.



Fig. 64. Locate wayfinding and informational signage at regular intervals along Greenways, and provide clear directions to key buildings and destinations.



Fig. 65. New trails should connect to the broader cycling and pedestrian network.



Fig. 66. Greenway entrances are good opportunities for seating and bike parking.

Black Creek Common

Black Creek Common is the major natural feature of the Employment Area. The vision for a revitalized Black Creek is to create an iconic landscape destination that functions as critical storm-water management infrastructure element and an innovative natural heritage public space.

The Black Creek corridor design and location is subject to future technical analysis related to ecological, geotechnical, hydrogeology and flood analysis and alignment of the corridor south of the Secondary Plan area.

Guidelines:

- R30. Coordinate the design of the Black Creek Common with the Employment Area and other public realm and stormwater features, including the stormwater management facility near the Bass Pro Mills Drive.
- R31. Coordinate the design of the Black Creek Common with the TRCA.
- R32. Coordinate the design of the Black Creek Common with the Black Creek Greenway. Require new buildings along the eastern edge of the Greenway to provide active frontage with public access towards the Greenway. See Figure 68.
- R33. Locate wayfinding and interpretive signs at major entry points and nodes. Consider natural or cultural interpretive themes.

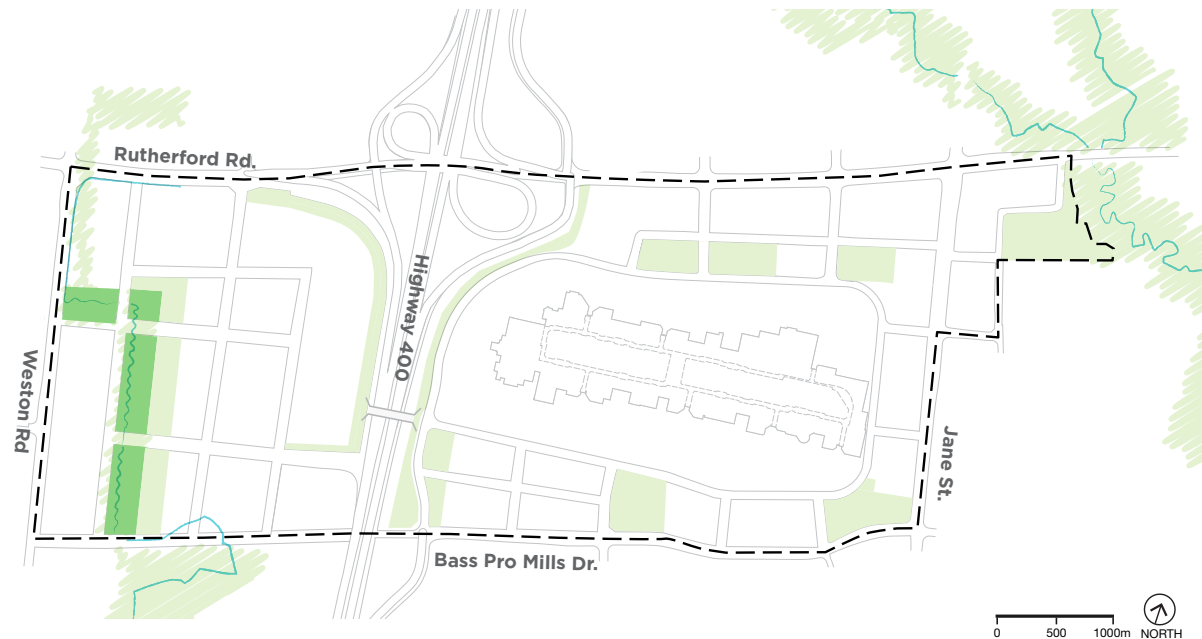


Fig. 67. Black Creek Common.

- R34. Trail entry points are opportunities to introduce a diversity of pollinator species and consider opportunities for local businesses and community groups to take stewardship of open spaces.
- R35. Design the bridges that connect across the channel to enhance pedestrian and cyclist movement and stitch together the east and west banks, while minimizing impact to the environment.
- R36. The TRCA requires the use of native, non-invasive plant species for all plantings.
- R37. Habitat enhancements zones should include native species which will help stabilize, creek banks and enrich aquatic and riparian habitat. See Figure 68.

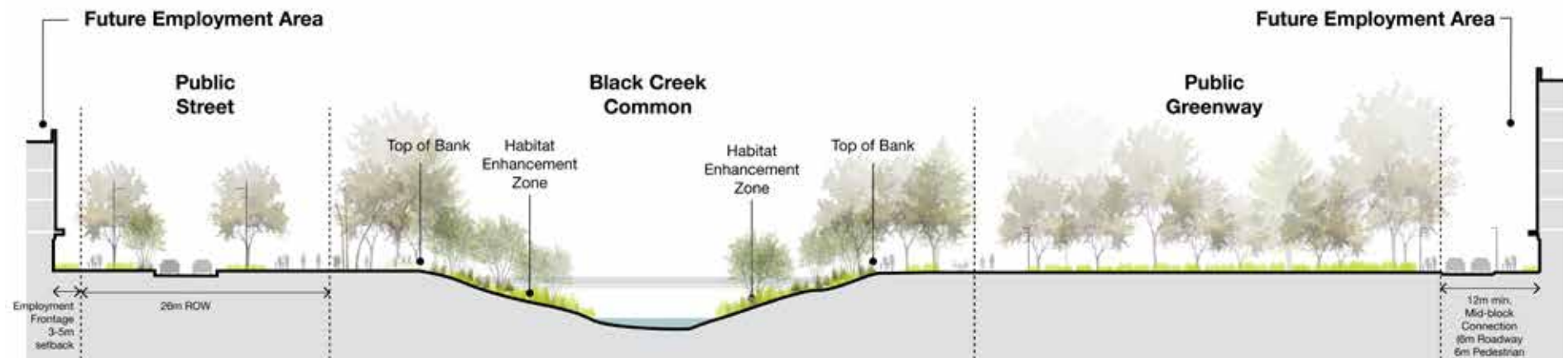


Fig. 68. Black Creek Common will be a defining landscape feature of the Employment Area, designed with layers of stormwater management, ecological restoration, and public space features and functions. The cross section includes public rights-of-way with active ground floor frontages on both sides and a public greenway along its eastern edge.



Fig. 69. Public art located at key view points.



Fig. 70. Signs and wayfinding marking entrances.



Fig. 71. Design for all seasons.

4.6. PRIVATELY OWNED PUBLIC SPACES

Privately owned publicly accessible open spaces (POPs) such as urban squares, courtyards and mid-block connections, are recommended within Vaughan Mills Centre to contribute to the overall network of public spaces.

Privately owned publicly-accessible spaces (POPS) are a specific type of open space in which the public are invited to use but remain privately owned and maintained. They augment and complement, but do not replace, the need for public parks within the public realm network. The location of POPs in the Framework Plan is conceptual and the exact location and design is to be determined through the development application process. The Frameworks Plan includes four types of POPs design character based on location, character areas and planned context:

Plaza/Gateway occur at key nodes, where the most intense pedestrian or retail activity is anticipated or to mark the transition from one character area to another. Plaza/Gateway's have one or two sides open to public street.

Green POPs occur near entrances to parks and open spaces and provide a sense of



Fig. 72. POPs.

transition from one character area to another. Green POPs may have a combination of hardscape or softscape elements and encourage small scale programming. Green POPs have one or two sides open to a public park.

Courtyard/Mews are generally located between buildings, and while they are accessible to the public, they are most frequently used by adjacent residents and/or employees. Courtyard/Mews generally accommodate passive programming reflective of adjacent uses, have a mix of hard and softscape elements, and will encourage small scale programming and passive

socialization, such as a children's play feature, or shaded seating areas. Courtyard/Mews are typically enclosed on two to four sides, so the design of the surrounding built-form is a critical design consideration. Mews can also be referred to as Mid-Block Connections and secured as POPs.

Mall Plazas are generally located at the entrances to the shopping mall. Given its prominent position in Vaughan Mills Centre as a community gathering place and transit hub, creating POPs in the form of new walkways, squares and plazas provide additional opportunities for movement throughout the mall property and potential for exterior

programming such as markets, performances, and seasonal functions. Ongoing discussion with the shopping mall managers for the development of neighbourhood amenities to support the growing local population is encouraged.

Guidelines:

- R38. Locate and design POPs in accordance with the City Wide Urban Design Guidelines Performance Standards No. 6.2.4-6.2.8.
- R39. Orient and design POPs to create a comfortable micro-climate. South-facing POPs are encouraged as they maximize the space's exposure to direct sunlight. Provide minimum 3 hours direct mid-day summer sunlight.
- R40. Design POPs to have prominent and direct visual and physical access from adjacent public streets, parks or other public space.
- R41. Connect and coordinate the design of POPs with mid-block pedestrian walkways.
- R42. Optimize siting and design to enhance landmarks, views and view corridors.
- R43. Use high quality seating, paving, pedestrian scale lighting and other materials that are complimentary to the Vaughan Mills Materials Palette. Refer to Chapter 6.
- R44. Building frontages, entrances and uses should activate and engage the POPs to creating animation and enhance safety.
- R45. POPs with strata parking should incorporate a minimum soil depth of 1.2m. It may be determined during design that a greater soil depth is required to ensure healthy tree growth.
- R46. The size and configuration of POPs will vary greatly across Vaughan Mills Centre and will depend on the existing and planned context and specific characteristics of the site and the building program.
- R47. Generally, POPs should have a 1:1 to 1:4 proportion of length to width (except for Mews) to provide for a range of programming opportunities.



Fig. 73. Example Plaza.



Fig. 74. Example Courtyard.

4.7. LANDSCAPE STITCH

The ‘Stitch’ is a signature landscape move—a significant green corridor that will improve pedestrian and cycling connectivity, and foster a unique identity and character for the Centre.

Improving the physical and visual relationship of Highway 400 to Vaughan Mills Centre neighborhoods is key factor in success of making an urban, livable place at Vaughan Mills Centre. Landscape improvements to the lands within the Ministry of Transportation and Infrastructure Ontario (MTO) right-of-way are recommended to improve the urban canopy, improve the image of the Centre, assist in mitigating the negative visual effects of the highway and improve east/west pedestrian and cyclist connectivity.

Guidelines:

- R48. Develop a landscape improvement strategy in coordination with the MTO to green the Highway 400 ROW. Opportunities include: tree and pollinator species planting.
- R49. Improve the pedestrian and cyclist environment at the existing Highway 400 crossing points (Rutherford Road and Bass Pro Mills). This can include: pedestrian and cyclist crossing

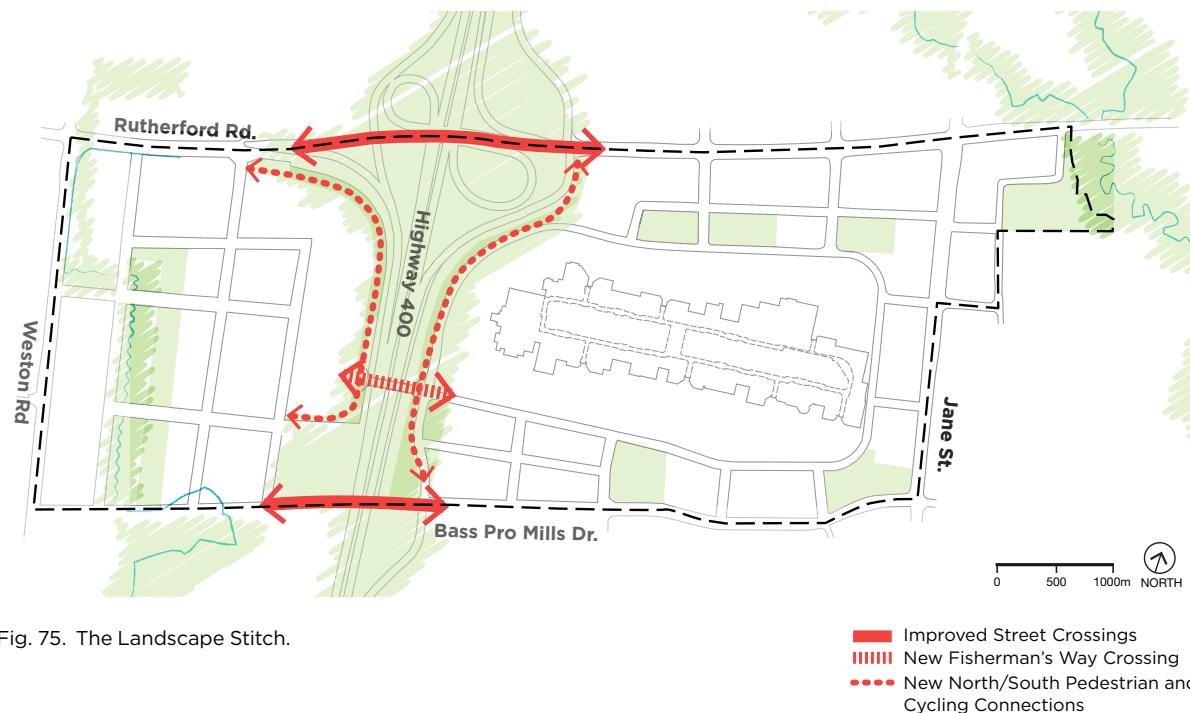


Fig. 75. The Landscape Stitch.

improvements at the entry/exit ramps; tightening curb radii to shorten pedestrian crossing distance; road diets over the existing bridges to add protected cycling; or adding seating at intermittent rest points (where space allows).

- R50. Coordinate landscape improvements with the design of the adjacent Greenway public spaces and active transportation linkages.
- R51. Protect for a future mid-way pedestrian and cycling bridge connection across

Highway 400 that aligns with the internal ring road to link the Employment District and surrounding community with future development areas east of Highway 400.

- R52. All work within and adjacent to the MTO ROW is subject to review and approval by the MTO.



Fig. 76. Greening of the Highway 400 right-of-way.



Fig. 77. The Redhill Bridge (Hamilton) allows walkers and cyclists to safely cross over 12 lanes of highway traffic, and serves as a key link in a large network of recreational trails.



Fig. 78. Greenways are located along the edges of the Highway 400 right-of-way.

4.8. GATEWAYS

Gateways are important entry points that will reinforce the Centre's identity as a distinct place. Gateways are located at key junctions between major streets and with Highway 400.

Two types of gateways are recommended: Landscape Gateways and Urban Gateways. Together, these Gateways provide an opportunity for an integrated strategy of public art installations as creative interpretive gateway markers and wayfinding tools to enhance identification of the Centre as a destination.

Landscape Gateways are located at crossing points of Highway 400 and the Green Frame Streets (Rutherford Road and Bass Pro Mills). These locations are the first urban experience of the Vaughan Mills Centre that many motorists have. As such, they should be considered as a 'higher order' gateways and given an appropriate landscape treatment in recognition of this. Landscape Gateways will occupy the lands between the ramps within the Study Area and could include special planted features, landmark signage or large public art installations. The Landscape

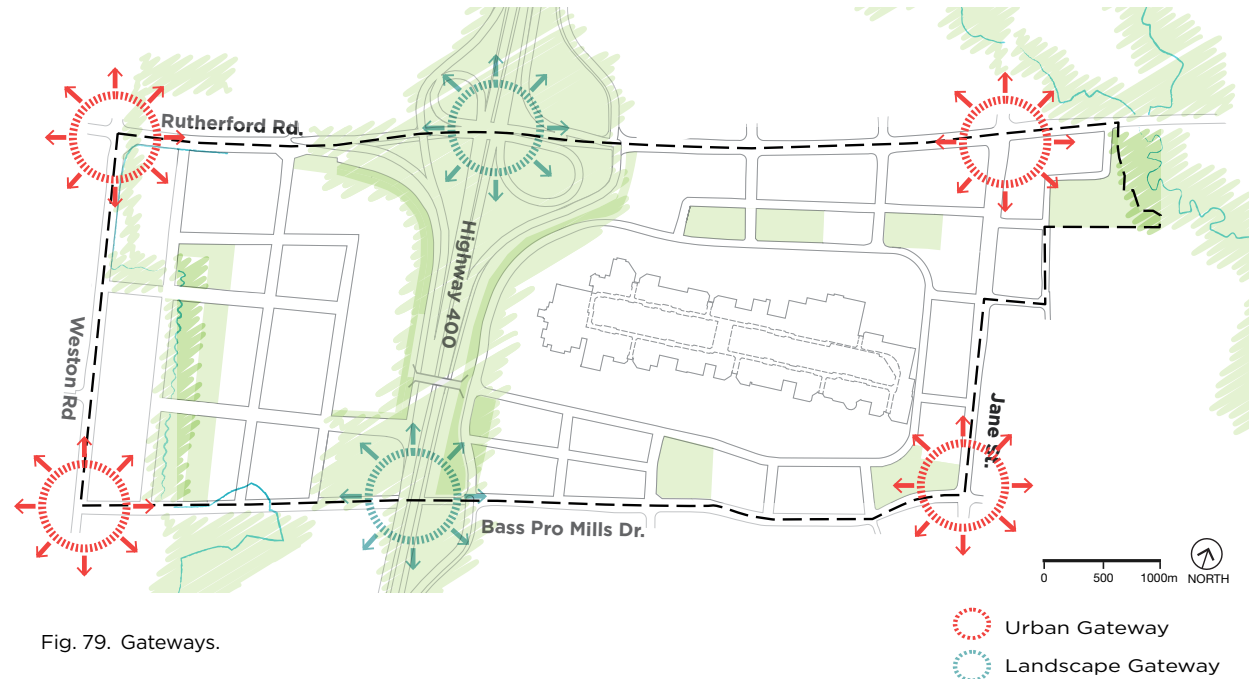


Fig. 79. Gateways.

Gateways are located within the Highway 400 right-of-way and their designs shall be coordinated with MTO.

Urban Gateways are located at key junction places at the intersection of Green Frame Streets and along important pedestrian routes. Urban Gateways are envisioned as pedestrian focused places with distinctive design, and wayfinding. They will assist in pedestrian legibility and enhance sense

of arrival. This can be achieved through the arrangement of built form with new plazas, framing key view or public art. The intersection of Jane Street and Rutherford Road and Jane Street and Bass Pro Mills are identified as a preferred Locations for Public Art. Refer to 4.12.



Fig. 80. Example Urban Gateway.



Fig. 81. Example Landscape Gateway.



Fig. 82. Example Urban Gateway.



Fig. 83. Example Landscape Gateway.

4.9. CYCLE CONNECTIONS

A network of cycle infrastructure and trail connections will link to the existing network beyond Vaughan Mills Centre, connect adjacent neighbourhoods and supplement the pedestrian network.

A well connected (internal and external) cycling facility network is needed in order to accommodate the increased volume of cycling in Vaughan Mills Centre. The proposed cycling connections include a range of on and off-street facilities that connects with adjacent and planned connections.

Multi-use paths, included within Greenways along both sides of Highway 400 and along the east edge of the Black Creek Common, will provide a new vital north/south connections.

Protected cycling facilities are proposed to be implemented along the major corridors of the site and to adjacent neighbourhoods. Local cycling routes will run along local streets and create an integrated cycling network across the site. A hierarchy of use and pathways



Fig. 84. Cycle Connections.

will be established to ensure a seamless experience for pedestrians and cyclists alike.

Refer to Chapter 5 for further information on specific cycle infrastructure recommendations by street type.

- Existing/Planned Boulevard MUP (Within R-O-W)
- Proposed Boulevard Bike Lane (Within R-O-W / Subject to Approval of York Region)
- Proposed Bike Lane/Signed Route
- Bi-directional Bike Lane
- Shared
- ... Trails (Existing/Proposed)

4.10. TRANSIT SUPPORTIVE

Jane Street is designated as a Regional Rapid Transit Corridor and there are also a number of existing and planned local bus routes within Vaughan Mills Centre.

The Secondary Plan envisions a multi-modal Transit Hub at the junction of Jane and Rutherford with the possible extension of the Spadina University Subway from the Vaughan Metropolitan Centre to Vaughan Mills Centre. The existing bus terminal is planned to continue serving as the transit hub/major transit connecting point until this time. The Secondary Plan proposed transit network (shown to the right) includes potential transit priority connections along Rutherford Road, Weston Road and higher order transit along Jane Street.

Guidelines:

- R53. Integrate future public transit facilities, including right-of-ways, stations, station entrances, stops and utilities into the design of streets and open spaces and built form.
- R54. Incorporate a transit hub/station entrance plaza open space within the Jane Street

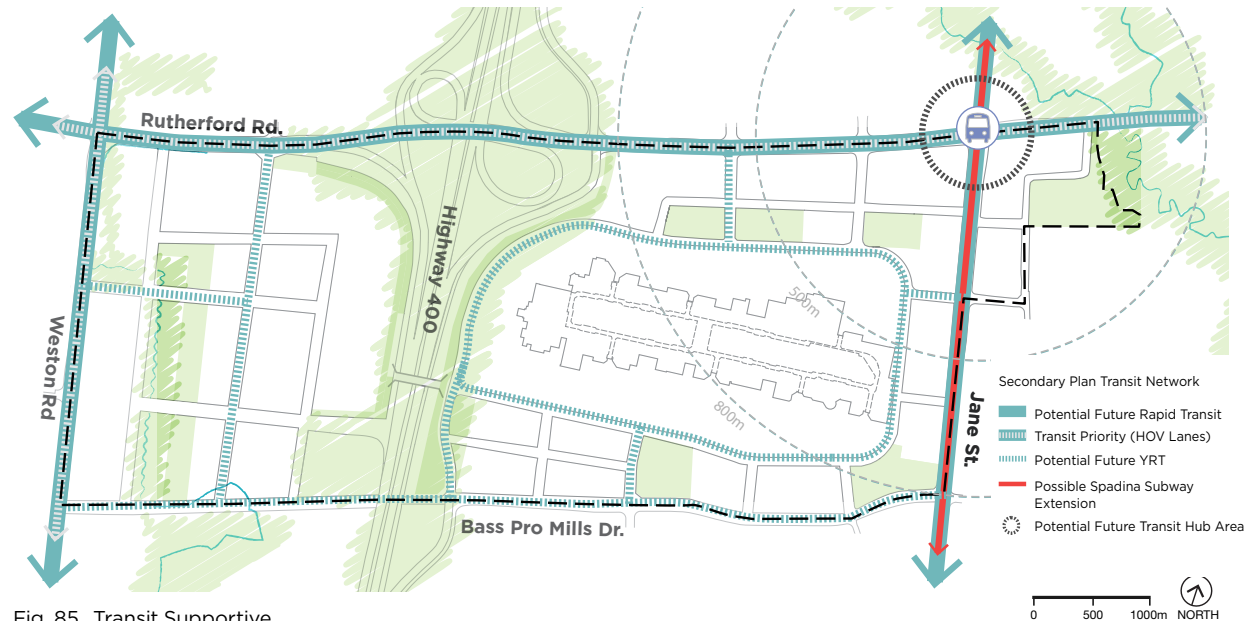


Fig. 85. Transit Supportive.

Node. The plaza should be highly visible from adjacent sidewalks and Jane Street, accommodate high pedestrian volumes around the entrance and be designed to be welcoming and accessible.

- R55. Design transit stops and stations to have an elevated design character to provide pedestrian comfort and micro-climate.
- R56. Coordinate the location and integration of transit stations and stops early in the design process to ensure sufficient space and adequate design.
- R57. Create pedestrian and cycling 'short-cuts' that lead directly to transit. Look for opportunities to link 'short cuts' to larger green space and cycling networks.



Fig. 86. Aarau Bus Station (Switzerland): The transit hub is located within a central plaza and framed by supportive building frontages with active ground floor uses.

4.11. STORM WATER MANAGEMENT

As the Centre intensifies, parks, open spaces, and streets will have an increasingly important role in storm water management.

In support of Vaughan's municipal guidelines on the management of storm water quality and quantity, Vaughan Mills Centre's open spaces should incorporate infiltration galleries, permeable surfaces and Green Infrastructure elements. Public realm improvements and opportunities to offset constraints of development sites should consider precinct-based strategies for storm water management.

Guidelines

- R58. Include green infrastructure elements as part of all public realm projects, including rain gardens, bioswales, bioretention/infiltration and large non-compacted soil volume as part of planting areas.
- R59. Explore opportunities for integrating storm water management systems in private streets and spaces to support and augment adjacent development site initiatives and reduce reliance on conventional storm water collection systems.
- R60. Seek to exceed the minimum stormwater management targets established by the Toronto and Region Conservation Authority, including peak flow control, erosion control, water quality treatment and water balance.



Fig. 87. Example rain garden.



Fig. 88. Example rainwater harvesting canopy.

4.12. PUBLIC ART

Public art provides opportunities to celebrate both local and City-wide cultural attributes, and can provide orientation, vibrancy, identity, interest and a sense of place for residents and visitors when placed in prominent locations.

Public art in Vaughan Mills Centre may take many forms, including stand-alone sculptures or features, murals, integrated design and built form elements, digital media, and/or unique plantings. Vaughan Mills Centre will contain a meaningful integration of public art and design features for human delight and the celebration of culture, spirit, and place appropriate to its function.

There is opportunity to employ public art as a powerful interpretive vehicle for conveying the distinct character of each Character Area, animating the natural and built heritage of Vaughan Mills Centre, and reinforcing the ecological storyline of the greater site as a whole and its complex parts.

Guidelines

- R61. The location and design of public art features should conform to the City's Public Art Program requirements.
- R62. All Public art should conform to commissioning and acquisition methodologies in the Vaughan City-Wide Public Art Program (i.e. open and limited competitions, direct commissions and artists on design teams).
- R63. Locate public art throughout Vaughan Mills Centre with more prominent pieces focused at select locations that will best showcase the installation. This includes culturally significant sites, gateway locations, public gathering spaces, highly visible locations and key redevelopment sites (i.e. the Jane Node).
- R64. Private developments with large open spaces (i.e. amenity areas, internal courtyards) should incorporate public art within outdoor spaces.
- R65. Public art should be creative and inspiring, but should also be specific to the Vaughan Mills context, or relevant in a similar manner.
- R66. Public art should generally be comprised of durable, low-maintenance materials that can withstand regular use and enjoyment.
- R67. Public art should be both visually and physical accessible for people of all ages and abilities.
- R68. Include both temporary and permanent installations.



Fig. 89. OY/Yo by Deborah Kass.



Fig. 90. Site Specific, by Scott Eunson and Marianne Lovink.



Fig. 91. The Water Guardians, by Jennifer Marman and Daniel Borins with James Khamsi.





CHAPTER 5: **STREETSCAPE** **MASTER PLAN**

Streets are a major component of Vaughan Mill Centre's existing and future public realm. They will support safe, efficient and accessible movement; serve as attractive, comfortable places and destinations in their own right; and demonstrate a resilient and ecologically responsible function and character.

5.1. STREET DESIGN

Within the broad objective of developing an exemplary sustainable public realm in Vaughan Mills Centre, the Streetscape Plan expands upon the proposed street hierarchy, street rights-of-way (ROWs) and transportation plans in the Vaughan Mills Centre Secondary Plan.

The Complete Streets approach for Vaughan Mills Centre describes streets for movement, as destinations and as Green Infrastructure.

Streets for Movement

Providing greater choice for how people move will enliven the public realm and help to manage congestion. Of paramount importance is designing a street network and public realm that emphasizes safety for the most vulnerable users. It is well understood that with this approach, cities become more resilient and efficient.

Streets as Destinations

Consider streets as 3-dimensional “urban rooms” with floors, walls, ceilings or canopies and furnishings. The quality of this space relies heavily on the attention given to the design (and stewardship), and the materials and finishes applied to the tactile area that is closest to the pedestrian. For example:

- Provide coherent street-walls, street-trees, and other elements that give enclosure to the street spaces.
- Maximize eyes and feet on the street throughout the day.
- Provide clear, if subtle, indications of what is public and what is private in choice of paving, walls, steps, materials, planting, etc.

The best streets are supportive settings for a wide range of social and recreational activities – places for sidewalk games, cycling, strolling, walking the dog, porch sitting, people watching, window shopping and a host of unplanned social encounters that

make for good gossip, local news-gathering, and conversation. The necessary supports for these kinds of activities are often quite simple but require careful design coordination. For example:

- On street parking for vehicles and bicycles.
- Traffic calming measures (and visual cues) such as appropriate traffic lane dimensions and curb radii, pedestrian pavers on roadways, etc.
- Optimum unobstructed sidewalks. dimensions scaled to the anticipated uses.
- Sidewalks with summer shade.
- Paving surfaces, catch basins and grates that do not impede universal access.
- Residential stoops, terraces, porches and canopies that encourage residents to linger at the entrance to their homes and canopies and screens to shops and cafes that can extend the outdoor season.

Streets as Green Infrastructure

Stormwater collection and management through the application of Green Infrastructure and low impact development facilities is a critical part of street design that will reinforce Vaughan Mills Centre’s character and green identity. These streetscape guidelines include Green Infrastructure and drainage strategies specific to each street types identified for the Centre.

The design principles, guidelines and the standards applicable to the various typologies of streets are set out in the following pages.

Streets for
movement



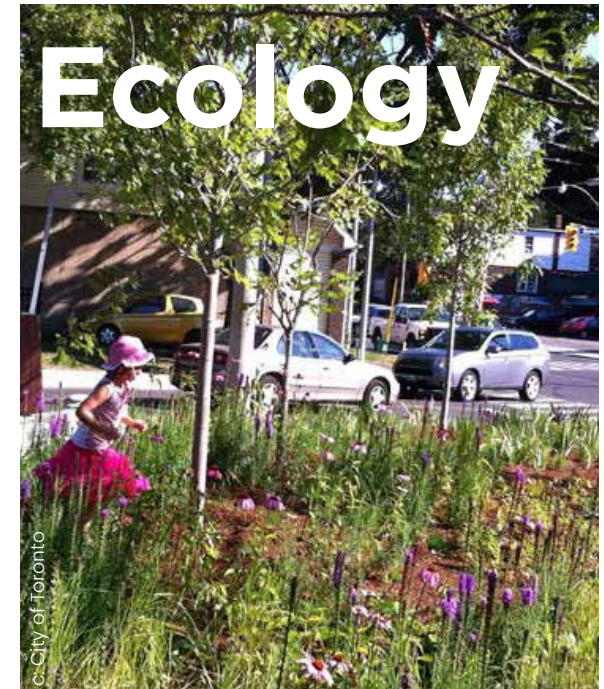
Design Objective:
Move People

Streets as
destinations



Design Objective:
Spend Time

Streets as green
infrastructure



Design Objective:
Improve Ecosystems

Fig. 92. Complete Streets Approach for
Vaughan Mills Centre.

5.2. STREET DESIGN PRINCIPLES



Complete Streets for all Users

Design the streets based on the principle of equitably. Balance facilities for all modes of movement and provide for the safety and convenience of the most vulnerable street users.



Promote Active Transportation

Design each street to accommodate and encourage pedestrian, cyclist and other active uses. Link streets together with other pathways, within and beyond the site, to form a comprehensive network of urban pedestrian and cycle routes.



Priority on Place Making

Design streets to be context-sensitive and encourage opportunities for social interaction in the public realm. The streets are as much local social meeting places for the neighbourhood as they are movement and infrastructure corridors.



Crime Prevention through Environmental Design (CPTED)

Locate, design and manage streets to maximize opportunities for natural surveillance and establish a sense of ownership.



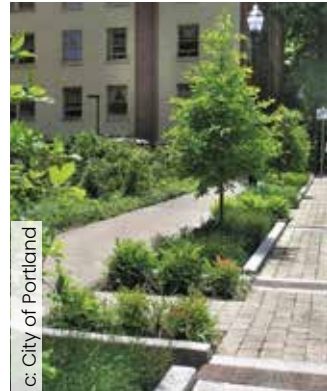
The First Couple of Metres/The Lower Floors

The design of the interface between public sidewalks and semi-public areas and the lower floors of buildings is integral in creating safe and vibrant streets.



Enjoyment in all Seasons

Streetscape elements, including canopies, sheltered secondary pedestrian routes, sheltered parkettes, and refuge areas will allow enjoyment of the street in all seasons. Streets will be designed to accommodate the most appropriate and energy efficient means of snow clearing and storage.



Innovative Storm Water Management

Incorporate Green Infrastructure elements such as bio-swales, soil-cells and other means of detaining and filtering storm water within the ROWs to support the sustainable storm water management strategy of Vaughan Mills Centre.



Healthy Trees and Landscaping

Design planting areas and tree pits to include high qualitative and quantitative standards of soils/growing mediums, aeration, drainage and irrigation systems to ensure good growing conditions. Use plant material that is native or well adapted to the area and sourced locally wherever possible.



Coordination of Infrastructure

Standards for the coordination of location and positioning of the various elements of below-grade infrastructure and access points will be integrated with the standards for street-tree soil-cells and bio-swales and will take into account practices for maintenance and repair of infrastructure.



Re-use of Existing Features/Materials

Existing road-beds, curbs, street-lighting, storm drainage infrastructure and other features of the existing street system will be retained in-situ as much as is.

5.3. STREET TYPES

Six Primary Street Types exist within Vaughan Mills Centre.

The Arterial Streets (Jane Street, Rutherford Road and Weston Road) and Major Collectors (Bass Pro Mills), are referred to as Green Frame Streets, and play a significant role in defining green and inviting edges to Vaughan Mills Centre.

The Emerald Necklace Streets (Fishermens Way and the Black Creek Loop) play a significant role in establishing the Green Infrastructure, linking parks and neighbourhoods and becoming more intimate main street destinations.

Minor Collector Streets and Local Streets, referred to as Neighbourhood or Employment Connectors represent the majority of the streets at Vaughan Mills Centre, and are designed for a mix of slow-moving vehicle and cycle traffic and generous pedestrian boulevards that reflect their role as social meeting places.

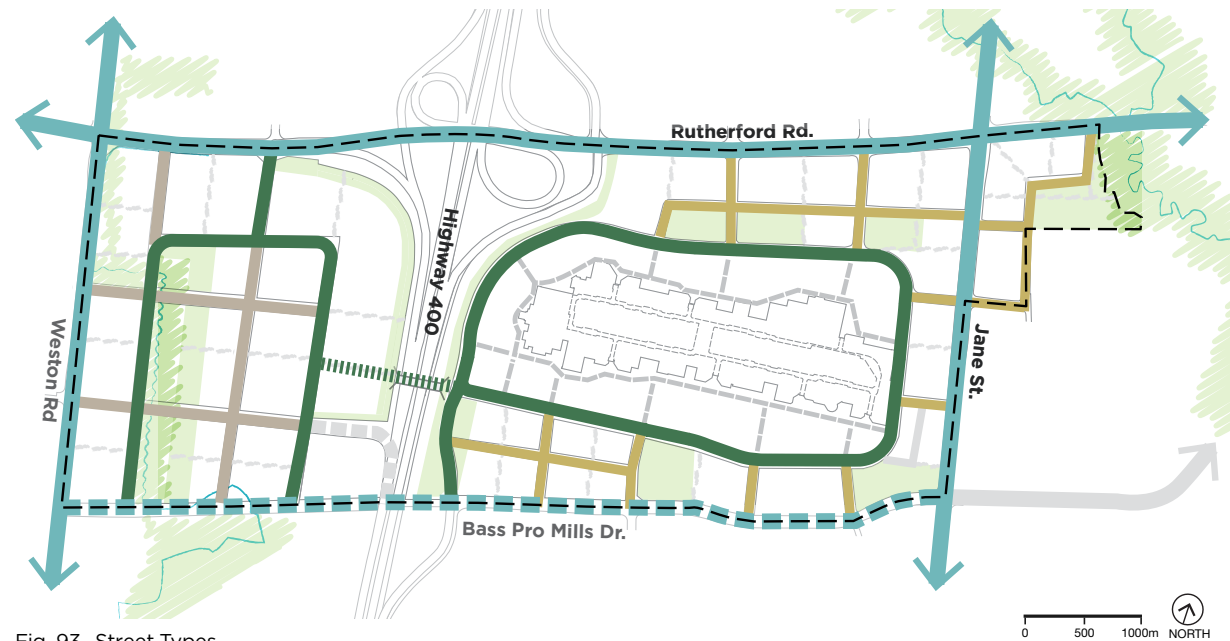


Fig. 93. Street Types

Subsidiary street types include Mid-Block Connections, Flex/Adaptive Streets and Mall Connections.

The street cross sections and that follow demonstrate the preferred typical street design with dimensioned metrics for the key elements. Refer to the Appendix for fully dimensioned cross sections.

- Green Frame Streets
- Green Frame Streets: Bass Pro Mills
- Emerald Necklaces
- Neighbourhood Connector
- Employment Streets
- Mid-Block Connections
- Pedestrian/Cycle Bridge
- Mall Connections

Green Frame Streets



Bass Pro Mills



Emerald Necklace



Employment Connector



Neighbourhood Connector



Mid-Block Connections



5.4. GREEN INFRASTRUCTURE STRATEGY

A range of potential Green Infrastructure (GI) elements are recommended for each street type based on available space, street function and adjacent uses.

Green Infrastructure projects are generally designed to complement grey infrastructure systems performing a combination of volume management, water quality improvement, and flood control. Greening and trees make the walking environment more inviting and pleasant by reducing temperature, attenuating noise, and improving air quality.

Guidelines:

- R69. Design and site Green Infrastructure with sensitivity to context, and implement with other geometric standards that reduce vehicle speed and improve visibility.
- R70. Seek complementary opportunities to integrate GI alongside safety, pedestrian access, or transit improvements. Aligning a GI retrofit with a mobility project is not only spatially efficient but can also unlock additional funding and resources.
- R71. Design Green Infrastructure with maintenance in mind. Maintenance personnel must be able to access and navigate equipment around green elements.
- R72. Include linear space within the ROW for snow storage.

Green Frame Streets

- ✓ Underground storage
- ✓ Oil-grit separators
- ✓ Stormwater tree trenches
- ✓ Enhanced urban tree canopy

Bass Pro Mills

- ✓ Bio-retention cells / stormwater planters (shorter/discontinuous)
- ✓ Stormwater tree trenches
- ✓ Soil cells
- ✓ Sub-surface ex-filtration system (where soil and groundwater conditions permit)
- ✓ Enhanced urban tree canopy

Emerald Necklaces

- ✓ Bio-retention cells / storm-water planters
- ✓ Curb extensions with bio-retention
- ✓ Stormwater tree trenches
- ✓ Soil cells
- ✓ Enhanced urban tree canopy

Neighbourhood Connectors

- ✓ As per Emerald Necklaces

Employment Streets

- ✓ As per Emerald Necklaces



Fig. 94. Soil cells.



Fig. 95. Increased urban tree canopy.

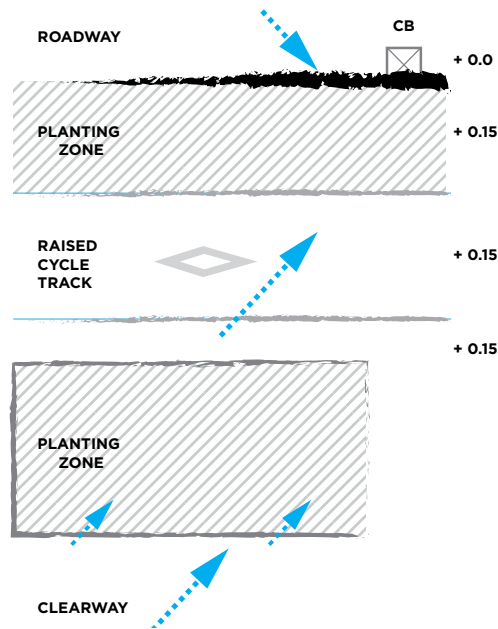


Fig. 96. Bio-retention / storm planters.

5.5. STORMWATER STRATEGY

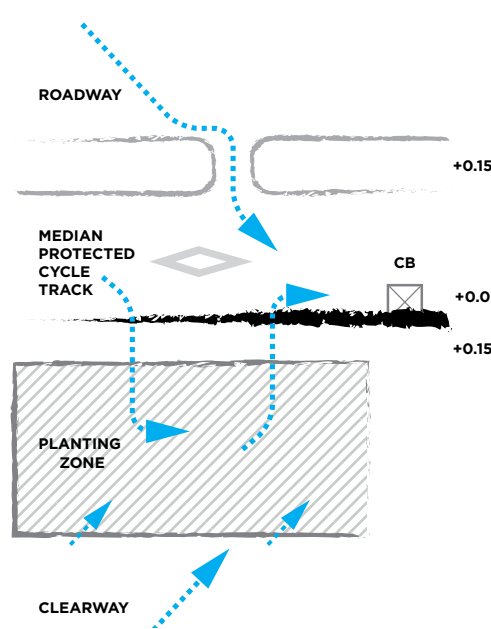
Stormwater collection and management through the application of Green Infrastructure and Low Impact Development facilities is a critical part of street design that will reinforce the Centre's landscape character and green identity. The three basic drainage concepts (below) apply to all streets in the

Centre. Each concept considers how the City of Vaughan currently manages stormwater and are further informed by best practices from other similar jurisdictions who, like Vaughan, need to demonstrate how they will satisfy Regional and Conservation Authority performance targets.



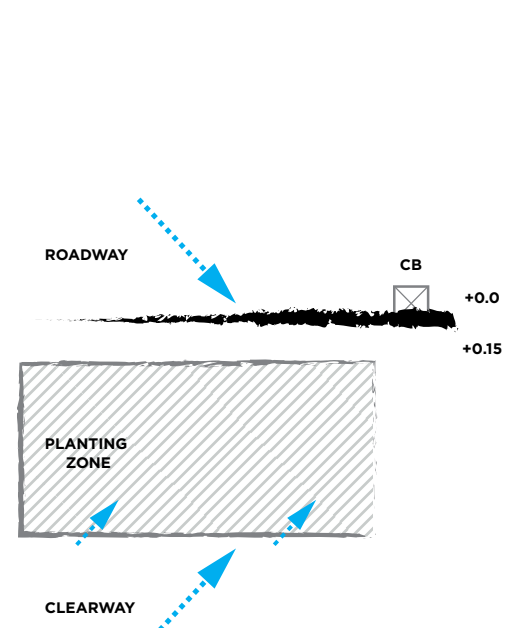
1/ Green Frame Streets (Regional)

Collect roadway surface runoff in catch basins.
Collect clearway surface runoff in planting zones with stormwater storage and infiltration below grade.



2/ Green Frame Streets (Bass Pro Mills and Emerald Necklace Streets)

Collect roadway and clearway surface runoff in open planters, which drain to catch basins. Include GI elements in open planters for storage, infiltration and filtering.



3/ Neighbourhood Connectors

Collect roadway runoff in catch basins. Collect clearway runoff planting zones and curb extensions. GI elements in open planters and curb extensions.

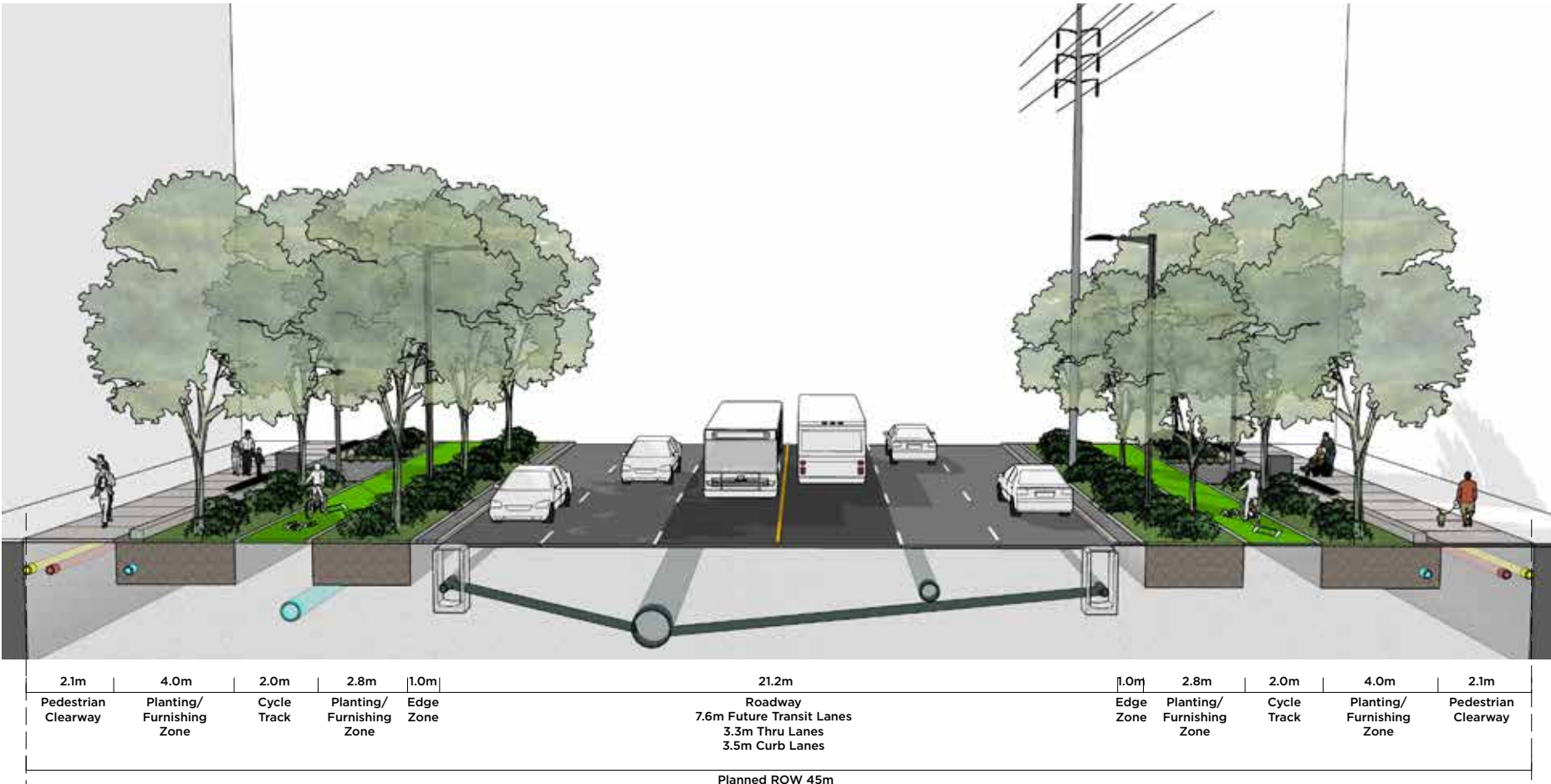
5.6. GREEN FRAME STREETS

Jane Street

Jane Street is a regional road and identified as a future BRT route in York Region’s Official Plan. It is the primary north/south Main Street for the Vaughan Mills Centre and identified as a Green Datum Street in the City-Wide Urban Design Guidelines.

The Jane Street cross section includes wide pedestrian clearways, consistent paving treatment, a double row of street trees in open planters and a range of seating opportunities. Generous setbacks provide opportunities for an additional row of trees and plantings within the private setback.

A central tree planted median can be considered as an interim condition until higher order is constructed. The Jane Street cross section is indicative and subject to detailed design.

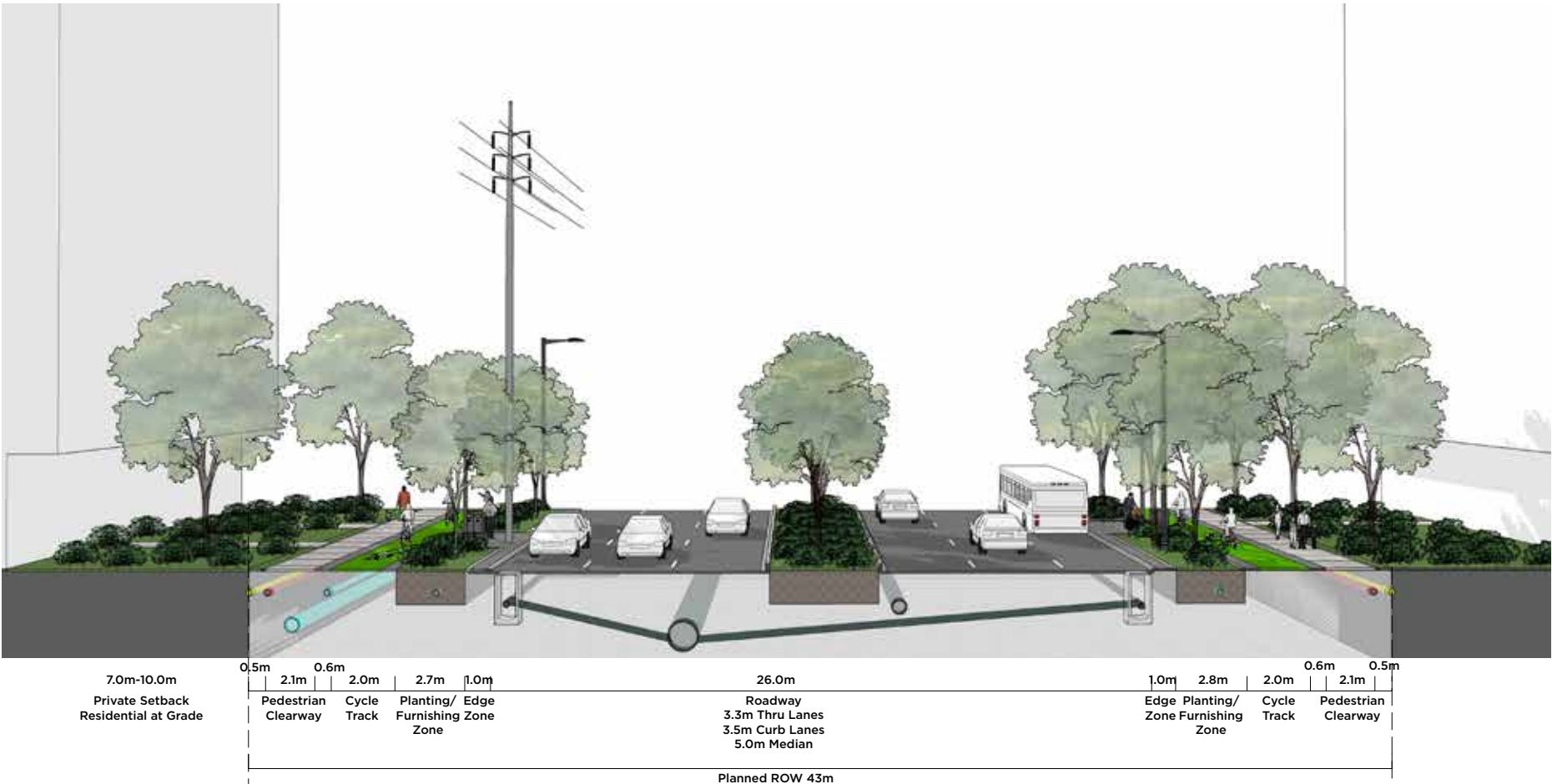


Rutherford Road

Rutherford Road is also a Regional Road and defined as a Green Datum Street in the City Wide UDG's. Rutherford Road has the opportunity to become a more green and gracious street, with street trees of a large size and number to moderate its large scale and high volume of vehicles.

The Rutherford Road cross section includes a central planted median and generous boulevards with a single row of street trees in open planters and single direction cycle tracks beside the pedestrian clearway. New buildings will be set back 7-10m from the right-of-way to provide generous boulevards for increasing greening and pedestrian activity.

The Rutherford Road cross section is indicative and subject to detailed design. The cycling facility is to be determined by the Region, in consultation with the City of Vaughan.

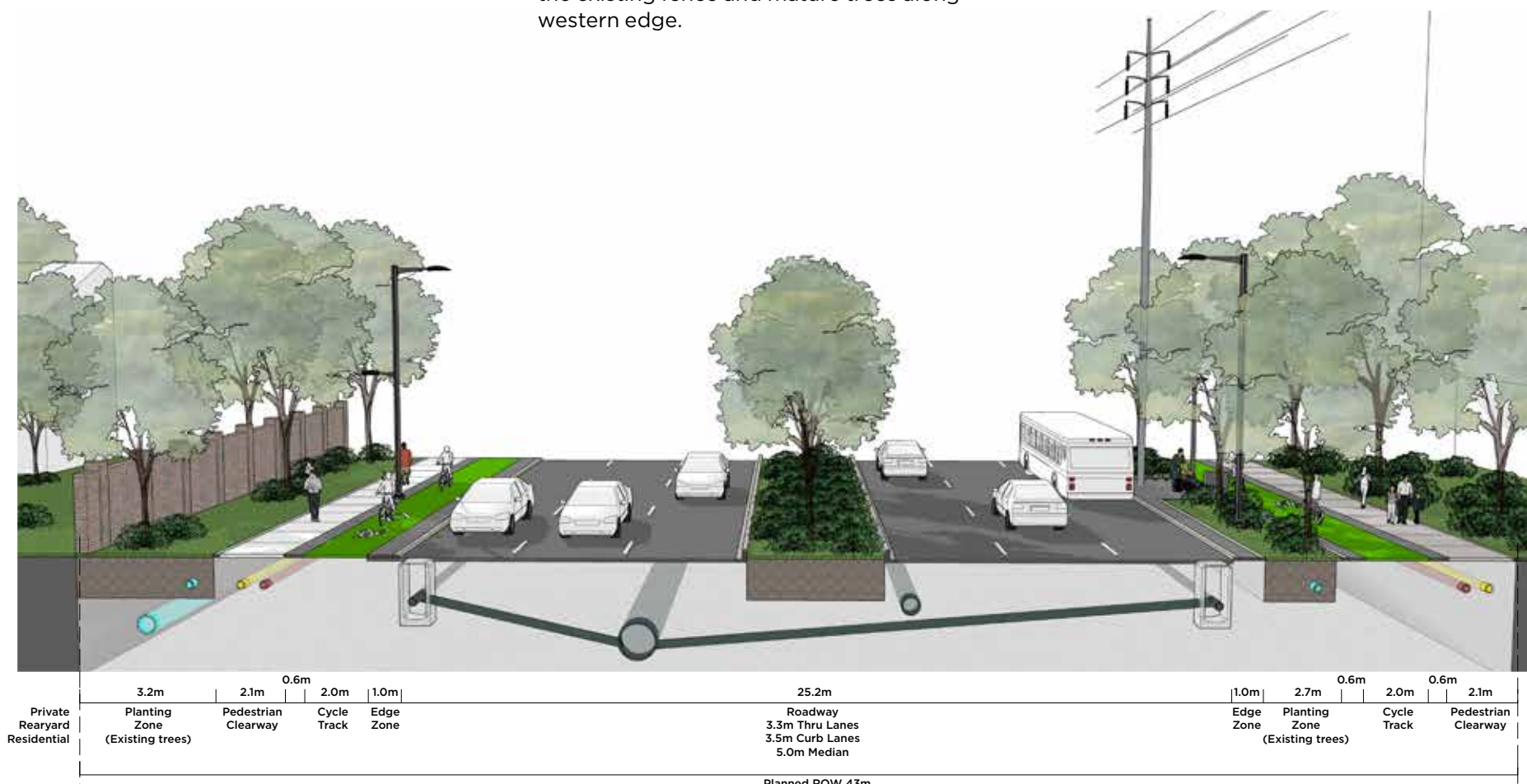


Weston Road

Weston Road will define a green and inviting western edge to the Employment District in Vaughan Mills Centre. It is also a Regional road and York Region will be undertaking detailed design to widen the road. As such, this cross section is indicative and subject to detailed design.

The Weston Road cross section includes a central planted median and generous boulevards with a single row of street trees in open planters and single direction cycle tracks beside the pedestrian clearway.

New buildings will be set back a 7-10m from the right-of-way to provide generous boulevards for increasing greening and pedestrian activity. The cross section retains the existing fence and mature trees along western edge.

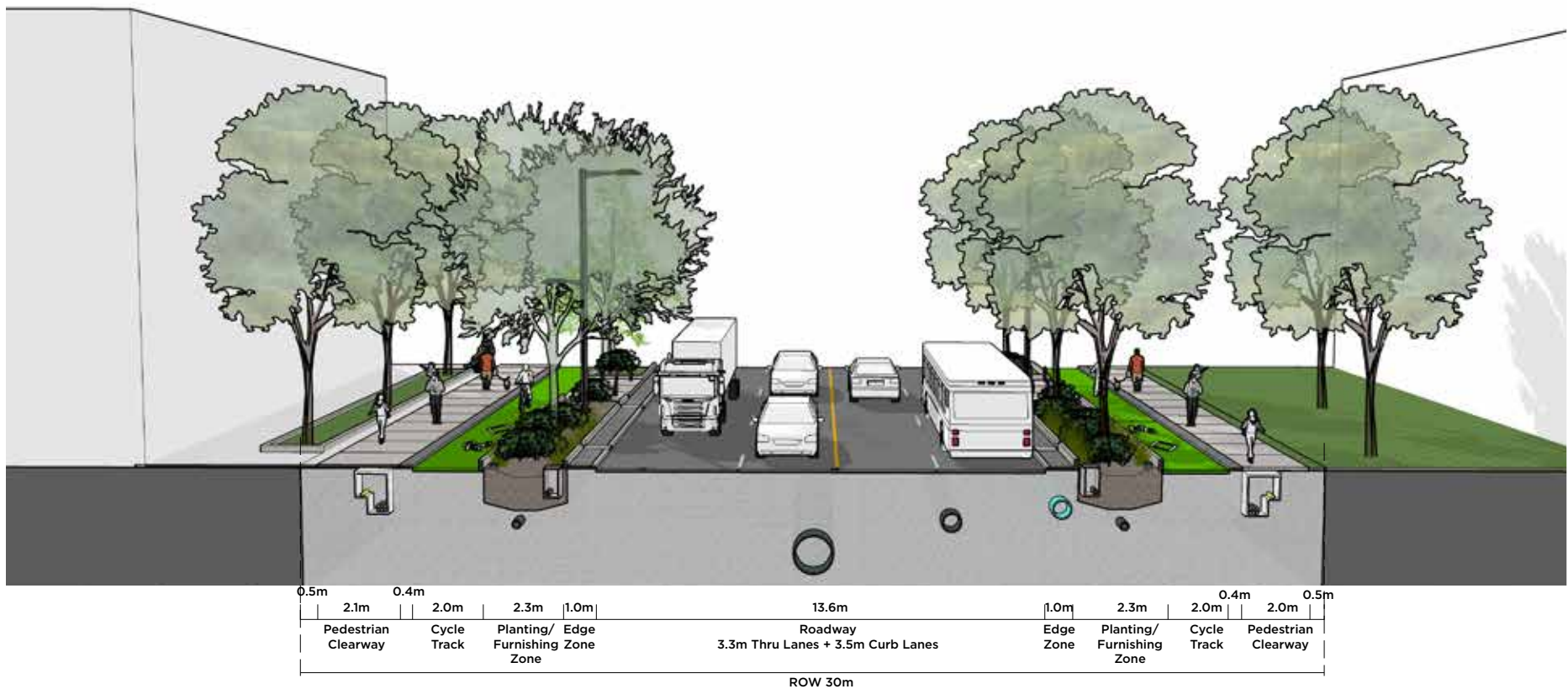


Bass Pro Mills

Bass Pro Mills, also a Green Frame Street, connects the Black Creek Common with the West Don River. Bass Pro Mills is identified as a Green Street in the Secondary Plan and is envisioned to having a strong green character and Green Infrastructure function.

The cross section envisions wide linear bio-retention planters and protected single direction cycle tracks beside and wide pedestrian clearways. Generous setbacks provide opportunities for an additional row of trees and plantings within the private setback.

A mixture of deciduous hardwood shade trees and native under-story planting is proposed within the planters to extend the entire length of the street and provide an ecological connection between the Black Creek Common and the West Don River. Bass Pro Mills detail design is subject to EA study.

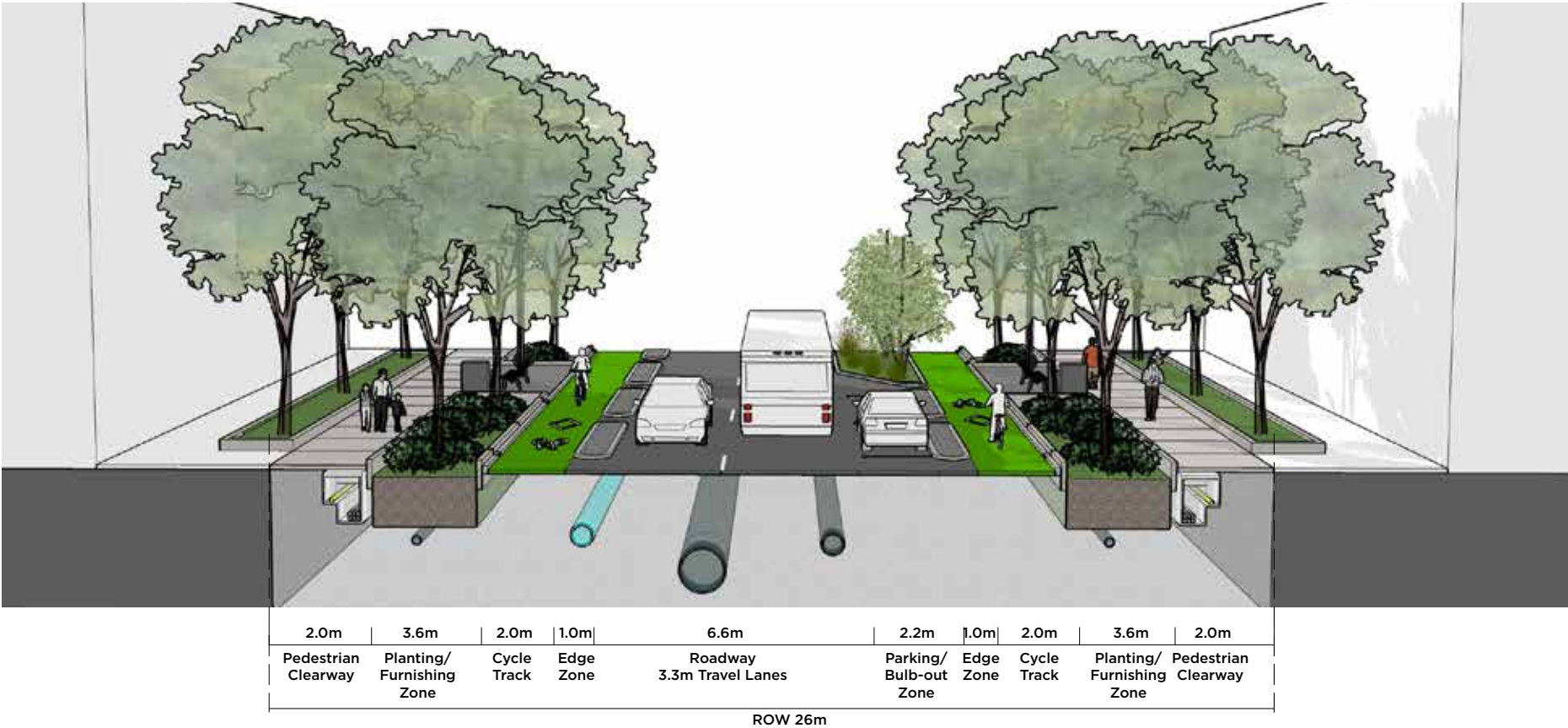


5.7. Emerald Necklace Streets

The Emerald Necklace Streets are minor collectors with a significant role in the overall Green Infrastructure strategy, linking important public places and parks and creating more intimate internal main streets. The cross section includes tree and shrub plantings in open pit bio-retention planters and cycle tracks at roadway level to accept and treat both roadway and boulevard surface water.

Given the proximity to Vaughan Mills Centre and Black Creek Common, special design consideration should include public art, outdoor spaces in front of shops, cafés and other outdoor seating opportunities to leverage connections with adjacent parks. Fishermen’s way detail design is subject to a Future Tertiary Plan for Vaughan Mills Mall.

A number of variations of the standard, in addition to those shown in this document, are also possible within the planned ROW and will be further explored through the tertiary plan process. See images to the right.



5.8. Emerald Necklace Streets: Variations

Variations of the Emerald Necklace standard are possible to respond to local context and varied conditions throughout Vaughan Mills Centre.

The 3 Lane Variant. A reduction in the planting zone allows for a central turning lane. Curbside activity such as parking would be on side streets.

Park Frontage Variant. In locations where Emerald Necklace streets are adjacent to urban parks, it is recommended that street trees are planted at the park edge within softscape areas at the back of the row to take advantage of additional soil volumes and better growing conditions.

Black Creek Common Variant. The cross section envisions an east side promenade with a bi-directional cycle track, linear bio-retention planter and wide pedestrian clearway to create a welcoming and green edge to the Common. A bidirectional facility is proposed along Black Creek Common as the Creek is a continuous open space with only two intersections and no development property, this caters to a safer cycling facility as oppose to uni-directional facility recommended by Pedestrian and Bike Master Plan.

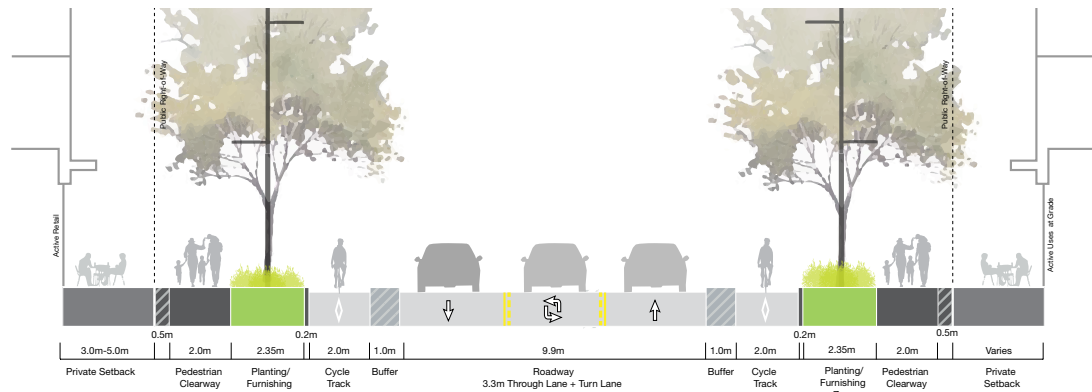


Fig. 97. 3 Lane Variant

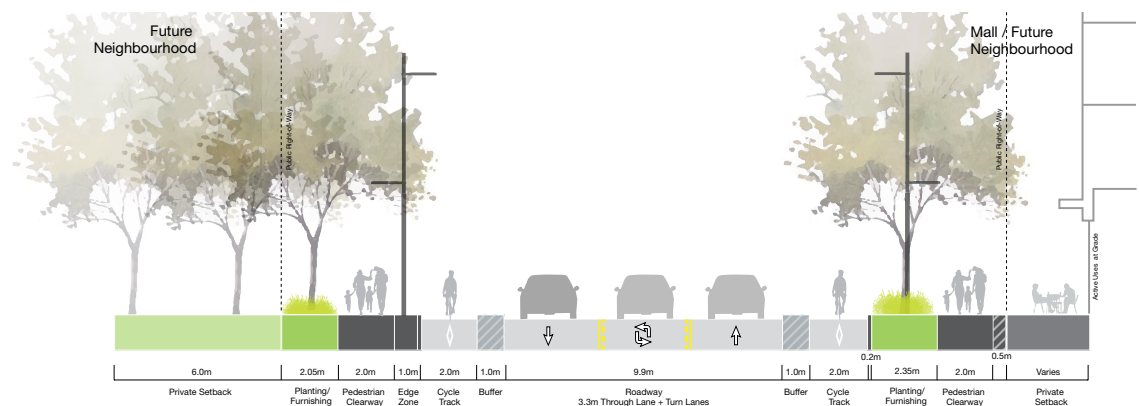


Fig. 98. Park Frontage Variant

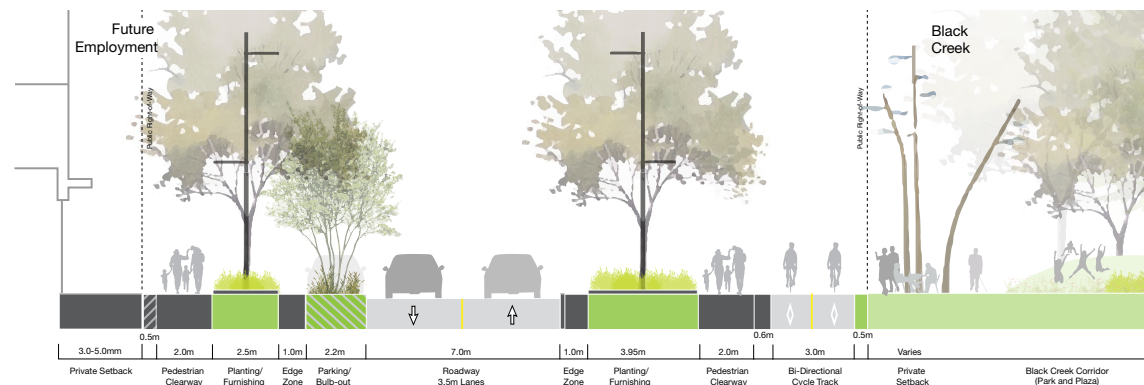


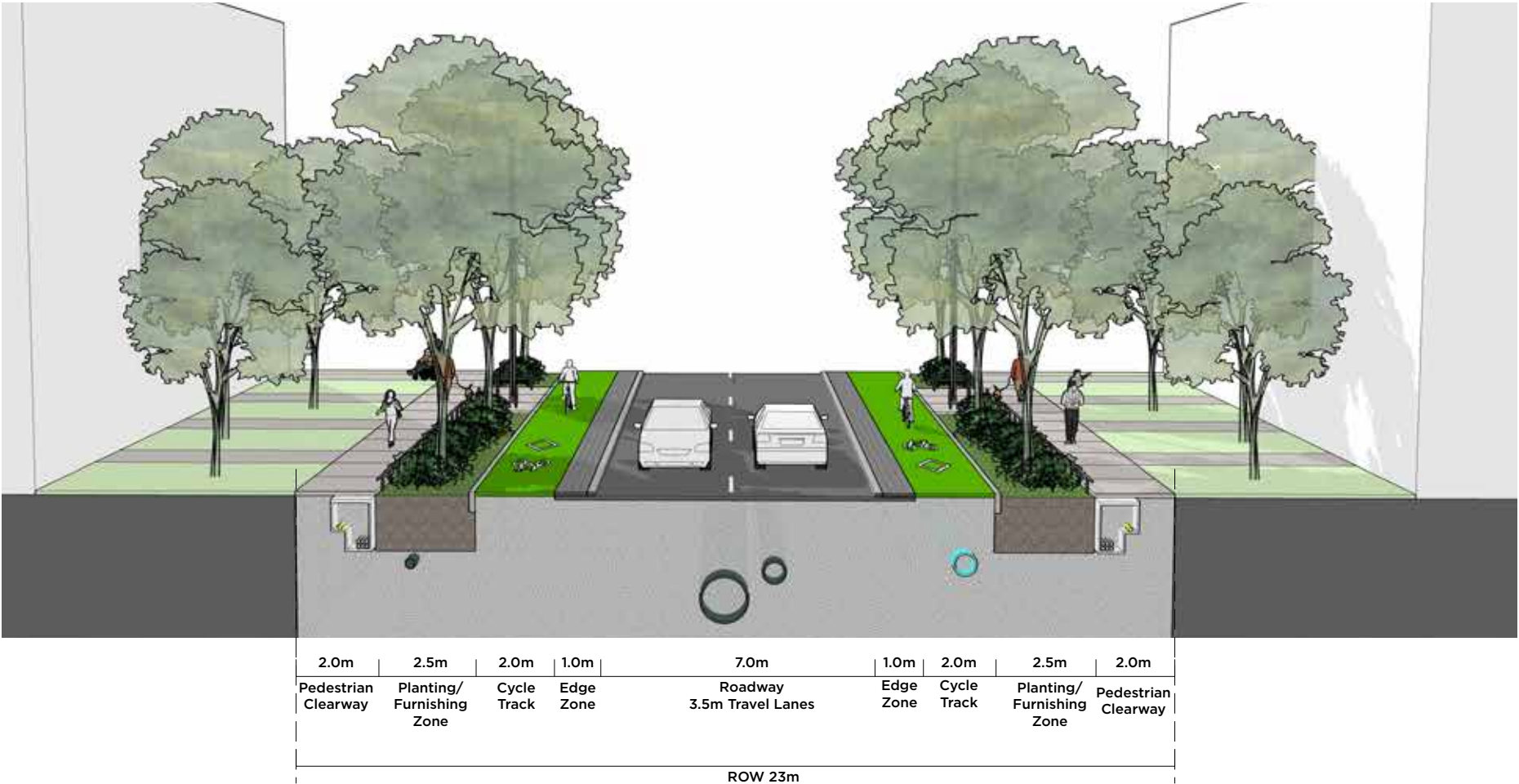
Fig. 99. Black Creek Common Variant

5.9. Neighbourhood Connectors

Neighbourhood Connectors accommodate vehicle movements with two travel lanes in both directions, and separated cycle tracks to support cycling in Vaughan Mills Centre and connect to the broader network.

A green furnishing and planting zone is located between the cycle track and pedestrian clearway. Between buildings and the public right-of-way are generous landscape setbacks to provide a green character to the street.

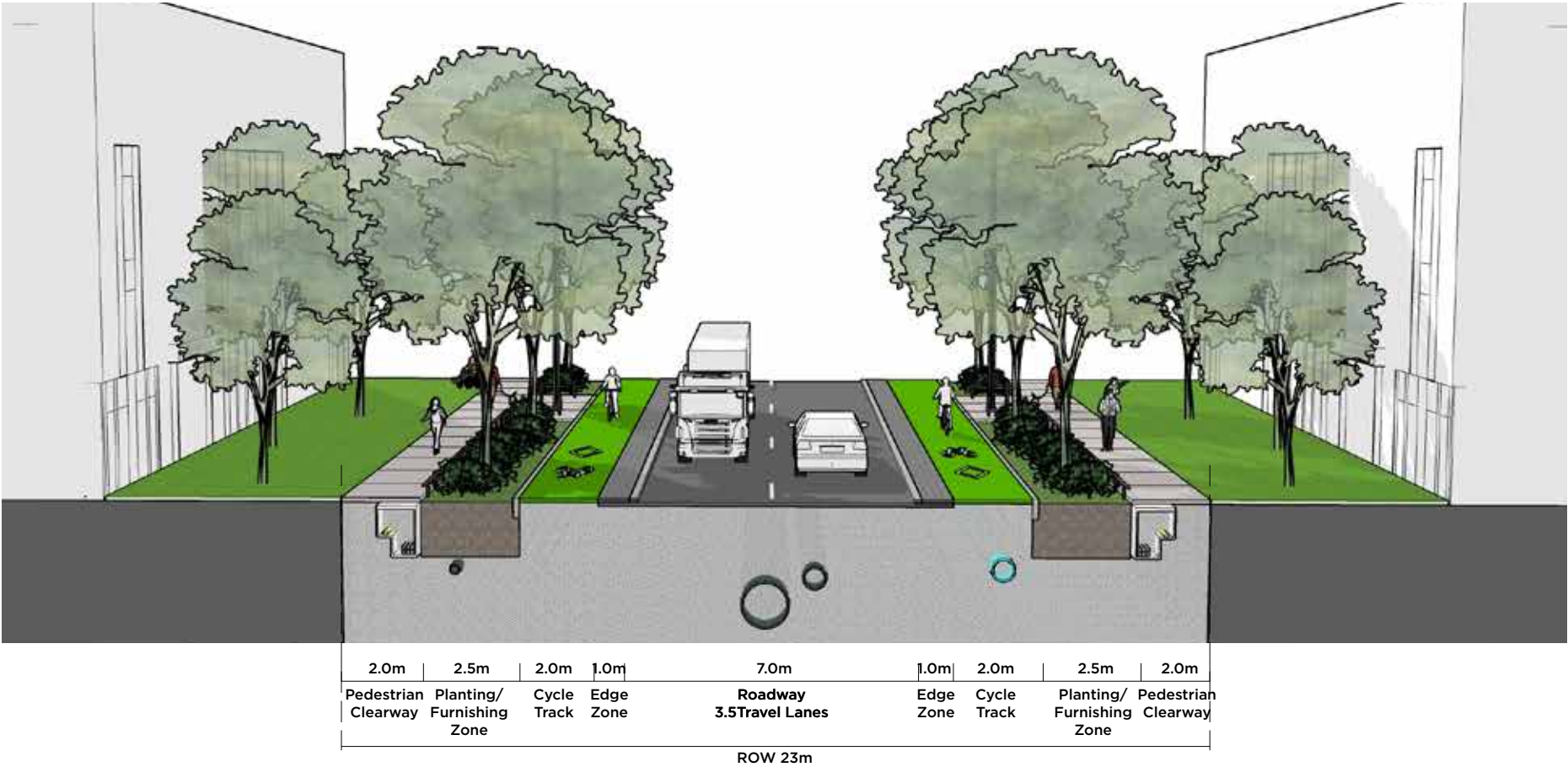
A number of variations of the standard, in addition to those shown in this document, are also possible within the planned ROW and will be further explored through the tertiary plan process.



5.10. Employment Connectors

Employment Collectors are minor collectors that provide primary people movement within the Business Park. The cross section is similar to the Neighbourhood Connectors, but with wider travel lanes to accommodate goods movement.

These streets typically have commercial mixed use buildings along their edges, which are setback from the street edge or parks along the edges.

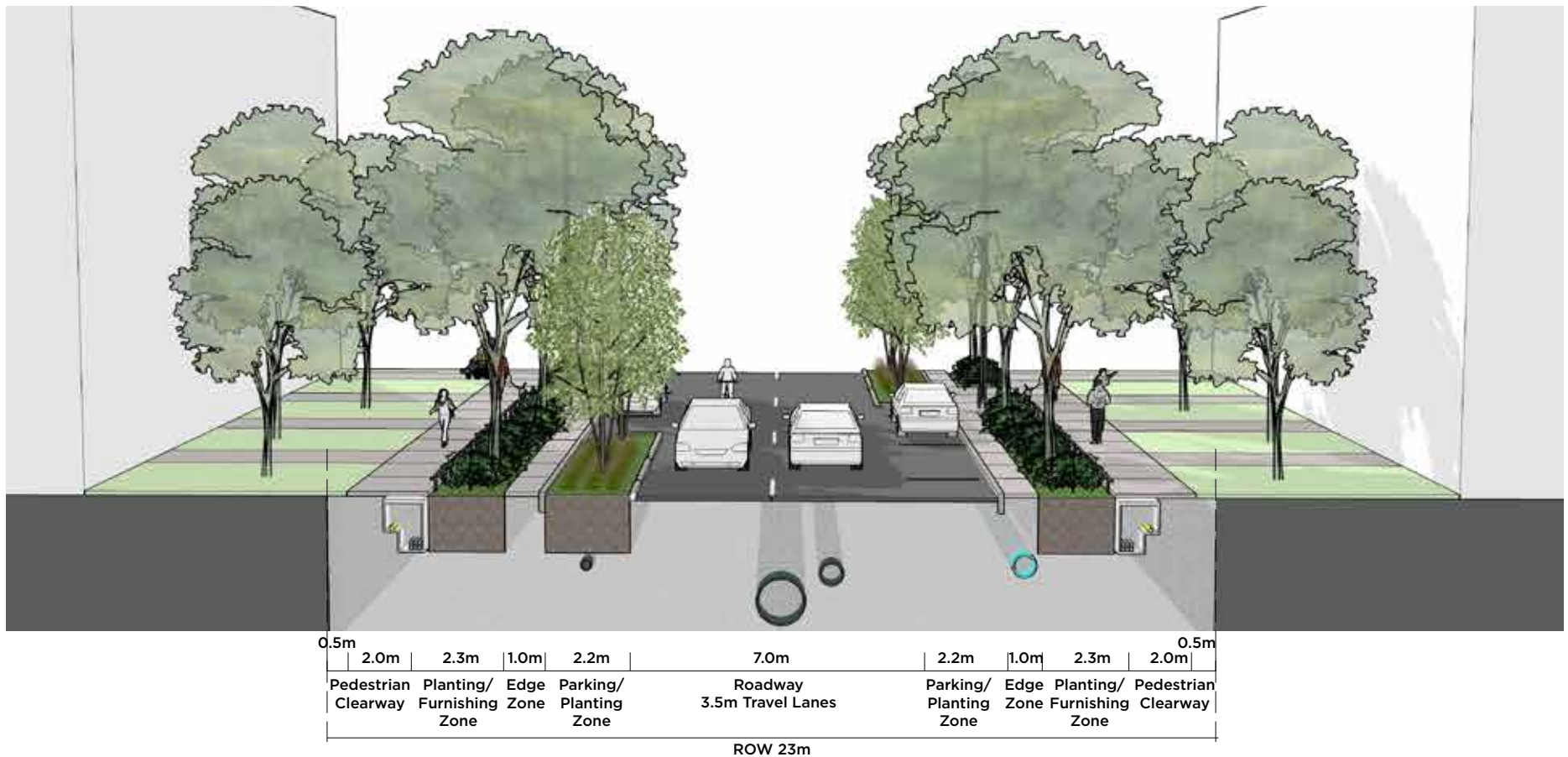


5.11. Local Streets

Local Streets will provide access from the Neighbourhood Connectors and Emerald Necklace Streets to residential, commercial, and employment uses. Vehicle traffic will be slower than on the other streets in Vaughan Mills Centre, and will support an enhanced pedestrian and cycling environment with additional greening.

Pedestrian and bicycle safety is priority on these streets and should feel safe, comfortable, and be places where you get to know your neighbours. Local Streets should include curb extensions and reduced turn radii at intersections to calm traffic, reduce pedestrian crossing distances and improve sight lines for all users.

Where parking is provided, elements such as curb extensions and bump-outs should be used to create visual and physical perception of a narrower roadway that is more conducive to slower speeds. Design and posted speed of 30 kph are recommended.



5.12. ADAPTABLE STREETS

Adaptable Streets are typically designed without raised curbs to define the travelway, with all parts of the street blended together as a single grade or surface. All modes of travel are welcome but move at extremely low speeds. Buildings are generally located close to the property line and clearly define the street edges. Adaptable Streets can support a variety of land uses, including commercial, entertainment, dining, and residences. Adaptable Streets can have a flexible design to support different uses and seasons. The location of Adaptable Streets within Vaughan Mills Centre is flexible, as such this typology is not identified on the illustrative map (page 68).

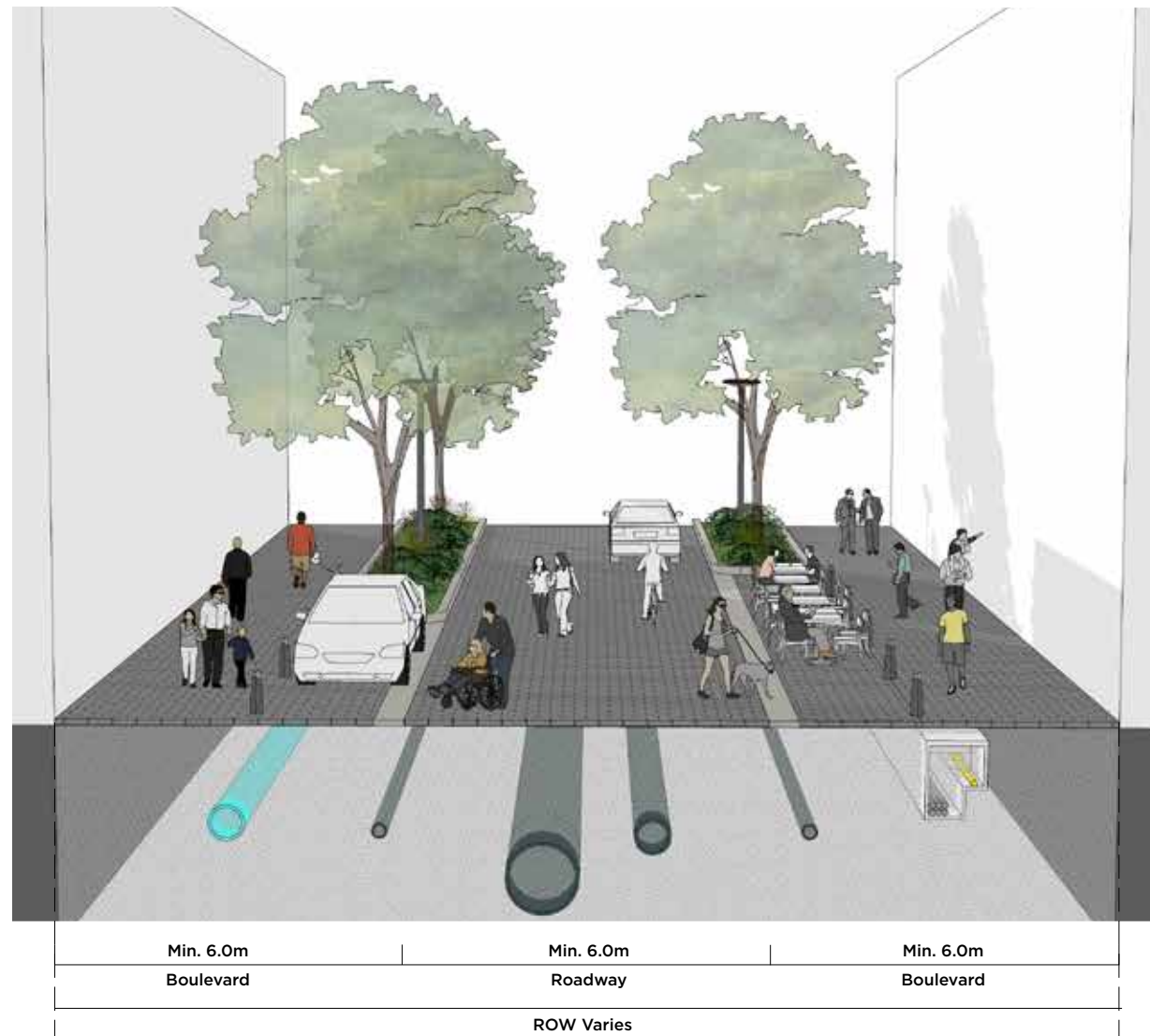




Fig. 100. The design of Adaptable Streets in Vaughan Mills Centre should emphasize their pedestrian scale and be designed for slow moving automobiles.



Fig. 102. Example of a street in Kleinburg where the parking lane is used for temporary stalls during the Kleinburg Binder Twine Festival.



Fig. 101. Adaptable Streets can provide places for weekend or temporary events and gatherings.



Fig. 103. Locate Adaptable Streets along short blocks. This enables the street to be closed for temporary events such as markets, street parties, or winter festivals.

5.13. MID-BLOCK CONNECTIONS

Mid-Block Connections are a key linking element of the broader open space and street network, and essential to achieving a porous and well-connected neighbourhood that supports all modes of transportation. Generally located between buildings, Mid-block Connections help to break up larger blocks, and provide more direct routes between key locations within Vaughan Mills Centre. Mid-Block Connections are generally experienced while in transition as users move through the site, or for short periods of rest and respite. While typically not programmed, Mid-Block Connections should be well animated through spill-out uses, active building elements, lighting, and small-scale gathering and seating areas.

5.14. MALL CONNECTIONS

Mall Connections are existing pedestrian routes, pathways or sidewalks through the Vaughan Mills Mall parking area. The design of future streets or Mid-Block Connections within the Mall property is subject to a Tertiary Plan.





Fig. 104. Mid-Block Connection example: mixed-use retail area.



Fig. 105. Mid-Block Connection example: residential area.



Fig. 106. Mid-block Connections increase the ease and efficiency of pedestrian and cyclist movement, while creating interesting and unique linear spaces.

5.15. BOULEVARDS

The boulevard includes the area between the curb edge and the face of a building. In Vaughan Mills Centre, boulevards are a key element of the public realm and an important extension of the open space network, providing vibrant spaces for residents, employees and visitors to gather and socialize.

All new streets within Vaughan Mills should reinforce wide, well-landscaped and pedestrian-supportive boulevards characterized by active at-grade uses, spill-out retail, street trees and landscaping, pedestrian furniture and public art. The design of boulevards should reflect the adjacent land use. For example, where at-grade retail is provided, the width and design of the boulevard should accommodate opportunities for spill-out retail.

Design the boulevard to include the following elements:

The Clear Zone should generally be located at the property line and be a minimum of 2.0m (2.1m on Regional Streets) on both sides of the street. The Clear Zone accommodates unencumbered pedestrian movement at all times.

Setbacks are located between the Clear Zone and the building face. A setback may be provided to accommodate active, at-grade uses, such as spill out retail or residential front-yards.

The Furniture and Planting Strip will generally be provided between the curb and the Cycle Track or Edge Zone and accommodate landscaping, street furniture and street lighting. The Furnishing and Planting Strip provides space to create optimal growing conditions for street trees. Where appropriate (i.e. along Emerald Necklace Street or within bump-outs on Local Streets), the Furniture and Planting Strip may be replaced with a bioswale.

The Edge Zone is a 1000mm edge zone behind the curb between the roadway and the Planting and Furnishing Zone. This zone plays an important role in road maintenance, especially for snow storage in winter and acts as a buffer between the roadway and the boulevard or cycle track.

A 500mm buffer is required at the back of sidewalk within the public right-of-way. The surfacing treatment of the buffer should be considered in conjunction with the design of the setback and can be hardscape or softscape.

Each of the following demonstrations illustrate the draft recommended Green Infrastructure elements, active transportation elements, materials palette, and planting edge details.

Jane Street

+/-12m boulevard / Green Frame Street /
Regional Street / Arterial / Mixed Use and
Residential Frontages



Fig. 107. Jane Street
boulevard example.



Fig. 108. Jane Street
boulevard example.

Rutherford Road

+/-8m Boulevard / Green Frame Street /
Regional Street/ Arterial /Mixed Use and Residential Frontage



Fig. 109. Rutherford Road
boulevard example.



Fig. 110. Rutherford Road
boulevard example.

Emerald Necklace

+/-5.5m Boulevard / Municipal Streets Fishermens Way and Black Creek Common / Mixed Use, Park and Employment Frontages



Fig. 111. Emerald Necklace boulevard example.



Fig. 112. Emerald Necklace boulevard example.

Local Street

+/-5.5m Boulevard / Municipal Streets / Local Streets and Minor Collectors / Primarily Residential Frontages



Fig. 113. Local Street boulevard example.



Fig. 114. Local Street boulevard example.



CHAPTER 6: **MATERIALS**

The recommended Materials Palette is an elegant family of robust materials and street furnishings.

6.1. MATERIALS PALETTE

The Materials Palette is applicable across Vaughan Mills Centre. It builds on projects already completed or underway in Vaughan to combine a simple and elegant palette of pavers in clearways and paths and a standard street furniture palette in a standard colour. A combination of materials is likely throughout the Centre with higher quality materials associated with the key destinations and more basic materials for the other streets.

The design of the public realm is a key tool in ensuring Vaughan Mills Centre is well adapted to climate change. Long-term sustainability in material specification is critical to ensure carbon saving and the efficient use of resources.

6.2. PAVING MATERIALS

The surfaces of public spaces and streets should aid navigation through consistent materials, patterns, and level of finish, and contribute to the quality of place. A consistent theme or variation of a themes will assist in defining an identifiable image of the place and support a continuous and consistent experience for pedestrians.

Paving materials for streetscape projects are limited to combinations of poured in place concrete and precast concrete unit pavers. Poured in place concrete with saw-cut joints is specified for Furnishing and Planting Zone and Clearways within Local Streets and

Minor Collectors. Mid-to-dark grey concrete unit pavers have a modular benefit and are recommended for the Furnishing and Edge Zones within the Emerald Necklace Streets and Green Frame Streets.

Paving materials for park projects are limited to poured in place concrete with saw-cut joints and/or precast concrete unit pavers. Secondary paths such as perimeter walking paths, or paths through planting beds, natural settings or playing fields can be in asphalt or other approved accessible materials.

Focal points such as meeting places, focal points and entrance plazas can use feature paving.

Guidelines

R73. Select materials and finishes from the Vaughan Mills Centre Materials Matrix to contribute to a consistent public realm character. Consider using special materials such as precast concrete unit paving patterns or sand blasting patterns on poured in place concrete to mark special locations such as entrances and gathering areas.

R74. Select paving materials that are stable, consistent and slip resistant and support universal accessibility.

R75. Select materials that are robust, durable, and readily available to minimize maintenance and facilitate repair and replacement over time.

R76. Consider permeable materials where appropriate and where proper maintenance is possible.

R77. Reduce heat island effect caused by hard surfaces by aiming to reduce the amount of paved impervious surfaces, and the introduction of permeable paving materials in the furnishing and planting zone (streets), parking lots and plazas to cool surface and subsurface temperatures through evaporate-transpiration.

R78. Give preference to pavement materials that have a high albedo and solar reflectance to reduce surface and subsurface temperatures.

R79. Multi-use trails should conform to City Standard materials and finishes to ensure a cohesive character over the full length of the trail.



Fig. 115. Focal points, such as park entrances and plazas, can use feature paving to highlight special places within the urban fabric. Feature paving can include variations in unit sizes, patterns or colours.

6.3. STREET FURNITURE AND LIGHTING

Street furniture includes seating and benches, raised planters, and waste receptacles, as well as any other amenities that provide a specific service and/or function to the public and complement outdoor spaces, rights-of-way, and accessible routes. The quality of street furniture and the precision of its placement is a simple and immediate means of enhancing the public realm. Street furniture throughout Vaughan Mills Centre should present a contemporary design that is part of a 'family' to give overall continuity while allowing some local variations to reflect the different character areas.

Benches

The Landscape Forms Generation 50 bench is recommended for Vaughan Mills Centre. This bench provides a range of armrest, backrest and size options to adapt it to specific locations or program requirements. Various configurations of the standard basic bench or combinations with other more custom designs are recommended.

Tree Surrounds

Tree surrounds vary based on street type and Green Infrastructure function. Open planters with raised curbs are possible on boulevards wider than 4.5m to provide a more beneficial opening for air and water exchange, and help to reduce the cost of structural elements. Trees with 1.2-1.4m openings are recommended for boulevards less than 4.5m. Achieve a minimum clearway (2.0m) and edge zone (1.0m).

Local Streets and Connectors include a simple and elegant toe rail detail to permit surface water to enter and restrict pedestrian access.

Emerald Necklace Streets include low curbs with inlets to allow for passive irrigation from the clearways. Additional inlets at roadside permit surface runoff into the planters as well. In moments of excessive volume any water that cannot infiltrate into the soil beneath can escape the planters into a conventional catch basin at curbside.

Green Frame Streets include planter edges with an integrated wooden bench parallel to the clearway. This arrangement considers the mixed use nature of adjacent development and the higher pedestrian traffic volume these major streets.

Lighting

Light fittings, poles, and building mounted lights should be LED, represent a 'family range' and offer coordinated fixtures for roadway and pedestrian level options. Road View lighting by Lumec is recommended for streets to complement and coordinate with lighting fixtures used along Bass Pro Mills. Philips/ Lumec Lighting Gardco Pureform Series is recommended for pedestrian areas such as Urban Parks and Greenways.

Guidelines

- R80. Street furniture should be included throughout Vaughan Mills Centre with a specific focus on high traffic pedestrian areas, such as streets, Urban Parks and Greenways.
- R81. Locate street furniture to align with pathways, but clear of the Clear Zone or main routes through open spaces.
- R82. Street furniture should not obstruct vehicular movement, or impact sidewalk maintenance and snow removal.
- R83. Where raised planters are provided, they should serve a dual purpose and be designed to accommodate seating areas.
- R84. Select street furniture to meet the functional needs of the widest range of users. Benches should have both arms and back support to facilitate sitting, resting and rising from the bench, particularly for older persons, persons with disabilities, and children.
- R85. Provide some benches without arms rests to accommodate families or groups that wish to sit side-by-side.

6.4. PLANTING

Planting should support the naturally occurring and adapted ecosystems of the area. Select species for their contributing value to the function of the landscape and to support year-round use of the spaces by humans and animals.

Within Vaughan Mills Centre, formal and informal open spaces will necessitate unique approaches to planting design. Planting can provide increased greening, increase the urban tree canopy, enhance streets, complement architecture and emphasize important views and focal points. All streets and major open spaces should consider opportunities to maximize planting areas and reduce paved surfaces to enhance the overall function and integration of the landscapes.

Within parks, give priority to clustered planting. Avoid narrow or enclosed planting areas. Where spaces are located above a structure, provide enough soil above the structure to maintain grade relationship (as opposed to raise planters) and provide large planting areas that support continuous landscape networks throughout the Centre.

Within streets, consider opportunities to cluster tree planting into open planting beds

to support layered and diverse planting as well as provide opportunities for stormwater infiltration.

Planting design along streets and circulation routes should support safe movement of humans and animals between spaces. Planting within public property and along public rights-of-way will conform to city standards.

Guidelines

R86. For park projects prioritize use of species that are low maintenance, hardy, naturally occurring (or adapted) and provide critical value to the overall function of the landscape (i.e. edible, nitrogen-fixing, habitat, etc.).

R87. All new tree planting is subject to confirmation of underground utility locations and other obstructions.

R88. Target 30% canopy cover for Vaughan Mills Centre. The large size urban parks and environmental open spaces provide big opportunities for robust tree growth.

R89. Cluster trees within major open spaces and groupings with understorey planting in open planters to maximize ecological function of planted areas.

R90. Avoid single trees planted in an urban condition with grates and surrounded by paving.

R91. Use plant colour and texture to highlight important locations such as entrances, meeting areas or visual termini. This applies to both parks and streets.

R92. Provide appropriate tree spacing and ample uncompacted, high-quality well-draining planting medium, 20-30m³ per tree. The use of soil cells is encouraged where continuous trench details or minimum soil volume cannot be achieved.

R93. Lawns and meadow areas within major open spaces should use native and adapted plants that reduce demand for irrigation and mowing.

R94. For City streets select shrubs and groundcover from Table E2-E4 (Salt and Drought Tolerant species list in the Vaughan City-Wide Streetscape Implementation Manual. Ensure proper soil flushing every spring prior to bud break.

R95. For City streets select street trees and plants in accordance with City of Vaughan Tree and Plant. Refer to the Appendix of the Vaughan City-Wide Streetscape Implementation Manual.

R96. Provide street tree diversity. Use no more than 10% single species, 20% genus, 30% family along a street.

R97. For Regional streets select street trees and plants in accordance with the Regions approved species list. Design tree pits and planting details in accordance with Region of York Standards. Refer to the Appendix of the Vaughan City-Wide Streetscape Implementation Manual.



Fig. 116. Use plant colour and texture to highlight important locations.



Fig. 117. Buffers at the edges of a street or park assist in protecting users from the elements.



Fig. 118. Street trees should have appropriate spacing and soil volume.



Fig. 119. Raised planter edges help protect street trees from salt splash.

6.5. STORMWATER PLANTERS

PLANT MATERIAL

Grasses	Flowering Perennials / Pollinators	Flowering Shrubs
Palm Sedge Grasses (<i>Carex muskingumensis</i>)	Summersweet "Ruby spice" or "Sixteen Candles" (<i>Clethra alnifolia</i>)	Abbotswood Cinquefoil (<i>Potentilla fruticosa</i>)
Tufted Hairgrass (<i>Deschampsia cespitosa</i>)	New England aster (<i>Symphotrichum novae-angliae</i>)	Burning Bush (<i>Euonymus alatus</i>)
Switchgrass (<i>Panicum virgatum</i>)	Blue Vervain (<i>Verbena hastata</i>)	Rose of Sharon (<i>Hibiscus syriacus</i>)
Karl Foerster (Feather reed Grass)	Russian Sage (<i>Perovskia atriplicifolia</i>)	Winterberry Holly (<i>Ilex verticillata</i>)
Indian Grass (<i>Sorghastrum nutans</i>)	Coneflower (<i>Echinacea</i>)	Meadowsweet (<i>spirea alba</i>)
	Black eyed Susan (<i>Rudbeckia</i>)	False Spirea (<i>Astilbe</i>)
	Lavender (<i>Lavendula angustifolia</i>)	
	Common Yarrow (<i>Achillea millefolium</i>)	
	Sea Thrift (<i>Armeria maritima</i>)	
	Coral Bells (<i>Heuchera</i>)	
	Sage (<i>Salvia</i>)	
	Catmint (<i>Nepeta</i>)	
	False Indigo (<i>Baptisia</i>)	



Fig. 120. Select plants so that as they mature and evolves it increasingly emulates the functionality of ecological systems with regard to density, biodiversity, plant succession, water use, and nutrient needs.

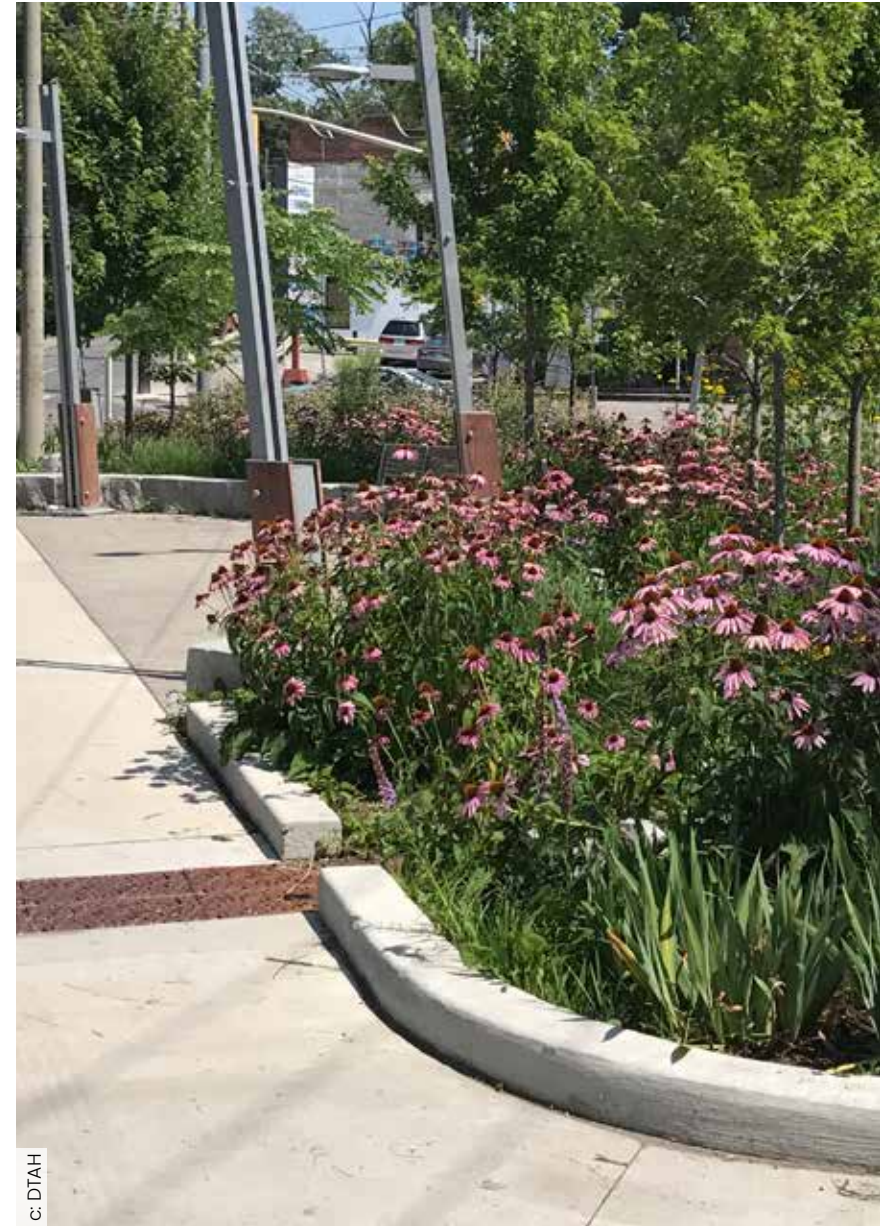


Fig. 121. Bioretention parkette example.

6.6. MATERIALS MATRIX

Paving and Surfacing Materials					Street Furniture
Location	Pedestrian Clearway	Furnishing and Planting Strip (F+P)	Curbs	Tree Surrounds	Seating, Litter Bins, Cycle Stands
Local Street	Cast-in-place concrete (CIP) with patterned sawcuts	CIP concrete with patterned sawcuts	Raised CIP concrete or pre-cast (PC) concrete	Open planter toe-rail, weathering steel: custom fabrication	Landscape Forms G50 or similar approved.
Neighbourhood Connector					Free standing: four legs, backrest, angle arm rests, storm cloud finish or similar approved.
Employment Connector					
Emerald Necklace		Pre-cast concrete unit pavers:	Raised CIP concrete with curb cut inlets and weathering steel drainage grating	Infiltration planters: 150 x 150 CIP concrete with weathering steel curb inlet gratings. Gratings: Ground Swell, by Iron Age Designs or similar	Mounted on planter: backless, storm cloud finish.
Green Frame: Bass Pro Mills		Unilock Promenade Paver, or similar approved. 100 x 300 x 100mm Steel Grey Blend			Cycle stand: Maglin Iconic, or similar approved. Matte gunmetal finish
Green Frame: Region		Permeable paving encouraged depending on ground conditions). Unilock Eco-Prioria, or similar approved. 120 x 240 x 80mm Steel Grey Blend	Raised CIP or PC concrete	150 x 250 CIP broad concrete. 500 x 500 CIP with integrated wood seating at focal points.	Recycling unit: Maglin 1400 - 3 Stream or similar approved. Matte gunmetal finish.
Adaptable/Flex Street	Special paving or unit paving to shared/pedestrian priority areas		Rolled curbs, flush curbs or combinations with drainage channels		
Urban Parks	Primary paths and entrances: concrete with patterned sawcuts or unit pavers as per F+P Secondary paths: asphalt or other approved.				
Greenways	Paths: asphalt Entrances: Pre-cast concrete unit pavers (as per F+P) or CIP concrete with patterned sawcuts				



c: Landscape forms

Fig. 122. Landscape Forms G50 timber bench: free standing with back and arm rests, free standing backless and wall mounted.

c: Iron Age Designs
Designs

Fig. 127. Iron Age Designs Ground Swell drainage grate for side inlets.



c: Google

Fig. 123. Poured in place concrete with sawcut jointing.



c: Unilock

Fig. 124. Unilock Promenade Paver 100 x 300 x 100mm Steel Grey Blend (Furnishing and Planting Zone).



c: Maglin

Fig. 128. Maglin Iconic cycle stand.



c: unknown

Fig. 125. Low steel toe rail tree surround (Local Streets and Connectors).



c: unknown

Fig. 126. Open bio-retention storm water planter (Emerald Necklace Streets).



Fig. 129. Maglin 1400 - 3 Stream Recycling Unit, matte gunmetal finish. (C. Maglin).



CHAPTER 7: **DEMONSTRATION PLAN**

The Demonstration Plan illustrates one possible outcome for how Vaughan Mills Centre could develop by following the intentions and recommendations of this document.



Rutherford Rd.

Weston Rd.

Highway 400

Black Creek

Bass Pro Mills Dr.

Edgeley Blvd.

7.1. DEMONSTRATION PLAN

The Demonstration Plan illustrates one possible outcome if the principles and recommendations are applied to a full build-out condition in Vaughan Mills Centre.

The Demonstration Plan is not a Master Plan. It is presented for illustrative purposes only and not the only potential outcome of the recommendations, which give flexibility for a number of approaches. In addition to the Demonstration Plan are four renderings to illustrate the potential public realm character that is possible by following the recommendations.





7.2. BLACK CREEK COMMON

A conceptual rendering illustrating an entrance into the Common.

A generous public boulevard with active transportation facilities, open pit bio-retention planters with native planting and seating defines the western edge of the Common. Surface water is collected in the planting areas within green infrastructure elements along the street edge.





7.3. FISHERMENS WAY

A conceptual rendering illustrating an elevation of Fishermens Way.

Fishermens Way plays a significant role in the overall green infrastructure strategy, linking important public places and parks and creating more intimate internal main streets.

The illustration shows the hard wood planting palette in open pit bio-retention planters, cycle track and seating opportunities within the furnishing and planting zone.





7.4. URBAN PARK

A conceptual rendering illustrating a new urban park within the Jane and Rutherford Node.

New parks and pedestrian links connecting from the intersection should reflect this important community hub and transit interchange. Urban Parks within Vaughan Mills Centre accommodate a mix of active and passive programming, and will become a destination for local events and activities.





7.5. POPS

A conceptual rendering of a privately owned public space (POPS) courtyard.

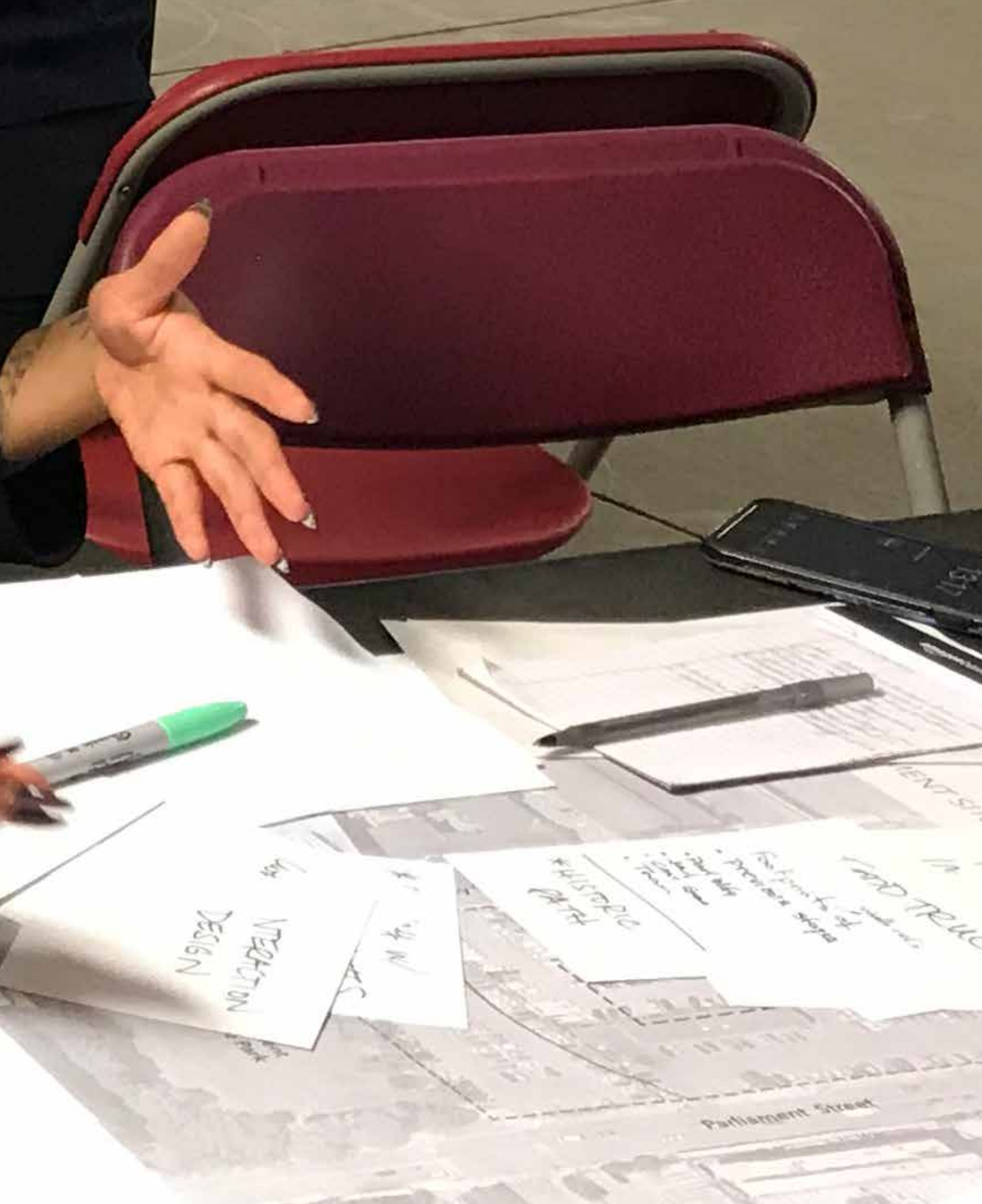
The edges of the courtyard are animated with active ground floor commercial uses and a high degree of transparency. The courtyard provides a balance of soft and hard landscaping, a variety of seating options and clear open sightlines to the adjacent street.





CHAPTER 8: IMPLEMENTATION AND PHASING

The transformation of Vaughan Mills Centre's public realm and streetscape will take place over several years and require coordination with and cooperation between multiple departments, agencies, landowners and other stakeholders.



The scale of Vaughan Mills Centre is expansive with multiple property owners; the number of future projects and initiatives is many. The City will deliver and secure new parks and streets over many years, through a range of sources and often with multiple partners.

The build-out of the public realm and streets will occur incrementally with a logical implementation process where each step builds upon those before it. The City must push forward initiatives already underway and leverage the momentum from these to initiate new actions.

Projects may change and/or new opportunities may occur, but if the principles and the framework recommendations are met, the introduction of a high-quality public realm in Vaughan Mills Centre will progress in a coordinated manner.

This Phasing and Implementation Strategy builds upon the Vaughan Mills Centre Secondary Plan, the City-Wide Streetscape Implementation Manual and Financial Strategy and other key reports that speak to the quality and the character of the parks and streets in Vaughan Mills.

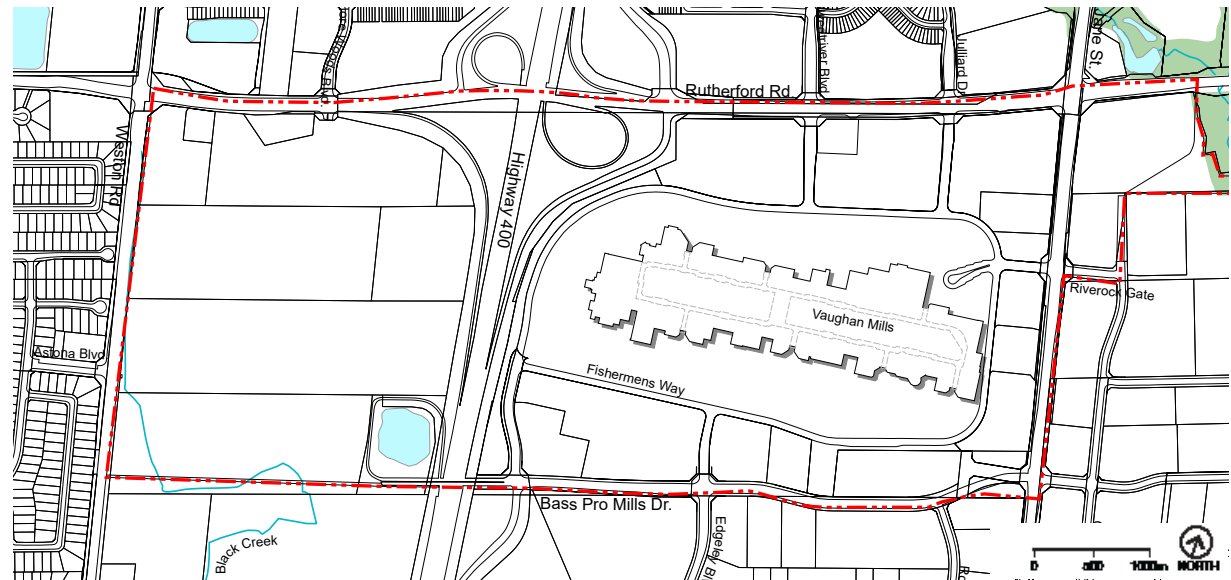


Fig. 129. Existing: streets and parcel fabric.



Fig. 130. Future: Demonstration Plan.

8.1. CHALLENGES AND OPPORTUNITIES

Intensification

Many of the parks, open spaces and streets within this plan will be secured through redevelopment. Redevelopment offers the opportunity to move the area away from the current auto-dominated urban form and create an urban environment focused on a connected parks and open space system, and an accessible network of streets and paths.

A review of the current development applications in the Study Area indicates high-rise developments, despite the Vaughan Mills Secondary Plan promoting mid-rise development around the ring road and Bass Pro Mills Drive and to locate taller buildings along arterial roads such as Rutherford Road, Jane Street, and the Highway 400. However, this high-rise trend provides additional opportunities for the collection of development charges and/or community benefits.

Employment District

The Vaughan Mills Secondary Plan envisions a unique employment district on the west side of Highway 400 that is vibrant, walkable, and active, while supporting a high-quality urban environment for a range of office and other employment land uses. The Secondary Plan identifies the importance of providing improved pedestrian connectivity to the future transit hub (Jane Street and Rutherford Road) from the employment district. There is an opportunity to look to development applications outside of the Study Area dedicated to both Mixed-Use Areas and Employment Areas (Creditstone) and to partner with both business incubators and transit providers (Viva/YRT) to meet this initiative and secure additional funding in the process.

Ownership and Public Streets

The management and oversight of public roads versus privately-owned roads will affect funding for various streetscape improvements. Existing streets inside the mall property are private, in addition to the construction of new private streets proposed by in recent development applications (Dulcina Investments). Working with developers to build out the network and navigating the oversight of new streets is a challenge, in addition to establishing the cycling network and implementing utilities and storm water management.

Parking

Many of the current development applications are producing additional parking spaces (whether by expanding existing lots or constructing underground parking). This increase in parking negates the active transportation focus and walkable, pedestrian-friendly streetscape objectives of the Vaughan Mills Secondary Plan and Public Realm and Streetscape Master Plan. Full build out will take time and until that happens, short to mid-term solutions are needed to encourage fewer vehicles in the Centre. This can include park and ride, car pooling, policy incentives, ride share, and gradual reduction of surface parking sites over time.

Parkland Rates

Parkland rates of 2% of the developable areas will be applicable to the employment district. Opportunities to secure new open space in the employment district should be considered and located strategically through development applications, to provide maximum community benefit and improved connectivity and amenity.

8.2. IMPLEMENTATION STRATEGY

This Implementation Strategy prioritizes the projects and actions based on the following strategies described below.



Focus Funding and Improvements on Concentrated Areas



Build Synergies with Parallel Initiatives



Work in an Interdisciplinary Way



Consider Life-Cycle Cost Benefit Analysis



Update Regularly



Create Project Specific Guidelines



Measure Success Over Time

Fig. 131. Implementation Strategy.

Focus Funding and Physical Improvements on Concentrated Areas.

Focus on concentrated areas where there is a concentration of projects and initiatives that will contribute in the most effective way to making a meaningful, memorable, and lasting place. The Seven Big Moves (to the right) identifies high priority areas based on a clustering of redevelopment, capital projects and other initiatives.

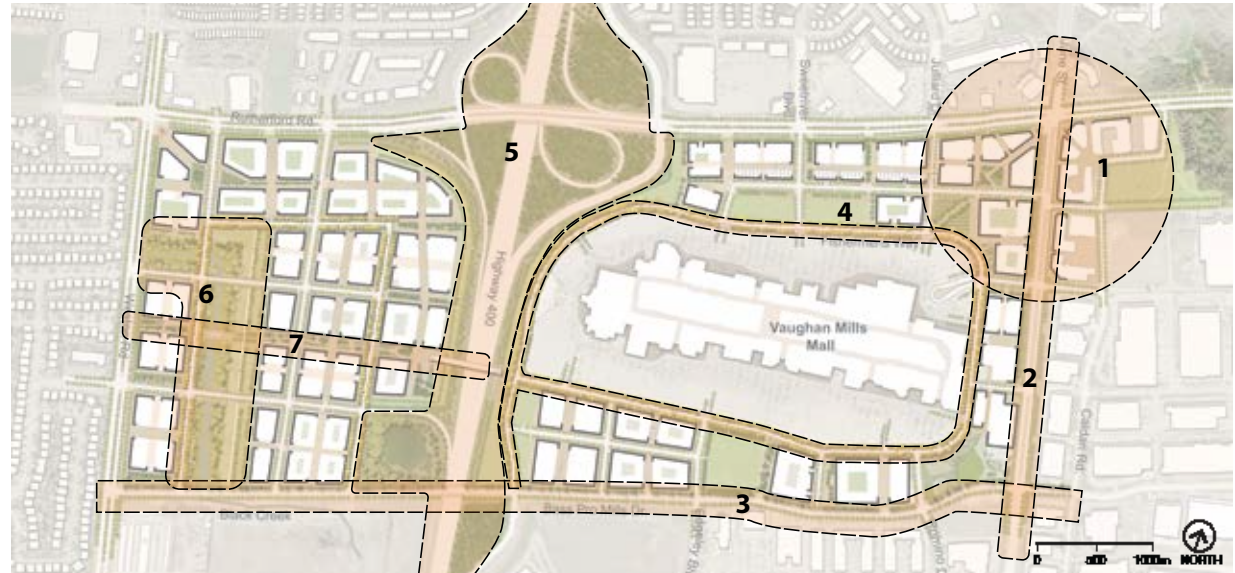


Fig. 132. Seven Big Moves.

1 | The Jane Node

Fine grain network of pedestrian friendly streets and plazas / connections to the West Don trails / transit hub focus / built form and public realm gateway to Vaughan Mills Centre / active ground floor frontages.

2 | Jane Streetscape

Green Frame Street defining east edge of Vaughan Mills Centre / strong green character / active transportation & transit focus / active ground floor frontages.

3 | Bass Pro Mills

Green Frame Street linking the proposed mixed-use residential neighbourhood to the north with the employment lands to the south/ strong green character / pedestrian and cycling focus.

4 | Fishermens Way

More intimate internal main street / green structuring element to link parks, the mall and neighbourhoods. Fishemans Way and any improvement within the Mall Property are subject to a Tertiary Plan.

5 | Landscape Stitch

Signature landscape move to green the edges of the highway / improved north/south active transportation linkages / improve the pedestrian environments at the two existing highway crossing points (Bass Pro Mills and Rutherford Road) / 400 Crossing - a future pedestrian and cycling bridge over Highway 400 linking the east and west halves of the Centre.

6 | Black Creek Common

Defining landscape feature of the employment district, designed with layers of stormwater management, ecological restoration, and public space features and functions.

7 | Employment Area Promenade

A critical pedestrian connection from Weston Road to the new 400 Crossing / a quieter, more pedestrian internal route.

Build Synergies with Upcoming and Ongoing Initiatives.

Combine public realm or streetscape improvements with development, parallel infrastructure upgrades and other capital projects, including transit infrastructure upgrades, municipal servicing upgrades (pipe replacement), or road resurfacing. Examples include:

- The Library and Community Centre sites, earmarked for land acquisition within the current Capital Plan, are examples of early win opportunities to secure new high-quality parks.
- The expansion of the Jane Street vivaNext bus rapid transit alongside the Region's 10 year Capital Plan upgrade to a trunk sanitary sewer (2024) is an opportunity to secure a new high-quality streetscape.
- The Region's upcoming EA study of Weston Road and the City's current EA study of Bass Pro Mills, also opportunities to secure high quality streetscapes.

Work in an Interdisciplinary Way.

Collaboration between City staff from multiple divisions/departments (Parks, Forestry and Horticulture Operations, Infrastructure Delivery, Development Planning, Recreation Services) and partners such as York Region, Metrolinx, and MTO are needed to successfully deliver the recommendations presented in this plan.

This implementation plan should link to department work plans to ensure the efficient delivery of each project. In approaching agencies for funding to support the delivery of public realm projects, importance should be attached to the clear definition of measurable objectives that relate to economic, social, or environmental improvements. Link project objectives to the 6 Guiding Principles of: Sense of Place; Green Attractive and Vibrant; Connected; Safe, Healthy and Comfortable; Sustainable and Resilient; and High Quality Design.

Life-Cycle Cost Benefit Analysis.

Use life-cycle cost benefit analysis over capital cost expenditure alone, to assess value from public realm investment and maintenance. The vision is to create a robust public realm that coordinates maintenance expectations and outlines life cycle expectations with long term stewardship.

Update Regularly.

The City should revisit and update the Implementation Strategy on a regular basis. Any changes should be undertaken with due regard to the guiding principles of this plan.

Create Project Specific Guidelines.

The City should require built form and public realm guidelines be created in advance of major projects. Guidelines should demonstrate how the layout and design of existing and proposed streets, parks, open spaces and POPs will contribute to the overall public realm of the Centre. The Guidelines should demonstrate common approaches to material selection and pedestrian and cycle infrastructure.

Measure Success Over Time.

The plan has a long-term time frame, and not all projects identified will occur immediately. Several factors will determine the pace of progress: funding availability, changes in City and community priorities, and the influence of the development marketplace.

The Appendix includes a Project Priority Matrix and range of funding and partnering opportunities. The Matrix identifies a number of short to mid-term priority projects and actions that the City can comfortably move forward in the coming years and include as part of the City's 10-year Capital Improvement Plan, updated on an annual cycle.

8.3. POTENTIAL FUNDING STRATEGIES & PARTNERSHIPS

Some tax revenue will go towards public realm and streetscape. However, in lower density areas, tax revenues are not as efficient due to higher streetscape costs per unit.

Funding strategies can draw from several additional sources, tools and strategies including:

- The City of Vaughan's Strategic Plan and Financial Plan (to the year 2022). Some of the streetscape and open space improvements have been identified in the 2018 Development Charges Background Study and there is an opportunity to identify other public realm improvements as a priority in the short- to medium-term in the upcoming Development Charges Background Study.
- Municipal financing tools, including development charges and community benefits (Section 37 is disappearing in September 2022).
- Coordination of streetscape improvements with other capital projects, including transit infrastructure upgrades, municipal servicing upgrades (pipe replacement), or road resurfacing.
- Collaboration between multiple municipal divisions/departments (Public Works, Infrastructure Development, Community Services).
- Regional, provincial, and federal infrastructure grants and programs, leveraging programs focused on green infrastructure, public art, and pedestrian/cycling infrastructure.
- Public-private partnerships. The streetscape along the vivaNext corridors successfully followed the P3 funding strategy.
- Partnerships with the local businesses and community groups to implement and maintain streetscape improvements near storefronts or local residential neighbourhoods. Consider creating a BIA for the current and/or future tenants of the Vaughan Mills Centre.

8.4. IMPLEMENTATION TOOLS

There are number of implementation tools and funding mechanisms at the provincial, regional and municipal levels through which the City can secure financing and plan for the build out of the strategies and projects detailed in this Master Plan.

Provincial Tools

Section 37 of the Planning Act (Community Benefits Charges/CBCs). Section 37 of the Planning Act allows municipalities to impose CBCs against land to pay for the capital costs of facilities, services and matters required because of development or redevelopment.

In recent years, several modifications have been made to the structure and scope of CBCs. On September 18, 2020, the Province of Ontario proclaimed into force Bill 108 as the More Homes, More Choice Act. Bill 108, as modified by Bill 197, replaced the negotiation of Section 37 Agreements with a new community benefits charge system. CBCs apply only to residential development above 5 storeys, with more than 10 units and is capped by 4% of land value. CBC's cannot fund what is already funded by Development Charges (DCs), but can supplement them if service levels are maxed out.

Bill 108, as modified by Bill 197, does not provide an itemized list of what facilities and services may be charged for under the CBC, meaning CBCs can be used to impose charges for services listed under subsection 2(4) of the Development Charges Act and for parkland acquisition, but municipalities are no longer able to charge for the same service using multiple mechanisms.

Municipalities have until September 18, 2022 to prepare a CBCs strategy to identify what services can be charged for under the new

system before passing a CBC By-law. The City of Vaughan will consider what elements of the Public Realm and Streetscape Plan may be good candidates for inclusion in the CBC strategy.

Section 41 of the Planning Act (Site Plan Control Area). Section 41 of the Planning Act provides the opportunity for municipalities to seek improvements to the public realm adjacent to private development. This may be beneficial for Vaughan to obtain streetscape features including trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities from developments on an individual parcel-by-parcel basis.

Parkland Dedication Guideline Document. Vaughan currently has a Cash-in-Lieu By-law that was last updated in 2012. The City does not currently have a parkland dedication By-law. The Cash-in-Lieu By-law was originally passed by Council in 1990 following changes to the Planning Act that permitted municipalities to impose parkland/payment-in-lieu conditions of approval. The City is currently developing a Parkland Dedication Guideline Document to help guide the City's parkland dedication and acquisition process as it responds to an evolving City and policy framework.

This guideline will provide key conclusions and recommendations that will assist with the implementation of a revised approach towards parkland dedication practices. The

Parkland Dedication Guideline will assist the City in achieving its goals with respect to the public parkland system and the planned urban structure and will complement the City's work on a new Parkland Dedication By-law as well as an update to its DC By-law and upcoming CBC Study and By-law. The timeline for completing the Parkland Dedication Guideline is Q4 2021.

Development Charges (DCs). The Development Charge Act (1997) guides municipalities to collect fees from new development, redevelopment, change of use and expansions or additions to buildings or structures. The goal of DCs is to ensure growth-related infrastructure is built in a fiscally sustainable way that aligns with the rate of development and will help to achieve complete communities. DCs help fund the increased need for engineering services, community services (such as swimming, camps, fitness centres, etc.), public works (including garbage, recycling, park maintenance, etc.), library services, fire and rescue services, and general government. In the City of Vaughan, DC By-law 083-2018 establishes DC rates at a city-wide level, with supplementary area-specific By-laws for localized services provided by the City of Vaughan, including water, wastewater and stormwater services. An example of the area-specific DC By-laws includes By-law 079-2016 ("Edgeley Pond and Black Creek Channel Works," which applies to most of the western portion of the Vaughan Mills Centre. By-law 079-2016 will have a new By-law number in June 2021.

Development in Vaughan is also subject to York Region DCs By-law as well as the York Region School Boards through the Education DC By-laws. Within the York Region DCs By-law, development that is classified as "retail" – including but not limited to car brokerage and auto repair shops, personal service shops, places of entertainment, fitness centre, and restaurants – are subject to both municipal and regional DCs. DCs are typically collected upon first building permit issuance.

Federation of Canadian Municipalities Funding. The Federation of Canadian Municipalities (FCM) has a Green Municipal Fund which supports municipalities create sustainable projects at a National level. In particular, the Green Municipal Fund supports greening, active transportation, and park development or revitalization, among other initiatives, plans, feasibility studies, pilot projects, and capital projects. The FCM also offers support for municipalities through the Municipalities for Climate Innovation Program, which enables communities to build sustainable and reliable services while tackling climate change and its effects through improved stormwater management and building active transportation networks. A partnership with FCM on the Green Municipal Fund could be a tool to achieve implementation of various elements of the Vaughan Mills Public Realm and Streetscape Plan.

Grant Funding. The Government of Ontario has several grant funding opportunities for infrastructure projects. These funding programs include: the Federal Gas Tax Fund; Sustaining Healthy Communities Through a New Clean Water and Wastewater Fund; The 2014 New Building Canada Fund; Provincial-Territorial Infrastructure Component Small Communities Fund; 2014 New Building Canada Fund: Provincial-Territorial Infrastructure Component National and Regional Projects; as well as the Ontario Community Infrastructure Fund and Federal/Provincial Infrastructure Funding Program. All these funds support development of new infrastructure and integration of sustainable practices into new developments and could be used to establish elements of the Vaughan Mills Public Realm and Streetscape Plan.

Regional and Municipal Tools

The Parks Redevelopment Strategy (PRS 2018). The 2018 PRS sets out a 10 year plan for the redevelopment of target priority parks within the City. The next PRS update will include a review of existing parks and updated priority list. A key trigger to call for a redevelopment of a park is the timing of planned adjacent intensification developments. In Vaughan Mills Centre this could include redeveloping adjacent parks that serve Vaughan Mills Centre.

Active Together Master Plan Review & Update (ATMP 2018). The ATMP Review & Update was approved by City of Vaughan Council on May 23, 2018. The ATMP defines how the City is focusing its leisure resources and priorities to provide the most value to citizens, while ensuring long-term sustainability. The Parks Redevelopment Strategy together with the Active Together Master Plan for Parks Development, Recreation Services, and Vaughan Public Libraries can also be used as a tool to define aspects of the Public Realm and Streetscape Plan funded through Section 42. This could include public parks, open spaces, trail and pedestrian options for active transportation, and places for recreational activities.

Municipal Infrastructure Projects. Municipal Infrastructure Projects and Capital Construction Projects are major projects that receive funding from the local City Council and improve key infrastructure in such as reconstruction and/or resurfacing of roads, replacement of sewers, culverts and watermains, bridge construction and/or rehabilitation, for example. A list of approved Capital Projects for Vaughan between 2020-2023 is available publicly through the City of Vaughan's Infrastructure Delivery webpage and includes the Bass Pro Mills Environmental Assessment from Weston Rd to Jane St, which received approval to begin in 2019.

Regional Capital Projects. York Region's Streetscape Program implements streetscape and master plan policies through Regional Capital Projects, which include road construction and re-surfacing projects, collaboration on VivaNext Rapid Transit projects, York Region Transit, pump houses and odour control facilities. Where there is overlap between planned Regional road infrastructure work and other parallel infrastructure projects as identified by York Region, the Region may provide funding at a rate of 50% of the project cost. In instances where projects which are located on regional roads that do not have regional road infrastructure work planned, York Region may fund the project at a lower rate of one third funding (33%).

COVID-19 Recovery. Currently, Economic and Cultural Development (ECD) does not have a placemaking grant program in place. As part of COVID-19 recovery, ECD is looking at a framework for delivery grants to not-for-profit groups and community service organizations that may encompass placemaking, but this the current context is specific to economic recovery

VivaNext. York Region has committed to funding streetscape projects and improvements along the VivaNext bus rapid transit routes. There is a future rapid transit line identified for Jane St, bordering the east boundary of Vaughan Mills Centre Secondary

Plan area, which could be used to fund streetscape elements identified in this plan along the Jane Street frontage.

Municipal Streetscape Partnership Program. The Municipal Streetscape Partnership Program (MSPP) is a York Region funding program that assists the City of Vaughan and eight other local municipalities in cost sharing on streetscape design projects on Regional roads. Three of four perimeter roads around Vaughan Mills Centre Secondary Plan (Jane Street, Weston Road, and Rutherford Road) are Regional Roads. The MSPP program can be used to: prioritize universal accessibility and pedestrian comfort and safety to encourage walking, cycling, and alternative means of transportation; provide for optimal street tree growing conditions; applying storm water management strategies and low maintenance planting; create a sense of place by integrating architectural features, public art, street furniture, enhanced paving, and generous planting design; and, to clearly define sidewalks, crosswalks, bicycle lanes and roadways. Local municipalities are responsible for the operation, maintenance and long term rehabilitation of enhanced streetscape features.

York Region Pedestrian and Cycling

Municipal Partnership Program. York Region offers a Pedestrian and Cycling Municipal Partnership Program (PCMPP) that is dedicated to working with various partners to build walking and cycling networks and improve connections within centres and to/from major destinations to make walking and cycling more viable transportation options. Funding is awarded based on a priority ranking system, which is listed in the PCMPP Guidelines. If a project is selected but funding is unavailable for the budget year, it will be recommended for the next year's funding. The program intends to support commuter cycling or walking; develop on-road or off-road facilities for public use under the jurisdiction of local municipalities, conservation authorities or other stakeholders that serve a Regional context; and provide linkages to multi-modal facilities. Projects need to be shovel ready projects which have been identified in the capital plan and have achieved tender ready status.

8.5. GREEN INFRASTRUCTURE (GI) AND CYCLE INFRASTRUCTURE

The implementation of green infrastructure and cycle infrastructure requires the City to adjust municipal design standards and reflect the Vaughan Mills Centre specific streetscaping designs within the Secondary Plan and Public Realm and Streetscape Master Plan.

The following actions and next steps are recommended:

- Determine long term maintenance costs and include these within annual operating budgets and long-term capital forecasts, no different from traditional infrastructure.
- Update Engineering Standards to include typical sections for enhanced public realm and GI across the centres. This will simplify implementation by developers and simplify City's long-term O&M if GI and enhanced public realm are standardized across all urban centres in the city. The pending Complete Streets project can be the catalyst for revisions/additions to the City's standards.

- Consider additional funding for green infrastructure and higher quality public realm through a funding arrangement shared between the directly affected property owner and/or the overall Vaughan Mills Secondary Plan owners. Examples are the City's area specific DCs for linear infrastructure such as watermain, sanitary and the Black Creek and Rainbow Creek improvements.

While the Region does not envision bioswales along their regional corridors; there are opportunities to explore LID technology such as rain gardens or permeable pavers, subject to a collaborative maintenance strategy between the City and Region.

8.6. PARTNERSHIPS

City-Wide Public Art Program. The City of Vaughan's "Percent for Public Art" is the first public art program of its kind and represents an effort for the City to support the creation of vibrant public space by supporting art installations in public space. The Program is intended to be led and implemented by the City, in partnership with the private sector and other partners, and encourages both City-acquired and privately-owned public art installations to populate public spaces as a means of providing a cultural and visual benefit to residents and visitors. Vaughan Mills Centre is one of seven focus areas for public art installation. The Vaughan City-Wide Public Art Program (2016) identifies over 20 Preferred Locations for public art within Vaughan Mills Centre.

Toronto and Region Conservation Authority.

The City of Vaughan contains lands that are regulated by the Toronto and Region Conservation Authority (TRCA) under Section 28 of the Conservation Authorities Act. Partnerships with the TRCA can be beneficial in achieving the successful implementation of parks within the Vaughan Mills Public Realm and Streetscape Plan, including most notably the Black Creek Common. The TRCA encourages Low Impact Development (LID) projects for enhanced stormwater management, increased habitat, and beautification through projects such

as rain gardens, bioswales, infiltration trenches, permeable pavement, and rainwater harvesting. It should be noted that Bill 229, Protect, Support and Recover from COVID-19 Act (Budget Measures), received Royal Assent on December 8, 2020 making major amendments to the Conservation Authorities Act. Bill 229 does not impact the regulation mapping and has no direct implications for the Vaughan Mills Public Realm and Streetscape Plan.

Ministry of Transportation and Infrastructure

Ontario. The Public Realm Plan includes greening of a Greenway, straddling the east and west borders of Highway 400 and planting within the MTO right-of-way. These improvements are to be established in partnership with the Ministry of Transportation and funded through other tools as part of a community benefit achieved by development and redevelopment in the area.

Other funding sources may also be considered including:

- The Pollinator Partnership of Canada, which has grants available for habitat restoration and enhancements using methods to promote pollinator richness and diversity along roadsides.
- Funding for the Forests Ontario's 50 Million Tree Program (through to 2023).
- Collaborations with Infrastructure Ontario through their Loan Program, which has helped support more than \$18 billion in local infrastructure investments across Ontario including revitalizing roads and bridges, building affordable housing units, and the provision of energy-efficient streetlights.

