Brampton's PathWays Master Plan (Volume One)
June 28, 2002

Mr. Karl Walsh
Director of Community Design, Parks Planning and Development
City of Brampton
2 Wellington Street West
Brampton, ON L6Y 4R2

Dear Mr. Karl Walsh,

Re: Brampton’s Pathways Master Plan

We are pleased to provide you with the Final report of the Brampton PathWays Master Plan. The plan consists of three volumes:

• Brampton’s PathWays Master Plan (Volume One)
• Brampton Planning and Design Guidelines (Volume Two)
• Brampton PathWays Technical Appendices (Volume Three)

The PathWays Master plan is intended to outline Brampton's plan to create a unique community that builds on the City's natural, cultural and heritage features. Key to the plan is the ability to create/capture a unique identity while connecting destinations that will leave pathway users with lasting impressions of the experience. In this regard, the strategic plan, founded on consultation and collaboration, is crucial in Brampton's attempts to attain a safe, seamless pathway system that best reflects the needs of the community and supports the inter-modal activities they enjoy!

Yours truly,

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Brampton’s PathWays Master Plan is a bold step in helping to achieve the City’s vision for an efficient transportation.
1.0 Achieving the Vision

Brampton has a vision. A vision for a high quality of community life, a prosperous and diversified economy, excellence in local government and an efficient transportation network.

The City of Brampton is committed to achieving this vision. Their mission is to make Brampton "a vibrant and attractive City of opportunity, where well-planned and organized services and facilities make it possible for families, individuals and the business community to grow, prosper and enjoy a high quality of life."

An important step in realizing the vision is to build on Brampton's open space infrastructure, a community asset over which the City has great influence and one that has helped to distinguish Brampton from other communities in Ontario.

Open space helps to define Brampton's image by establishing a contextual relationship with the built form and providing an avenue for community stewardship and health.

The PathWays system is an important component of the city's open space infrastructure. They knit parks and valleys together and provide convenient pedestrian and cycling routes across Brampton.

Brampton's PathWays Master Plan is a bold step in helping the City to improve its pathways trail system and achieve the vision.
Brampton’s residents value their pathways.

Through the public process used to develop this Plan, it was established that:

- Walkers, cyclists and in-line skaters actively use the existing 89 km of pathways. In 2001 alone, an estimated two-thirds of Brampton residents used pathways for recreation, exercise and practical purposes.
- Existing pathways, such as the Etobicoke Creek Trail, Professor’s Lake Trail and Chinguacousy Park Trail, are attractive amenities that help to define the identity and character of Brampton’s neighbourhoods.
- New pathways, such as those in Springdale and Fletcher’s Meadow, are being used to connect and market Brampton’s newest neighbourhoods.
- Residents clearly support better and expanded pathways. In a public attitude survey conducted for this study, nine-in-ten respondents stated they favour the City of Brampton spending money to maintain, expand and improve the pathways system.

(3A) PathWays vista in Springdale, (3B) PathWays will become a valued community asset
The City is listening to the public's comments, and through a collaborative process, have turned it into a mandate to make improvements to Brampton's PathWays.

Brampton's PathWays Plan (the Plan) spells out responses to key public priorities and opportunities and establishes an implementation process to ensure results. The Plan focuses on core objectives and strategic actions, leaving site-specific details to planning and functional design studies that will be completed based on the recommendations of the Plan.

The Plan is divided into these volumes. These are:

1. Brampton's PathWays Master Plan (Volume One) - consist of this report, which provides the core objectives and strategic actions resulting from the study.
2. Brampton's PathWays Planning and Design Guidelines (Volume 2) - are guidelines to assist the City in the development and maintenance of the system.
3. Brampton's Pathways Technical Appendices (Volume 3) - consists of a record of the public information collected over the course of the study.

The Plan focuses on three campaigns that will direct the revitalization and expansion of pathways. The campaigns, with their associated goals and objectives, will be valuable measuring devices for ensuring that pathways help achieve Brampton's vision.

For each campaign, the Plan sets out strategic actions - 17 in all - that will make Brampton's pathways a valuable community amenity and the envy of towns and cities across Canada. The Plan also establishes the design and policy framework and community involvement ideas within which the strategic actions will be realized.

It is time for Brampton's pathway's to bloom!
With the existing infrastructure, enthusiasm and commitment, Brampton’s PathWays are ready to bloom.

(1A) Blue Oak Park, (1B) New bridges and trails - Sandalwood Park, (1C) Elgin Park
2.0 Seeds for Success

Brampton has invested in pathways for over two decades. Invested in pathways planning, design, development, maintenance and marketing.

As highlighted on Map A, Brampton's investment is most evident in the 89 km of existing off-road trails - trails such as Professor's Lake, which is a popular destination for residents seeking exercise, relaxation and social interaction.

LISTENING TO RESIDENTS

Investing in pathways involves choices - choices that should reflect the needs and expectations of residents and local business.

A city-wide public attitude study was commissioned specifically for this Plan. In addition, meetings, open houses and information sessions were held for the public and stakeholders throughout its development.

The results of these activities indicate residents’ attitudes toward existing pathways and their desires for future pathways.

Public Attitude Survey

Environics Research Group conducted a statistically valid city-wide public attitude survey over the telephone to a random sample of Brampton households. A total of 528 interviews were completed as a part of the survey and the results have a margin of error of less than 5%.

The survey results yielded seven key findings. These are:

1. Pathways benefit Brampton

Residents recognized that the trail system offers numerous benefits to individuals and the entire City. The greatest benefits of the trail system noted by residents relate to health (51%), social benefits and the fostering of community pride (16%), and the preservation of nature and green spaces (14%).
MAP A - Existing Pathways

LEGEND

- Existing Trails
- Future Highway/Parkway

Other:
- Parkland / Open Space
- Future Parkland / Open Space
- Secondary Plan Number & Boundary
2. Pathways are well used

The majority of residents (66%) reported that they, or someone in their household, used the trail system within the past year.

3. Pathways serve a variety of roles

Walking is the primary mode of choice among recreational and practical users, followed by cycling, jogging and in-line skating.

4. Pathways can be made even better

Despite the fact that 48% of residents evaluate the existing pathways as "good", less than two-in-ten viewed them as "excellent". A further two-in-ten rate the existing pathways as "fair" (17%) or "poor" (4%).

5. Pathways must be well designed

Residents identified the hallmarks of good pathways as providing safe ways to cross busy roadways or rail lines (88%), well-maintained surfaces (85%), good lighting for evening use (84%) and good signs to help people find their way (78%).
Residents also place a great deal of importance on establishing links between trail use and environmental considerations and on the need to accommodate a wide range of users. About half of the respondents placed a high importance on the aesthetics of the trail and on amenities or services, such as reserved bike lanes and restrooms.

6. Pathways use can be increased

To encourage recreational use of the trail system, residents suggested easy access to brochures/maps (75%), greater interest and use among family and friends (63%), public restrooms along the trails (59%), emergency phones (57%), educational programs (55%), access to nearby venues (47%) and equipment rentals at primary staging points of the trail (43%).

To encourage increased practical use of the trail system, residents suggested that the trails should be expanded to make the trails more convenient or useful (15%), provide more information about the trails (7%) and undertake safety (5%) and maintenance improvements (4%).

7. Residents support paying for Pathways

Residents expressed strong support for the City of Brampton spending money to maintain, expand and improve the trail system.

Nine-in-ten residents are strongly (39%) or somewhat (51%) in favour of the City of Brampton spending money to maintain, expand and improve pathways, while fewer than one-in-ten are strongly (3%) or somewhat (5%) opposed.
Public and Stakeholder Events

Five public and stakeholder events were held during the development of this Plan. These events provided over 100 individuals and groups the opportunity to identify their interests, issues and directions for the PathWays system.

The public and stakeholder events yielded seven key findings. These are:

1. PathWays must be better maintained

Residents and stakeholders indicated that the City must improve and maintain the existing PathWays. This includes repairing existing sections where the trail surface has degraded over time and regularly cleaning the system of debris.

2. PathWays should be connected and accessible

Residents and stakeholders indicated they wanted PathWays that are: accessible to all members of the community; within a 15 minute walk from their home; provide better east-west connections; and are accessible by public transit.

3. PathWays should be safe

Residents and stakeholders want safe PathWays. This includes support for programs that deliver trail etiquette messages, and security features such as appropriate design measures.
4. PathWays should be green

Residents and stakeholders are seeking environmentally progressive PathWays. They support the appropriate integration of PathWays into natural areas and the greening of the existing system.

5. PathWays should accommodate multiple users

Residents and stakeholders support multiple users of the PathWays system, including walkers, joggers, dog walkers, cyclists and in-line skaters. At the same time, they recognize the existing PathWays are too narrow to accommodate all users and that some uses may not be appropriate in environmentally sensitive areas.

6. PathWays marketing should be improved

Residents and stakeholders want more information about the PathWays system, particularly maps. They also indicated that the City should communicate the PathWays successes better to the community.

7. PathWays development should involve the community

Residents and stakeholders are clearly interested in helping the City develop PathWays. A variety of public involvement and outreach mechanisms were suggested by participants, including adopt-a-trails, stewardship programs and corporate sponsorship.

The results of the public attitude survey are consistent with those from the public and stakeholder events. They emphasize the importance of a well-connected and maintained pathways system for all users as well as the desire for improved promotion and material.

For a complete review of the public attitude survey, as well as the results of the various public and stakeholder events, please consult the Brampton's PathWays Technical Appendix (Volume Three).
Multi-use Pathway.
Successful PathWays will result from a bundle of efforts over the next two decades.
3.0 Growing Success

Successful pathways will not result from a single project or activity. Rather, it will result from a bundle of efforts that will carry on over the next two decades.

This Plan provides direction for Brampton’s PathWays in keeping with residents’ needs and expectations as expressed in the previous chapter.

The Plan is founded on three primary campaigns derived primarily from the interactive consultation program. These are:

1. Campaign for Customer Driven Pathways
2. Campaign for Beautiful Pathways
3. Campaign for Valued Pathways

Each campaign is divided into three parts: the "Goals" that will establish the benchmark for Brampton's pathways; the "Objectives" that call for specific strategies to meet them and the "Actions" that will enable the vision to bloom.

In describing the campaigns, words such as "will" are used. It is recognized that the implementation of this Plan will take time. The use of these words should not be construed as Council's commitment to proceed with undertakings immediately. This will be done in a phased manner, subject to budgeting and program availability.

It should be also noted that the campaigns are not intended to be static. The timing and details related to the "Actions" can and should evolve through community consultation and detailed technical studies as appropriate. Similarly, monitoring mechanisms such as customer satisfaction surveys must also be used in order for the City to measure success and/or make adjustments to the Plan. At the same time, however, the extensive community effort that established the overall direction for this Plan must be respected. Therefore, specific changes to alignments, facility types, awareness initiatives and implementation priorities should be evaluated in the context of such a decision's impact upon the community's desire to achieve Brampton's vision.
Resident needs and desires will help guide PathWays development, programming and
4.0 Campaign for Customer Driven PathWays

Pathways must reflect and respond to residents' needs and desires. This will promote PathWays use and encourage a wider user base. The first campaign of this Plan is for customer driven pathways.

Brampton’s customers are the people who currently make use of the system, as well as those that could make use of the system in the future. Customer use is important since setting the right conditions to maintain current use and broaden the appeal for increased growth is one of the measures of success for this Plan.

**Goals**

The Campaign for Customer Driven PathWays is directed at achieving pathways that are designed by the community, for the community. Pathways that will:

- minimize the risk to its customers;
- serve residents’ modal choices;
- take residents where they want to go; and
- offer the experiences sought by residents.

**Objectives**

The success of the Campaign for Customer Driven PathWays will be measured by five objectives. These are:

1. Pathways will serve a broad range of users and interests.
2. Pathways will provide safe and diverse on and off-road experiences.
3. Pathways will link all residents with desirable or important destinations.
4. Pathways will be accessible to all residents within a five-minute bike ride or fifteen (15)-minute walk.
5. Pathway design will be flexible to meet the evolving needs of residents.

**Actions**

There are four actions to achieve Customer Driven PathWays:

1. Develop pathways for all uses.
2. Adopt the PathWays Network Plan.
3. Improve and expand PathWays in a logical manner - one that capitalizes on bringing the current inventory up to the recommended standards followed by an expansion of the network in a reasonable timeframe.
4. Adopt a maintenance regime that the City can resource, at a level the community expects.

Each action is described in detail in the following sections.
DEVELOP PATHWAYS FOR ALL USES

Residents indicated that they use the pathway network for a variety of uses, including walking, jogging, cycling and in-line skating. Accordingly, three classes of facilities are recommended to accommodate the greatest variety of these uses. These are:

1. **Multi-Use Paths (Class I)** are any off-road dedicated facility for pedestrians and in-line skaters as well as non-motorized vehicles such as bicycles.
2. **Bike Lanes (Class II)** are dedicated portions of the road surface for exclusive bicycle use. They are designated by pavement markings that separate the portion of the road used by motor vehicles from that portion used by bicycles. Pedestrians and in-line skaters would use the sidewalk.
3. **Signed Routes (Class III)** are any roads specifically signed to encourage bicycle use. Pedestrians and in-line skaters would use the sidewalk.

The bicycle is formally recognized as a vehicle under Ontario’s Highway Traffic Act. Bicycles, therefore, have the right to share all classes of roadways, including arterials, collectors and local streets, with the exception of controlled access and 400 series highways.

The fact the bicycles have the right to use municipal, regional and provincial highways leads to an important principle of roadway design - every road is a cycling road. Brampton, therefore should adopt bicycle friendly design guidelines for all roads, whether or not the road is designated as a part of a pathway network. Bicycle friendly roadway features typically include, among other things, wide curb lanes plus drainage grates that are bicycle friendly and ideally located out of the desired path of cyclists.
It is imperative that the City recognize that providing a pathway system to serve the community does not release it from an obligation to ensure that all roadways in Brampton are designed, updated and maintained in a manner that promotes a safe environment for cycling.

Detailed planning and design guidelines for each PathWays facility class, as well as bicycle friendly streets, is provided in the Brampton PathWays Planning and Design Guidelines (Volume Two) under separate cover.

ADOPT THE PATHWAY NETWORK MAP

Residents indicated that they use pathways for two purposes: recreational pursuits and utilitarian trips. Utilitarian trips mean activities where the destination is of primary importance, such as going to work, school, shopping or visiting friends.

Residents also indicated that convenient access to the pathway network was important. This is interpreted as connections within a 15 minute walk or five minute bike ride from any given point in the City of Brampton.

With this in mind, the recommended PathWays Network was developed using a three phase process, which is summarized as follows:

1. **Identify Destinations.** Map B illustrates some of the major destinations in Brampton, such as recreational and employment centres. Commercial, institutional, recreation centres, parks and transportation nodes were also identified and categorized.

2. **Identify Opportunities and Constraints.** Map C illustrates some of the major constraints in Brampton, including the 400 series of highways, railway corridors, major arterial roads and right-of-ways. These constraints should also be considered opportunities. For example, under a re-development scenario, a major arterial road could present an opportunity to expand the network in the boulevard.

3. **Develop and Evaluate Candidate PathWays Routes.** Candidate pathway routes were developed with staff, the public and consulting team. Subsequently, each route was evaluated by the consulting team and staff through field visits and the consideration of various evaluation factors such as continuity, safety, traffic volumes available space and attractiveness. The selection of routes underwent several iterations with input from the public, stakeholders and City staff until the preferred corridors were chosen.
MAP C - Opportunities and barriers
The recommended PathWays Network is provided on Map D. It represents a grid of north-south and east-west routes spaced approximately 2 kilometres apart. This spacing will ensure that all residents will be within a 15 minute walk or five minute bike ride from the network.

Like most transportation related systems or networks, such as roads with highway, collector and local designations, the Brampton PathWays system is represented in categories. The categories do not represent a formal hierarchy; however, they are used as an organizing tool to applying design criteria.

The "Community Network" identified on Map D will function as the spine of the PathWays network, providing connections across Brampton and to neighbouring municipalities.

The Community Network is intended to be composed primarily of multi-use paths (Class I facilities) as illustrated on Map E. However, given physical constraints and funding realities, it is recognized that this is a long-term goal. Therefore, the Community Network will also consist of bike lanes (Class 2 facilities), where appropriate.

The Community Network is expected to accommodate:

- high recreational user volumes; and
- PathWays traffic that is utilitarian oriented to locations such as community facilities and major employers.

The Neighbourhood Network identified on Map D is intended to provide neighbourhood connections to the Community Network. This network provides short loops for recreational activities as well as healthy community benefits.

The Neighbourhood Network is intended to be composed of all facility classes as illustrated on Map E.
MAP E - Recommended PathWays facility types
The Neighbourhood Network is expected to accommodate:

- both recreational and utilitarian pathway users;
- Pathway traffic that is neighbourhood oriented, recognizing that this network will also connect to the Community Network.

The staging areas identified on Map D are intended to identify significant activity nodes. These areas are envisioned as providing residents and visitors opportunities to access pathway facilities from areas where parking or public transit is available for trail users. They will also contain amenities, such as water fountains, washrooms and benches, to better serve residents.

**IMPROVE AND EXPAND PATHWAYS IN A LOGICAL MANNER**

Residents were clear on the issue of phasing the expansion of the Pathway system. During focus groups and public forums, residents stated they wanted the current system improved and the necessary repairs made prior to expansion, unless the expansion meant that the existing system would become more accessible and/or seamless.

With this in mind, Map F identifies the recommended phasing for the PathWays network. The recommended phasing reflects community input as well as the following considerations:

- scheduled improvements funded by SuperBuild;
- the location and timing of planned road and public works projects;
- scheduled and planned road and bridge environmental assessments; and
- the development of a mid-term spine that will serve to build the PathWays system.
MAP F - Recommended Phasing Program
The full build-out of the PathWays system is expected to take 20 years. Accordingly, the phasing program is divided into three phases: short term (2002-2003), medium term (2004-2008), and long term (2009+).

The recommended phasing should not be viewed rigidly. Opportunities to expand the pathway system as a part of new public or private development or redevelopment projects, such as subdivisions and road reconstruction, should be seized. Accordingly, it is recommended that staff actively seek these opportunities wherever feasible.

Key to the plan is the ability to connect destinations. Many of these connections will be linear and occur within public road right-of-ways, municipal parks, utility corridors and abandoned rail corridors. Hydro transmission corridors are especially important in Brampton as they are existing greenways that can and should accommodate pathways and serve as valuable links to adjacent residential and commercial neighbourhoods, as well as serve as recreational corridors. These corridors are crucial in the City of Brampton's attempts to attain a safe, seamless pathway system that best reflects the needs of the community and supports the inter-modal activities they enjoy.
ADOPT A MAINTENANCE REGIME

Residents want the PathWays system to be better maintained, including repairing trail surfaces and related facilities as well as clearing the system of debris. Accordingly, it is recommended that the City adopt a formal maintenance regime for the PathWays system.

The formal maintenance regime will ensure the City maximizes the lifecycle of PathWays infrastructure. Sound maintenance practices will also reduce the risk of injury to users, enhance the PathWays experience for those using the network, and portray an image of community excellence.

The City must manage and maintain the network proactively. Inspections on a regular and timely basis are an efficient way to monitor the network. An annual program, coupled with system reviews after a severe weather event, helps to prevent serious loss. Another important element related to managing and maintaining the network is documenting the inspection results as well as when the corrective action was taken. Although there are currently no formal documented pathway maintenance standards in the City of Brampton, this is recommended to be changed.

Off-road and on-road trail maintenance is the responsibility of the Parks and Recreation Division of the Community Services Department and the Works and Transportation Department, respectively. Coordination between these two departments is imperative to ensure consistent maintenance practices. Reciprocal agreements between the departments should also be recognized.
The following is a reference list of maintenance and management items that should be considered through the development of a formal maintenance regime:

- Inspection - annually and/or after severe weather event;
- Litter and trash removal - weekly at a minimum and after special events;
- Sweeping on a regular basis - annually and/or prior to community events;
- Snow removal - based on events and route designation;
- Grass cutting - when and where necessary on a 10 day cycle;
- Clearing encroaching woody plant material - annual review;
- Vandalism repairs - event oriented based on inspection and customer requests;
- Bridge and culvert audits - annual;
- Sign maintenance - annual;
- Furniture refurbishing - annual and on-going;
- Line painting - biannual;
- Light re-lamping, lens cleaning and electrical distribution review every 5 years; and
- Surface repairs - when and where necessary.
PathWays will define Brampton as an attractive city in which to live, work and play.
5.0 Campaign for Beautiful Pathways

For the pathways to truly set Brampton apart from other communities, they must celebrate the City's history and define its character. The second campaign of this Plan is for beautiful pathways.

Goal

The Campaign for Beautiful Pathways is directed at achieving attractive and memorable pathways unique to Brampton. Pathways that will:

- evoke Brampton's "floral" heritage in a thematic, symbolic and meaningful manner;
- feature appealing views and vistas, creating excitement and drawing residents onto and along the pathways;
- offer a wide range of experiences both in natural and urban contexts; and
- possess unifying elements that clearly identify the system as part of Brampton.

Objectives

The success of the Campaign for Beautiful Pathways will be measured through three objectives. These are:

1. Pathways will be designed to maximize the safety of all users.
2. Pathways will respect and enhance the character of the built forms within and connecting neighbourhoods.
3. Pathways will provide community meeting places to facilitate social, cultural and leisure interaction.

Actions

There are four actions that will achieve Beautiful Pathways. These are:

1. Establish Pathways themes that reflect Brampton.
2. Adopt consistent design standards and guidelines.
3. Enhance strategic points of interests and focal areas along the Pathways.
4. Provide appropriate signage.

Each action is described in detail in the following section.
ESTABLISH PATHWAYS THEMES THAT REFLECT BRAMPTON

Residents, the business community and staff have indicated their desire for well-designed pathways. Pathways that are appealing to use, offer a variety of amenities, build awareness of the natural environment and link points of interest.

Brampton’s Pathways are well positioned to become a defining feature of the community. They convey an image, lifestyle and quality that is unique, desirable and community-oriented.

By taking proactive steps to articulate themes and corporate messages, Pathway customers will immediately recognize the network as an important amenity and be left with lasting positive impressions of Brampton.

Programming the spaces adjacent to Pathways is recommended to create spectacular public spaces - spaces that include flowers, public art, historical interpretations and natural settings.

Along the Pathways themselves, consistent character elements and signature features are recommended to identify the network as uniquely Brampton. To ensure a city-wide approach is taken, a hierarchy of design treatment, elements and amenities is recommended for adoption and implementation.

The supplementary document Brampton Pathways Planning and Design Guidelines (Volume Two) provides detailed descriptions of the character elements and signature features recommended in this Plan. The following description is intended as a synopsis of that document.
There are three key character elements recommended for the PathWays network. These are:

1. **The Column/Pier** - This timeless element will be used at varying scales in a variety of contexts. It should always be characterized by coping detail and reveals, an embossed PathWays logo and granite appearance. It is the single most important element that will unify the system. Its application ranges from trail markers to Gateway anchors.

2. **Wrought Iron** - This versatile material takes on contextual responsibilities as a PathWays element. It will form a symbiotic relationship with the more "corporate" column/pier to harmonize the character element with its surroundings. For example, in a natural area the wrought iron companion to the column/pier may be fashioned to reflect the unique attributes of the setting like flora or fauna.

3. **Plant Material and Pavers** - Augmenting the structural regimes of the character elements is the use of plant material. It too must be sympathetic to the context and evoke a feeling of recognition. For example, indigenous material may be used in natural areas and vibrant material used when a sense of excitement or active context is expected. These materials may be combined when establishing bold themes such as a "roseway". Plant material gives the system a life of its own and should be treated with importance, respect and must be cognizant of maintenance realities.

Another import design and character element is the use of pavers. When designing treatments such as plaza spaces or rest areas a "Brussel Block" (textured, weathered) square sandstone paver is recommended. In addition to the block, a banding constructed of "Unigranite" (textured black) should be used as an accent.

These character elements will be reflected in a variety of signature features that will define the PathWays network as unique to Brampton.

One of the paramount signature features is the gateway.
Map D identifies a number of potential gateway locations along the PathWays network. Gateways are envisioned as an introduction to Brampton and its neighbourhoods. It is recommended that a hierarchy be established to represent community, local and thematic level contexts.

**Community Gateways** are intended to set the tone for the system. They introduce Brampton as a community oriented place and are intended to create a sense of welcome, arrival and safety. They are recognized by their plaza-like design and appeal to a variety of senses (sight, smell, touch and in some cases sound). They are also an opportunity to establish trail use conventions, punctuate historic significance and establish thematic backdrops. A bold use of columns and piers is required, companied with rich wrought iron treatments and plaza space using "Brussels Block" (textured, weathered square sandstone pavers) and bands of "unigranite" (textured black pavers). They also boast generous/lush plant material that must always be sympathetic to the feature’s context. It is also important to offer people amenities such as benches, trash receptacles, drinking fountains and information/directional kiosks.

**Local and Thematic Gateways** are intended to celebrate Brampton’s unique and diverse community. The local gateway maintains a more "pragmatic" tone. They primarily reaffirm PathWays conventions and introduce locally significant themes. They also prepare Brampton residents and visitors for transitions during the system experience. They are often paired with information and wayfinding signs. Similar to the Community Gateway, a Local Gateway maintains elements such as columns, piers and wrought iron and is augmented with the signature pavers. They punctuate the system at a reduced scale and less density. Unlike the Community Gateway they may not be associated with "plaza" space. They will become a recognizable feature in the Brampton landscape and are important to its customers. These sights should become an integral part of the marketing initiative and should be identified on the City map and identified through a geodetic system.
Other important signature features are:

- **The Route** - One of the boldest statements that the PathWays will make is that customer needs are paramount. It is important to view it as a system and as such it must be seamless and consistent. For example, where the system intersects with or over-laps sidewalks, or is paired with another component of the transportation network, the trail should not take less priority.

- **Bridges as Important Design Elements** - Bridge cladding could be used as an important PathWays identifier. By the addition of a PathWays logo or embossed element within the forming, customers will identify these elements as integral part of the PathWays experience.

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**ADOPT DESIGN STANDARDS AND GUIDELINES**

Residents clearly support well designed pathways. This includes pathways that are developed in a safe and consistent manner.

The PathWays system is intended to provide recreational and utilitarian opportunities for pedestrians, cyclists and in-line skaters of all ages and abilities. The multi-use nature of the network must be reflected in the design standards used to develop the system.

As part of the preparation of this Plan, a supplementary and comprehensive Planning and Design Guidelines document (Volume Two) was developed to assist the City and other local partners in the development of Brampton's trail network. It contains detailed information on planning and design, and is intended as a guide to develop and maintain the PathWays network.
The purpose of the supplementary guide is to document the existing standards used by the City of Brampton, compare them with state-of-the-art trail and bikeway design guidelines from across North America and finally recommend a set of planning and design guidelines to guide the City in the development and maintenance of the PathWays system.

This section briefly summarizes some of the proposed changes to the City’s design standards.

**Class 1: Multi-Use Trail** - Off-road multi-use trails are the backbone of the Brampton PathWays Network. They are typically incorporated into parkland and valleyland, or within the boulevards of road rights-of-way. The existing City of Brampton standard indicates that multi-use recreational trails are typically incorporated into parkland/valleylands or within the boulevards of road rights-of-way.

The current design of the parkland/valleyland trail system is typically a 2.4 metre wide asphalt path allowing for two way recreational cycling. The typical road right-of-way trail incorporates either a 2.4 metre two-way directional path or a 1.5 metre wide one-way directional path within the boulevard between the curb and the property line. The 2.4 metre wide path is located adjacent to the sidewalk or is installed in lieu of a sidewalk. On smaller roads, the 1.5 metre wide path occurs on each side of the road and is constructed adjacent to a 1.0 metre wide asphalt killstrip.

Multi use trails should be designed to accommodate a variety of user groups. A review of various bikeway and trail design guidelines from throughout North America indicates that standards vary depending upon the trail’s location, the anticipated number of users and the permitted uses. The minimum width is typically 3.0 m, which allows for bi-directional flow. On popular, heavily travelled multi-use trails, widths of up to 3.5 m are recommended to allow for a wider variety and greater number of users.
The recommended guideline for the Class 1 Multi-Use Trail is summarized in Table 5.1.

### Table 5.1: Recommended Guideline: Multi-Use Trail

<table>
<thead>
<tr>
<th>Class 1 - Boulevard Multi-Use Trail</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Travel Width</strong></td>
</tr>
<tr>
<td><strong>Travel Surface</strong></td>
</tr>
<tr>
<td><strong>Clearing Width</strong></td>
</tr>
<tr>
<td><strong>Clearing Height</strong></td>
</tr>
<tr>
<td><strong>Desirable Grades</strong></td>
</tr>
<tr>
<td><strong>Slope</strong></td>
</tr>
</tbody>
</table>

For routes which are served by bike lanes, it is expected that pedestrians and in-line skaters will be accommodated on the sidewalk. However, it must be recognized that in-line skaters may prefer to use the bike lane.

The current City of Brampton standard for bike lanes is a lane identified by a separation line from the vehicular travelled portion of the road, with signage and/or bicycle symbols painted on the road surface. This standard currently only applies to the Queen Street corridor, and has not yet been implemented.

Bike lanes have several advantages over wide shared lanes. Some of these include exclusive space, a higher level of safety and an increased compliance with traffic control devices. Bike lanes are therefore attractive to less skilled cyclists and may encourage more people to cycle. The optimum recommended bike lane width is 1.5 m (1.2 m minimum to 1.8 m maximum), enabling cyclists to travel in single file. Lane widths greater than 1.8 m are not recommended since they may encourage use by motor vehicle drivers for passing other vehicles on the right, or for stopping and parking.

**Class 2: Bike Lanes** - Where off-road routes are not feasible or desirable, bike lanes should be considered to establish key connections between adjacent systems and to facilitate utilitarian use. The on-road facility design criteria is based on the class of roadway on which the facility will be constructed, as well as anticipated demand and right-of-way availability.
The recommended width of a bike lane in the City of Brampton is summarized in Table 5.2. This type of lane should be separated from the vehicular travelled portion of the road using pavement markings, and should be clearly identified through signage and symbolic pavement markings.

<table>
<thead>
<tr>
<th>Table 5.2 - Recommended Guideline: Bicycle Lane</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-Road Bicycle Lane</strong></td>
</tr>
<tr>
<td><strong>Travel Width</strong></td>
</tr>
<tr>
<td>1.5 m preferred</td>
</tr>
</tbody>
</table>

**Class 3: Signed Route** - On-street signed routes are typically implemented on local and collector roads to form a connection or link in a trail network. On-street signed routes should only be implemented where wide curb lanes exist or can be provided, or where traffic volumes are low, such as is typically found on a local or collector road. An on-street signed route can also form part of a trail network when the addition of bike lanes is not possible in the short term due to limited pavement or right-of-way widths and/or because of on-street parking. In addition to trail route marker signs for on-street signed routes, consideration should be given to shared-use pavement markings and/or "share the road" signs.

There is currently no Brampton standard for the design of on-street signed routes. The recommended guideline for Signed Routes is summarized in Table 5.3.

<table>
<thead>
<tr>
<th>Table 5.3 - Recommended Guideline: Signed Route</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-Road Bicycle Lane</strong></td>
</tr>
<tr>
<td><strong>Travel Width</strong></td>
</tr>
<tr>
<td>4.0 - 4.5 m wide curb lane recommended</td>
</tr>
</tbody>
</table>
Table 5.4 provides a summary of recommended design standards described in this section.

<table>
<thead>
<tr>
<th>Trail Type</th>
<th>Travel Width</th>
<th>Existing Brampton Standard</th>
<th>Proposed Brampton Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1 - Multi-Use Path</td>
<td>2.4 m</td>
<td>3.0 m</td>
<td></td>
</tr>
<tr>
<td>Class 2 - Bike Lane</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No On-Street Parking</td>
<td>1.5 m</td>
<td>1.5 m</td>
<td></td>
</tr>
<tr>
<td>On-Street Parking</td>
<td>N/A</td>
<td>1.8 m + 2.2 m parking aisle</td>
<td></td>
</tr>
<tr>
<td>Class 3 - Signed Route</td>
<td>N/A</td>
<td>4.0 m - 4.5 m wide curb lane</td>
<td></td>
</tr>
</tbody>
</table>

**Lighting** - the City of Brampton presently illuminates all existing multi-use trails. Lighting, however, can have a significant effect on the environmental values of many of the valley trails. Further, residents indicated that lighting was not a major deciding factor when they determined whether or not to use a trail at night. In fact, concerns were expressed that illumination creates a false sense of security. Therefore, it is recommended that the installation of trail lighting by the City be discontinued, except along trails that have a high volume of evening use and at gateways.

**ENHANCE STRATEGIC POINTS OF INTERESTS AND FOCAL AREAS ALONG THE NETWORK**

Residents stated they wanted the pathways to access points of interest. Creating destination is also important to encouraging network use and to build City attractions that could potentially increase tourism and provide economic stimulus.

Fortunately, Brampton has been blessed with many unique natural features and a rich cultural history.

A number of strategic points of interest were identified through the development of this Plan and are shown on Map G. The areas recommended for specific design exercises to create strategic points of interest and focal areas along the PathWays are:

- Gateways
  - Clairville
  - Churchville
  - Heart Lake
  - Halton Hills
  - Vaughan
  - Chincousauy Park
Map G - Special study area
PROVIDE APPROPRIATE SIGNAGE

Residents indicated they wanted good signage along the PathWays to help them find their way. At the same time, good signage also helps to address concerns regarding user safety and trail etiquette. Therefore, it is recommended that PathWays signage communicate various kinds of information to the trail user.

Recommended signage has been organized according to the following five functions:

1. Designation/directional signs.
2. Regulatory signs.
3. Warning signs.
4. Information signs.
5. Interpretative signs.

The following provides a brief overview of each of the five functions, as more detail is provided in the Brampton PathWays Planning and Design Guidelines (Volume Two).

**Designation/directional signs** are used to indicate which facilities constitute the PathWays system. This signage should be placed at changes in direction as well as on long straight sections of the trail at recommended intervals. Directional signs may be used beyond the...
system itself, in adjacent park space for example, to guide the way to the trail access points. The PathWays logo is prevalent in this signage.

**Regulatory signs** are intended to control particular aspects of travel and use along the trail. Signage restricting or requiring specific behaviour is not legally enforceable unless it is associated with a provincial law or municipal by-law. Where applicable, it is recommended that authorities discreetly include the municipal by-law number on signs to reinforce their regulatory function.

**Warning signs** are used to highlight trail conditions that may pose a potential safety or convenience concern to trail users. Examples are steep slopes, railway crossings and pavement changes. These signs are diamond in shape, with a black legend on a yellow background.

**Information signs** provide general information about the use and identity of the trail, as well as adjacent features. Signs can communicate a single point of information on a standard sign, or a number of points on a large format signboard. Signs at trailheads, access points and gateways may communicate a range of information, including maps. The preferred (as opposed to the regulated) use of the trail is communicated through "use symbols" where the separation of trail users has been accommodated. Interpretative signs provide specific information about points of ecological, historical and general interest, as well as current land uses along the trail. They represent a broad range of possible sign formats and applications, depending on the interpretative program and complexity of information to be communicated.

**Interpretative signs** provide specific information about points of ecological, historical and general interest, as well as current land uses along the trail. They represent a broad range of possible sign formats and applications, depending on the interpretative program and complexity of information to be communicated.
Wrought iron element and gateway feature
Residents and businesses will help make Pathways a living community asset.

(1A) Sandalwood Parkway off-road boulevard trail, (1B) Elgin Park
6.0 Campaign for Valued PathWays

For the PathWays network to become a "living" asset, it must engender a sense of pride and ownership within Brampton. This requires effort, time and a passion to succeed. The third and most challenging campaign of this Plan is for Brampton to establish a valued pathways network.

Goal

The Campaign for Valued PathWays is directed at achieving pathway ownership and pride among the Brampton business community and residents. A campaign that will:

- engage, customers, stakeholders, business and residents;
- inspire action by those that are engaged;
- create a sense of ownership and pride; and
- proclaim champions.

Objectives

The success of the Campaign for Valued PathWays will be measured through five objectives. These are:

1. Public awareness of pathways will be increased.
2. Residents and visitors will use the pathways more frequently.
3. Pathways will be promoted as an important amenity and integral component of the City’s leisure and transportation systems.
4. Pathway users will be educated on proper pathway etiquette.
5. A sense of pathway ownership will be developed.

Actions

There are three actions that will achieve Valued PathWays. These are:

1. Encourage pathway use.
2. Educate pathway users about proper trail etiquette.
3. Promote stewardship and foster partnerships.

Each of these actions is described in detail in the following sections.
ENCOURAGE PATHWAY USE

Residents indicated that they actively use the existing pathway network. They also indicated that the City must take a more active role encouraging pathway use. This included activities directed at raising awareness of the pathways network.

The recommended approach to promoting the PathWays network is to develop and implement a communications strategy that will:

- inform residents of the location of pathways;
- programme the network; and
- capture customer interest by way of events.

The communications strategy should consider the use of a variety of mediums, including the development of a PathWays map, the City’s website and existing publications, as well as media advertisements.

The programming of the network is described in detail in Chapter 5 of this Plan. It involves actions such as the placement of public art along the pathways as well as the development of focal points and areas of interest.

Events are great mediums to showcase the pathway network and recognize volunteer efforts. Various events should be programmed along the pathways, particularly when key milestones are achieved.
EDUCATE PATHWAY USER ABOUT PROPER TRAIL ETIQUETTE

Residents indicated the need to improve pathway etiquette, particularly related to the safe and proper use of the network.

The recommended approach to educating pathway users about proper trail etiquette is to use two proven vehicles: signage and skills training.

National signage for trails is provided through the Transportation Association of Canada (TAC) Bikeway Traffic Control Guidelines for Canada (1998). It is recommended that these guidelines also be supplemented with Brampton specific signage as outlined in the PathWays Planning and Design Guidelines (Volume Two).

Skills training is usually associated with programmes geared to cyclists. However, recognizing that this Plan recommends both on and off-road trails, it is also important to address the education of motor vehicle operators and other trail users.

There are four components to address cycling education in Brampton:

1. Develop safe cycling skills in children.
2. Teach adult cyclists their rights and responsibilities.
3. Teach motorists how to more effectively share the road with cyclists.
4. Work with the Ministry of Transportation to develop and implement bicycle safety strategies.
Children can be effectively taught safe cycling skills through the elementary school system. The school boards should be encouraged to deliver the following messages:

- Wear a helmet, since it reduces the risk of serious head injury by 85%;
- Obey all traffic laws, since cyclists have the same responsibilities and consequences as motorists;
- Look both ways before crossing the street;
- Always ride with the flow of traffic;
- Be predictable by signaling your intentions;
- Be visible by wearing bright or reflective clothing, and always using a front and rear light at night; and
- Very young children should always ride with experienced supervision.

The second component of educating cyclists is to focus on adults. Adult cyclists fall into several different categories of riders. Some adults are comfortable riding on busy streets and mixing with traffic, while others prefer quieter streets or off-road trails. There are adults who ride a few times a year, for recreational, work and commuting. Therefore, educational efforts must be tailored to match the concerns of each group and their cycling requirements.

Targeting adult cyclists with education is more challenging than children since they may have long established cycling habits and are not often held together as a captive audience. However, the City should take advantage of its existing programmes, committees and publications to deliver the following message:

- Obey all traffic laws since cyclists have the same responsibilities and consequences as motorists. Disobeying traffic laws gives cyclists a bad reputation, is potentially dangerous and may result in a ticket under the Highway Traffic Act;
- Be alert for other users, motorists and potential road hazards such as potholes and loose gravel;
- Wear a helmet, since it reduces the risk of serious head injury by 85%;
- Always ride where motorists and others expect to see cyclists;
- Be predictable by signalling your intentions, never weaving in and out of traffic and staying approximately 1 metre away from the curb;
- Be visible by wearing bright or reflective clothing, and always using a front and rear light at night; and
- Stay off sidewalks since in Ontario, bicycles ridden by adults are legally classified as vehicles and should behave as such.
The third component of education is to teach and inform motorists. The goal should be to foster a broad awareness and respect for cyclists. Many motorists are already cyclists and can be encouraged to ride more often. All motorists should be taught good driving practices and information about cycling behaviour to improve safety.

As with adult cyclists, the City should take advantage of its existing programs, committees and publications to deliver the following message:

- Obey all traffic laws since minor collisions between a motor vehicle and a cyclist could result in a serious injury to the cyclist;
- Be alert for trail users, for sudden changes in their behaviour, and at intersections;
- Be patient, since cyclists have a right to travel on every road except expressways, aggressive driving creates an unnecessary atmosphere of hostility;
- Be predictable by signaling your turns;
- Do not sound your horn unless necessary, since cyclists can see and hear motor vehicles; and
- Follow and pass at a safe distance so cyclists can react safely to hazards that motorist may not see.

The final component of education is for the City of Brampton to work with the Region of Peel and the Ministry of Transportation to develop and implement bicycle safety strategies.
A 1998 Coroners report on cycling fatalities stated that the Ministry of Transportation (MTO) should take a lead role in encouraging bicycle use in urban centres and in improving safety.

The City of Brampton should work with the MTO to implement the recommendations in the Coroners report, which included:

• improving cycling safety content in all publications and driving courses;
• providing current bicycle safety training for all driver examiners, police recruits and court personnel, as outlined above; and
• providing funding for bicycle promotion and safety programs to assist Brampton in reducing cycling injuries.

Other trail users need to be educated to follow established trail etiquette, including:

• stay to the right and allow others room to pass on your left;
• yield to pedestrians: they have the right of way on multi-use trails;
• when passing others, sound your bell if your on a bike or call out "On your left";
• ride slowly down hills, under and across bridges and where trails curve sharply; and
• stay on designated, open trails.

Such trail etiquette messages should be conveyed by the City through promotional material and information signage.

**PROMOTE STEWARDSHIP AND FOSTER PARTNERSHIPS**

Residents and businesses stated they want to help the City achieve a great pathway system. Promoting and fostering active community involvement is recommended to make Brampton's pathways a living system.

A living pathway system means much more than people using the system. It requires the community to contribute to its overall health. An active example is a Brampton group called Walker Against Glass (W.A.G.). With almost 100 volunteers, they are committed to assisting the City with the control of glass within the open spaces of Brampton.
The mandate of this group could be expanded to act as the eyes and ears of the City by alerting staff of events of vandalism, pathway repair locations and areas prone to litter.

The City should actively promote stewardship and foster partnerships by undertaking six key steps. These are:

1. Understand the community volunteer base.
2. Rationalize City services with volunteer mandates.
3. Prepare a community involvement strategy.
4. Initiate programs with enthusiasm.
5. Monitor the effectiveness of programs.
6. Recognize volunteer efforts.

The following provides a more detail discussion of each of these steps.

**Understand the Community Volunteer Base**

Every community has a volunteer base. The challenge is to seek them and find out about their interests and/or mandate. The information should be documented as a base for the future. Once contact with the individuals and/or organizations have been made, periodic follow-up calls are recommended to establish a solid working relationship.

**Rationalize City Services with Volunteer Mandates**

The City should review its core activities related to the management and health of the pathways. Some examples include:

- litter control;
- tree planting;
- inspection;
- programming and events;
- fund raising; and
- capital improvements and monuments.

The next phase is to rationalize which individuals and groups share similar mandates or could potentially expand their mandate to include the activities outlined in the City’s core businesses, locations and needs.
Prepare a Community Involvement Strategy

Before going to the volunteer base, a clear plan with concise objectives and the level of commitment required must be developed. This strategy should include the following components:

• marketing /communication plan;
• volunteer protocol agreements, which identify items such as the frequency of involvement, insurance obligations and the length of the agreement;
• a detailed understanding of the City's role in the partnership;
• recognition strategy;
• goals and objectives of each partnership; and
• administrative format and/or staff contact for each program.

Initiate Programmes with Enthusiasm

The greatest challenge with any volunteer based programme is to inspire volunteers to participate in a given program.

Working with volunteers takes a special individual and/or organization. Many management-consulting firms agree that motivating people to volunteer is one of the purist forms of leadership. It should be noted that this venture truly takes time and diligence.

Monitor the Effectiveness of Programs

As the groups and organizations begin their role in the partnership arrangement, staff must monitor their progress and follow-up to ensure the City has met their obligations to the partnership. A call, a visit, or some popsicles for the children involved are all signs of good-will and go a long way in cultivating these important relationships.

Recognize Volunteer Efforts

As mentioned, programmes involving community members requires a recognition programme to companion sponsorship and in-kind programmes. This could simply be in the form of a participation certificate, volunteer luncheon or sign noting the contribution. There is a greater chance of success when the sponsorship and partnerships programmes are companioned with a recognition programme. Very often recognition is the catalyst required to engage volunteers.
(1A) New bridges and trail: Sandalwood Park, (1B) Steeles Park, (1C) Elgin Park
7.0 Cultivating Success

This Plan is not static.

The timing and details related to its implementation, particularly the location of recommended routes and facility types, can and should evolve through continued community consultation and detailed technical studies when and where appropriate.

At the same time, however, the extensive City and community effort that established the overall direction for this Plan should be respected.

Cultivating this success requires the following tools and mechanisms necessary to implement this Plan.

Implementing Actions

There are six actions that will cultivate the success of this plan. These are:

1. Define, refine and deliver the PathWays network.
2. Incorporate key PathWay elements in the Official Plan.
3. Provide an administrative structure to achieve success.
4. Fund PathWays projects on an annual basis.
5. Resource the necessary maintenance regime.

Each action is described in detail in the following sections.

Define, Refine and Deliver the PathWays Network

The recommended PathWays network illustrated on Map D will evolve through the implementation process in response to physical challenges and opportunities as well as funding realities.

The actual construction of the Pathways network will result from three steps: define, refine and deliver. These steps are summarized in Table 1 and described in the following section.
The defining stage is intended to result in preferred pathway corridors and facility types. This is a strategic level assessment that typically occurs at a city-wide or community level. As such, it is typically associated with master plans, official plans or secondary plans.

The defining stage has been completed through the development of this master plan and involved five key considerations. These were:

1. **Connections** - Preferred corridors were located to connect and extend existing pathway segments. This was to ensure a seamless pathway system across Brampton.
2. **Spacing** - Preferred corridors were located to maintain network spacing of a fifteen minute walk to the community-wide system and a 10 minute walk to the neighbourhood system. This will ensure all Brampton residents have convenient access to pathways.
3. **Destinations** - Preferred corridors were located to link desired destinations, including parks, community centres, schools and commercial centres. This will ensure residents can use the system to get where they want to go. Map B identifies desired destinations identified through the development of this Plan.
4. **Visibility** - Preferred corridors were located where they will be highly visible. This will ensure residents are aware of the system and those pathways enhance the character of Brampton.
5. **Barriers** - Preferred corridors were located where major barriers, such as the 400 series highways and rail corridors, can be overcome. This will ensure the network can be safety and efficiently built. Map C identifies barriers identified through the development of this Plan.
The **refining stage** confirms the pathway route and facility type. This involved a focused assessment of a preferred corridor and is typically associated with block plans, plans of subdivision or conceptual design.

Refining a preferred corridor to confirm the pathway route and facility type involves six key considerations. These are:

1. **Access** - Defined pathway routes will provide direct and convenient access to destinations. This will ensure the pathway serves the needs of Brampton's residents.
2. **Intersections** - Defined pathway routes will intersect with other pathways at key nodes and overcome barriers, such as arterial roads and rail lines. This will ensure efficient and safe movement along the pathway system.
3. **Volume** - Defined pathway routes and facility types will be appropriate for the volume of traffic expected on and/or adjacent to the facility. This will ensure the route and facility is integrated with Brampton's transportation system.
4. **User** - Defined pathway routes and facility types will accommodate expected users of the system, including pedestrians, cyclists and/or in-line skaters. This will ensure the route and facility meets the needs of Brampton residents.
5. **Continuity** - Defined pathway routes and facility types will provide continuity between existing and planned pathways. This will ensure safe and extended use of the system by various skill levels and modes.
6. **Gateways and Character Elements** - Defined pathway routes will have prominent city and neighbourhood entry points as well as various character elements. This will ensure pathways are defining features of Brampton.
7. **Views and Vistas** - Defined pathway routes will provide views and vistas of prominent landmarks, community and neighbourhood features and open spaces. This will ensure residents a diverse experience along the pathway system.

These considerations were used at a conceptual level to develop the recommended pathway types shown on Map D. These types should be confirmed on a site-by-site basis in keeping with the directions of this Plan and the detailed provisions of the *Brampton PathWays Planning and Design Guidelines*. 
The **delivery stage** results in the design and development of a pathway route to accommodate a specific facility type. This involves a detailed assessment that is typically associated with the preparation of construction drawings, as well as its construction, acceptance and maintenance.

Delivering a pathway involves eight key considerations: width, grade, design speed, stopping distances, alignment, site-specific features, design treatments and elements, as well as construction and maintenance costs. These considerations are discussed in detail in the *Brampton PathWays Planning and Design Guidelines* as well as other technical publications.

From a staff perspective, the define, refine and deliver process will result in seven key steps. These steps are illustrated in Figure 1. These are:

1. **Candidate Route** - will be identified for development or redevelopment in a particular area of Brampton.

2. **Route Analysis** - the feasibility of the candidate route will be determined through an analysis of the site-specific characteristics of the route in keeping with the considerations outlined in the Brampton PathWays Planning and Design Guidelines. As well, public input into the route analysis should be sought to make the public aware of the planned pathway and seek their comments and suggestions on pathway design and development.

3. **Concept Plans** - will be developed to evaluate alternative means of accommodating a specific connection through an area in keeping with the considerations outlined in the Brampton PathWays Planning and Design Guidelines. Again, public input should be sought on these concept plans to ensure the pathway reflects the needs of the customers.
4. Detailed Design - involves the preparation of detailed construction drawings and associated costs for the facility in keeping with the considerations outlined in the Brampton PathWays Planning and Design Guidelines.

5. Construction - involves those activities required to develop a functioning pathway connection, including meeting any tendering, contracting and acceptance protocols.

6. Promotion - involves making the public aware of the new connection in keeping with the communications strategy.

7. Maintenance - involves monitoring the facility and making the necessary repairs to minimize customer risk and extend the life of a facility.

INCORPORATE KEY PATHWAY ELEMENTS IN THE OFFICIAL PLAN

The Official Plan has established a 20-year planning framework to manage physical growth and development of Brampton.

The current Official Plan provides support, in the form of objectives and policies, for the predecessor to this Plan - the Pedestrian and Cycling Trails (PACT) Report. These objectives and policies should be amended to reflect this Plan.

The recommended Official Plan amendment should contain revised objectives and policies that incorporate the key directions of this Plan, in addition to a schedule that reflects Map D. Recommended text is provided in Appendix A. City staff should initiate the formal Official Plan Amendment immediately following adoption of the Pathways Master Plan.

Provide an administrative structure to achieve success

People and leadership are the keys to setting the implementation of the PathWays Plan in motion. The formal relationships between individuals and organizations and their operational practices are important factors in determining whether a PathWays initiative will proceed and be successful. Maximizing participation and removing obstacles to the flow of information between participants are the two main objectives in managing implementation.
The current administrative structure for organizing and implementing pathway initiatives within the City of Brampton largely rests with three departments: Community Services, Planning and Building and Works and Transportation.

Administratively, the lead department responsible for the implementation of the PathWays Master Plan should be the one at the forefront of design and development. In the City of Brampton this is the Planning and Building Department.

At present, there is no staff person solely responsible for co-ordinating all pathway activities that are envisioned in this Plan. Therefore, the City should establish a full-time staff position to oversee pathway related issues in Brampton. The responsibilities of this position should include:

- co-ordinating and championing the implementation of the PathWays Master Plan across departments;
- providing pathway input on various municipal and development projects;
- managing the pathway related projects;
- co-ordinating the pathway related projects with other agencies and adjacent municipalities;
- inspiring participation within the community for pathways; and
- developing funding opportunities in both the public and private realm.

The City of Brampton presently does not have a Council appointed public advisory committee for pathways. Given the substantial community and stakeholder involvement throughout the development of this Plan and the campaign for a customer drive pathways, this is recommended to change.

The Brampton PathWays Advisory Committee, or B-PAC, is recommended to provide active community involvement in the development of successful pathways. The B-PAC would be responsible for advising Council on pathway related issues and projects, such as:

- the annual phasing of pathway development;
- promotion and marketing activities;
- seeking partners to implement various projects; and
- actively working with the community.

Resource teams of people drawn from each City department and outside community agencies would support the B-PAC on an as-needed basis.
Fund PathWay projects on an annual basis

This Plan recommends a significant capital and operational investment in pathways.

The capital investment is associated with the construction of the PathWays network and elements.

The capital cost estimates to construct the recommended pathways network are based on the field evaluation of the existing conditions at a master plan level of detail. As such, these estimates cover the basic cost of installing the facility and do not include the costs associated with site specific major improvements or additional on-site amenities.

The cost estimates are based on the following unit prices:

- **Multi-use path (Class I)** - $100/m of trail, which reflects the cost of installing a new 3 metre wide asphalt trail under normal site conditions. Alternative site treatments may be considered, such as limestone screening, however these are no assumed in the cost estimates. It is recognized that the cost to upgrade the existing multi-use paths is over and above any reconstruction costs. For estimating purposes, the additional cost for this upgrading is assumed to be $40/m.

- **Bike Lane (Class II)** - $100/m of roadway, reflects a blended rate for line painting and signage ($20/m) as well as and road widening ($180/m). In the case of road widening, it is assumed the reconstruction is a part of other road upgrading projects. Therefore the $180/m estimate does not include curbs and other related elements.

- **Signed Route (Class III)** - $2/m of roadway, which reflects the cost of installing route signs and directional signage at intersections (on average every 100m), on both sides of the road.

- **Bridges** - $5000/m of bridge span, which reflects the cost of installing a 3m wide structure.

In preparing the estimate, the following general assumptions were made:

- construction costs are in 2002 dollars and do not include taxes;
- costs associated with property acquisitions are not included in the unit prices;
- costs associated with utility relocations are not included in the unit prices; and
- costs associated with major site-specific projects, such as bridges, retaining walls and stairs are not included in the estimate.
The estimated capital investment is $43,000,000 over 20 years. Appendix B provides a detailed cost estimate on a secondary plan area basis. This appendix contains a detailed breakdown of the order of magnitude costs for each class of facility identified in accordance with Map E.

The operational costs are associated with the ongoing maintenance and promotion of the PathWays network. Based on the experience of the project team, overall trail maintenance costs per kilometre vary widely from $25/km per year for trails in a suburban or natural setting to $175/km per year for a highly maintained system in an urban setting. The operations budgets of the Community Services and Works and Transportation departments should be reviewed by staff to include these additional costs. For promotional costs, the City should anticipate resourcing approximately $50,000 per year for materials such as trail maps, promotional campaigns, events and web site updates.

To assist in reducing municipal tax-payer costs, the City of Brampton should continue to seek outside funding opportunities, such as funding from the Province of Ontario and private-sector donations.

**Resource the Necessary Maintenance Regime**

Maintenance was, by far, the most discussed topic during the public open houses. Some visitors to the sessions went so far as to bring photos of areas illustrating three years of problems. For most people, the City must improve and resource the maintenance practices in relation to the system. This will be paramount to increasing customer use and satisfaction. The City needs to adopt a level of service, establish maintenance protocols and procedures and deliver the necessary service.

**Market, Promote and Inspire Stewardship**

In the same way that the City must do its part related to maintenance, the citizens of Brampton must be encouraged to do their part. The City should facilitate stewardship by designing community based programmes that lead to a strong sense of ownership and pride. Resources for planting the seeds of these programmes are with staff. The fruit of the seeds are reduced maintenance costs, reduced events of vandalism and a system that is valued by all that use it. Marketing, and stewardship may take the form of adopt-a-path, pitch-in, environmental celebrations, earth day or a host of other community driven opportunities. After all, deeds speak.

The following provides the recommended amendment provisions to incorporate the key elements of the Brampton PathWays Plan into the Official Plan. While the exact wording of these provisions may be refined through the on-going Official Plan review process, the intent of the suggested provisions should be maintained.

The amendment will be comprised of text and a schedule. The text is provided in the following section. The schedule should reflect Map D of Volume 1.

The following text is intended to provide an initial framework to replace the existing preamble, objectives and cycling trails policies provided in sections 4.3.6 and 4.5.9 of the Official Plan.

**Amendment Text**

The City is committed to meeting the needs of non-motorized modes of travel, such as walking and cycling, as part of Brampton’s overall transportation strategy.

The PathWays system is an important component of this strategy. This planned on and off-road network of multi-use trails, bike lanes and signed routes will provide a means to establish Brampton as a vibrant and attractive city.

**Objectives**

To establish and maintain a city-wide on and off-road walking and cycling network for a broad range of users and interests.

To achieve an attractive and memorable PathWays trail system that is unique to Brampton.

To achieve a PathWays trail system that is designed by the community, for the community.

To achieve PathWays ownership and foster pride within the Brampton business community and among residents.

**Policies**

Policies should ensure that the key considerations and outcomes identified in Table 7.1 (see page 7-3) are addressed.
The City shall require all proposed developments and infrastructure undertakings to provide facilities for PathWays wherever appropriate in keeping with the provisions of this Plan and the Brampton PathWays Plan.

The City shall provide for the development of PathWays by:

(i) designating PathWays on Schedule _ and in secondary plans, where appropriate;
(ii) implementing, monitoring and updating the Brampton PathWays Plan;
(iii) providing for the development and maintenance of PathWays facilities;
(iv) ensuring that the design of PathWays complement and connect with the City’s open space infrastructure, key destinations and transit stations where feasible;
(v) ensuring that all new development proposals and infrastructure undertakings include extensions and improvements to PathWays as a part of the up-front stages of construction wherever appropriate.

The City may require the installation of PathWays features, elements and supportive facilities, such as bicycle racks, as a part of residential, commercial and industrial developments.

The City shall coordinate the development and expansion of PathWays with adjacent municipalities and other agencies as appropriate.

The City shall minimize the risk to pedestrians, cyclists and motorists through the appropriate design of PathWays facilities, the provision of signage and support for educational activities and programs.
## Appendix B - Costing

### Estimated Trail Lengths and Costs by Secondary Plan Area

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<th>Secondary Plan Area</th>
<th>Existing Trail Length (m)</th>
<th>Proposed Trail Length (m)</th>
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<th>Class I @ $160/m</th>
<th>Total @ $4800/m</th>
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### Notes:
1. Upgrading unit price does not include replacement costs, which are estimated in the order of $590/m.
2. Class II unit pricing represents a blended rate for new road construction, estimated at $1900/m, and road re-striping, estimated at $200/m.
3. Bridge unit price based on a standard 3 metre wide crossing.

### Total:
- Northward Area: $1,365,040
- Heart Lake Corridors: $28,667,300
- Carlawell Corridors: $1,370,600
- South Border: $1,712,200

Total: $38,646,902