



Trails Master Plan



PLANbyDESIGN - Urban Planners & Landscape Architects, 8 Peter Street South, Orillia, ON, L3V 5A9





Part One

Creating the Trails Master Plan

Contents

1.0 Introduction to the Project.....	2
1.1 Why a Recreational Trails Master Plan?.....	2
1.2 Benefits of a Complete Trails, Bicycle, All Terrain Vehicle (ATV) and Snowmobile System.....	2
1.3 Project Description.....	3
1.4 Project Objectives.....	5
2.0 Parry Sound Trails Today.....	6
2.1 Town of Parry Sound.....	6
2.2 Existing Recreational Trails.....	6
3.0 Public Consultation.....	7
3.1 Collecting Resident & Trail User Input.....	7
3.2 Key Findings from the Public Consultation Process:.....	8
4.0 Developing the Town of Parry Sound Trails Network.....	9
4.1 Route Development and Selection Principles.....	10
4.2 Inventory of the Trails.....	11
4.3 Identifying Local Destinations.....	13
4.4 Inventory of the Bicycle Routes.....	14
4.5 Loop the Fitness (Waterfront) Trail.....	15
4.6 The Parry Sound to McDougall Trail Link.....	16
4.7 Extend 'The Link'.....	17
4.8 Cycling Improvements.....	18
4.9 Snowmobile Trail Improvements.....	20
4.10 ATVs in the Town of Parry Sound.....	21
4.11 ATVs in the Town of Parry Sound – Preferred Final ATV Trail Route.....	22
4.12 ATVs in the Town of Parry Sound – Preferred Interim ATV Trail Route.....	23
4.13 The Final Trails Network.....	24

Alternate formats available upon request



1.0 Introduction to the Project

1.1 Why a Recreational Trails Master Plan?

A linked Town-wide Trails Master Plan can provide many direct, as well as indirect, benefits to the community and the surrounding area. Importantly, connected trails and bicycle routes support a physically active and healthy lifestyle. This helps to create a higher quality of life and can be a significant factor in attracting new residents and visitors to the area. Although improved health and quality of life are two of the most important reasons for a Trails Master Plan, a well-developed and connected trails system can offer many other benefits to a community. Additionally, All



Terrain Vehicle (ATV) and snowmobile trails offer recreational opportunities and year-round tourism, benefitting residents, the local economy and visitors.

1.2 Benefits of a Complete Trails, Bicycle, ATV and Snowmobile System

Public Health: Increasing the opportunities for walking and cycling not only leads to an increase in physical activity levels but can also reduce the reliance on cars. This lowers the health risks associated with obesity and other conditions such as heart disease, certain forms of cancer and Type-2 diabetes. Emerging research shows that a lack of physical activity is also associated with mental health issues, including depression.

Safety: Well-designed trail networks can greatly improve pedestrian and cyclist safety. The overall performance and safety of the transportation network can be improved through measures such as; traffic calming, streetscape improvements, traffic speed reductions, and vehicle restrictions. The safety benefits generated by these improvements not only apply to pedestrians and cyclists, but also to drivers. Coordinating ATVs and snowmobiles in an appropriate manner will assist in mitigating risk to new or existing users.

Environmental Protection: Trails and bicycle routes are used by 'self-propelled' forms of transportation and generate significantly less air pollution than others, particularly single occupant vehicles.

Economic and Financial: The development and maintenance costs relating to trails and bicycle route infrastructure are lower than other transportation infrastructure. There is also evidence to



support an increase in economic development and tourism associated with well-designed trails, bicycle, snowmobile and ATV networks. An ATV network through Town will benefit the community in a similar manner as snowmobile networks, providing the possibility for year-round motorized trail based tourism.

1.3 Project Description

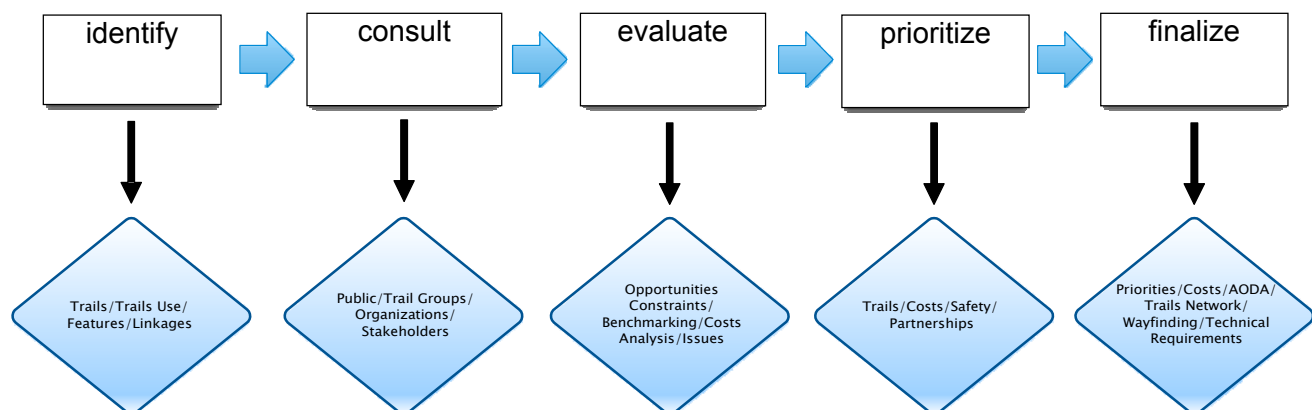
Parry Sound includes a number of existing trails and trails opportunities and this Trails Master Plan will include recommendations for linking exiting trails, hiking, biking, ATV and snowmobile routes. The plan will identify connections to municipal neighbours to aid in the creation of a larger regional trails network.

Another important aspect of this plan is the consideration of trails as economic drivers. Many trail users will purchase goods and use services in the communities they are located and can even increase home values. People using your trails means money is being spent in local restaurants, accommodations, retail purchases and day trips. This plans considers both motorized trail users and non-motorized trails users as the primary trails users. This plan aims for a balanced approach in making recommendations that will enhance the trails experience for both of these groups.

The main objectives for this study include:

- ✓ **Identifying municipal owned and private trails;**
- ✓ **Considering the need for trails in Parry Sound;**
- ✓ **Linking the principals of the '8-80 Cities' model into the overall Plan;**
- ✓ **Identification, Assessment, and Recommendations Concerning Key Issues;**
- ✓ **Ensuring inclusiveness and the consideration of the variety of users;**
- ✓ **Developing a wayfinding signage strategy for recreational trails in Parry Sound;**
- ✓ **Identification of Priority Trails and Project Capital Costs; and**
- ✓ **Final Recommendations, and detailed Operations and Maintenance practices.**

The process followed to prepare this study is highlighted below.





The plan makes recommendations to improve trails and pedestrian infrastructure throughout the Town. This has been accomplished by **identifying** key issues, **connecting** multiple destinations and establishing an interconnected municipal trail **network** linking neighbouring trail systems. **Leveraging** opportunities for partnerships, and strategically **building** a complete trail system will also play a prominent role in the success of the Recreational Trails Master Plan.

Identify
Connect
Network
Leverage
Build



**“There comes . . . a longing never
to travel again except on foot.”
— Wendell Berry, *Remembering***



1.4 Project Objectives

Identify It

Use local community knowledge to understand the key issues and identify trail development opportunities, which can assist in creating a walkable, accessible, bicycle snowmobile and ATV friendly community.

Connect It

Identify destinations requiring increased pedestrian/cycling links and an ATV thoroughfare, and identify the safest and most efficient way to connect them. Connections to neighbouring municipalities should be created.

Network It

Make trail infrastructure a visible part of the Town by promoting ATVing, hiking and cycling through clear signage, wayfinding, and delineated paved shoulders for cyclists.

Leverage It

Establish partnerships and work with neighbourhood/community interest groups and multiple levels of government to encourage and support local walking, cycling, ATV and snowmobile initiatives.

Build It

Develop an implementation strategy for trail projects that access available resources and ensure trail linkages are completed, shoulders along bike routes are paved, and that proper signage is posted.

Compatibility

Generally, this plan will strive to encourage trails which are shared by compatible users. For instance, it is not encouraged to have pedestrians and cars share a single lane. Where possible, the compatibility of trail users will be taken into account and measures will try to protect the more vulnerable users.



2.0 Parry Sound Trails Today

2.1 Town of Parry Sound

The Town of Parry Sound is the world-renowned jewel of the 30,000 Islands on Georgian Bay. Located on Hwy 400 approximately 2 hours north of Toronto, and 2 hours south of Sudbury, Parry Sound hugs the shores of the world's largest freshwater archipelago, known as the 30,000 Islands.

In 2004, UNESCO designated the area as a World Biosphere Reserve, the Georgian Bay Biosphere Reserve. Parry Sound is rich in arts, culture and heritage. The Charles W. Stockey Centre for the Performing Arts and Bobby Orr Hall of Fame are home to the international summer music festival, the Festival of the Sound. The Hall of Fame pays tribute to home-town hockey hero, Bobby Orr.

2.2 Existing Recreational Trails

The existing Waterfront Trail, the Rotary and Algonquin Regiment Fitness Trail (Fitness Trail), is a 6 km long trail stretching across the Parry Sound waterfront and linking to the North Shore Rugged Trail. The Fitness Trail is the primary hiking/biking piece of infrastructure in the Town and is also shared by snowmobiles in the winter. The Rugged Trail located along the shoreline of Georgian Bay North West of the downtown area is also a popular trail although slightly less used than the Fitness Trail due to its location and rugged nature. Other important parts of the recreational trails system in Parry Sound include the existing on-road Bicycle Routes and Snowmobile trails. All existing trails are identified in this report.





3.0 Public Consultation

3.1 Collecting Resident & Trail User Input

An important component of the Trails Master Plan was public consultation and working closely with the Trails Committee and Town Staff. The involvement of the public was essential in creating the plan and drew upon local knowledge of trails from the users themselves. Meetings with the Trails Committee were designed to obtain meaningful input regarding the existing and proposed trails network, key issues, partners, priorities, and final recommendations.

Public consultation revealed that many residents recognize the benefits of trails and generally support investment to build and improve trails. The results also suggested that residents could be encouraged to use trails more often if there was a more interconnected network.

Further in regards to the Trails Master Plan a Public Workshop entitled **8-80, Creating Healthier & Happier Communities** was hosted by the Town of Parry Sound in October of 2014. The basic premise of 8-80 is that if public spaces and streets were constructed and managed to be great for everyone from 8 years old to 80 years old, we would end up with healthy and vibrant communities.

ATV members advocated for a thoroughfare trail which connects Seguin Township to McDougall Township, using the Town as the missing link. This route would ideally have access to restaurants, the downtown and fuel. This would provide this user group the opportunity to benefit the local economy.





3.2 Key Findings from the Public Consultation Process:

1. Loop the Fitness Trail;
2. Rename the Rotary and Algonquin Regiment Fitness Trail as the 'Waterfront Trail';
3. Provide an ATV thoroughfare through Town, providing access from Seguin Township to the south to McDougall Township to the north, with the Town;
4. Maintain and improve upon the snowmobile trail system, and provide a connection to gas stations/restaurants/accommodations;
5. Cycling routes should be identified and connected to each other, and to important destinations;
6. Signage and mapping to identify where parks and trails are is required;
7. Entrance improvements to parks such as paved paths and/or vegetation/brush removal should be completed where appropriate;
8. Trail maps, rest areas, dog waste stations, and garbage receptacles are required for existing trails;
9. Develop cycling/pedestrian/trails focused events;
10. Install bicycle route signage along routes that are currently safe;
11. Connect the existing Fitness Trail to Rose Point Trails;
12. Install trail markers along the 'Rugged Trail';
13. Raise awareness of trails through wayfinding signage, branded maps, and innovative trail events and programs;
14. Develop cycling/pedestrian/trails focused events; and
15. Connect trails and bicycle routes to neighbouring communities.

“There is no power for change greater than a community discovering what it cares about.”

- Peter Kenyon



4.0 Developing the Town of Parry Sound Trails Network

The final recreational trails network will consist of hiking trails, on and off-road bicycle routes, snowmobile and ATV routes, and the waterfront trail. Recommendations in the plan will focus on completing missing links in the existing trail network, ensuring accessibility requirements are met, identifying opportunities for new trails and trail improvements. The guidelines and principles provided in the plan will ensure the Town is able to provide pedestrian and bicycle friendly neighbourhood design well into the future, and safe ATV route implementation. The following process was used to develop the Trails Master Plan.

Connect It

Identify destinations requiring increased pedestrian and/or cycling links and identify the safest and most efficient way to connect them with pedestrian and cycling infrastructure, and connect ATVs to the downtown.

1. Complete inventory of existing trails and conditions using mapping and reports from the Town, which identified existing trails, cycling routes, snowmobile routes and the requirements for ATV travel through Parry Sound.
2. Consultation with the Steering Committee, key stakeholders and interested members of the public to receive feedback on existing trails, user needs, and potential trail routes.
3. Develop a network of potential routes to be examined and considered for inclusion in the final recreational trail network.
4. Discussion regarding trails routes and trail user's needs with the committee, residents, staff analysis of aerial imagery and field investigation.
5. Recommend facility types for each of the on and off-road trail routes and linkages.
6. Review and consult with the Steering Committee and public to receive feedback on the recommended network and trail facility typologies.
7. Finalize the recreational trails network, trail typologies, and a phasing strategy based on feedback from the committee, staff and the public.



4.1 Route Development and Selection Principles

The following list of guiding principles was used to select the preferred trails and bicycle routes for the Town of Parry Sound Trails Master Plan.

Key Issues: Preferred trails and bicycle routes should help address the key issues identified during the public consultation portion of this study, specifically:

- Trails in Parry Sound include non-Motorized and Motorized Users
- Connect existing trails;
- Loop the Fitness Trail;
- Connect to neighbouring communities;
- Include trail improvements such as signage, rest areas, dog waste stations, and garbage receptacles;
- Identify safe cycling routes to connect to major destinations;

Safety: Preferred trails, ATV routes and bicycle routes should be located along direct and maintained routes. These routes should be signed, and utilize design standards for the steepness of gradient when required, including cross slopes.

Visibility: Preferred trails and bicycle routes should visually connect to other transportation infrastructure, including sidewalks, and be integrated into the roadway.

Linkages: Preferred trails and bicycle routes should be located in areas that connect existing trails and destinations.

Multiple User Types: Trails should provide opportunities for motorized and non-motorized travel and allow multiple types of users (walkers, cyclists, runners, motorized etc.) to use the same trail, separation should be considered where conflict or safety issues are identified.

Convenience/Comfort: Preferred trails and bicycle routes should include rest areas, points of interest, and signage at regular intervals.

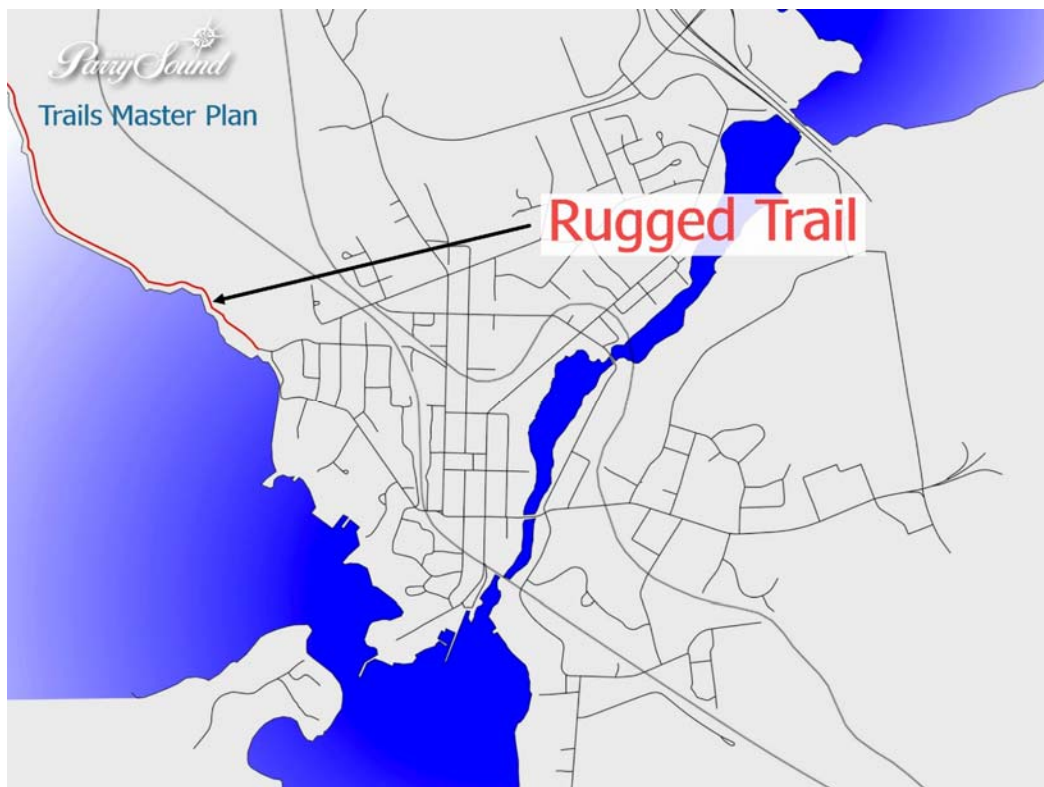
Accessibility: Preferred trails and bicycle routes should be accessible when and where feasible. Accessibility and universal design will be a primary consideration in any **new trails or park development** and will meet the requirements of the Accessibility for Ontarians with Disabilities Act, 2005 (AODA) Design of Public Spaces regulation.

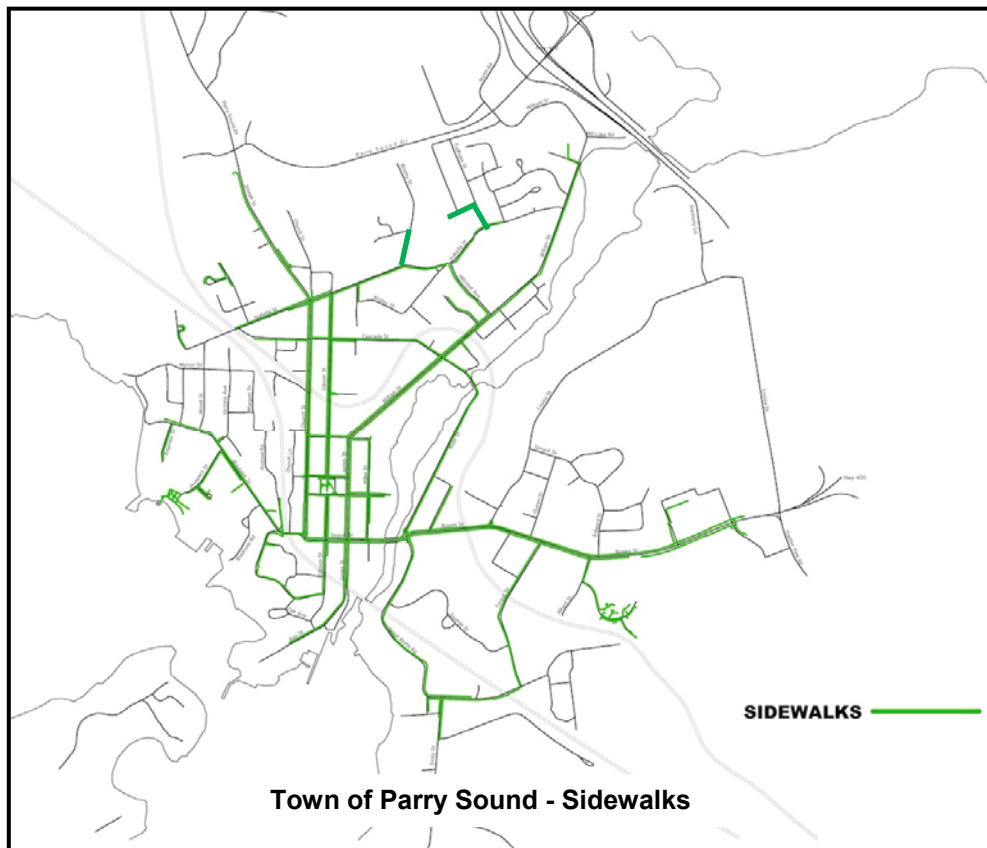
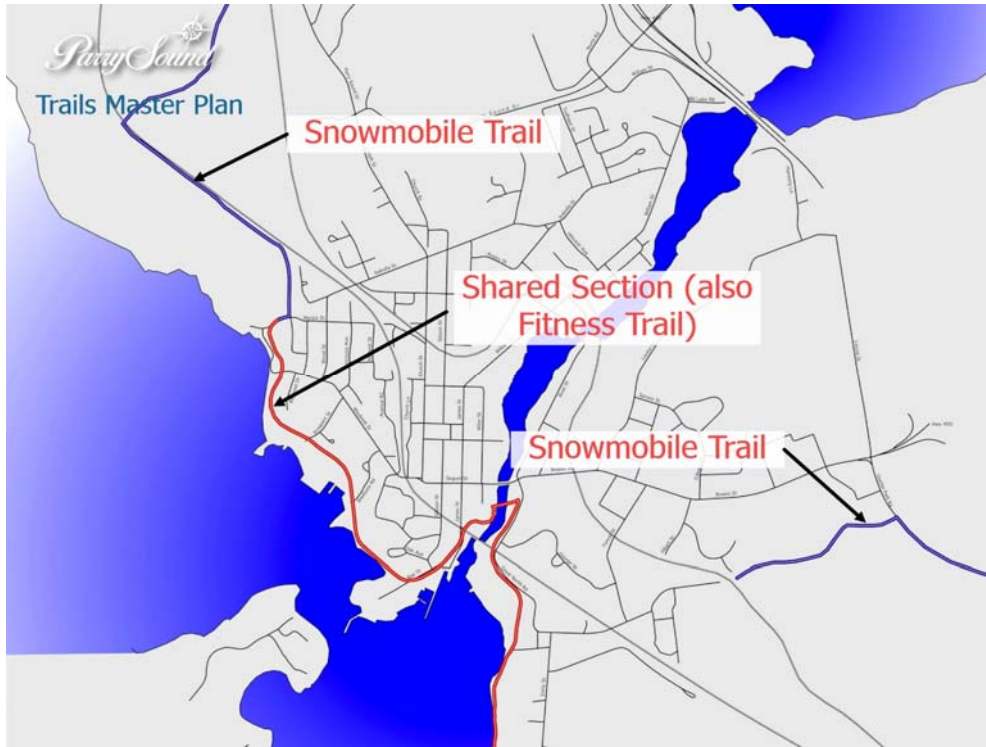
Network It

Make motorized, pedestrian and cycling infrastructure a visible part of the Town's promotion through clear signage, wayfinding, and delineated paved shoulders for cyclists.



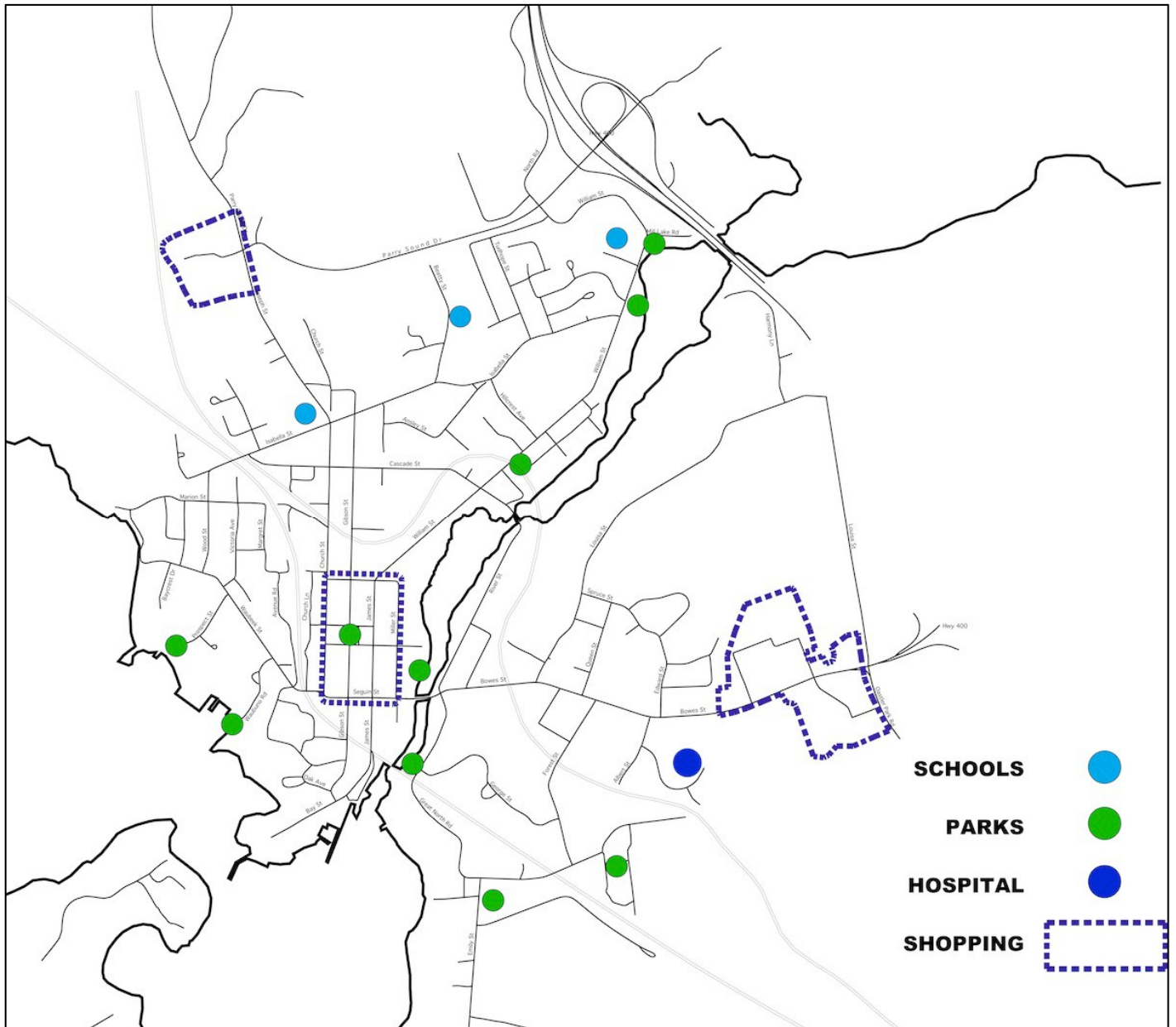
4.2 Inventory of the Trails





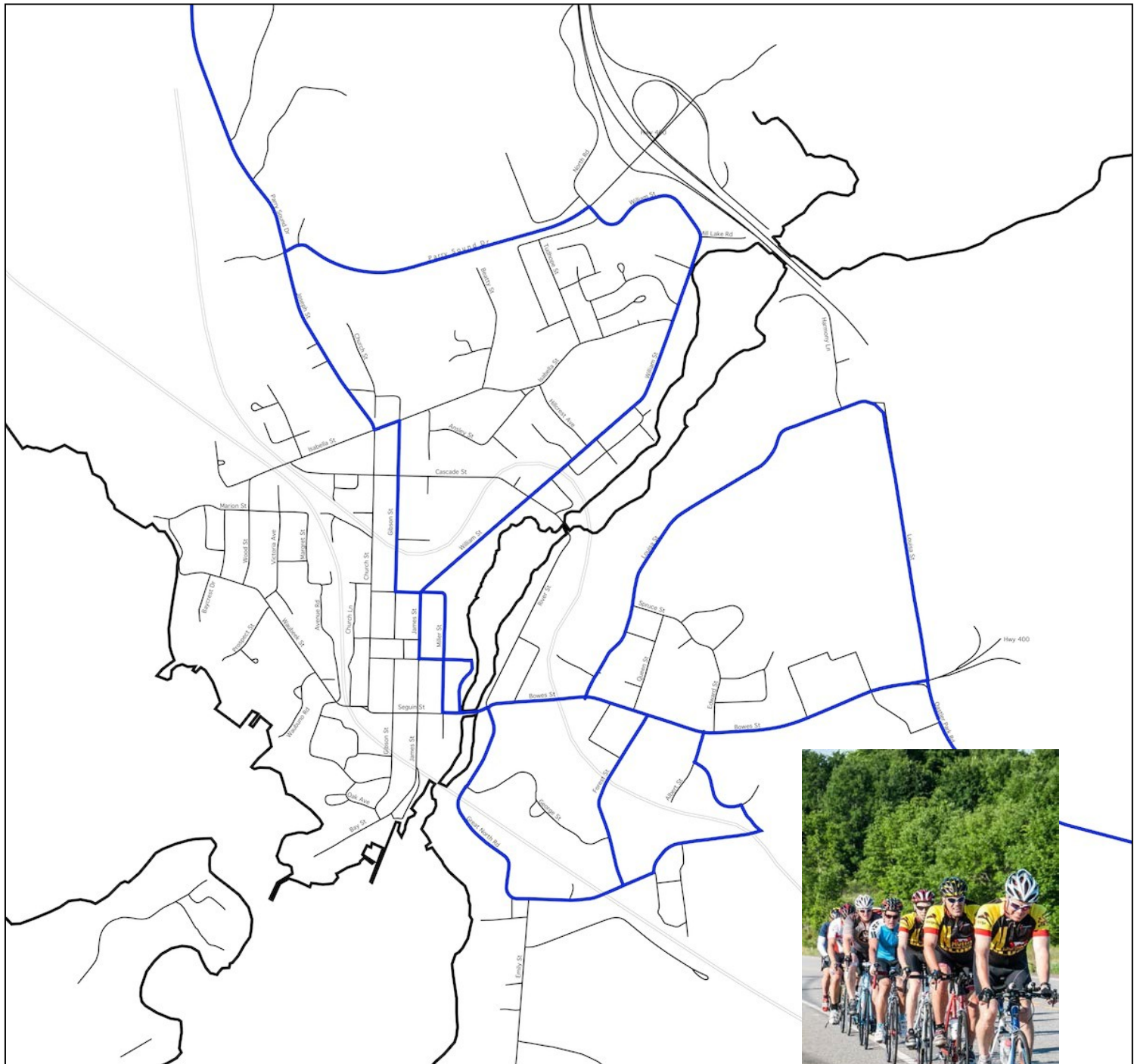


4.3 Identifying Local Destinations





4.4 Inventory of the Bicycle Routes



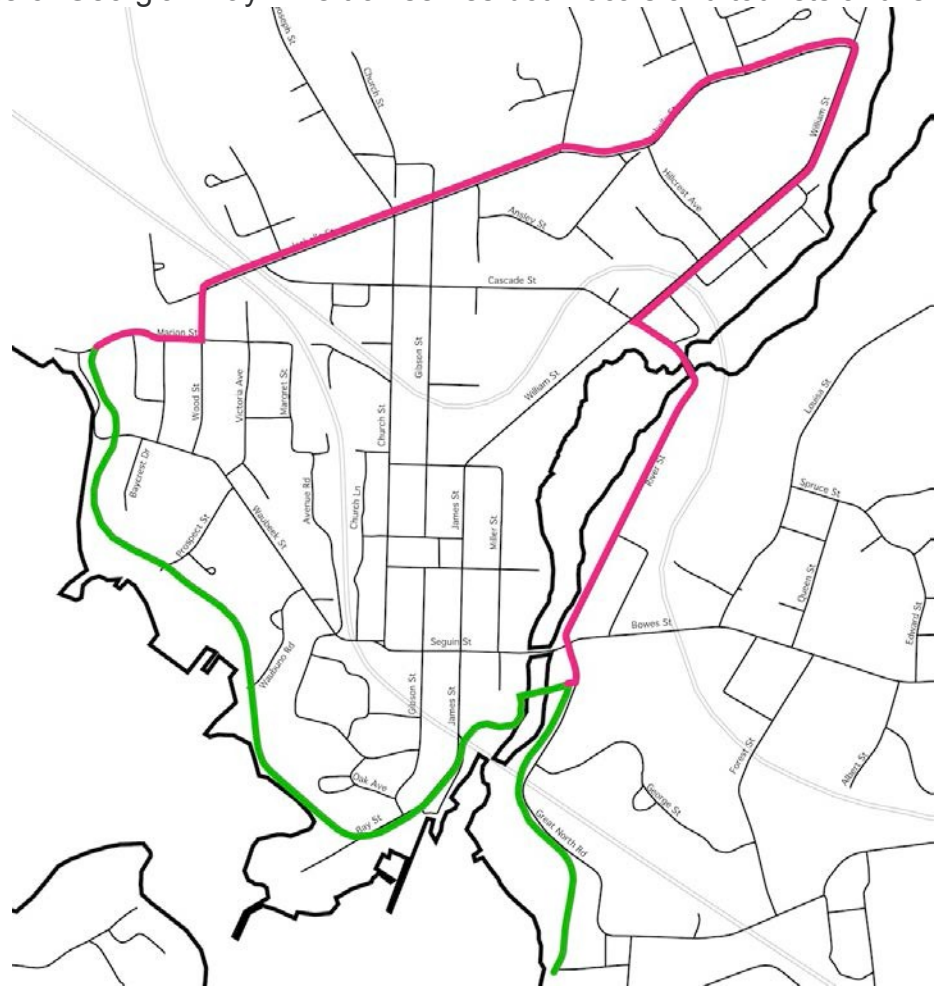
Popular Cycling Links – On-Road



4.5 Loop the Fitness (Waterfront) Trail

The waterfront Fitness Trail in Parry Sound is the most significant piece of local hike / bike / snowmobile infrastructure. The trail serves a diversity of users types and is aligned along an extremely scenic route at the edge of Georgian Bay. The trail serves both locals and tourists and is an important part of the overall image of Parry Sound. The trail is presently a linear experience along the waterfront, connecting to the Rugged Trail at the North East terminus and onto road and eventually Rose Point at the South West terminus.

One of the main priority projects and recommendations of this plan is that this trail should be looped so that a continuous route, taking users from the waterfront and into the Town, is provided. The method for doing this identified in this plan is to connect to the existing trail at Marion Avenue (at the North East end of the trail) from there onto Wood Street, to Isabella Street, to William Street, travelling across the Seguin River on Cascade Street to River Street, to Great North Road and connecting back to the existing waterfront trail at the pedestrian bridge.

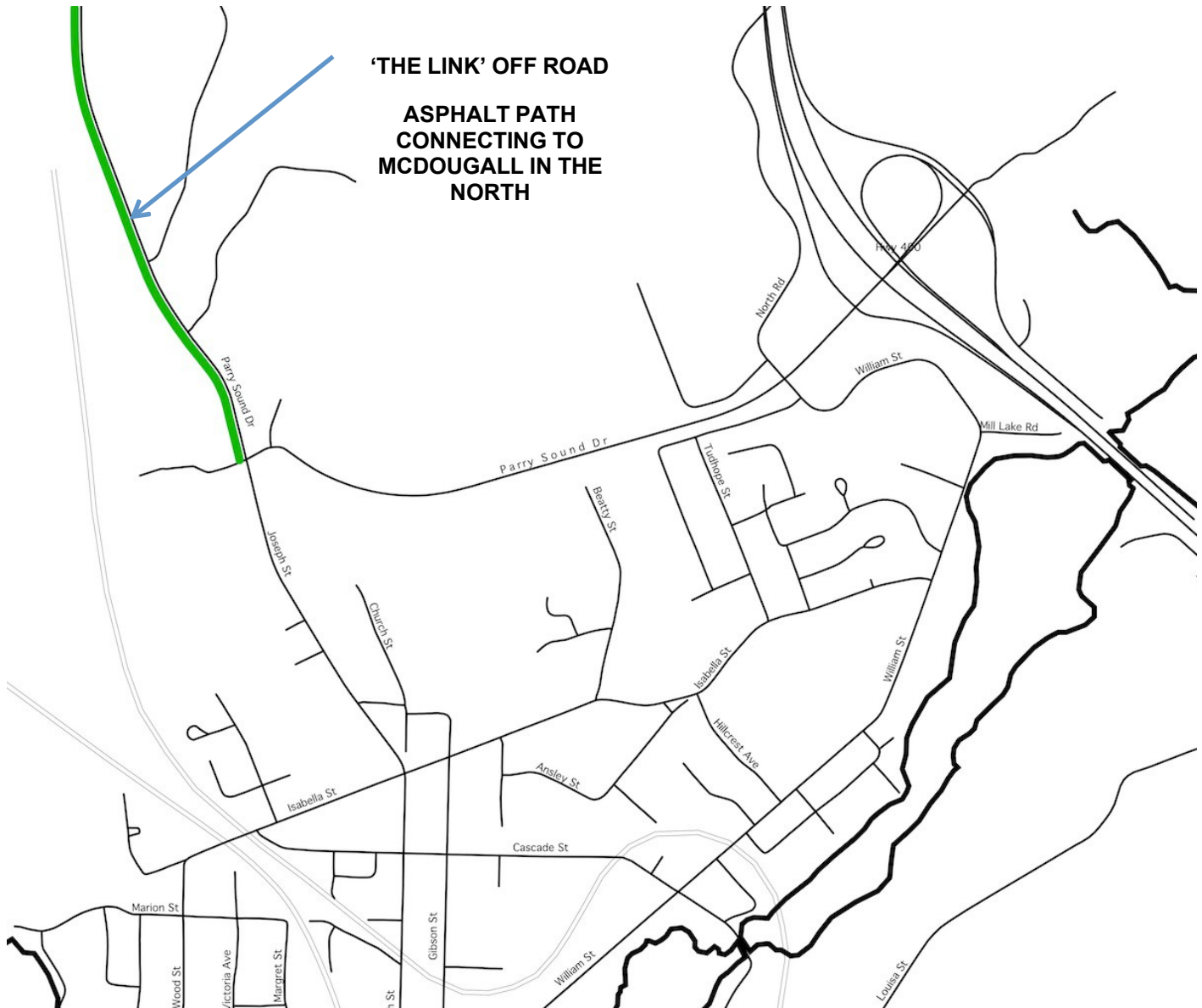


Further it is recommended that this loop be improved to accommodate both pedestrians and cyclists. Sections of Marion Avenue, Isabella Street, and Wood Street require widening to safely accommodate cyclists. Cyclists should be accommodated on road by providing a paved shoulder that provides space for a bicycle (min. 1.2m wide).



4.6 The Parry Sound to McDougall Trail Link

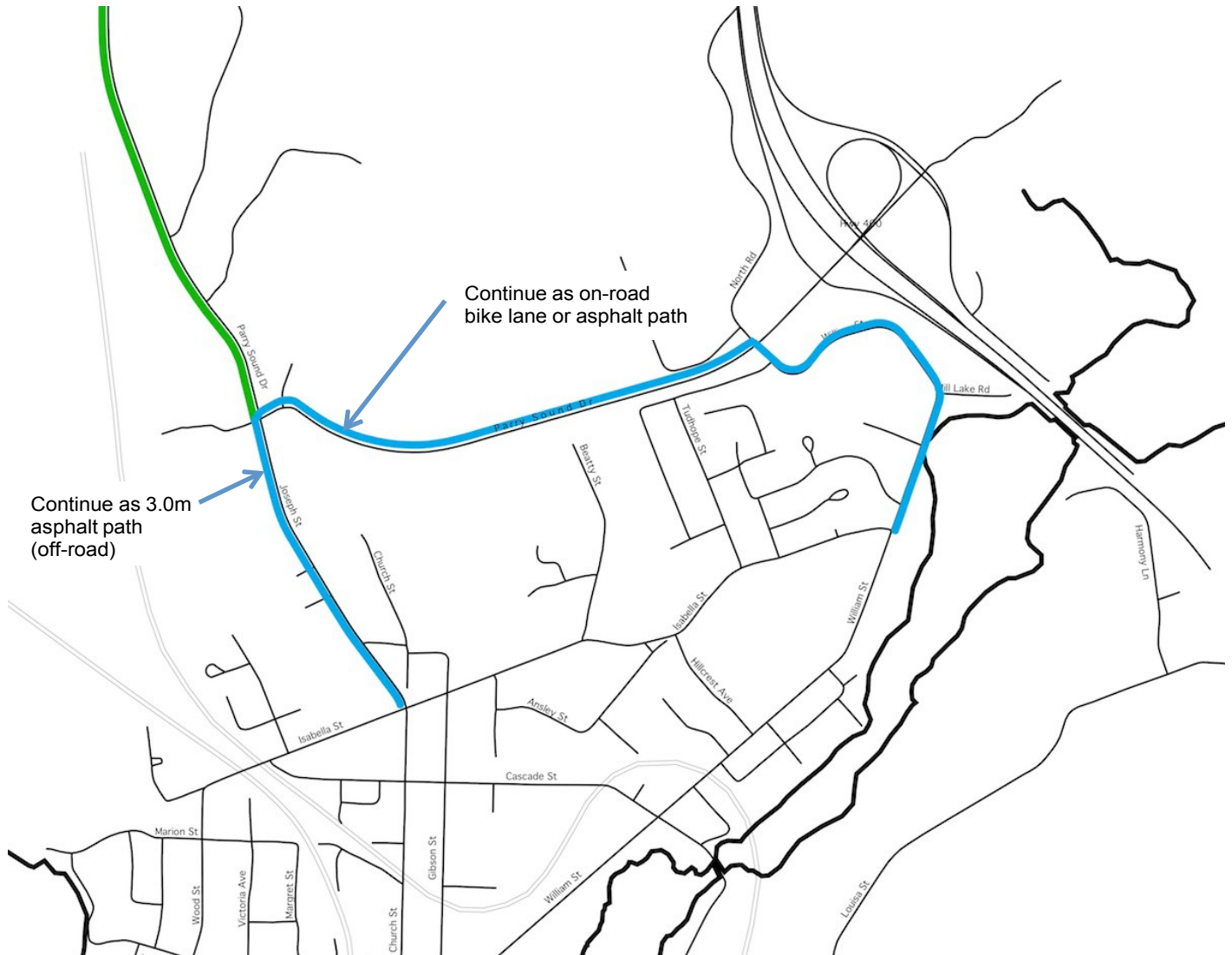
The Town of Parry Sound is presently proposing a trail connection that will link Parry Sound with their neighbour to the north, the Municipality of McDougall. This trail is referred to locally as 'The Link' and will be accommodated off road, within the existing right of way, as a 3.0m wide asphalt pathway. A trail of this width can easily accommodate multiple users types (cyclists and pedestrians) and two-way traffic. This trail represents a significant piece of trail infrastructure for the Town of Parry Sound and connecting other existing and proposed trails to this will be one of the main goals of this plan.





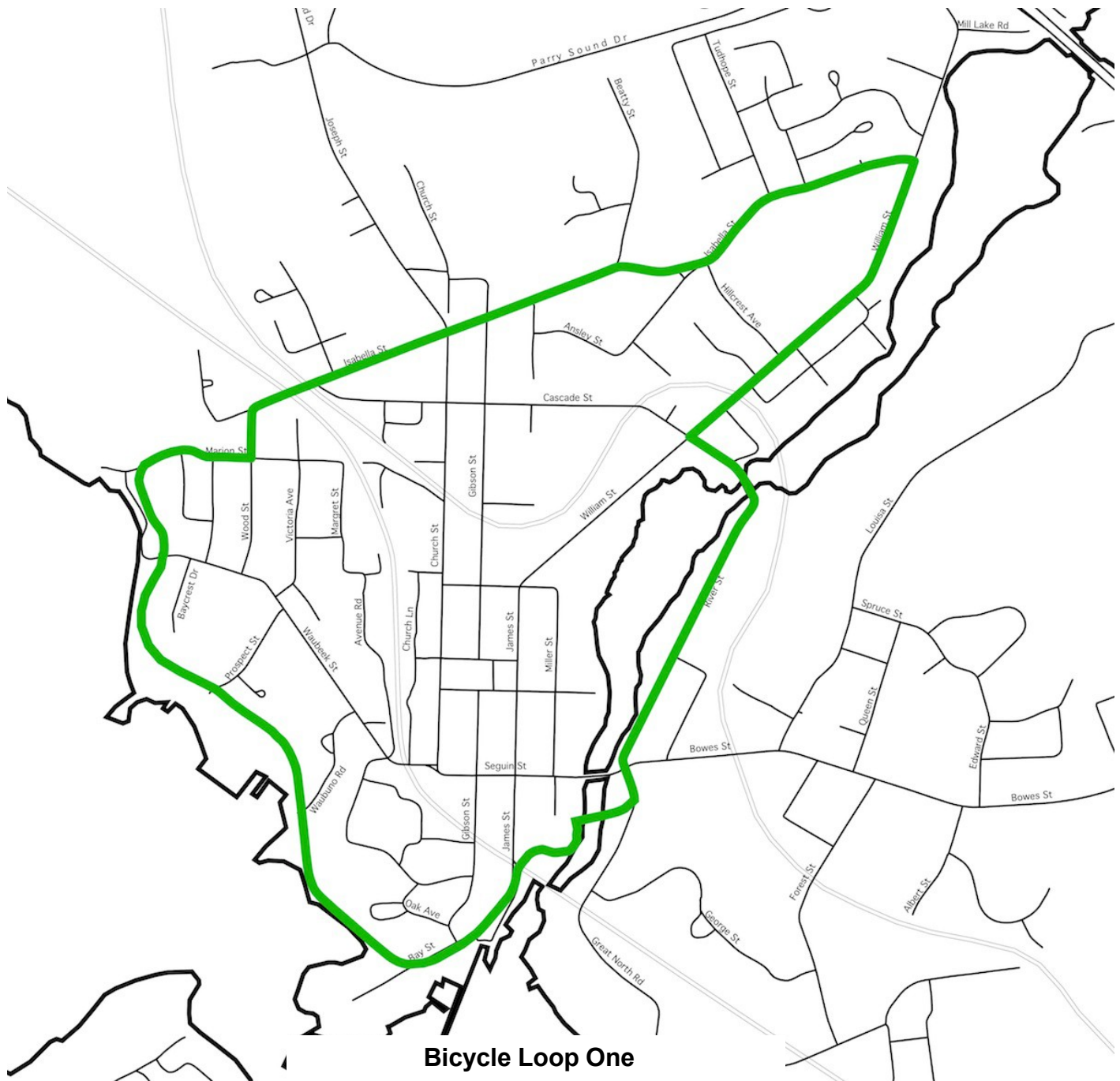
4.7 Extend 'The Link'

'The Link' as it is presently planned will terminate/initiate where Parry Sound Drive and Joseph Street meet. Considering the significance of this trail, one of the main objectives of this plan is to connect to and extend 'The Link' so that a seamless pedestrian and bicyclist experience is provided. This plan proposes that the trail be extended down Joseph Street to connect with Isabella Street where other planned routes will allow cyclists and pedestrians to continue into the downtown. Also from the intersection of Parry Sound Drive and Joseph Street it is proposed that the trail be extended along Parry Sound Drive as either an on road bike lane or an asphalt path separated from the road.

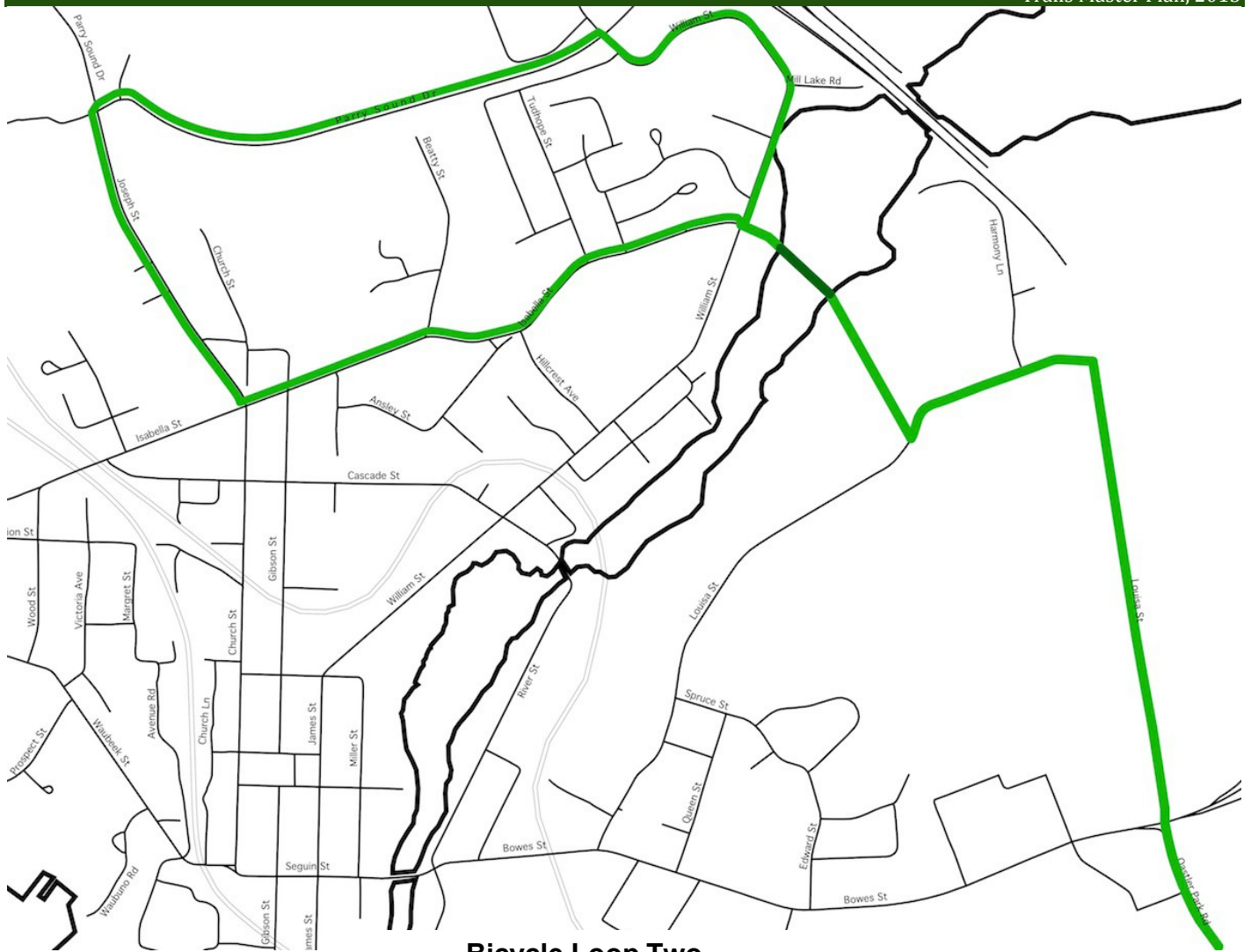




4.8 Cycling Improvements



- 1. Initiate engineering studies for widening and/or bicycle safety improvements at Marion Avenue, Isabella Street, and Wood Street.**
- 2. Formalize the Parry Sound Bicycle Loop using route signage and mapping.**
- 3. Promote the new bicycle route once signage and safety improvements have been completed.**

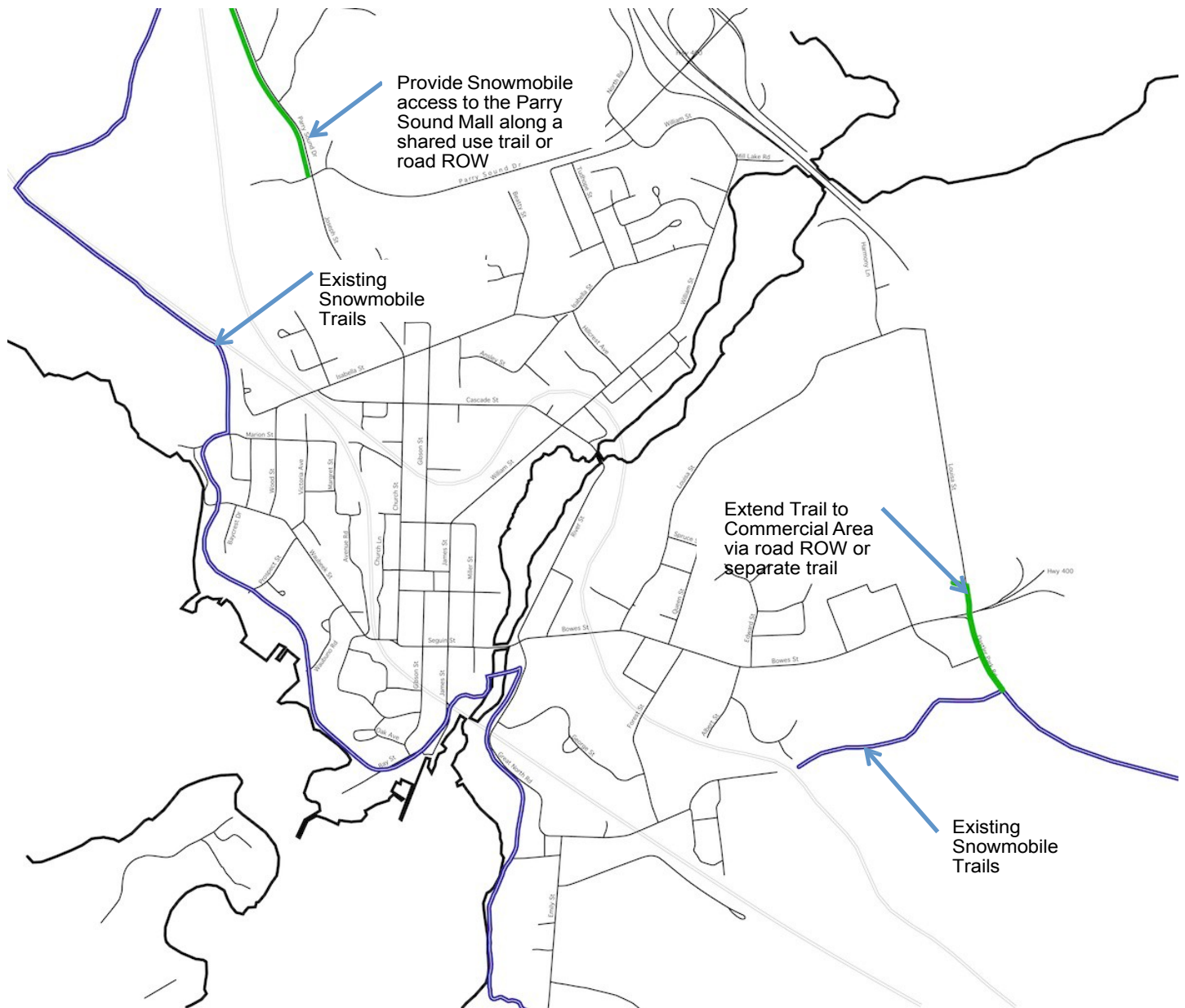


Bicycle Loop Two

- 1. Install Safety Signage at Bows Street and River Street for Bicycle Crossing.**
- 2. Install Bicycle Route Signage on all identified bike routes.**
- 3. Initiate the engineering studies for creating a safe pedestrian/bicycle route connecting; 'the Link', to Parry Sound Drive, to William Street, Isabella Street, and Joseph Street.**
- 4. Initiate engineering studies for Seguin River crossing and trail connections.**



4.9 Snowmobile Trail Improvements





4.10 ATVs in the Town of Parry Sound

There is currently no ATV route through the Town of Parry Sound and ATV users traveling in this area are required to bypass the Town. ATV use in general is growing in popularity and in the Parry Sound Region the 'Park to Park' trail is a significant piece of tourism infrastructure attracting a significant number of users from across Ontario. According to Ontario Trails; the Park-To-Park Trail is a regional initiative to create an east-west link through Parry Sound/Muskoka Districts and Haliburton County. Connecting Killbear Provincial Park to Algonquin Provincial Park, this 230 kilometre length of trail is a destination for all trail enthusiasts. Whether you walk, bike, horseback ride, or ATV/UTV/Dirtbike, the Park to Park Trail system has a trail for you.

The project will ultimately produce a four season multi-use trail system that will link seven of the province's premiere provincial parks, as well as area attractions, services, amenities and other trail networks such as the Trans Canada Trail. This provides a seamless trail system encompassing community trails, snowmobile routes, historic colonization and logging roads, former rail beds, new links and some secondary roads.

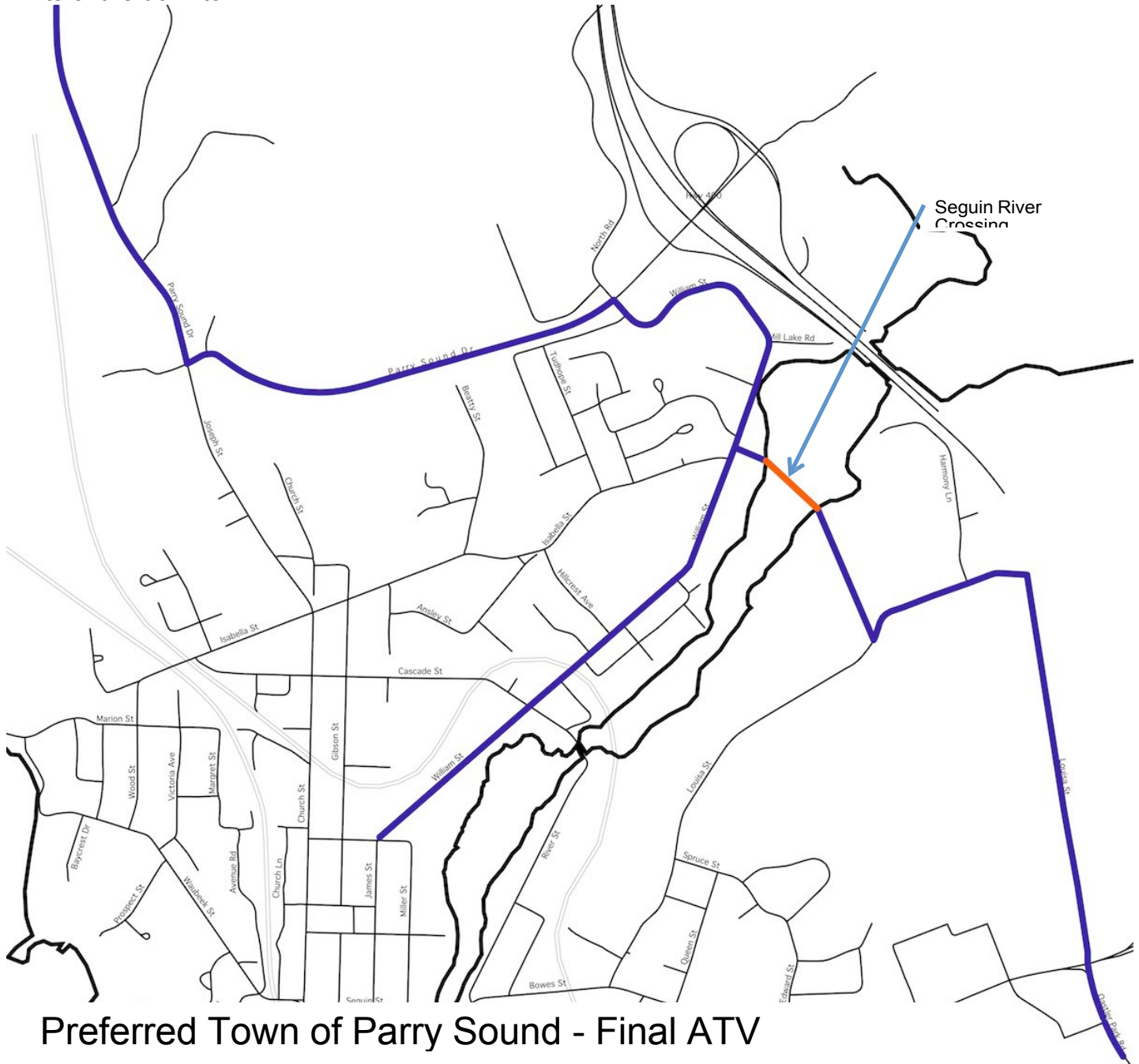
Although the Park to Park trail is advertised and promoted as being in the 'Parry Sound' area, there is opportunity for the Town to capitalize on the economic benefit provided by these visitors. This plan recommends that an ATV route be identified so that these users have a way to get into and through the Town of Parry Sound. To this end several candidate routes were identified as part of this study. The candidate routes were reviewed in the public open house with ATV users and examined by the Steering Committee – ultimately a preferred 'interim' route and a preferred 'final' route for ATV users has been identified and it is being recommended that ATV use be allowed in the Town of Parry Sound along the interim route until the final route has been constructed and opened for use.





4.11 ATVs in the Town of Parry Sound – Preferred Final ATV Trail Route

This plan proposes a Seguin River Crossing that would be planned as a multi-use bridge to accommodate ATVs, snowmobiles, hikers, and bikers. This bridge could act as a draw for both active and motorised transportation tourism. The new river crossing makes the final ATV route through Town possible and would also provide significant convenience to other trail users. With ATV usage growing and because of the economic benefits related to providing convenience to these users the final route includes an identified way to travel through Parry Sound but also to the limits of the downtown.

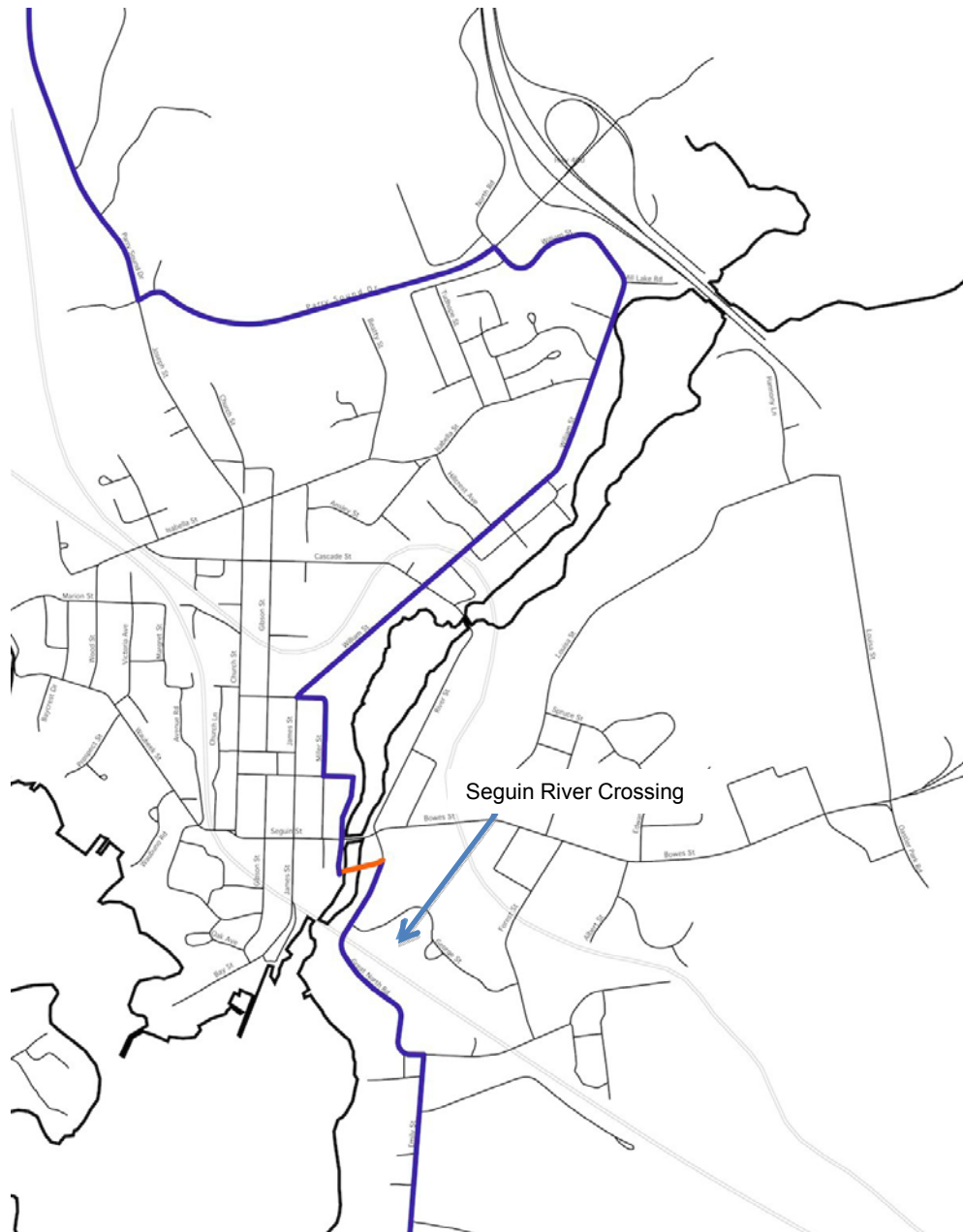


Preferred Town of Parry Sound - Final ATV



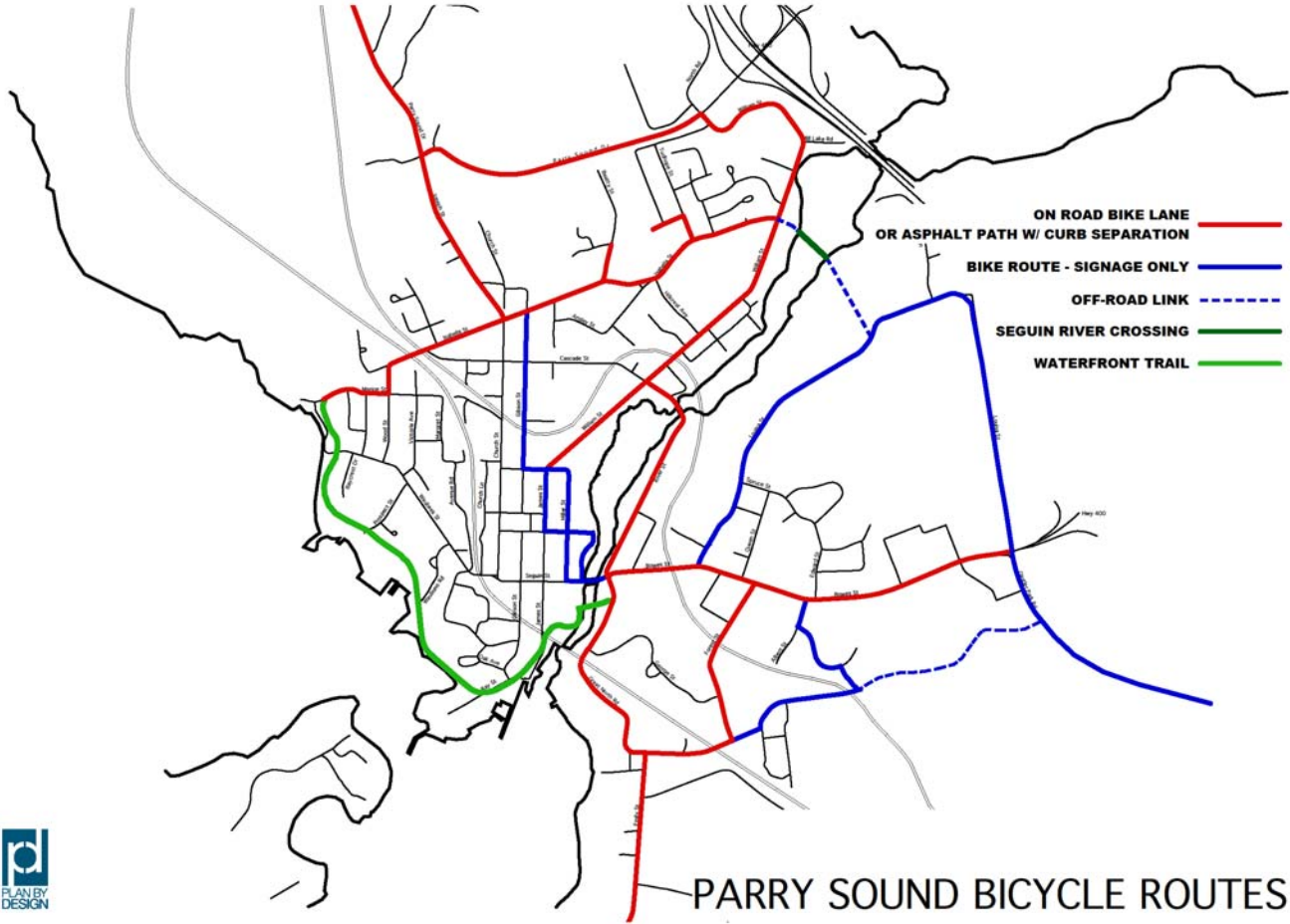
4.12 ATVs in the Town of Parry Sound – Interim ATV Trail Route

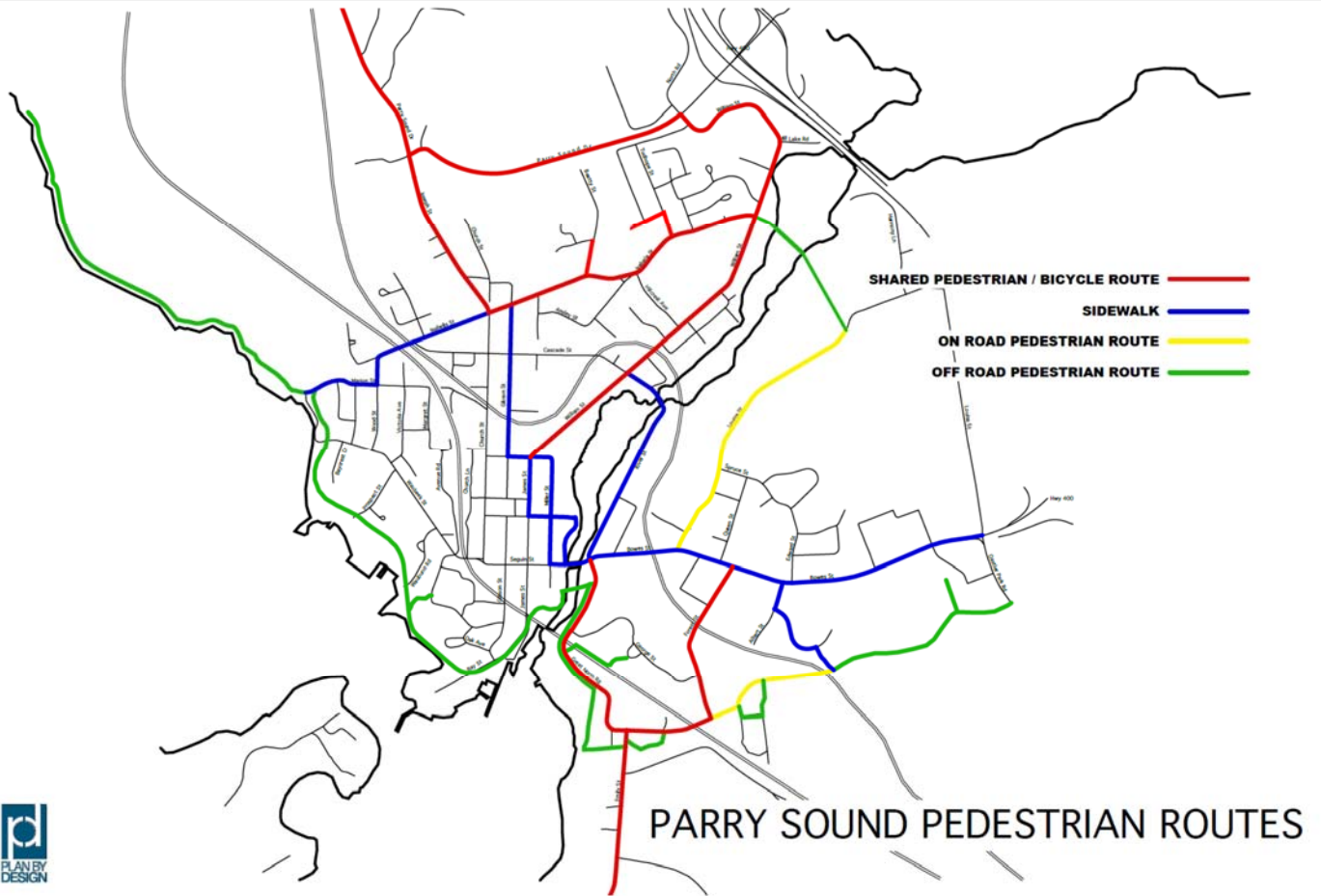
Recognizing that the river crossing is a long-term goal that will likely require funding to be constructed, an interim route for ATV travel is proposed in the Town of Parry Sound. The route proposed will allow ATVs to travel through Parry Sound along the Park to Park trail, which currently leads to Rose Point Road. From Rose Point Road it is proposed that ATVs utilize portions of Emily Street to Great North Road, cross the Seguin River on the existing pedestrian bridge, travel under the Seguin River to the Bobby Orr Community Centre and then to Miller Street. ATV traffic would then utilize William Street and Parry Sound Drive to continue through Parry Sound. Proper signage along the roadways and trails would have to be installed to ensure compatibility and safety issues are addressed.





4.13 The Final Trails Network







Part Two – Design Guidelines

Contents

6.0 Pedestrians and Cyclists	30
6.1 Pedestrians	30
6.2 The Importance of Good Design	30
6.3 Pedestrian Needs	30
6.4 The Bicycle.....	31
6.5 Cyclist Needs	31
6.6 Universal Design for Pedestrians and Cyclists	32
7.0 Trail Typologies.....	33
7.1 Trail and Bicycle Facilities Typologies.....	33
7.2 General Recreational Trail Requirements	33
8.0 Sidewalk Corridors.....	34
8.1 Pedestrian Friendly Streets	34
8.2 Sidewalk Corridor Design Guidelines	35
8.3 Design Principles for Pedestrian Friendly Streets	37
8.4 Design Principles for Accessible Sidewalks	37
8.5 Prioritize the following Sidewalk Improvement Projects:.....	37
8.6 Typical Sidewalk Construction Program.....	37
9.0 Multi-Use Trails.....	38
9.1 Multi Use Trail Type 1 – Town of Parry Sound Waterfront Trail.....	39
9.2 Multi Use Trail Type 2 – Within the Road Right-of-Way (ROW)	40
9.3 Principles for Multi-Use Pathways in the Town of Parry Sound	43
9.4 Typical Trail Construction Program.....	43
10.0 Community Trails.....	44
10.1 Community Trails – Rugged Trail and Rose Point Connection	44
10.2 Design Guidelines for Community Trails.....	44
10.3 Design Principles for Community Trails	46
10.4 Typical Trails Construction Program:.....	46
11.0 Bicycle Facilities.....	47
11.1 Space Requirements for Cyclists.....	47
11.2 Steepness/Gradient and Bicycle Facilities.....	47



11.3 Cross Slope48

11.4 Design Guidelines for Bicycle Facilities.....48

11.5 Principles for Accessible Bicycle Facilities in the Town of Parry Sound.....55

11.6 Typical Construction Program for Bicycle Facilities:55

12.0 ATV Facilities.....56

12.1 ATV Trail Routing – Downtown and Urban Areas.....56

12.2 Designing and Building ATV Trails57

12.3 On-Road ATV Usage58



6.0 Pedestrians and Cyclists

6.1 Pedestrians

Pedestrian travel can be a person's primary mode of transportation. This segment of the population includes enthusiasts of non-motorized travel, those who do not use a motor vehicle including some older adults, children and young adults, people with specific mobility requirements, and people who choose not to pay for other modes of transportation.

6.2 The Importance of Good Design

The importance of good design not only applies to the development of new facilities, but also to the improvement and retrofit of existing facilities. When access is expanded and existing conditions are improved, higher numbers of pedestrians can be expected to use the system.

Pedestrians want facilities that are safe, attractive, convenient, and easy to use. If designed properly, the best public trail facilities can also be durable and easy to maintain. Poor design of trail facilities can lead to perpetual problems. They can discourage use, if pedestrians are made to feel unsafe, unprotected, or uncomfortable. Additionally, unattractive, inadequate, and poorly designed and/or maintained facilities can be a significant burden on financial and staff resources. Good design requires the understanding of pedestrian needs.

6.3 Pedestrian Needs

- ✓ Safe trails and streets
- ✓ Convenience
- ✓ Nearby places to walk
- ✓ Visibility
- ✓ Comfort and shelter
- ✓ Attractive and clean environment
- ✓ Interesting things to look at while walking
- ✓ Opportunities for social interaction

ACTIVE TRANSPORTATION PLAN

*Halifax Regional Municipality,
Nova Scotia*

The plan recommends a primary network of on-road and off-road active transportation corridors to connect urban and rural communities, linked to individual neighbourhoods. It includes a long-range implementation plan, technical guidelines for network planning and design, and a framework for education and promotion.

For more information, see
www.halifax.ca/activetransportation.





6.4 The Bicycle

The bicycle is formally recognized as a vehicle according to the Highway Traffic Act. Cyclists have the right to share all classes of roadways, except controlled access highways. Essentially every road in the Town of Parry Sound is a legal bicycle route. It is therefore in the Town's best interest to design and maintain all roads in a way that provides a safe environment for bicycle use. Completing on-road cycling improvements to existing designated roads, when road improvement work is being completed, will help control expenses significantly.

6.5 Cyclist Needs

On-Road Bicycle Safety

Major on-road cycling routes should include measures that have proven to increase safety and encourage increased bicycle use. Any perception of a lack of safety is a deterrent to cycling. Safety considerations include:

- ✓ Cyclists are safer when focusing on traffic and are not distracted by poor cycling conditions.
- ✓ Most collisions involving cyclists occur at intersections.
- ✓ Poor lighting and personal security concerns will deter cyclists.
- ✓ Blocked drains and poorly located drainage grates and manholes are unsafe for cyclists.
- ✓ Debris such as broken glass, sand, dirt, wet leaves, etc. create safety issues for cyclists.

Coherent and Direct Bicycle Routes

Cycling routes within a particular region or system should be logical, continuous and be as direct as possible. Inconvenient routes should be avoided. Road markings and signage should be clear and consistent.

Attractive and Comfortable Bicycle Routes

Major cycling routes should provide a pleasant, interesting and comfortable ride. This is particularly important for beginners, tourists and recreational cyclists. Cycling routes should include windbreaks, provide visual interest, adequate lighting and a cycling surface in good condition, clear of debris. Improved cycling comfort can be achieved through providing adequate space on the road for a cyclist, proper drainage, high-quality surfacing, rest stops; and connected routes that link to points of interest, major trip origins and significant destinations.

Cyclist Etiquette and Safety – (a note to cyclists)

David Suzuki Foundation

'A lot of criticism of the growing number of cyclists in populated areas such as towns and cities is valid: too many blast through stop signs, don't give pedestrians the right-of-way, refuse to signal turns, ride against traffic, don't make themselves visible enough and use sidewalks. Many seem to have a sense of entitlement compelling them to ignore laws. It doesn't take much to learn and follow the rules, and invest in proper gear — including lights and reflectors — it is absolutely necessary. You'll not only be safer; you'll also be less likely to anger motorists, pedestrians and fellow cyclists. People navigating on foot must be aware of surrounding bikes, buses, cars and other people and not wander with their eyes fixed on electronic devices. Car drivers need to follow road rules and be more aware of cyclists and pedestrians. Some cyclists just need to be smarter.' – David Suzuki



6.6 Universal Design for Pedestrians and Cyclists

Universal design means taking into consideration the needs of as many people as possible, and for the purposes of this study, incorporating those needs into trail facilities and services. By taking into consideration the abilities, needs, and interests of the widest range of possible trail users, universal design ensures a range of facilities are developed. Ensuring a wide variety of users can access the Town of Parry Sound Trails system will create a safer and more welcoming experience for all users.

Principles for Universal Design for a Trails System

- ✓ Trail facilities should be accessible and universal design will be a primary consideration in any new trails or park development;
- ✓ Trail facilities should provide opportunities for combining user types and avoid separating user types;
- ✓ Trail facilities should provide clear wayfinding signage along all routes;
- ✓ Trail facilities should include rest areas at regular intervals along all major routes;
- ✓ Each trail facility type should utilize standards for the steepness of gradient, including cross slopes;
- ✓ All new development plans should be reviewed to ensure accessibility has been adequately considered.

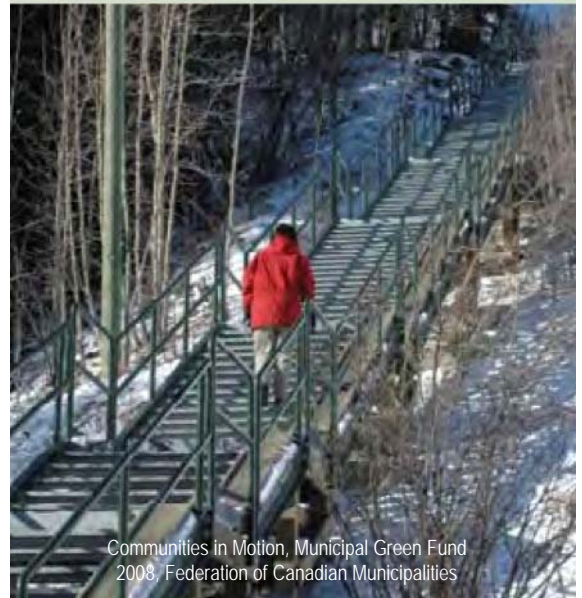
WHITEHORSE MOVES

City of Whitehorse, Yukon

The City of Whitehorse worked with partners to install new trails, a pedestrian bridge, a lighted staircase, downtown bike lanes and several "artisan" bike racks. City residents now enjoy a well-connected network of routes for walking and cycling.

For more information, see

www.whitehorse.ca.



Communities in Motion, Municipal Green Fund
2008, Federation of Canadian Municipalities



7.0 Trail Typologies

7.1 Trail and Bicycle Facilities Typologies

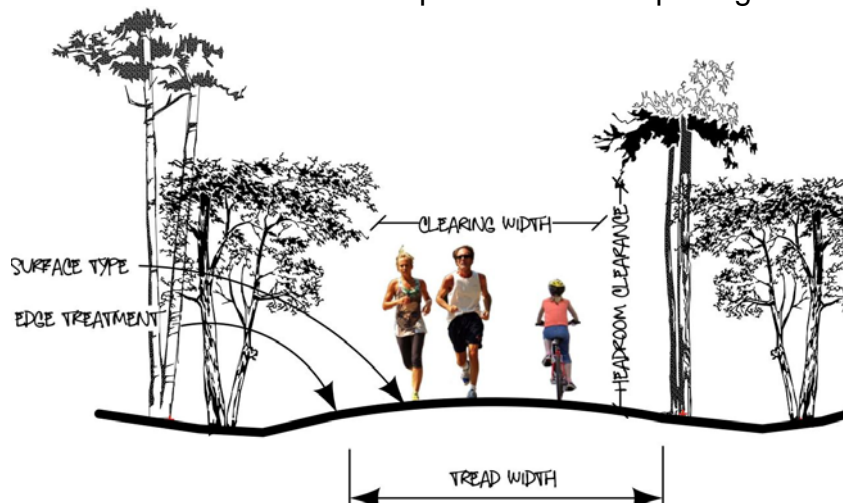
The Trails Master Plan for the Town of Parry Sound identifies new trails and trail connections, and supportive pedestrian and bicycle amenities along these routes. An overview of the various trail typologies proposed is provided below.

- Sidewalk Corridors – 1.5 to 1.8 metre sidewalks with accessible ramps, road crossings and landscaping
- Waterfront Trail (formerly The Fitness Trail) – current alignment, gravel surfaced
- Off-Road Multi-Use Trail – 3.0 metre wide (minimum) multi-use trail
- Off-Road Community Trails – 0.75 to 3.0 metre gravel or bark surfaced hiking trails
- Paved Shoulders – 1.2 to 1.5 metre on-road paint delineate shoulders
- On-Road Signed Bike Routes – existing roads clearly labeled as bike routes, including ‘share the road’ signage

7.2 General Recreational Trail Requirements

To meet the requirements of Ontario Regulation 413/12, made under the Accessibility for Ontarians with Disabilities Act, 2005; the following requirements apply to all recreational trails:

- Trails should have a clear width of 1 metre;
- Trails should have headroom clearance of 2.1 metre above the trail;
- The surface of a recreational trail must be firm and stable;
- Trails constructed adjacent to water or a drop-off require edge protection that is at least 0.5 metres above the trail surface and that does not impede the drainage of the trail surface;
- The entrance to a recreational trail must provide a clear opening of between 0.85 metre and 1 metre;



Trail Head Signs / Beach Access Routes / Boardwalks / Ramps

Ontario Regulation 413/12, made under the Accessibility for Ontarians with Disabilities Act, 2005; has further requirements detailing design requirements for trailhead signs, beach access routes, boardwalks, and ramps. Find Ontario Regulation 413/12, made under the Accessibility for Ontarians with Disabilities Act, 2005 attached to this report as Appendix ‘A’.



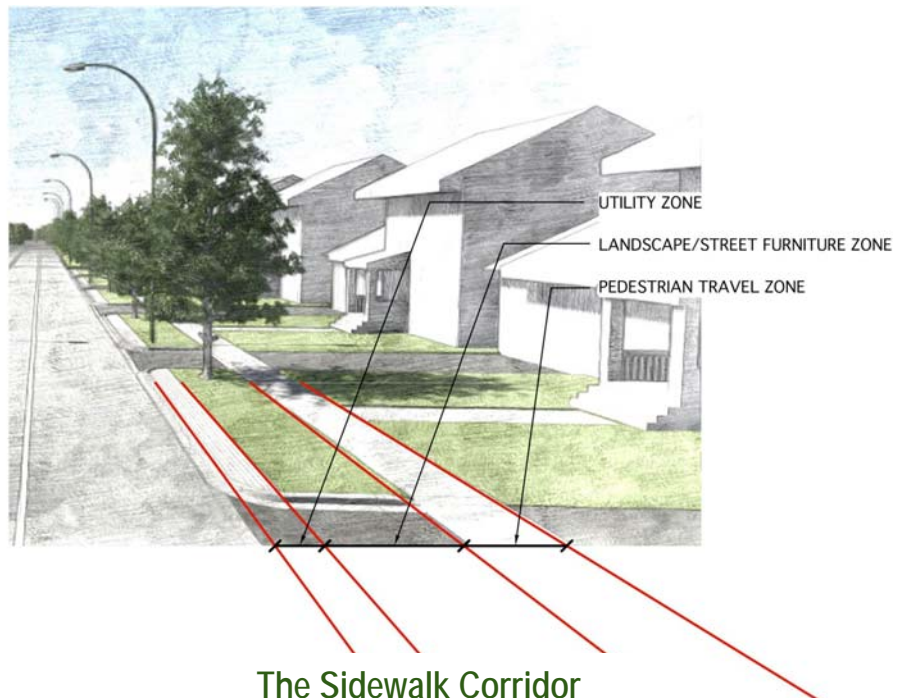
8.0 Sidewalk Corridors

Accessible sidewalks and road crossings are the backbone of a trails system. An important part of planning to design a high quality pedestrian environment is having detailed standards for each separate element. To plan for pedestrian facilities within the road right-of-way, it should be considered as having two separate corridors; the “vehicular corridor” and the “sidewalk corridor”.

Dividing the public right-of-way into two separate corridors for design purposes will ensure the safe separation of vehicles and pedestrians. Each corridor is then broken down into its parts; the vehicular corridor into car and bicycle zones; and the sidewalk corridor into utility zone, landscape and/or street furniture zone, and pedestrian travel zone. A corridor and zone system for approaching right-of-way design provides flexibility of use while ensuring none of the important component parts are left out.

8.1 Pedestrian Friendly Streets

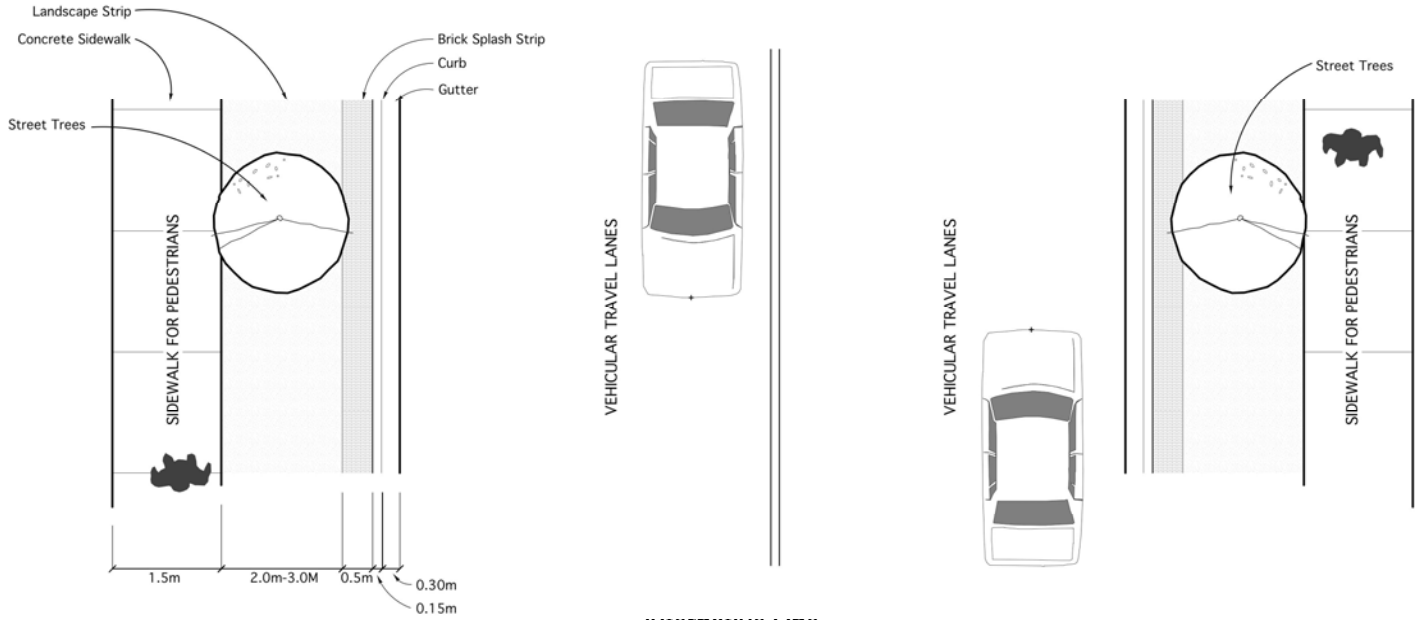
In the development of a Trails Master Plan, it is important not to overlook the street. Streets provide an important part of the pedestrian system and are relied on to access off-road trails. Although the purpose of this study is not to provide design guidelines for streets, a set of general principles for pedestrian friendly streets is provided here for reference.



**“Cars are happiest when there are no other cars around.
People are happiest when there are other people around.”
— Dan Burden**



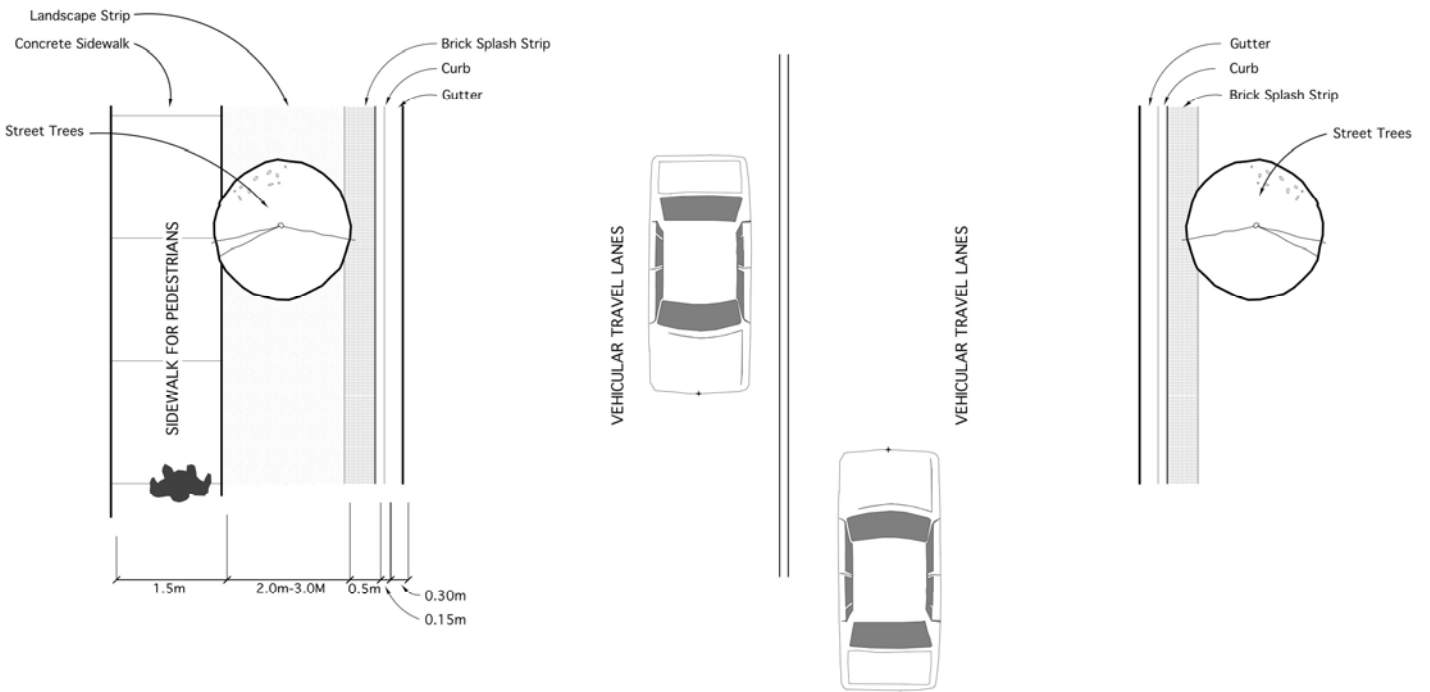
8.2 Sidewalk Corridor Design Guidelines



Alternative One

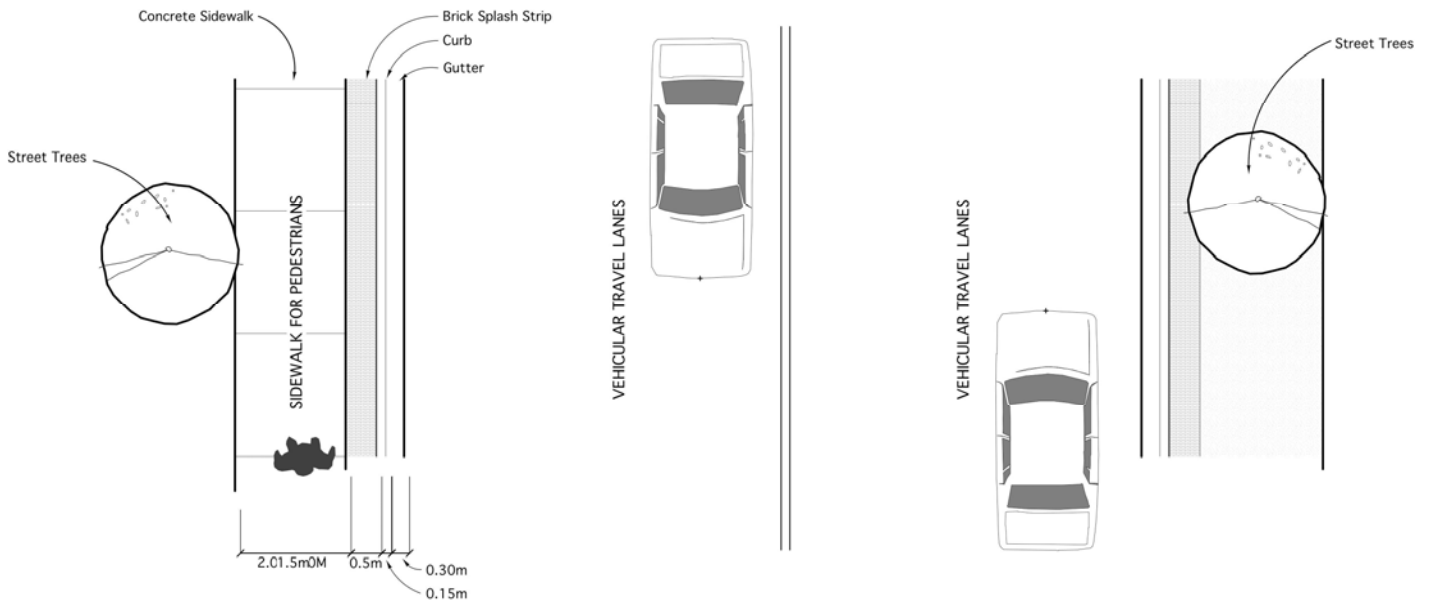
Sidewalk Corridor Design

Sidewalks Both Sides - Preferred Sidewalk Corridor Layout



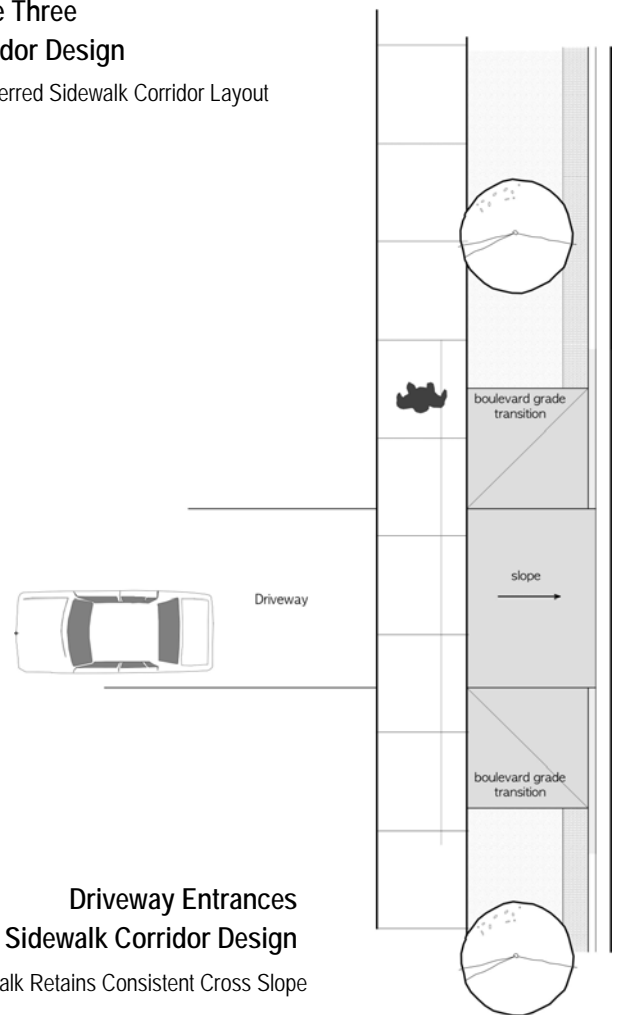
Sidewalk Corridor Design

Sidewalk One Side - 2nd Preferred Sidewalk Corridor Layout



Alternative Three Sidewalk Corridor Design

Sidewalk One Side at Curb – Least Preferred Sidewalk Corridor Layout



Driveway Entrances Sidewalk Corridor Design

Design Principle – Sidewalk Retains Consistent Cross Slope



8.3 Design Principles for Pedestrian Friendly Streets

- ✓ Streets that are interconnected provide good opportunities for pedestrian access and mobility;
- ✓ Narrower streets, scaled down for pedestrians, are less conducive to high vehicle speeds;
- ✓ In downtown areas, consider awnings/covered building entrances that shelter pedestrians from weather;
- ✓ Plan wide (1.5-1.8 metres) and continuous sidewalks or separated walkways that are fully accessible;
- ✓ Use street furnishings, such as benches, garbage receptacles, drinking fountains, and newspaper stands, that are not placed in the route of travel, in downtown areas; and
- ✓ Use signs, information kiosks, maps and other elements in downtown cores and public spaces to help pedestrians.

8.4 Design Principles for Accessible Sidewalks

- ✓ Sidewalks should be accessible to all users (follow the principles of universal design);
- ✓ Sidewalks should be an adequate width (1.5-1.8 metres);
- ✓ Sidewalks should be safe to use (sidewalk users should not feel threatened by adjacent traffic or by the environment);
- ✓ Sidewalks should be continuous and connected (sidewalks are safely connected to other pedestrian infrastructure);
- ✓ Sidewalks should include a landscaped buffer space between pedestrians and traffic, providing safety and shade;
- ✓ Sidewalks should include rest areas, where pedestrians can rest safely and participate in public leisure;
- ✓ Rest Areas will include as a minimum, a metal bench, a waste receptacle and a bicycle lock up; and
- ✓ Sidewalks should not exceed a 2% cross slope.

8.5 Prioritize the following Sidewalk Improvement Projects:

1. Sidewalks on Isabella Street past the Cemetery;
2. Isabella Street to Hillcrest Road;
3. Better Access on Isabella Street and sidewalk improvements along entire street;
3. Tudhope Street to William Street;
4. More Sidewalks on William Street;
5. Sidewalks for the Parry Sound Public School;
6. Sidewalks be extended from the Louisa Street/Oastler Park Drive intersection to the Bowes Street/Pine Drive intersection;
7. Sidewalks be extended for Marion Street and Isabella Street and Wood Street; and
- 8 Any new public use or large facility open to the public consider sidewalk extension.
9. Surface improvements under CPR tunnel and interior lighting.



8.6 Typical Sidewalk Construction Program

1. Prioritize sidewalk improvement projects, with safety issues receiving top priority;
2. Follow design standards and principles to develop the appropriate design;
3. Identify the supportive elements to be included within the sidewalk corridor, i.e. street trees, splash strips;
4. Identify road crossing and driveway conflict issues and use design standards and principles to resolve;
5. Prepare construction documentation and cost estimates;
6. Issue tender and construct sidewalk improvement.



9.0 Multi-Use Trails

9.1 Multi Use Trail Type 1 – Town of Parry Sound Waterfront Trail

The Waterfront Trail is the most significant trail feature in the Town and will remain so. It's location along the waterfront and its accessibility make it an excellent facility that is already well used by the community. This trail is intended to safely accommodate a wide variety of trail user types (including snowmobile usage in the winter) and two-way travel. This trail will continue to promote walking and cycling and to attract new users. In addition to athletic fields and recreational facilities, this trail should be considered a primary recreational component of Parry Sound. It serves as a transportation and recreational conduit for both residents and visitors.

The trail is presently gravel surfaced and due to the pristine nature and naturalistic quality of the trail alignment, as well as the type of usage the trail receives, there is no recommendation to change this. The current alignment, width, and surfacing of the trail is adequate for now and into the future.

There are no significant changes being contemplated for the Waterfront Trail and the recommendations of this report for this trail section focus on connecting to Rose Point, installing uniform furnishings (benches, bike racks, trash receptacles), and new signage. Further, this study has concluded that the continued use of the trail by snowmobiles is appropriate and should continue to be supported.

Prioritize the following Waterfront Trail Improvement Projects:

1. Officially change the name to the Waterfront Trail including all signage and promotional material.
2. Determine the routing for a permanent connection to the Rose Point Trails.
3. Construct the Rose Point Trail Connection.
4. Develop an Interpretive Signage program for the length of the trail.
5. Install uniform benches / trash receptacles / bicycle locks ups at key locations.
6. Install safety signage (re: shared use) at constricted points along trail.
7. Wayfinding signage directing motorists to the Waterfront Trail to be installed at key locations.



9.2 Multi Use Trail Type 2 – Within the Road Right-of-Way (ROW)

Separate multi-use trails along the roadside are popular in high demand locations. Trail users on multi-use boulevard trails have the right-of-way as they intersect private driveways allowing for continuous travel.

A new multi-use trail located within the existing road ROW (the 'Link') connecting Parry Sound to the Municipality of McDougall is planned. Further the Trails Master Plan suggests extending the 'Link' so that a seamless pedestrian and bicyclist experience is provided. This plan proposes that a similar trail

be extended down Joseph Street to connect with Isabella Street where other planned routes will allow cyclists and pedestrians to continue into the downtown. Also from the intersection of Parry Sound Drive and Joseph Street it is proposed that the trail be extended along Parry Sound Drive as either an on road bike lane or a multi-use path separated from the road.



Priorities for the Multi-Use Trails within the Road ROW

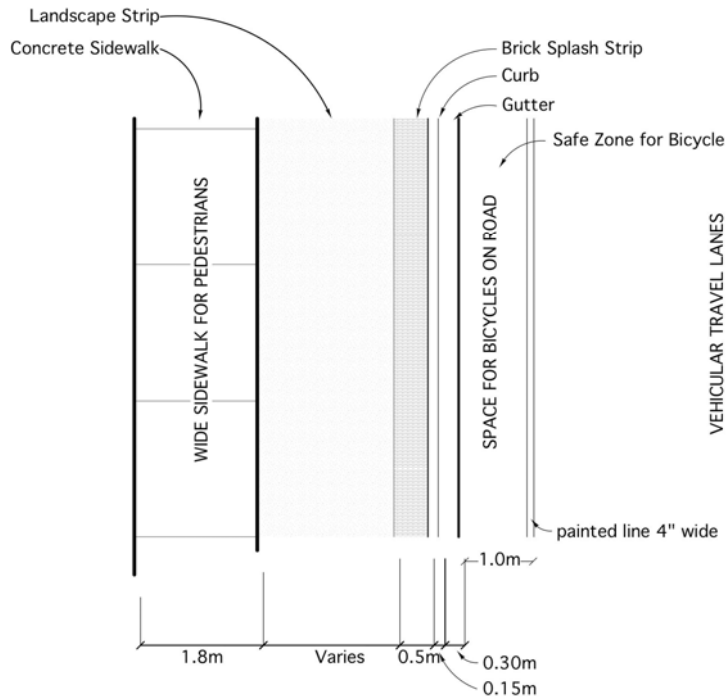
As trail usage increases in demand the Town of Parry Sound may want to consider expanding the trails located within the Road ROW. When locating trails within the public road, right-of-way consideration must be given to driveways and intersecting roadway conflicts, in order to select routes with the least number of potential conflicts. At intersecting roadways, motor vehicles making right hand turns may not be anticipating the speed at which some users of the trail may be traveling and cautionary signs need to be used appropriately. Design guidelines for integrating multi-use trails into the public road right-of-way are provided in this section of the report.

The following are some general roadway conditions that Town staff should review where the application of a multi-use boulevard trail within the public road right-of-way is being considered:

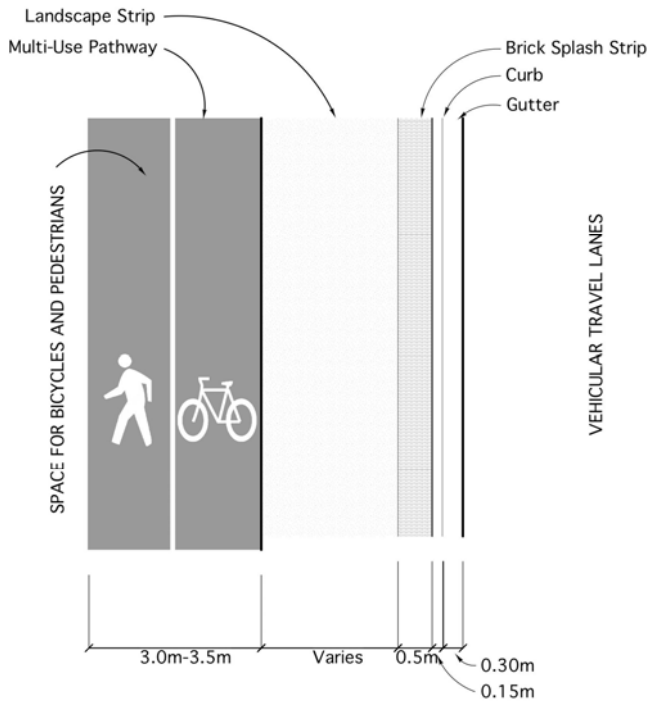
- ✓ Urban arterial, collector or rural roads where there is ample right-of-way between the edge of the road or curb for urban cross section; and shoulder for rural cross section, and maintain a minimum separation of 2 metres between the road and the trail;
- ✓ Routes that provide connections between important destinations or links, where no alternative route exist nearby; and
- ✓ Along corridors where there are limited commercial or residential driveway crossings.



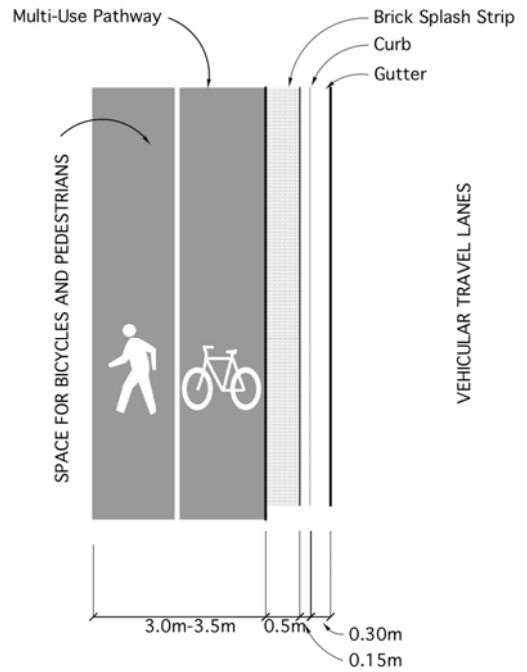
Multi-Use Trails – Within the Road Right-of-Way (ROW)



Alternative One
Multi-Use Boulevard Design



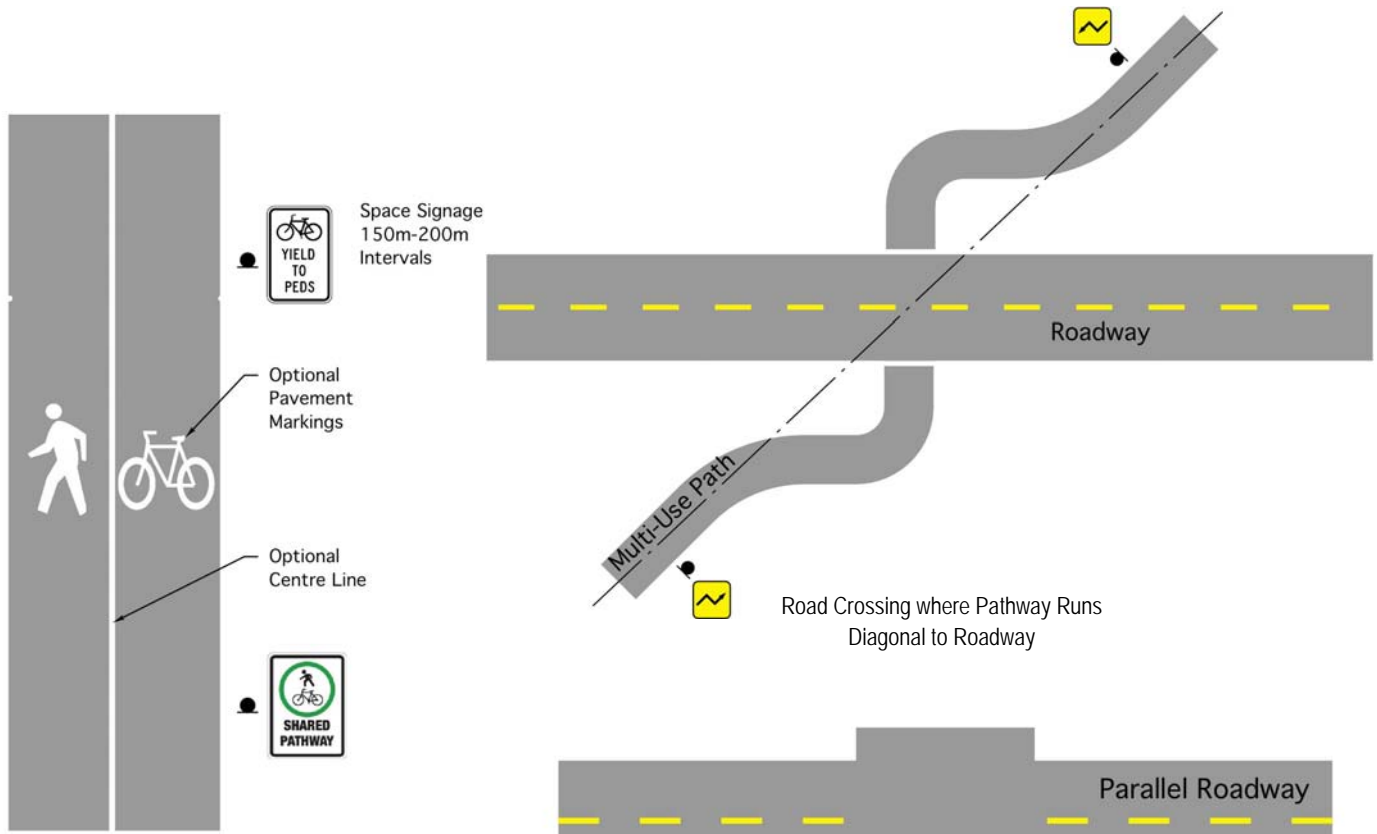
Alternative Two
Multi-Use Boulevard Design



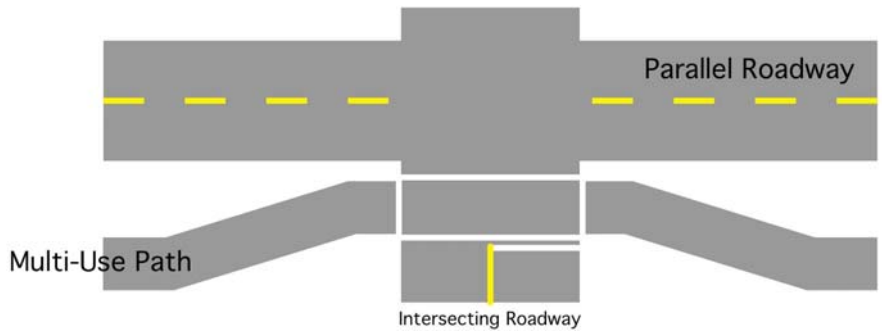
Alternative Three
Multi-Use Boulevard Design



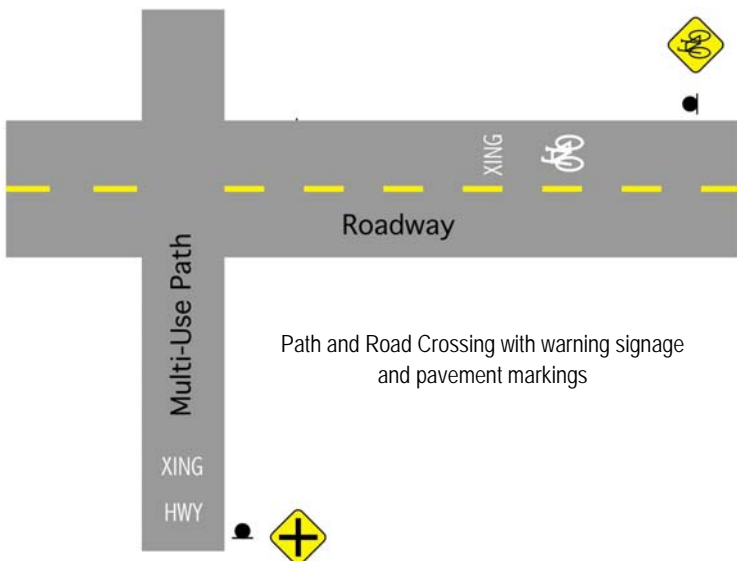
Multi-Use Trails – Within the Road Right of Way (ROW)



Multi-Use Pathway with Signage and Pavement Markings



Road Crossing at Intersection where Path and Roadway Run Parallel



Path and Road Crossing with warning signage and pavement markings

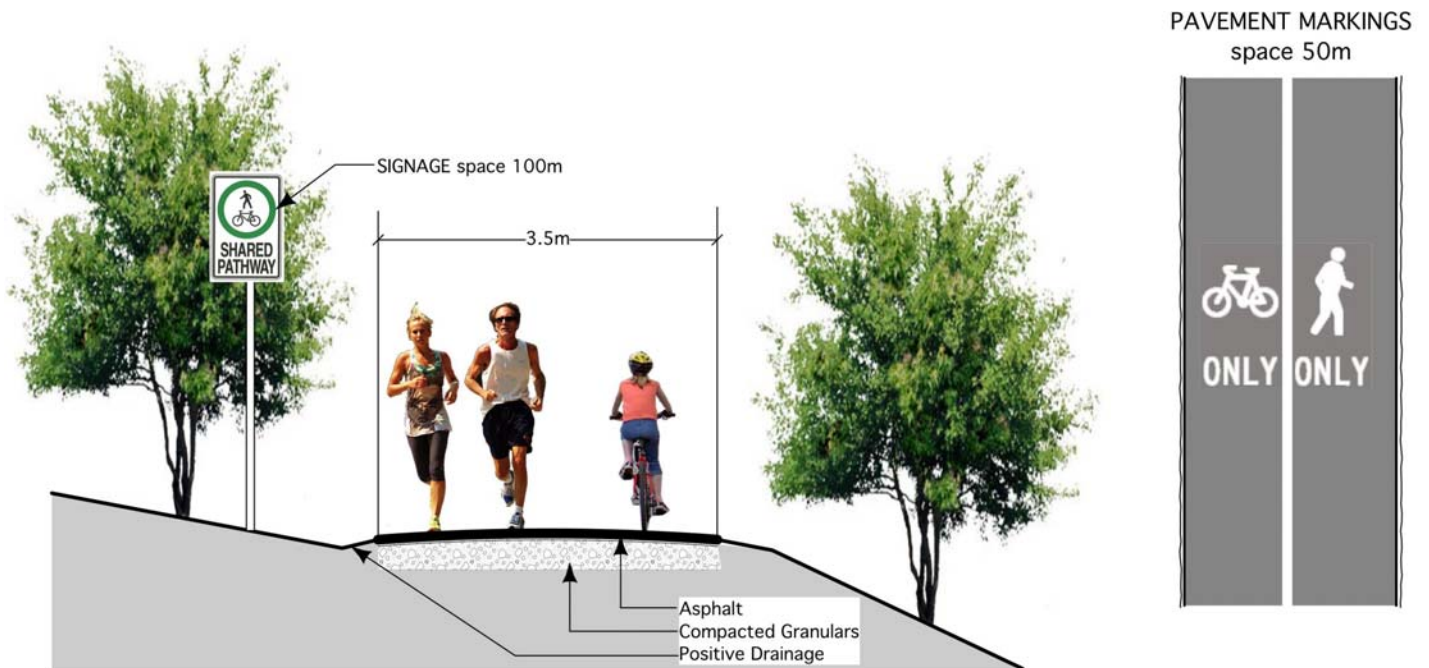


9.3 Principles for Multi-Use Pathways in the Town of Parry Sound

- ✓ Multi-Use pathways should be accessible;
- ✓ Multi-Use pathways should provide opportunities for combining trail user types;
- ✓ Multi-Use pathways should provide clear wayfinding signage along routes and at access points;
- ✓ Multi-Use pathways should include rest areas at regular intervals;
- ✓ Multi-Use pathways should utilize a gradient maximum of 5% and, where possible, should not exceed a 3% gradient;
- ✓ Multi-Use pathways should utilize a cross slope of 2%.

9.4 Typical Trail Construction Program

1. Complete a background review for available information
2. Follow the design standards noted above and flag the proposed trail alignment.
3. Complete a topographic survey of the flagged route
4. Determine wayfinding and trailhead signage requirements
5. Prepare construction documentation
6. Prepare cost estimates
7. Issue tender and construct trail section



Multi-Use Recreational Trail Section



10.0 Community Trails

10.1 Community Trails – Rugged Trail and Rose Point Connection

Community trails such as the Rugged Trail in Parry Sound are intended to support walking, hiking and an appreciation for nature. A connection to Rose Point is identified in this report as a community trail. The Town of Parry Sound is required to determine the final routing for this trail section and should use the following guidelines for the routing and design of the trail. Other connector trails or trails within new development areas are also candidates for new community trails. Soft surfaced trails such as a community trail may be grubbed and treated with a trail surface hardener. More heavily used trails should be surfaced with compacted granular. The trail should be identified with signage and used for connections between popular destinations. These guidelines will also offer a consistent treatment for new community trails made possible by new development. Trail widths will range from 1.0 metres, for lesser used trails, to 2.0 metres wide, for trails such as the Rose Point Connection.



Trail Width- 1.0-1.5m



Trail Width- 1.8m



Trail Width- 2.0m

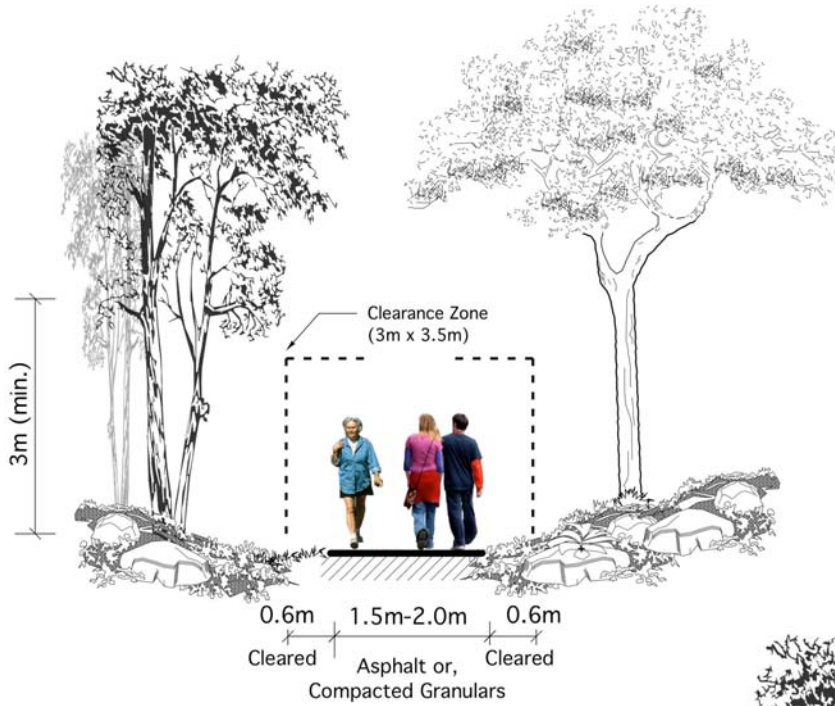
Proposed Trail Width based on
Levels and Type of Usage

10.2 Design Guidelines for Community Trails

In the case of any new development in the Town of Parry Sound, opportunities for new community trails and trail connections should be considered important. These trail standards can be used to discuss trail opportunities with developers and to negotiate for trails within new development areas. The general standards to follow in routing and building these trail sections are provided below.

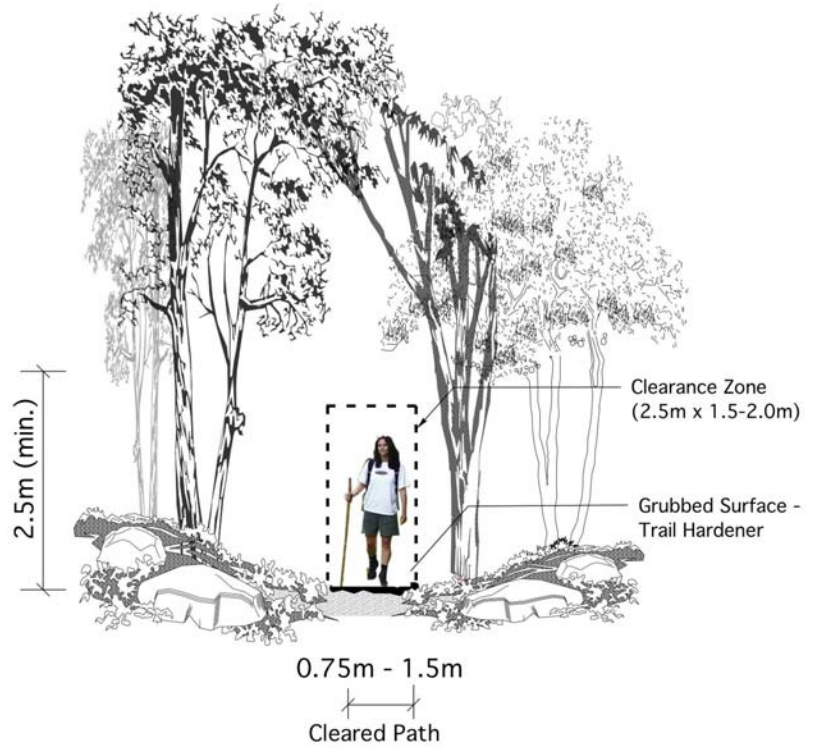


Design Guidelines for Community Trails



Alternative One Community Trail Design

Preferred Community Trail for Heavily Used
Trails and Trails close to Major Destinations



Alternative Two Community Trail Design

Preferred Community Trail for Non-Heavily
Used Trails and Less Populated Areas



10.3 Design Principles for Community Trails

- ✓ Community trails should be accessible;
- ✓ Community trails should provide clear wayfinding signage along routes and at access points;
- ✓ Community trails should include rest areas at regular intervals;
- ✓ A curvilinear trail alignment is more pleasing for trail users
- ✓ Community trails should utilize a gradient maximum of 10% and where possible, should not exceed 5%;
- ✓ Community trails should be routed to generally maintain the existing drainage patterns
- ✓ Community trails should be routed to minimize the clearing of tree and vegetation.

10.4 Typical Trails Construction Program:

1. Look for resident groups interested in “adopting the trail” – including helping to construct;
2. Complete a background review for available information;
3. Complete “on the ground” field inspections;
4. Follow the design standards noted above and flag the proposed trail alignment;
5. Complete a topographic survey of the flagged route;
6. Determine wayfinding and trailhead signage requirements
7. Prepare construction documentation;
8. Prepare cost estimates;
9. Issue tender and construct trail section.

GRAND CONCOURSE WALKWAY

*St. John's Metropolitan Area,
Newfoundland and Labrador*

This 120-kilometre system of interconnected walkways links schools, seniors' homes and other destinations to parks and waterways in St. John's, Mount Pearl and Paradise. The Grand Concourse features rest areas, wayfinding and interpretive information, and is managed by an authority with the involvement of local municipalities.

For more information, see
www.grandconcourse.ca.



Communities in Motion, Municipal Green Fund
2008, Federation of Canadian Municipalities



11.0 Bicycle Facilities

High priority bicycle routes are shown in the Trails Master Plan and are proposed to be delineated in different ways. Firstly, 'paved shoulders', which are required to be delineated with a painted line for safety and separation can be used. An alternative to the paved shoulder is an asphalt pathway separated from the traveled roadway by a curb. Whereas, where an existing route is safe and well used and no changes to the roadway are contemplated, the only required improvement is to install signs identifying the route. The different treatments for proposed bicycle routes are identified in the mapping provided in this report. In the case of any new road development in the Town, opportunities for integrating bicycles into the road design should be considered.



11.1 Space Requirements for Cyclists

The standard required space to accommodate a cyclist used in bicycle facility planning is provided by the Transportation Association of Canada's (TAC) Geometric Design Guide for Canadian Roads. A 2 metre height and a 1.5 metre width is recommended for low speed (<60 km/h), moderate traffic volume roadways.

In constrained conditions, such as on low speed, low to moderate traffic volume roadways, an absolute minimum 1.2 metre bike lane may be applied for short distances. TAC notes: *"the bicycle is a distinct vehicle, which is often used in locations of substandard geometrics. In such cases, providing suitable warning signs along bicycle routes is a significant consideration in maintaining safety."* For higher speed, higher volume multi-lane roads, a width of 1.8 metres is recommended, bike lanes in excess of 1.8 metres for one-way are undesirable.

11.2 Steepness/Gradient and Bicycle Facilities

For on-road bicycle facilities in locations where gradients exceed 8%, it is preferable to widen the standard 1.5 metre bike lane to 1.8 metres. This standard is applied where the width of the ROW allows for widening and is required, based on the fact riders climbing hills tend to use a wider area due to the side-to-side movement of the bicycle during the climb. During a descent on a gradient exceeding 8%, cyclists may weave in order to correct their travel line or maintain their balance.

In locations where it is not possible to widen the bicycle lane due to right-of-way restrictions, alternative routes can be identified. Where alternative routes cannot be identified, signage should be used. TAC guidelines suggest posting a Motor Vehicle Passing Prohibited sign (RB-33) and a Do Not Pass Bicycle tab sign (RB-33S) to warn motorists that they must not overtake a cyclist within a specified zone. For off-road bicycle facilities, ideal gradients should be less than 5% for climbs of 50 metres or less, and less than 3% for climbs greater than 50 metres. In addition, flat rest areas should be incorporated every 30 metres.



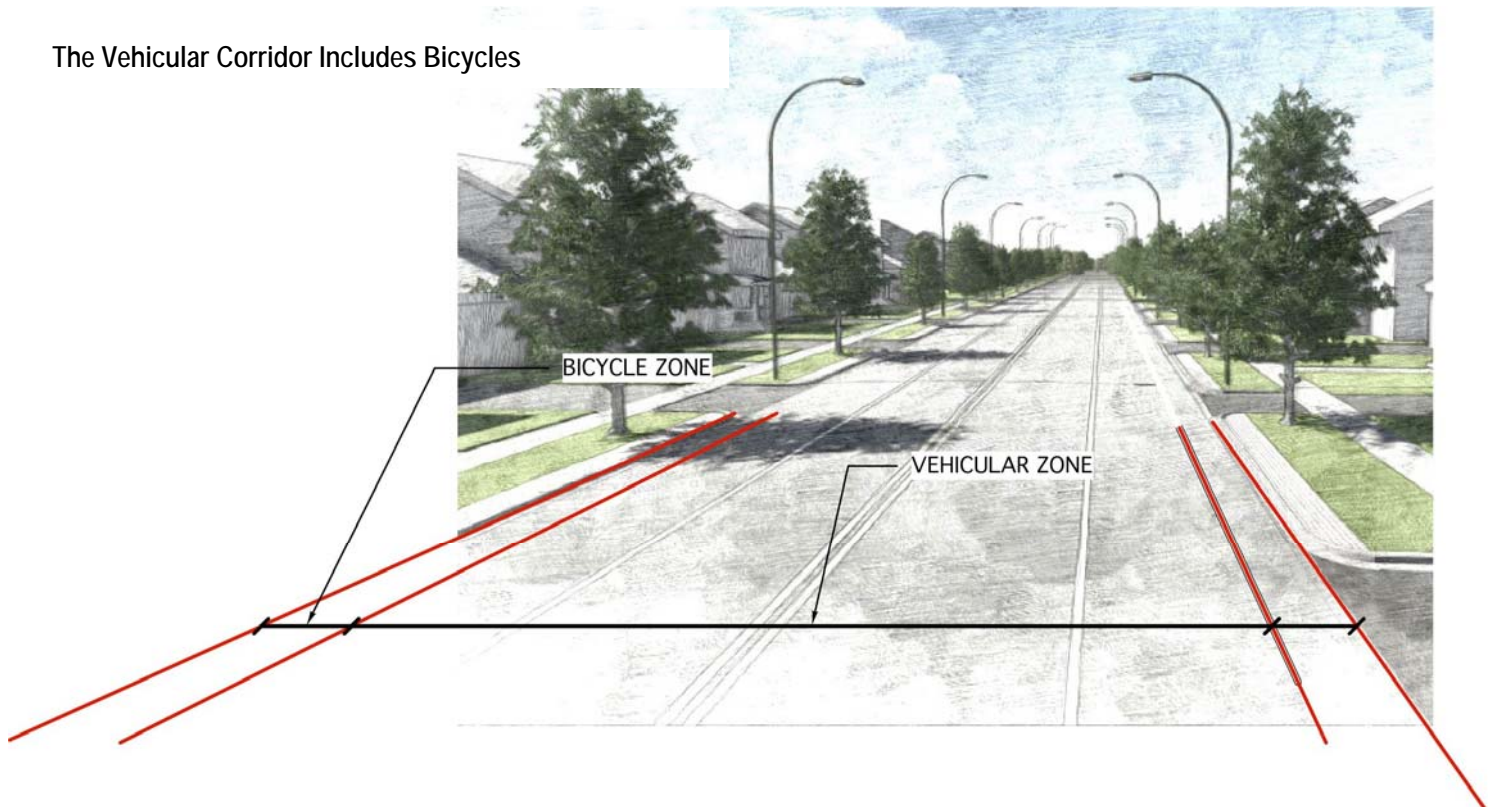
11.3 Cross Slope

For drainage purposes cross slopes are required to maintain safe cycling conditions. Off-road bicycle paths should be designed with a 1.5% cross slope. On-road bicycle facilities will achieve adequate drainage based on standard roadway design, which is governed by both MTO's Geometric Design Standards and TAC's Geometric Design Guide.

11.4 Design Guidelines for Bicycle Facilities

Source: *Transportation Association of Canada (TAC)*

The Vehicular Corridor Includes Bicycles

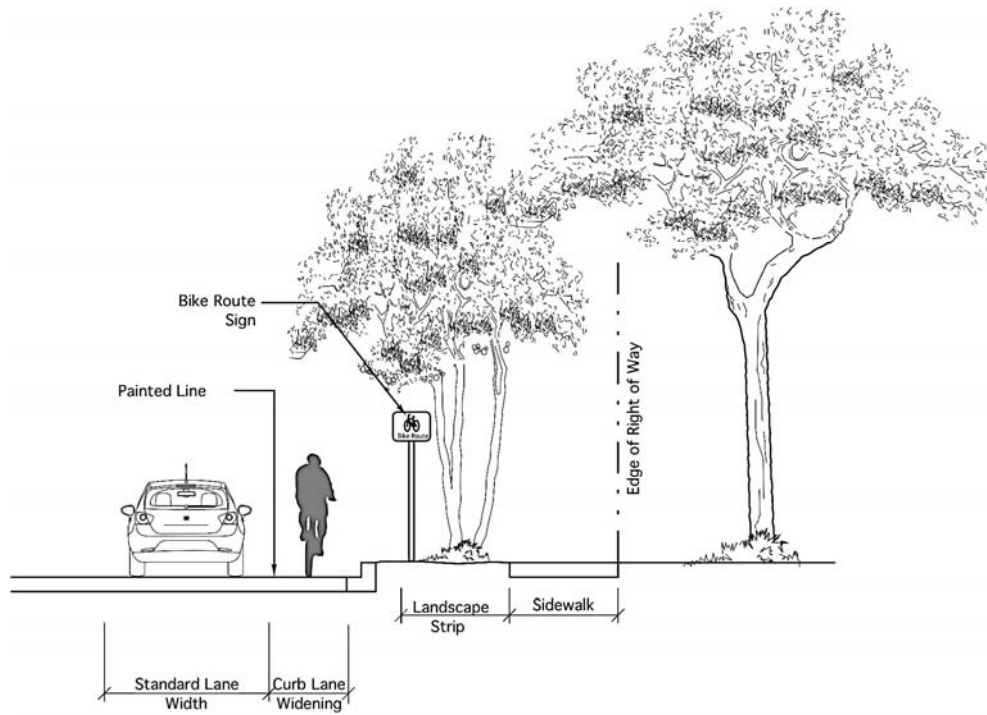


The bicycle is formally recognized as a vehicle according to the Highway Traffic Act



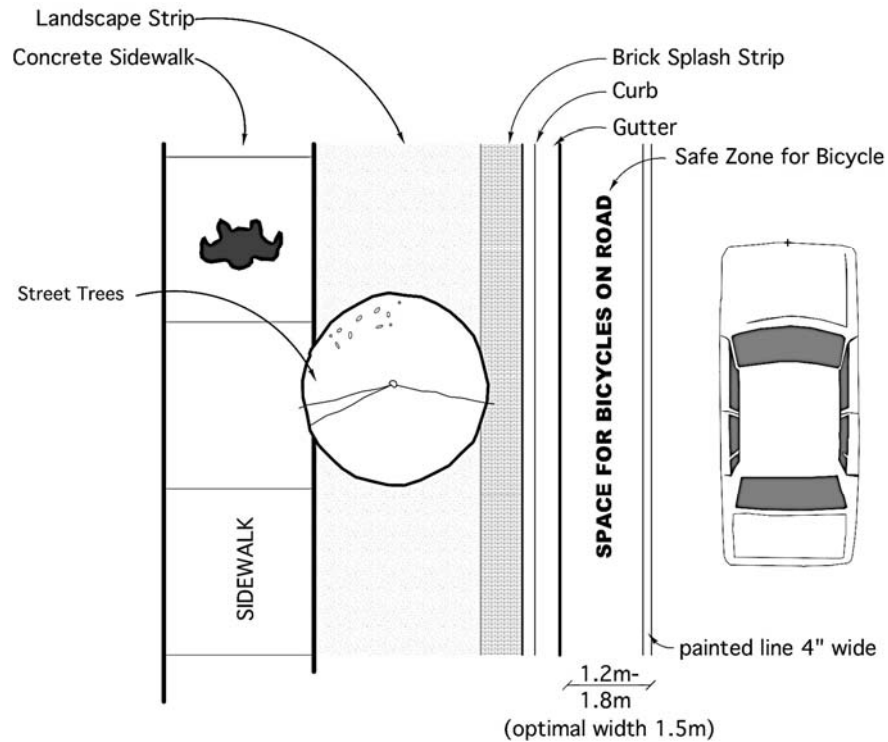
On-Road Bike Facility – Type One

On-Road Widened Shoulders As Dedicated Space For Bicycles



On-Road Bike Facility – Type One

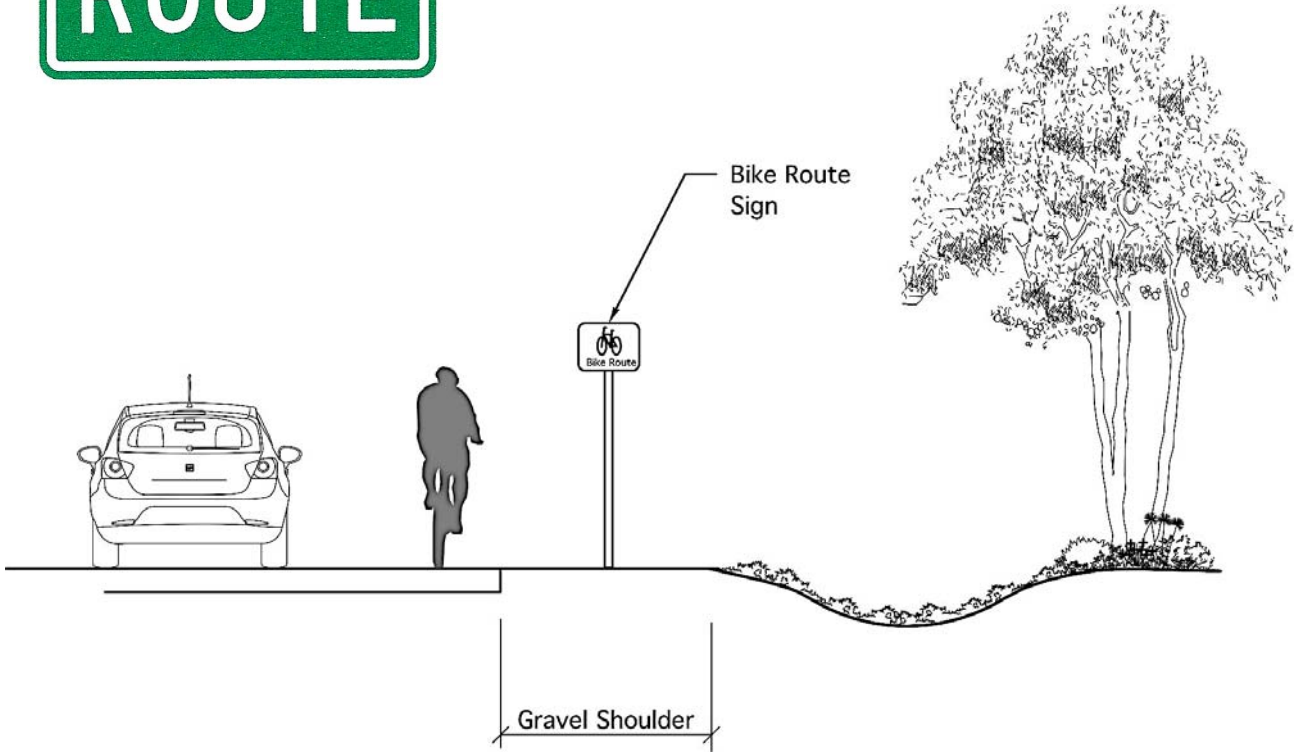
On-Road Widened Shoulders As Dedicated Space For Bicycles



On-Road Bike Facility – Type Two

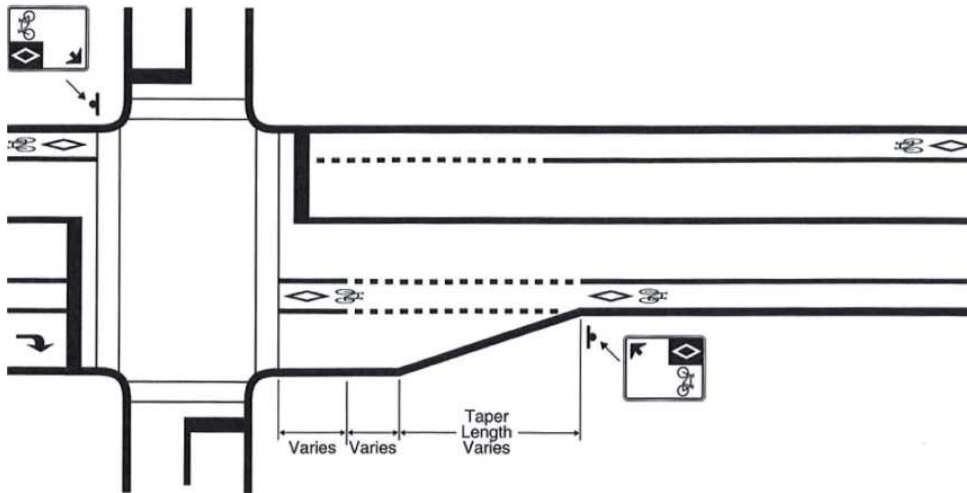


Bike Route Signage Only – On Existing Routes

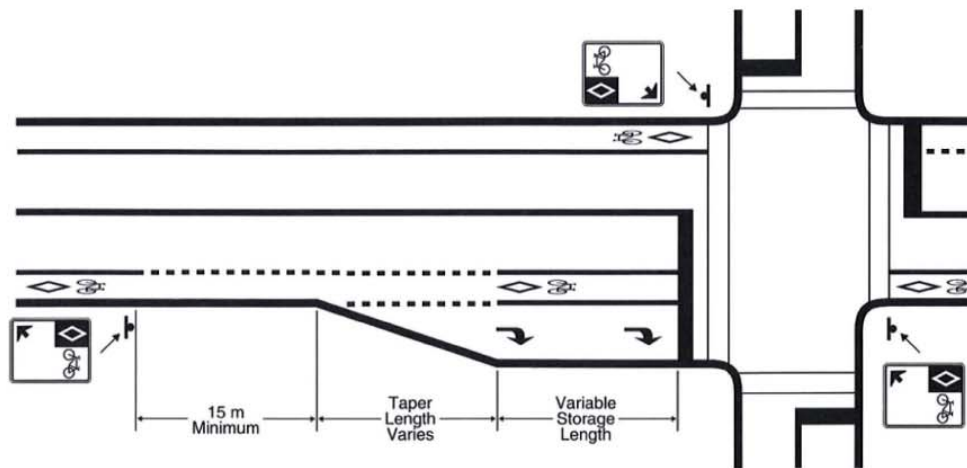




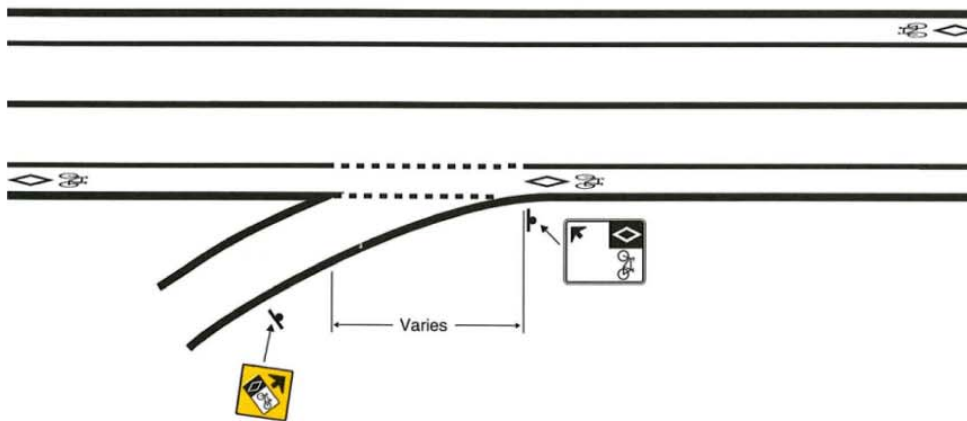
On-Road Bike Facility – Type One On-Road Dedicated Paved Shoulders – Painted Line As Delineation (painted bicycle icon is not necessary)



Adjacent to Merge Lane



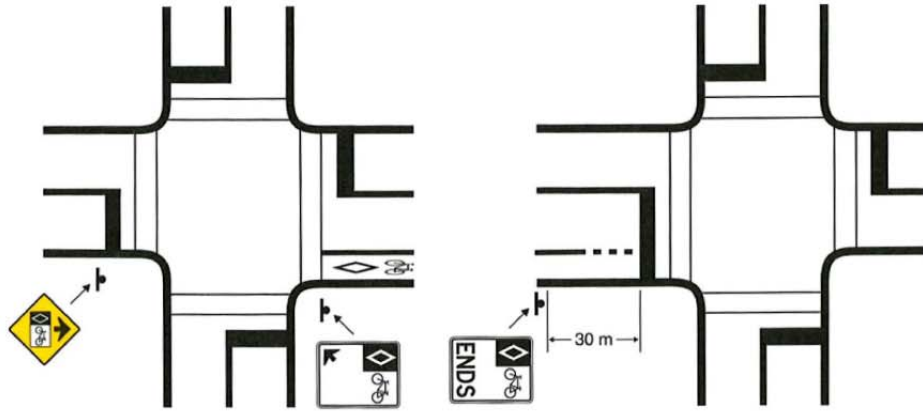
Adjacent to Right Turn Lane



At Merging Ramp Family

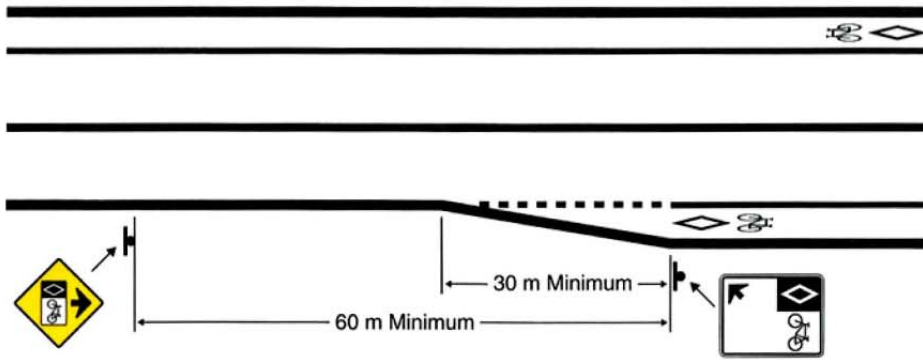


On-Road Bike Facility – Type One On-Road Dedicated Paved Shoulders – Painted Line As Delineation (painted bicycle icon is not necessary)

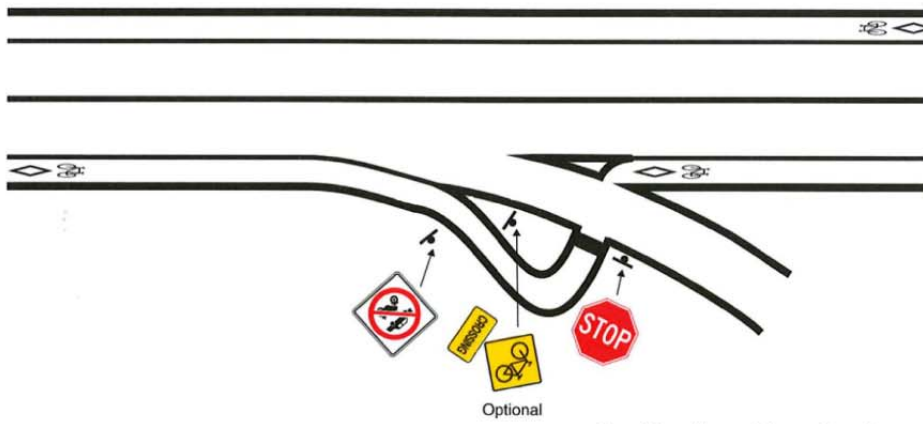


Introduced bicycle lane may be shadowed by an exclusive right turn lane or on-street parking

Introduced and Discontinued Lane



Introduced and Discontinued Lane

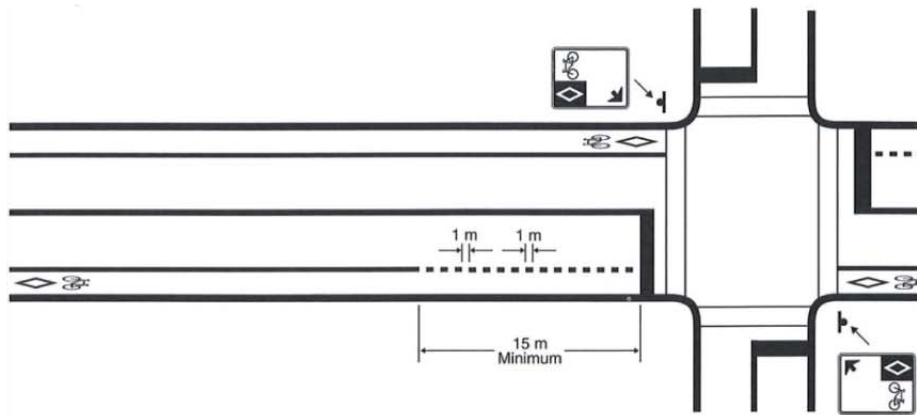


Jug Handle at Diverging Ramp

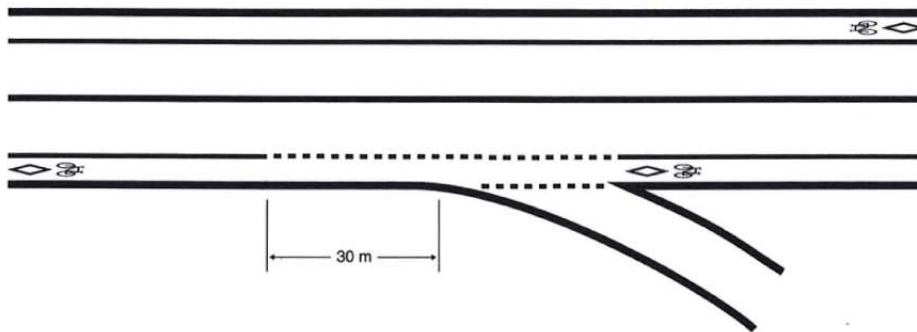
On-Road Bike Facility – Type One



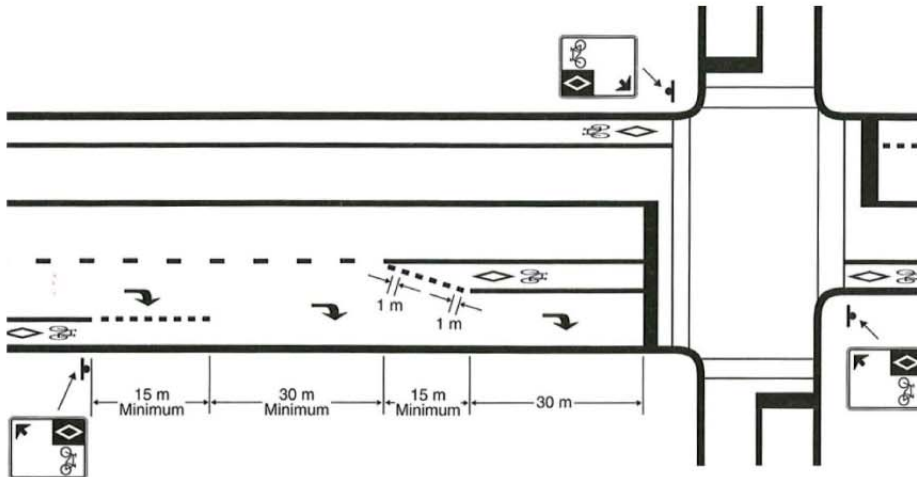
On-Road Dedicated Paved Shoulders – Painted Line As Delineation (painted bicycle icon is not necessary)



Adjacent to Combined Through/ Right Turn Lane



Adjacent to Diverging Ramp



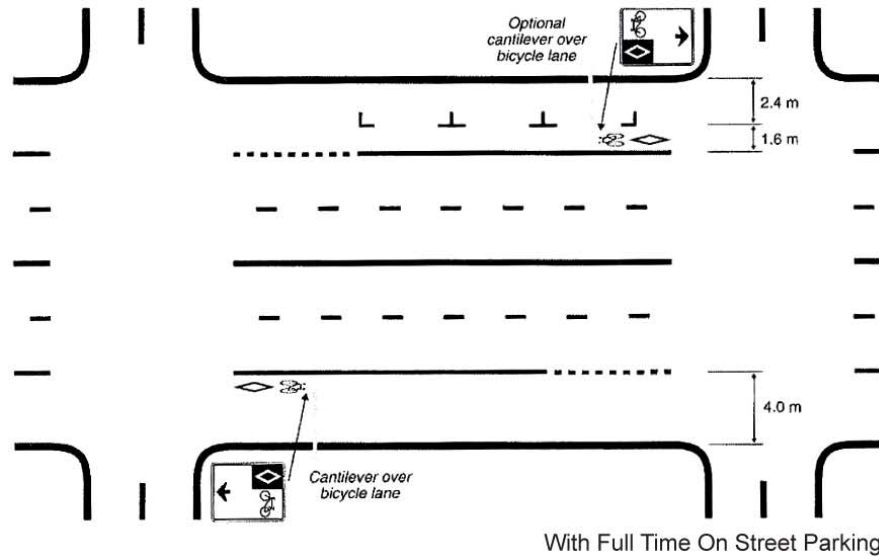
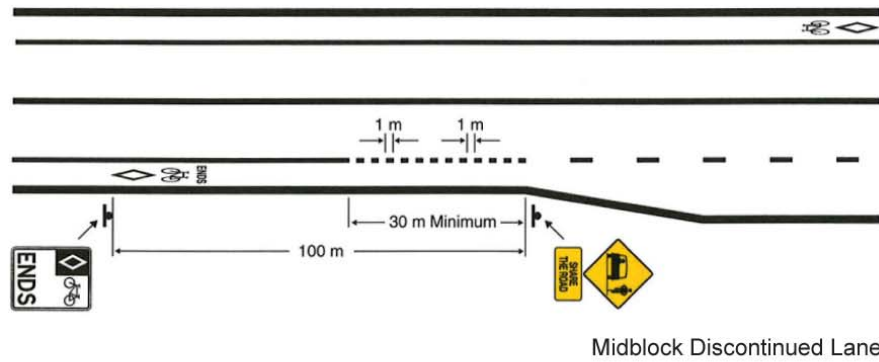
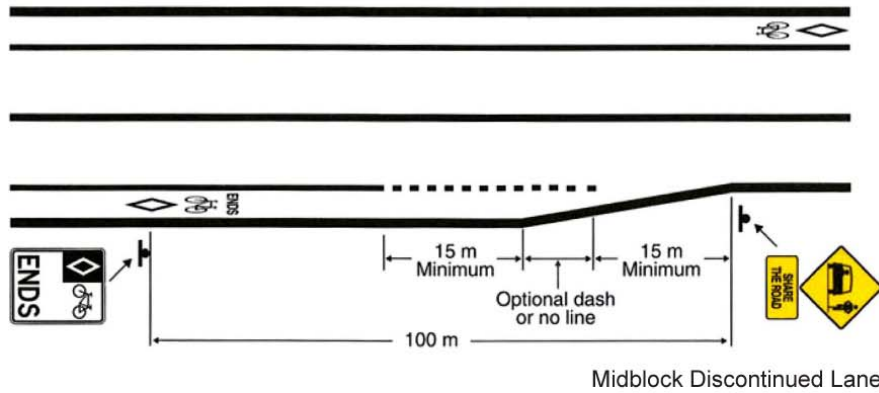
Adjacent to Introduced Turn Lane



On-Road Bike Facility – Type One

On-Road Dedicated Paved Shoulders – Painted Line As Delineation

(painted bicycle icon is not necessary)





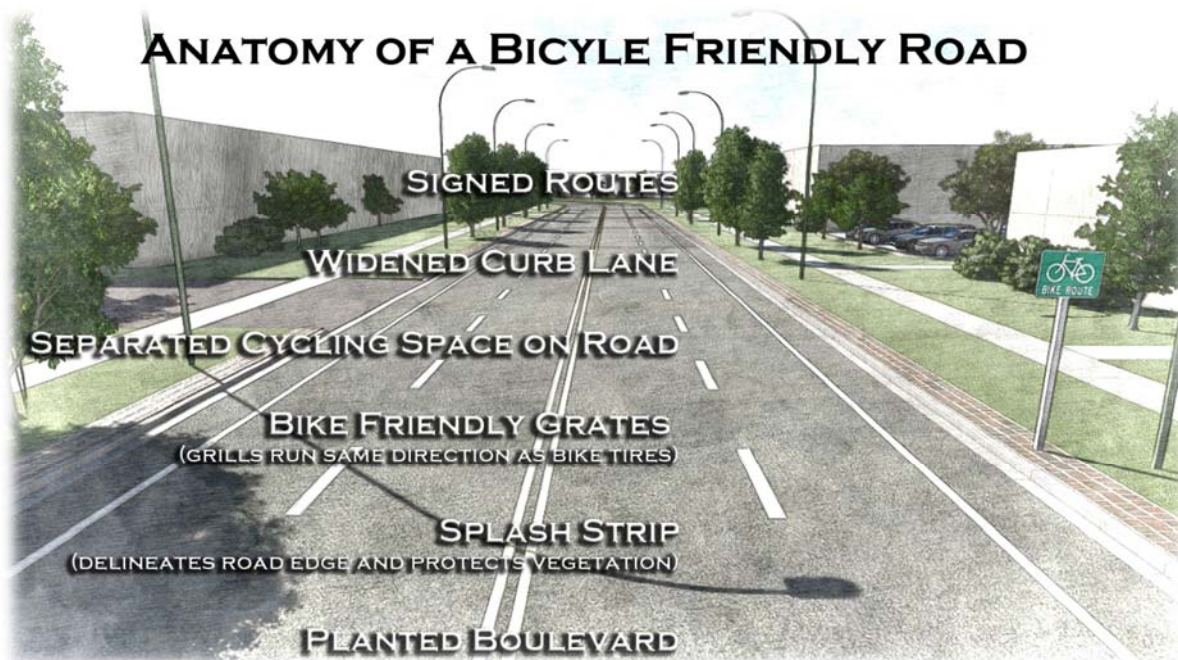
11.5 Principles for Accessible Bicycle Facilities in the Town of Parry Sound

General considerations for maintaining roads that provide a safe environment for bicycle use include; wide curb lanes, proper signage, pavement markings to delineate the limits of the motor vehicle lane, bicycle friendly drainage grates, and adjustments to detection loops at intersections to ensure that a bicycle will actuate a traffic signal.

- ✓ Paved shoulders must be delineated with a painted line, (do not include a widened shoulder without paint separation)
- ✓ Bicycle facilities should be available to all user types, (following the principles of universal design;)
- ✓ Bicycle facilities should be an adequate width, (see design guidelines;)
- ✓ Bicycle facilities should be properly signed for safety and wayfinding;
- ✓ Bicycle facilities should be continuous and connected, with bike routes safely connected to other pedestrian infrastructure;
- ✓ Bicycle facilities should include rest areas and amenities for cyclists.

11.6 Typical Construction Program for Bicycle Facilities:

1. Prioritize bicycle route improvement projects;
2. Include the local cycling community in project prioritization and facility type from these guidelines;
3. Complete projects in conjunction with proposed capital improvement projects;
4. Determine wayfinding and signage requirements
5. Prepare construction documentation with the associated capital improvement project;
6. Prepare cost estimates;
7. Issue tender and construct with associated capital improvement project.





12.0 ATV Facilities

12.1 ATV Trail Routing – Downtown and Urban Areas

Several communities across central and northern Ontario are moving towards allowing ATVs access to local roadways and in some cases access into downtown areas. The popularity of ATV usage as a recreational activity and the associated tourism and economic benefits has brought this issue to the fore in many locations.

The factors driving the changes in how ATV use is regulated include the fact that these users, whose numbers are large and growing, require access to the urban infrastructure in order to participate in their chosen activity. ATV users require access to fuel stations, accommodation, restaurants and grocery stores. Communities that wish to welcome this group are looking for the safest and least impactful ways to do so. The benefit to opening up roadway access is that it sends a clear message to ATV riders that they are welcome in the community and provides them with greater opportunity to engage in other local activities. Considerations for determining the appropriate routes include education, monitoring, enforcement, noise, safety, and traffic congestion.

As part of the Trails Master Plan study the question of how to provide ATV users a route through Parry Sound and whether or not this route should include access to the downtown area has been considered. The recommendation of this report is that the Town of Parry Sound should identify a route for ATVs that includes access to the downtown. Two routes have been identified (see section 4.10 of this report). The proposed interim route will allow ATVs to travel through Parry Sound from the Park to Park trail, which currently leads to Rose Point Road. From Rose Point Road it is proposed that ATVs utilize portions of Emily Street to Great North Road, cross the Seguin River on the existing pedestrian bridge, travel north along the trail under the Seguin Bridge to the Bobby Orr Community Centre and then to Miller Street. ATV traffic would then utilize William Street and Parry Sound Drive to continue through Parry Sound. Proper “share the road” and “share the trail/bridge” signage will need to be installed. In addition, consideration will need to be given to yielding to pedestrian traffic along the pedestrian bridge and signage to ensure ATVs are aware which user group has the legal right of way.

A second long term solution to routing ATVs through Parry Sound is also provided, however the first order of business will be to put a bylaw in place to allow ATVs access to the identified interim route. With a bylaw in place the regulation of these users will then be a police and bylaw issue. In addition to selecting the preferred route other considerations in regards to ATVs using local roads are hours of operation and seasonal restrictions. As the proposed route includes access through residential areas it may be appropriate to restrict ATVs to daytime usage. Further, the narrowing of the traveled roadways in the winter due to snow accumulation may provide a rationale for placing seasonal restrictions on ATV road access.



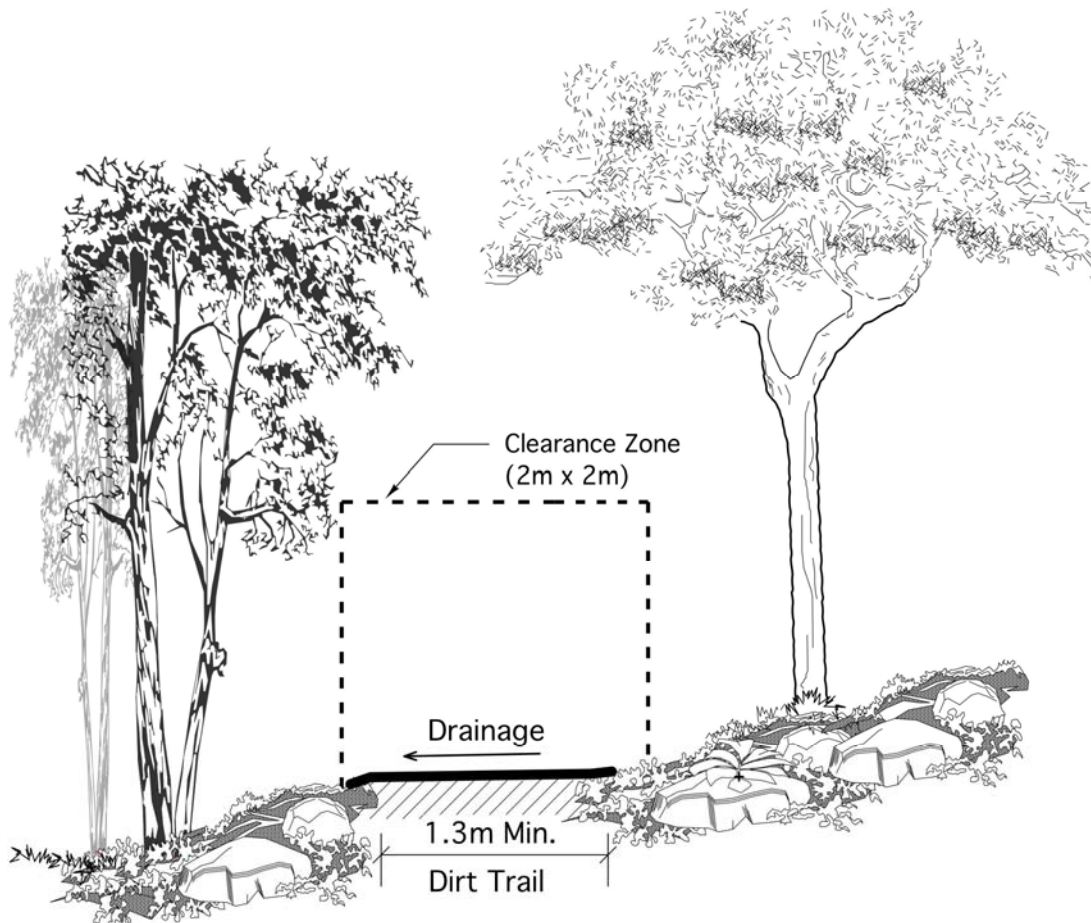
12.2 Designing and Building ATV Trails

As the popularity of ATV use increases it will be in the Town of Parry Sound's interest to have some general goals and guidelines in place for designing and building ATV trails. Best practices for designing and building ATV trails include the following important goals:

ATV Trail Design / Build Goals

- 1) Limit environmental impacts;
- 2) Keep maintenance requirements to a minimum;
- 3) Avoid user conflicts.

ATV trails general follow a path that gently traverses a hill or sideslope. It's characterized by a gentle grade and undulations, and a tread that usually tilts or outslopes slightly toward the outer edge. These features minimize tread erosion by allowing water to drain in a gentle, non-erosive manner. When water drains in thin, dispersed sheets, erosion issues can be avoided.



Typical ATV Trail



ATV Trail Design / Build Guidelines when Off Road or on Mixed Use Trail

- 1) Design to keep the water off the tread.
- 2) Build on the contours of the land and not down fall lines.
- 3) Avoid the Fall Line - fall-line trails usually follow the shortest route down a hill - the same path that water flows. The problem with fall-line trails is that they focus water down their length and will erode.
- 4) Avoid Flat Areas - if a trail is not located on a slope, there is the potential for the trail to become a collection basin for water. The trail tread must always be slightly higher than the ground on at least one side of it so that water can drain properly.
- 5) A trail's grade shouldn't exceed half the grade of the sideslope
- 6) Maximum grade should be 15 percent;
- 7) Average grade should stay under 10 percent;
- 8) Route trails to viewpoints, water, and other attractions;
- 9) Trails should be a minimum of 1.3m (50") wide.

12.3 On-Road ATV Usage

In regards to on road usage once a bylaw is in place identifying the roads where ATV access is permitted the regulation of ATV users is a police and bylaw matter. Ontario Regulation 316-03 "Operation of Off Road Vehicles on Highways" regulates how ATVs can legally be used on highways. Where a municipality deems the use of ATVs on specific roadways this bylaw also regulates how ATVs can legally be used on those roads. With a bylaw in place a person who contravenes Ontario Regulation 316-03 is guilty of an offence and is liable to a fine as provided in the Provincial Offences Act.

The local bylaw provides a schedule identifying the routes where ATV access is permitted and identifies any further restrictions that are not part of Ontario Regulation 316-03, such as hours of operation and any seasonal restrictions (such as no winter use) and notes that an ATV shall not be operated on roadways unless it meets the provisions of Ontario Regulation 316-03 "Operation of Off Road Vehicles on Highways" and that all the provisions of Ontario Regulation 316-03 "Operation of Off Road Vehicles on Highways" shall apply to the local bylaw.



Part Three – Implementation

Table of Contents

- 13.0 Maintenance and Operations..... 54
 - 13.1 On-Road Bicycle Facilities Maintenance and Operations 55
 - 13.2 On-Road Bicycle Facilities Maintenance Cost Controls 55
 - 13.3 Hiking Trails Maintenance and Operations 55
 - 13.4 Town And Departmental Responsibilities 56
- 14.0 Amenities to Budget For 57
 - 14.1 Miscellaneous Work, Amenities, and Signage..... 57
- 15.0 Trails and Bicycle Use Promotion 58
- 16.0 Phasing Strategy – Town of Parry Sound 59
 - 16.1 Town Trails Advisory Committee 59
 - 16.2 Town Trails Advisory Committee – Principles 60
 - 16.3 Priority Projects – Cycling Improvements 61
 - 16.4 Priority Projects – Pirority Projects - Waterfront Trail 63
 - 16.5 Priority Projects – Priority Projects 64
 - 16.6 Priority Projects – Community Parks & Trails 65
 - 16.7 Priority Projects – Sidewalks & Pedestrian Safety 66
 - 16.8 Priority Project – Snowmobile and ATV 67



13.0 Maintenance and Operations

An important part of a trails system for the Town of Parry Sound will be ensuring that resources are available to maintain both existing infrastructure and new infrastructure. It will be necessary for the Public Works and Development and Leisure Services Departments to review the current maintenance regime and, as the bicycle and trail facilities expand, to plan for increased maintenance and operational requirements for the proposed facilities.

13.1 On-Road Bicycle Facilities Maintenance and Operations

So that bike lanes, bike routes and widened shoulders are maintained in a manner that ensures the safety of these routes, the following maintenance practices should be incorporated into existing practices.

Sweeping: Annual removal of sanding materials, dirt, litter and debris from all roads with bike lanes, bike routes and widened shoulders. Additional sweeping will take place as required.

Surface Problems: Regular review of surface quality should be conducted and any potholes and other surface irregularities should be patched; including ridges or cracks as needed.

On-Road Bicycle Signage: The bicycle signs identified in the design guidelines in this report should be maintained in the same manner as Town roadway signs are typically maintained.

On-Road Bicycle Markings: Bicycle lane paint markings should be renewed at the same time that routine paint marking for the roadways is completed.

13.2 On-Road Bicycle Facilities Maintenance Cost Controls

The cost of incorporating the above noted practices into current maintenance routines will vary based on the amount of pedestrian and bicycle facilities constructed and the frequency of routine activities. Review of surface conditions, signage and road markings should be a routine practice within the Town. It is important to understand that new hiking and cycling routes and their associated repair and maintenance will gradually increase the cost of maintenance and manpower requirements. These should be monitored and reported to Council if increases become significant.

13.3 Hiking Trails Maintenance and Operations

The recommendations provided below should be merged with the Town's current maintenance practices to ensure multi-use trails and community trails are maintained in an appropriate manner to ensure safety.

Grasses Adjacent to Trail Edges: Tall grasses should be mowed ensuring potential hazards are not hidden from a cyclist's view. Vegetation also needs to be prevented from breaking up the edge of pavement and encroaching on the trail surface. A clearing strip on each side of the trail surface that is a minimum of one mower width, approximately 0.5 metres, should be maintained.

Signing and Marking Trails: Regular inspections for theft or vandalism should be conducted to ensure that signs are still in place and in good condition. Special attention should be paid to regulatory and warning signs.

General Clearing of Debris: All trails and trail linkages should be patrolled regularly and inspected to ensure that debris is removed.



13.4 Town And Departmental Responsibilities

ACCELERATING ACTION

City of Winnipeg, Manitoba

The City of Winnipeg's surge in active transportation programs has been championed by the mayor and strongly supported by council and energetic community groups. Since conducting its 2005 Active Transportation Study, the city has hired a dedicated coordinator and formed an advisory committee. Over the same period, the city's capital budget for active transportation has risen from \$300,000 to more than \$3 million.

For more information, see www.winnipeg.ca/services/transportation.



Photo: City of Winnipeg

Communities in Motion, Municipal Green Fund 2008, Federation of Canadian Municipalities

Leadership and municipal support will be needed to implement this plan. Elected officials will be a part of moving recommendations in this report forward. Council and senior management should be kept informed of continual efforts, as well as the necessary resources required, in order to move the plan forward.

It will be important to dialogue and coordinate trail initiatives with neighbouring municipalities as they develop their own trails systems and bicycle routes.

Leverage It

Establish partnerships and work with neighbourhood/community interest groups and multiple levels of government to encourage and support local walking and cycling initiatives.





14.0 Amenities to Budget For

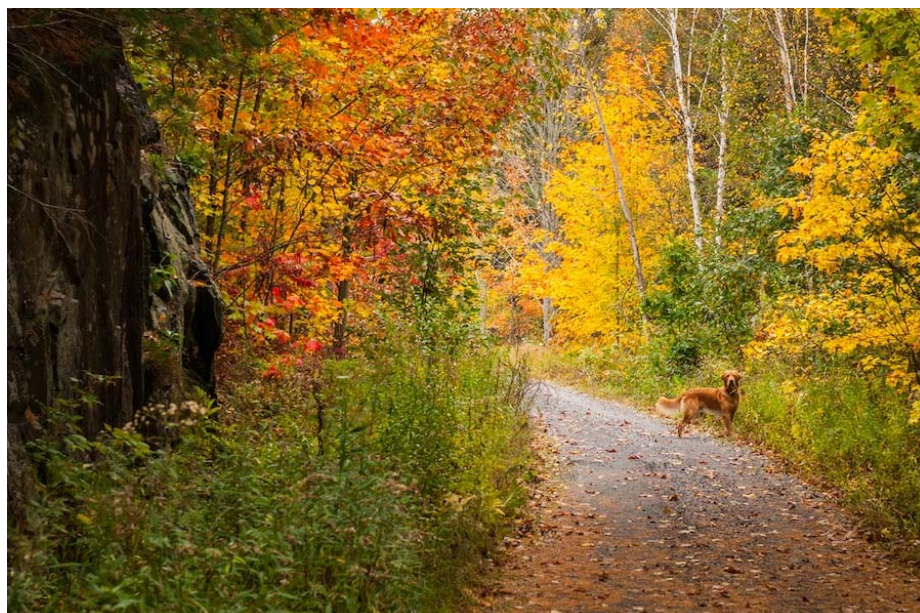
The Consultant has prepared the types of features for a typical trail projects and pedestrian improvements. These features are intended to provide elected officials, Town staff, and the public with an initial understanding of the amenities involved with undertaking the improvements described in the Town of Parry Sound Trails Master Plan. All proposed improvements require more detailed designs before detailed cost estimates can be completed. Each year, these types of improvements will need to be budgeted for depending upon the trail project.

14.1 Miscellaneous Work, Amenities, and Signage

TRAILS - WATERFRONT STABILIZATION/NATURALIZATION	
2.1	Shoreline stabilization
2.2	Armourstone retaining wall
2.3	Post and wire fencing

STREET FURNITURE & AMENITIES	
3.1	Bollards at Intersections
3.2	Trash Receptacle
3.3	Bike Lock up
3.4	Benches

SIGNAGE & WAYFINDING	
4.1	Regulatory Signs
4.2	Interpretive Signs
4.3	Directional Markers
4.4	Trail Heads w/Trail Map Signage





15.0 Trails and Bicycle Use Promotion

Maximize Your Market. Several tools help make hiking, biking, and general trail usage a desirable choice. Promotional events raise awareness and encourage people to try new ways of getting around. Awards recognize key individuals and organizations. Maps help cyclists and pedestrians find the best routes and the Town of Parry Sound should ensure that their trails mapping is included in the GIS data. Advertising and media coverage can build a positive image for trails, while targeted marketing helps families explore travel options in a personal and customized way. The Town should dialogue with the Trails Organizations and others to ensure Town mapping is included in regional trails, snowmobile, ATV, and bicycle literature.

Build It
<p>Develop an implementation strategy for trail projects that access available resources and ensure trail linkages are completed, shoulders along bikes routes are paved, and that proper signage is posted.</p>

Focus On Safety. While changes to signs, signals, streets and trails may be needed to improve safety, other measures can be just as important. Educational programs teach drivers to share the road with cyclists. Training courses give cyclists the skills and confidence they need to ride in traffic. Enforcement campaigns encourage cyclists to have the right safety equipment, and encourage everyone to obey the rules of the road.

Help Children Get To School. Across Canada, communities are promoting alternatives to children being driven to school. ‘Walking school buses’, ‘cycling trains’, school-to-school contests and classroom curricula can improve children’s physical and mental health, and reduce congestion and emissions around schools. Physical changes to walking and cycling routes support these efforts, making routes safer and more convenient for children.

ACTIVE AND SAFE ROUTES TO SCHOOLS

City of Peterborough, Ontario

Local organizations including the City of Peterborough have partnered to encourage active transportation by school children. Activities include Cool Captain Climate transportation shows, International Walk to School Day, a Cross-Canada Walking Challenge, school zone anti-idling projects, monthly IWALK days and school travel maps.

For more information, see www.peterboroughmoves.com.

Extend Your Reach With Partnerships. Municipalities shouldn’t try to do it all by themselves, when partners offer much-needed energy, knowledge and skills. Snowmobile and ATV groups are excellent partners for specific trails initiatives. Non-profit organizations can run educational programs and special events, employers can offer incentives to active transportation commuters, and associations can educate professionals about bicycle and pedestrian planning and implementation.





16.0 Phasing Strategy – Town of Parry Sound

16.1 Town Trails Advisory Committee

In order to provide the necessary momentum and organization required to implement the vision for the Parry Sound Trails Master Plan, an important part of the phasing strategy will be a Town Trails Advisory Committee. It is recommended that a committee be formed (or that the current committee be so empowered, such as the Parry Sound Area Active Transportation Committee or Park to Park) to provide guidance related to moving the plan forward. This Committee, with staff assistance, should be tasked with confirming yearly priorities and recommended projects, along with arranging the necessary detailed design and cost estimates for those projects, and bringing a work plan to Council for budget consideration each year.



Important: This master plan document is a living document and requires monitoring. Updating the implementation plan and adjusting long-term objectives along with the project completion timeline, is an ongoing task - annual budgets, grant opportunities, changes in Council, may provide both challenges and opportunities - the Town of Parry Sound Trails Advisory Committee needs to remain cognizant of this.



TRAVELSMART

Metro Vancouver, British Columbia

A number of area municipalities recently partnered with TransLink to test the potential of targeted marketing. Preliminary results indicate that by offering households customized information and incentives, the TravelSmart project increased walking by almost 10 per cent and cycling by more than 30 per cent in a variety of neighbourhoods.

For more information, see www.translink.bc.ca/projects.



16.2 Town Trails Advisory Committee – Principles

- ✓ Review, measure and recommend any adjustments related to the Plan's objectives on a yearly basis, to ensure its effectiveness;
- ✓ Consult efforts with the Public Works Department so that any planned road reconstruction and resurfacing projects include the necessary pedestrian and cycling improvements;
- ✓ Consult efforts with the Planning Department so that new development areas are required to incorporate connecting routes into the overall development and link with the planned pedestrian trail system;
- ✓ Continue soliciting and evaluating suggestions from the public regarding priorities for trails and linkages; this Trails Master Plan document should be considered a living document that requires monitoring and updates, as conditions change and/or opportunities arise;
- ✓ Prioritize projects where the highest demand is anticipated, addressing any identified safety concerns and targeting key areas;
- ✓ Links that are part of existing trails should receive the highest priority;
- ✓ Links to neighbouring municipalities in this report should receive a high priority;
- ✓ Proposed trails in new, or redeveloped, public park should receive a high priority;
- ✓ Trails along public portions of waterfront should receive a high priority; and
- ✓ Trail head signage and wayfinding signage should be integrated into each pedestrian improvement project.



Communities in Motion, Municipal Green Fund
2008, Federation of Canadian Municipalities

MULTIMODAL BRIDGES

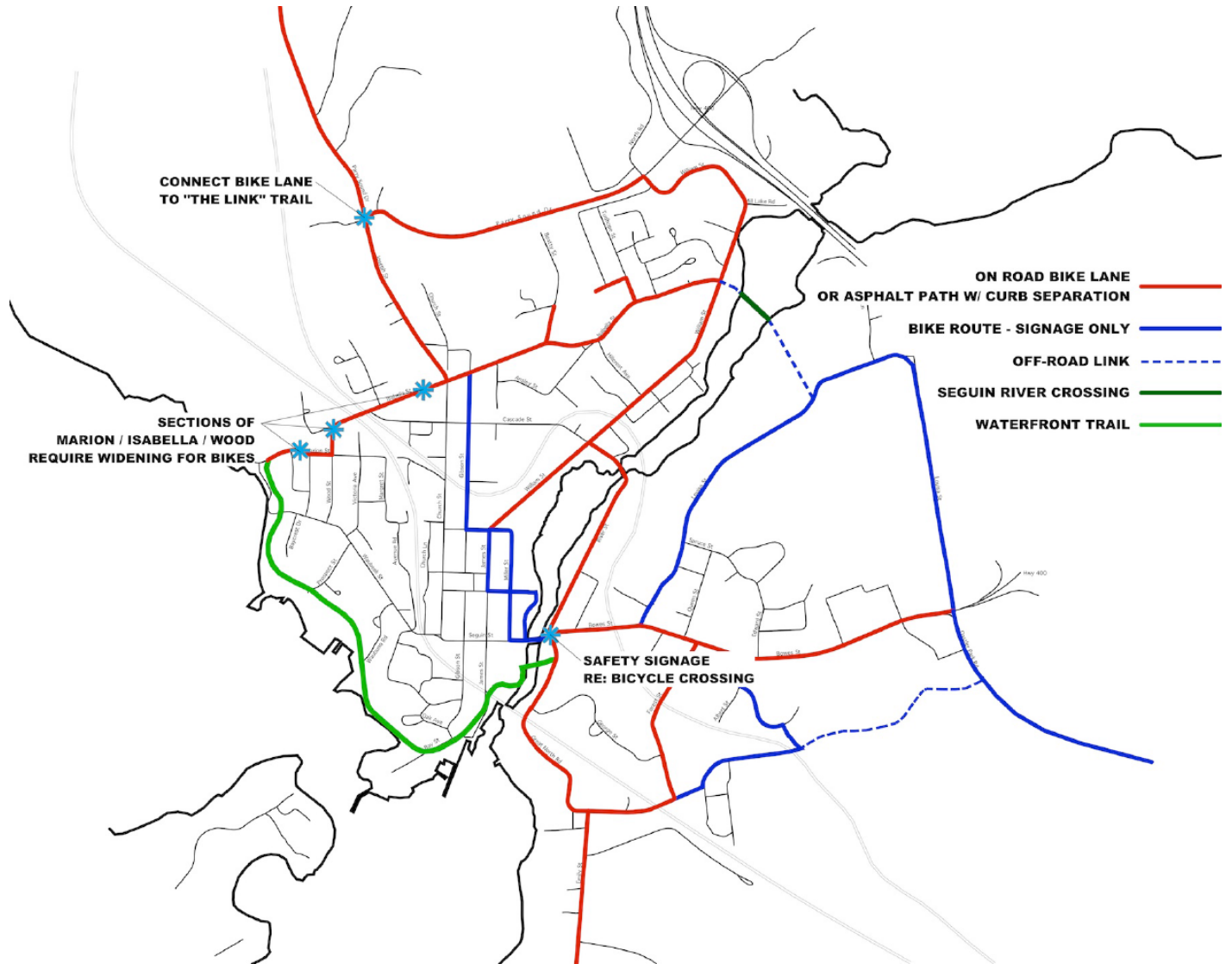
City of Ottawa, Ontario

Ottawa's numerous bridges serve thousands of cyclists and pedestrians every day. In recent years the city has upgraded older bridges with bike lanes and wide sidewalks, included bike lanes and off-road paths on new bridges, and opened the landmark Corktown Footbridge across the Rideau Canal.

For more information, see www.ottawa.ca.



16.3 Priority Projects – Cycling Improvements



Cycling Improvements – Map



On-Road Safety Improvements – Parry Sound Bicycle Loop

Item

Marion Street – widen section on the proposed Parry Sound Bicycle Loop

Isabella Street – widen section on the proposed Parry Sound Bicycle Loop

Wood Street – widen section on the proposed Parry Sound Bicycle Loop

Formalize the Parry Sound Bicycle Loop using route signage and mapping

Identify the Parry Sound Bicycle Loop (see map) with Signage including sections of Marion Street (at the NE end of the trail) Wood Street, Isabella Street, William Street, River Street, Great North Road and connecting to the waterfront trail at the pedestrian bridge.

Identify all local Bicycle Routes (see map) with Route Signage

Improve the existing snowmobile trail connecting Oastler Park Road to Great North Road for bicycle use

Bowes Street (from Oastler Park Road to River Street)

Joseph Street (from Parry Sound Drive to Isabella Street)

Parry Sound Drive (from Joseph Street to William Street)

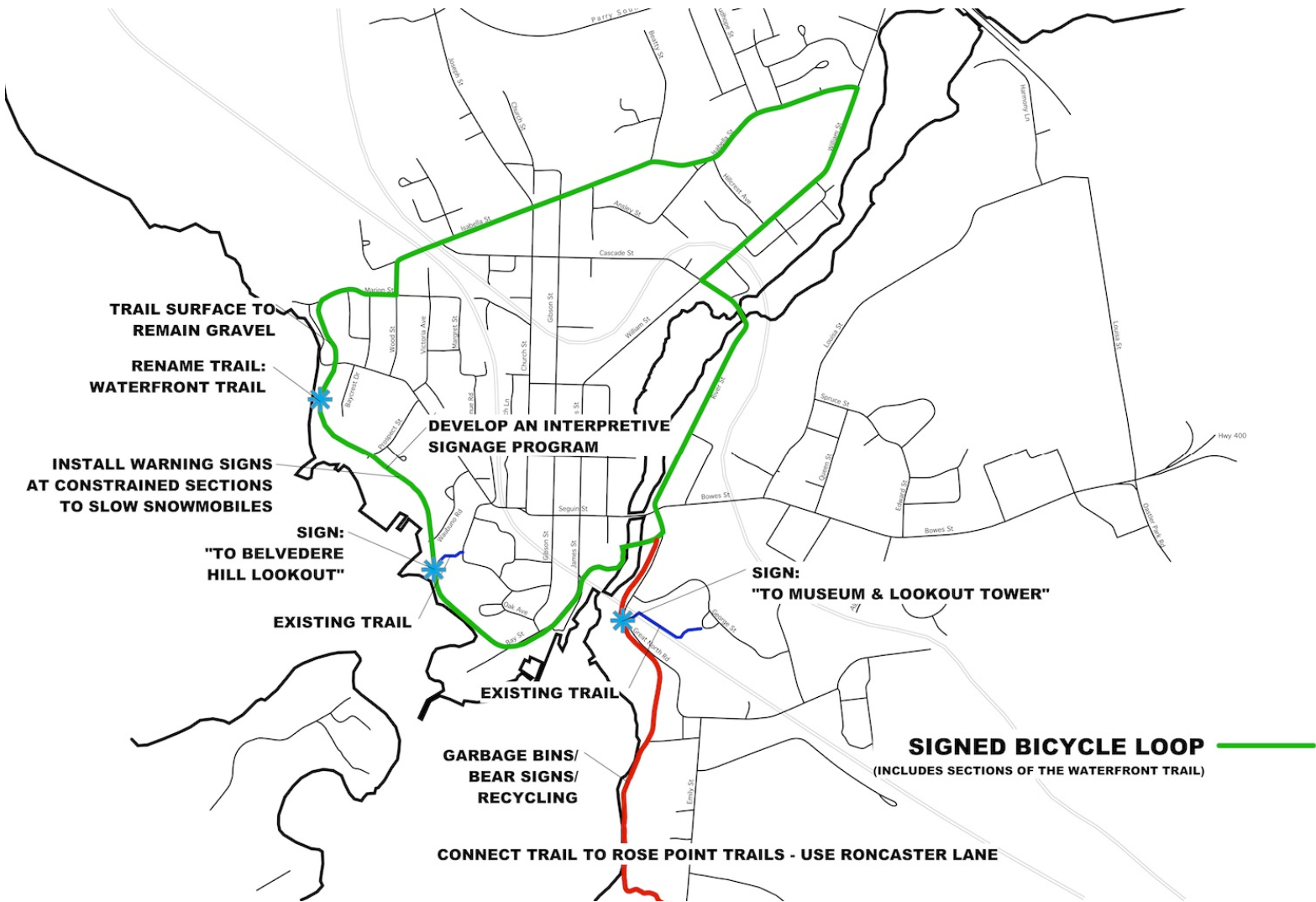
William Street (from Parry Sound Drive to Addie Street)

Prioritize route improvements that extend and connect 'the Link' to the downtown (Joseph Street, Isabella Street, and Gibson Street)





16.4 Priority Projects – Waterfront Trail



Waterfront Trail Improvements – Map



16.5 Priority Projects

Waterfront Trail Proposed Improvements
Item
Change the name of the Fitness Trail to the Waterfront Trail
Install Warning Signs to slow snowmobiles at restricted sections of the trail
Install Sign – To Belvedere Hill Lookout
Install Sign – To Museum and Lookout Tower
Directional Signage in public ROW identifying the Waterfront Trail Entrance Points
Trailhead Signs at all major Entrance Points to Waterfront Trail
Install Garbage and Recycling Bins along Trail
Develop and Interpretive Signage Program for the Waterfront Trail
Remove Invasive Species along Trail
Connect the Waterfront Trails to Rose Point Trails – final alignment to be determined by Town (consider Roncaster Lane)
Install new Benches at Key Locations (where space is available and separated by a minimum of 250M)
Overview Map Sign at Major Entrance Points to Waterfront Trail

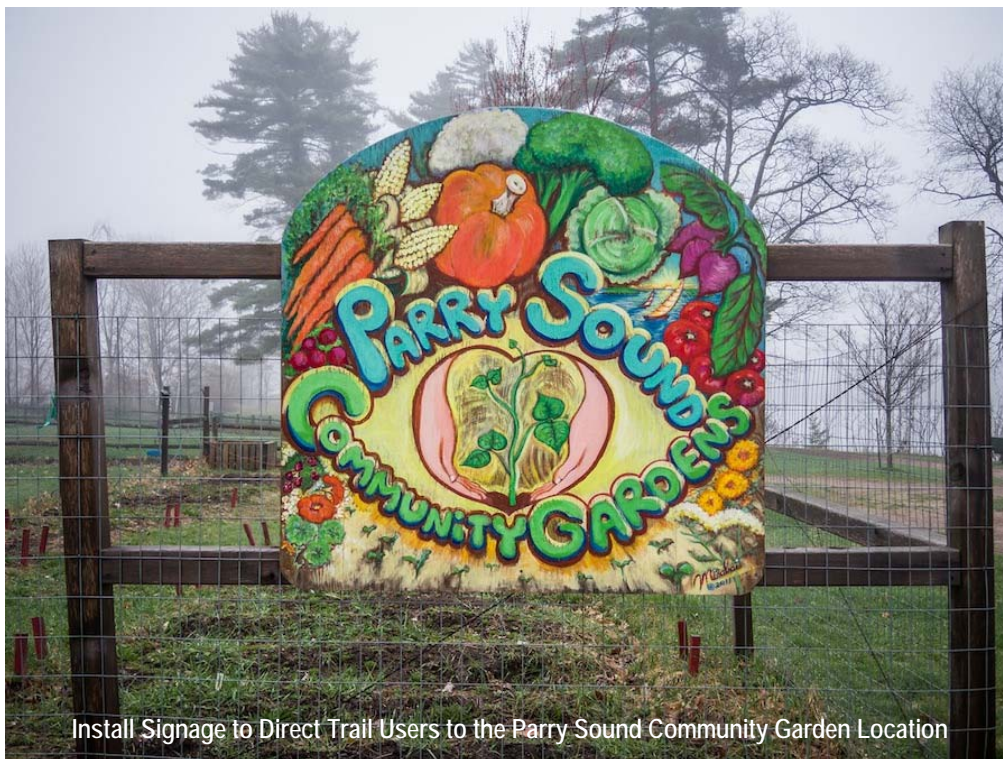
Signage along Trails should direct trails users to important landmarks such as the Lookout Tower





16.6 Priority Projects – Community Parks & Trails

Community Parks & Trails Proposed Improvements
Item
Directional Signage in the public ROW identifying all Community Parks
Identification Signage at all entrances to Community Parks
Trailhead Signage for at all major Entrance Points to Community Trails
Formalize trail connection between Waterfront Trail to the Belvedere Hill Lookout
Formalize trail connection between Waterfront Trail to Museum and Lookout Tower
Trailhead Sign at the Entrance to the Rugged Trail
Overview Map of Trail at the Entrance to the Rugged Trail
Distance Markers along the length of the Rugged Trail (space at 500m)
Remove Invasive Species along Rugged Trail
Town to Partner with Granite Harbour (see map) for formalizing trails on private lands
Connect the Waterfront Trails to Rose Point Trails – final alignment to be determined by Town (consider Roncaster Lane)
Install Signage along Trails to direct to Parry Sound Community Gardens
Install Signage along Trails to direct to Parry Sound Skate Park on the waterfront



Install Signage to Direct Trail Users to the Parry Sound Community Garden Location



16.7 Priority Projects – Sidewalks & Pedestrian Safety

Sidewalks and Pedestrian Safety Improvements
Item
Complete a comprehensive review of all sidewalks to identify missing links
Sidewalks on Isabella Street past the Cemetery
Sidewalk Isabella Street to Hillcrest Road
Sidewalk Tudhope Street to William Street
Adequate Sidewalk connections to the New School
Sidewalk connections and improved accessibility to all Community Parks to be considered
Consider all direction walk (scramble intersection) at Seguin Street & James Street
Sidewalks and Pedestrian Crossing Lights McDonalds to Starbucks (Bowes Street and Louisa Street Intersection)



Install Signage to Direct Trail Users to the Parry Sound Skate Park



16.8 Priority Project – Snowmobile and ATV

Snowmobile and ATV Trails Proposed Improvements	
Item	
	Formalize and approve the preferred Interim Route for ATVs through Town;
	Extend Snowmobile Trail from Oastler Park Road to connect to the Commercial Area at Bowes Street and Louisa Street
	Partner with Snowmobile Association to install new safety signage on Waterfront Trail.
	Complete a feasibility study and preliminary design study for the proposed Seguin River Bridge
	Pursue Funding for the proposed Seguin River Bridge
	Construct the proposed Seguin River Bridge
	Celebrate the Grand Opening of the new Seguin River Bridge
	Move the official ATV route through Parry Sound to the new alignment using the Seguin River Bridge

DEMONSTRATING LEADERSHIP

City of Toronto, Ontario

The City of Toronto partnered with Green Communities Canada to co-host the 2007 Walk21 Conference. The city adopted a Pedestrian Charter in 2002, supports cycling and pedestrian advisory committees, and coordinates an annual Bike Week that grew into Bike Month in 2008. Staff members are working to implement a five-year, \$30-million cycling infrastructure plan. The city is also creating a new public realm unit to improve pedestrian infrastructure while it develops a comprehensive Walking Strategy framework.

For more information, see
www.toronto.ca/cycling and
www.toronto.ca/walking.



Communities in Motion, Municipal Green Fund
2008, Federation of Canadian Municipalities