



To: Mayor and Council From: Stephanie Clark, Director of Community Services Date: March 24th, 2025 Committee of the Whole Date: April 14th, 2025 For Direction For Information For Adoption Attachment: 31 pages

Title: Creating Engaging Green Spaces through a Connected Trail Network

Recommendation: That the Council of the Corporation of the Town of Smiths Falls adopt the *Trail Standards Plan*, the *Parks and Open Space Connectivity Guide*, and the *Connected Trails Implementation Plan*, as presented, to guide the development of a connected and engaging trail network across the community.

Purpose

To seek Council's adoption of three coordinated planning documents that will support the design, development, and implementation of a connected trail network, aligned with Strategic Priority 6.1. These documents provide a clear framework for expanding and enhancing active transportation, recreation, tourism, and placemaking opportunities in Smiths Falls.

Background

As identified in the Strategic Plan (2023-2026), the Town has prioritized creating engaging green spaces and enhancing trail connectivity to support active transportation, accessibility, tourism, and environmental sustainability. In addition, the Parks and Recreation Master Plan underscores the importance of investing in sustainable and accessible green spaces to foster community engagement, outdoor recreation, and economic growth.

In response, the Community Services Department has developed three key documents:

- Parks & Open Space Connectivity Guide
- Smiths Falls Trail Standards Plan
- Connected Trails Implementation Plan

These documents identify current gaps, barriers to accessibility, and opportunities to improve trail connections. The Implementation Plan outlines a five-year, phased approach to enhance trail linkages, add key amenities, and ensure all neighbourhoods have access to green spaces. Together, these plans support a unified vision for a trail system that is inclusive, sustainable, and well-integrated into the broader community.

Together, these documents will serve as a framework for both immediate and long-term trail planning, integrating trails into the broader vision for a livable, inclusive, and environmentally connected community.

Analysis and Options

Options for Council Consideration

- 1. Adopt all three plans as presented and proceed with phased implementation over five years. (*Recommended*)
- 2. Adopt the plans with modifications, such as adjusted timelines or priorities based on funding availability. (*Not recommended*)
- 3. Defer adoption to revisit funding strategies. (Not recommended)

Budget/Financial Implications

The estimated total cost for full implementation of Strategic Plan Item 6.1 is **\$1,285,000**, allocated over five years, with funding anticipated from:

- Municipal capital allocations
- Provincial and federal grants

Annual capital and operating budget allocations will be subject to Council approval as part of the municipal budgeting process.

Link to Strategic Plan (2023-2026)

This initiative aligns with the following key strategic priorities:

• Strategic Priority 6.1: Creating Engaging Green Spaces through a Connected Trail Network

Existing Policy

- Town of Smiths Falls Strategic Plan (2023-2026)
- Town of Smiths Falls Parks and Recreation Master Plan
- Accessibility for Ontarians with Disabilities Act Compliance Guidelines

Consultations: Community Services staff; Accessibility Advisory Committee; Parks Canada: Economic Development and Tourism Staff; Cataraqui Trail Conservancy; Trans Canada Trail staff.

Attachments

- Creating Engaging Green Spaces through a Connected Trail Network
 Implementation Plan
- Parks & Open Space Connectivity Guide
- Smiths Falls Trail Standards Plan

Respectfully Submitted by:

Approved for agenda by CAO:

Stephanie Clark, Director of Community Services Malcolm Morris, CMO

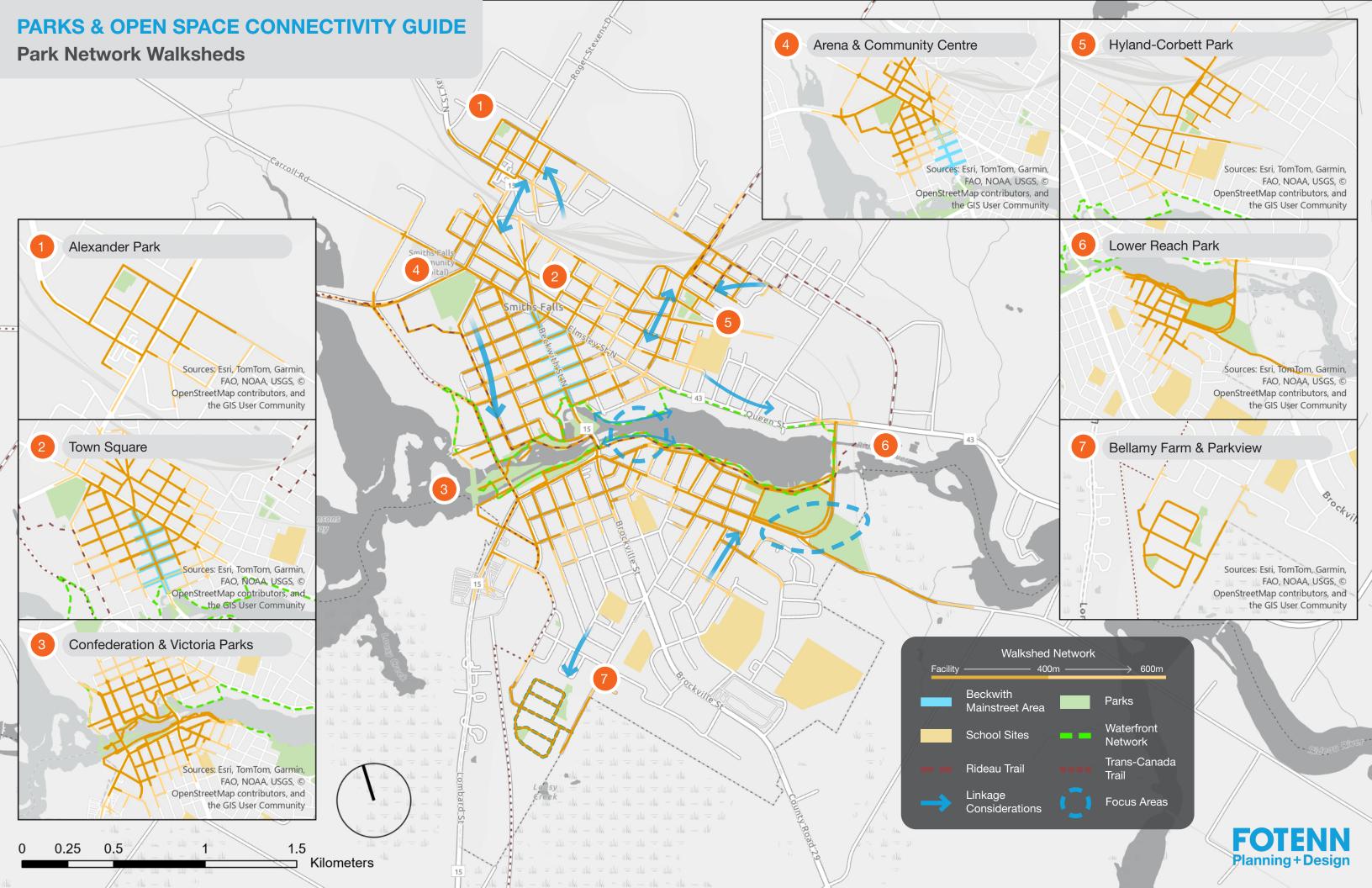
Parks & Open Space **Connectivity Guide**

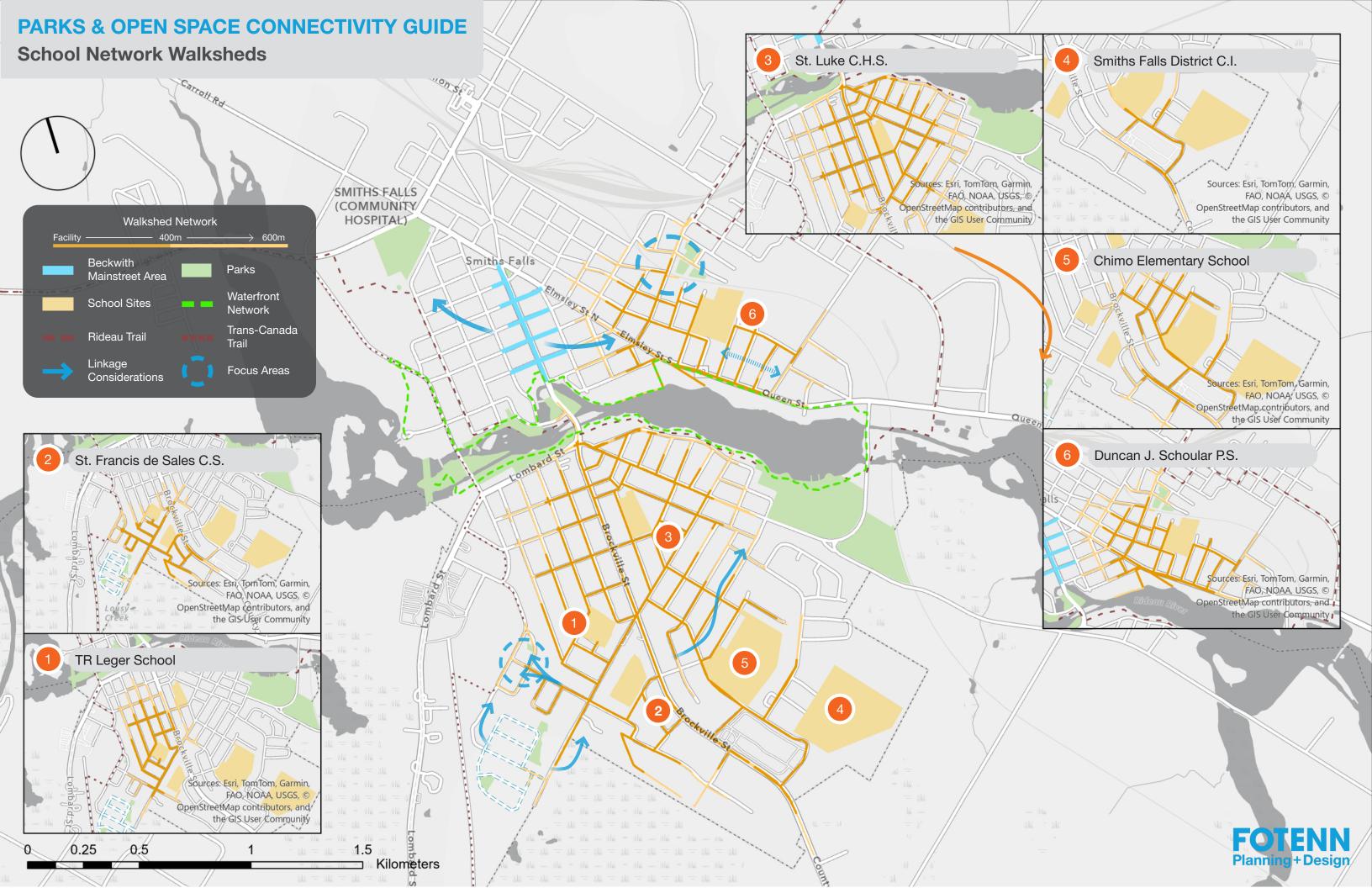




Prepared by Fotenn Planning + Design

February 11, 2025





Purpose

The Parks and Open Space Connectivity Plan presents a graphical representation of the existing park and school assets located within the Town of Smiths Falls for the purpose of identifying existing walking networks connecting these facilities.

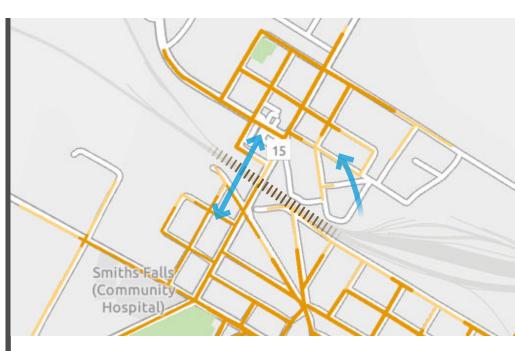
The purpose of this tool relies on the assumption that shorter walking distances be safer and encourage active modes of transportation, particularly for vulnerable populations, including children and the elderly. As walking distances increase, ensuring that connections between facilities are safe, clearly identifiable, and efficient can enhance the overall functionality of the network as a means of enhancing the access to and between these individual facilities.

The accompanying maps and figures illustrate the cumulative and individual *walksheds* extending from each facility, at intervals of 400 metres (~5 minute walk) and 600 metres (~7.5 minute walk).

WALKSHED: A visual representation of areas located within a certain distance of a specific point or facility, highlighting accessible routes and barriers.

Utilizing this information, focus areas and linkage considerations between these facilities and the existing active transportation and park networks have been identified. These opportunities highlight areas that may benefit from further consideration as it relates to infrastructure improvements, wayfinding initiatives, and parks planning priorities.

This document has taken guidance from, but does not seek to contradict or amend any of the findings of the Smiths Falls Active Transportation Plan (2021) or equivalent.



Alexander Park sits at the north end of the Town, and remains relatively isolated from the broader park network. This area is mainly accessible via Highway 15, which passes under the railway which bisects the Town is this area. As identified by the Park Network Walkshed, the railway underpass may pose a barrier to active transportation movements due to the nature of the connection, the visual impact of the railroad bridge, and the traffic volumes see along Highway 15.

Two (2) linkage considerations have been identified as it relates to Alexander Park:

1. While not a physical obstruction, the railway presents a potential psychological and navigational barrier for pedestrians and cyclists traveling between the residential areas surrounding Alexander Park and the broader park network to the south.

2. Areas to the north of the railway and east of Highway 15 are generally isolated from the Town's park network, including portions sited outside of the 600-metre walkshed of Alexander Park. Establishing a defined pedestrian route for these areas—while accounting for Highway 15 as a high-traffic arterial—may improve accessibility and integration with the larger network.



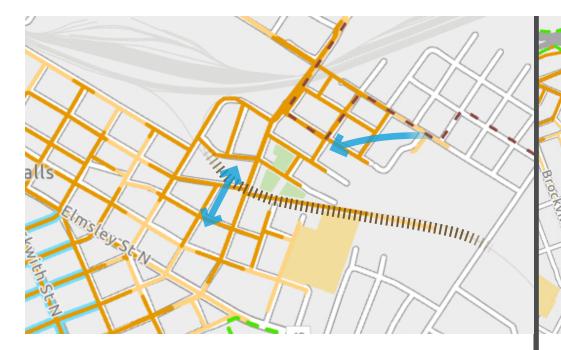
The Smiths Falls Memorial Community Centre, Youth Arena, and baseball diamonds represents a prominent community hub, serving the immediate neighbourhood as well as the greater Town and surrounding areas.

Two (2) linkage considerations have been identified as it relates to this community hub:

1. As a significant community hub, ensuring seamless connections between these facilities and the broader parks and active transportation network supports safer and more efficient access. Strengthening these linkages also enhances the overall value and functionality of the Town-wide park facilities and network.

2. The Beckwith mainstreet corridor represents a wellconnected network of walkable, active streetscapes and pedestrian-oriented commercial activity. The mainstreet area is well connected to other networks and can serve as an extension of safe walksheds while Establishing a well-defined link between this corridor and the community hub presents an opportunity to further expand the Town's walkable network. By guiding pedestrian movement through safe, accessible, and strategically located pathways, this connection can improve overall walkability and reinforce key nodes within the community.





Hyland-Corbett Park is similar to Alexander Park in that it is a relatively isolated park facility located north of the railway, serving several residential areas. The park is also situated in close proximity to Duncan J. Schoular Public School, as identified on the School Network Walkshed.

Two (2) linkage considerations have been identified as it relates to Hyland-Corbett Park.

1. Similar to Alexander Park, the railway presents a potential navigational and psychological barrier for active transportation movements, particularly for students. Ensuring safe and comfortable crossings is essential to supporting pedestrian movement and connectivity between park and school facilities.

2. The residential neighbourhood to the northeast of the park is further disconnected from the broader park network. As such, Hyland-Corbett Park has the opportunity to directly serve these residents, providing a clear and identifiable access to these facilities. Additionally, the Rideau Trail, which enters the Town along Chambers Street and passes through this neighborhood, presents an opportunity for coordinated improvements to strengthen connections between both networks. Lower Reach Park represents a major addition to the Smiths Falls network of parks and open space. As depicted in the provided maps and figures, this area includes Lower Reach Park, Gleeson Park, and the Smiths Falls Curling and Squash Club. These facilities serve both the adjacent residential neighborhoods and the broader community.

Two (2) linkage considerations have been identified as it relates to the Lower Reach Park area:

1. The areas to the south of Lower Reach Park, while situated in close proximity, face a physical barrier in the form of a significant grade change along Jasper Avenue. As a result, Vincent Street serves as the primary access route to the park from the south. This constraint presents an opportunity to consolidate improvements and wayfinding efforts along this corridor which serves several schools in the area as well as the surrounding residential areas.

2. Lower Reach Park, Gleeson Park, and the Smiths Falls Curling and Squash Club are situated along Old Slys Road which disrupts the seamless interaction between these spaces. Prioritizing safe crossings and improving connectivity along this corridor would allow these assets to function as a more cohesive recreational hub, enhancing their overall accessibility, value, and community utility.

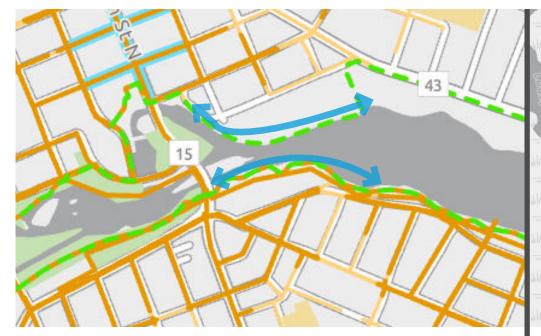
The area to the east of Duncan J. Schoular Public School largely falls outside the walkshed of identified park facilities. Additionally, the waterfront remains inaccessible due to riverfront lot formations. Despite these spatial disconnections, this area benefits from an internal path network that extends from Thurber Street in the west to Lorne Street in the east.

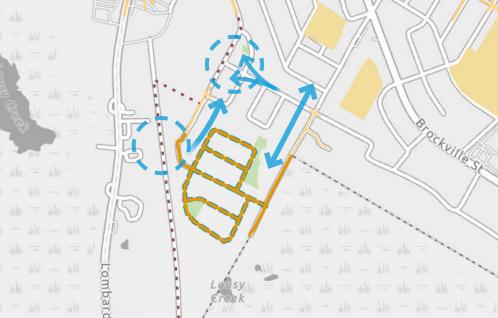
One (1) linkage consideration has been identified as it relates to this area:

1. The interior path connection from Duncan J. Schoular Public School eastward represents an opportunity to implement clear and identifiable wayfinding, facilitating pedestrian and active transportation movements towards Lower Reach Park to the south. Consideration should also be made for how the end of this path is guided towards the safe crossing to Lower Reach Park across Old Slys Road.









The waterfront trail network spans a significant portion of the riverfront, connecting major park facilities, including Lower Reach Park to the east and Turtle Island, Duck Island, and Victoria Park to the west. However, certain sections of the trail are less accessible and difficult to traverse, creating gaps that disrupt connectivity to these park facilities and the greater active transportation network as a whole.

Consideration should be made towards ensuring these sections are improved to match the quality of the adjacent trails to the east and west. Strengthening these connections will create a more seamless network, better linking individual facilities throughout the Town. The Bellamy Farms neighbourhood represents a new addition to the Smiths Falls built-up area. The neighbourhood is set to feature two (2) new park facilities, contributing to the livability of the new residents, as well as those in surrounding areas.

Two (2) linkage considerations have been identified as it relates to the area surrounding Bellamy Farm:

1. Improved access to the park facilities within Bellamy Farms presents an opportunity to serve residents of existing neighbourhoods to the north and east. Additionally, the presence of schools to the northeast highlights the need for well-planned connections to facilitate movement in and out of the neighbourhood.

2. The Cataraqui Trail runs along the western boundary of Bellamy Farms, featuring two distinct trailheads: one at the western end of Ferrara Drive and another at the intersection of Ferrara Drive and Harold Street to the north. Establishing clear pathways to these trailheads—from within Bellamy Farms and surrounding neighbourhoods—will enhance connectivity, further integrating the community into the broader Town-wide trail and park network.

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APPENDIX A: INDIVIDUAL PARK WALKSHED MAPS















APPENDIX B: INDIVIDUAL SCHOOL WALKSHED MAPS











Creating Engaging Green Spaces through a Connected Trail Network

Strategic Priority 6.1

A Vision for a Connected and Accessible Smiths Falls

The Town of Smiths Falls has long been defined by its rich natural environment, historic charm, and the strong sense of community among its residents. As the town continues to grow, so too must the approach to public spaces evolve. Parks and trails are not simply places to pass through—they are destinations that foster community, encourage outdoor activity, and create lasting memories.

With this in mind, the Town is embarking on an ambitious transformation: Strategic Plan Item 6.1, a five-year plan to expand, connect, and enhance Smiths Falls' parks and trails. This initiative is not just about infrastructure; it is about building a town where every resident—regardless of age, ability, or background—can enjoy safe, accessible, and well-connected green spaces.

Understanding the Need for Connectivity

Strategic Plan Item 6.1 aligns directly with the current *Parks and Recreation Master Plan*, which emphasizes the need for a cohesive and accessible trail network that supports both recreational and active transportation goals. The Master Plan highlights the importance of improving trail connectivity, accessibility, and infrastructure to better serve residents and visitors while fostering a healthier, more active community. By implementing this initiative, the Town is taking a significant step toward achieving the long-term vision set forth in the Master Plan, ensuring that parks and trails are safe, well-maintained, and seamlessly linked to enhance overall community well-being.

Smiths Falls is home to several beautiful parks and natural spaces, but gaps in connectivity, and a dearth of wayfinding and/or directional signage can make these areas feel disjointed rather than part of a cohesive network. The recently completed *Parks & Open Space Connectivity Guide* highlights key obstacles, including railway crossings, high-traffic roadways, and inconsistent trail surfaces. These barriers make it difficult for residents to move easily between parks, discouraging active transportation and outdoor recreation.

The Town's *Trail Standards Plan* provides a framework for addressing these challenges by emphasizing accessibility, safety, and sustainability. By improving existing trails and creating new connections, Smiths Falls can transform its public spaces into a fully integrated green network.

Additionally, Smiths Falls holds a unique position in regional and national trail networks. The town is a terminus for the Cataraqui Trail, providing a critical gateway for trail users. It is also a key link in the development of the developing Eastern Ontario Rail Loop, a long-distance cycling and recreational trail system. Furthermore, Smiths Falls is part of the Trans Canada Trail, a national trail system linking outdoor enthusiasts across the country. The establishment of a dedicated trailhead facility at the start of the Cataraqui Trail will serve as a central hub for local and visiting trail users.

A Phased Approach to Transforming Our Green Spaces

This initiative is planned over five years, ensuring thoughtful and sustainable progress. Each phase builds upon the last, gradually realizing a well-connected, accessible, and inviting green space network.

Laying the Foundation (Year 1 - 2025)

Building on the foundational work completed in the Parks and Open Space Connectivity Guide, the Community Services Department will focus on key improvements to the trail network in Year 1. This will include:

- Minor infrastructure repairs to existing pathways and trails.
- Installation of accessible signage in play areas.
- A comprehensive on-the-ground review of trail conditions within identified core walksheds and connectors.
- Preparatory work for the Cataraqui Trailhead parking lot, positioning this location as a future hub for active transportation.

While a more extensive trailhead facility is planned for Years 4 and 5, this initial work lays the foundation for future enhancements, which may include a washroom facility and a water station to support increased trail usage and visitor amenities.

Strengthening Core Connections (Year 2 – 2026)

With a clearer understanding of existing conditions, Year 2 will focus on enhancing identified walkways and connectors in collaboration with Public Works. This will include:

- Improving accessibility at key locations (curb cuts, sidewalk additions, and pedestrian crossings).
- Wayfinding enhancements, including directional signage and interactive maps to help users navigate the trail system.



• Seeking grant funding and partnerships to support expansion efforts and infrastructure improvements.

Enhancing the Trail Experience (Year 3 – 2027)

Once core connections are in place, attention will shift to making trails more inviting and userfriendly. Improvements will include:

- Resurfacing pathways with accessible materials.
- Adding benches, lighting, and rest areas to improve user comfort throughout Lower Reach.
- Adding and/or benches along select trail linkages (e.g. Queen Street)
- Undertaking a focused native tree and shrub-planting initiative to introduce additional shade and greenery.
- Collaborating with businesses and interest groups to encourage eco-tourism and local economic benefits.

Completing the Vision and Ensuring Sustainability (Years 4 & 5 – 2028-2029)

The final phase will refine and ensure long-term sustainability by:

- Closing remaining connectivity gaps to ensure all neighborhoods have safe, traversable access to green spaces.
- Developing the full Cataraqui Trailhead Facility, adding washrooms and water stations.
- Introducing a community stewardship program to engage residents in trail maintenance and beautification.
- Conducting a comprehensive review of trail usage, accessibility, and public feedback to inform future improvements.

Partnerships & Collaboration

The success of this initiative relies on strong collaboration with key partners such as Parks Canada, the Town's Accessibility Advisory Committee, the Chamber of Commerce, the Downtown Business Association, and other municipal departments. By working together, the Community Services department can align efforts to enhance green spaces, promote active transportation, and support tourism. Engaging these stakeholders ensures that trail development is integrated with economic growth strategies, business engagement, and conservation efforts. Partnerships will also help secure funding, share resources, and promote



Smiths Falls as a premier outdoor recreation destination, making our connected trail network a valuable asset for both residents and visitors.

Accessibility Considerations

Ensuring that Smiths Falls' trail network is inclusive and accessible to all users is a foundational priority in the implementation of Strategic Plan 6.1. The Town is committed to meeting AODA standards by incorporating key features that enhance accessibility, safety, and comfort. The installation of accessible rest stations, including strategically placed benches at regular intervals, will provide essential resting points for individuals with mobility challenges. Adequate lighting along key sections of the trail network will enhance safety and support year-round usability, particularly in the darker months. Furthermore, trail surface coverings will be selected with accessibility in mind, ensuring a firm, stable, and slip-resistant path suitable for wheelchairs, walkers, and other mobility aids. Options under consideration include permeable asphalt, stabilized engineered wood fiber, rubberized surfaces, and compacted stone dust with stabilizing agents, all of which offer varying benefits in terms of durability, maintenance, and environmental impact. These improvements will ensure that the Town's trails remain welcoming, navigable, and inclusive for residents and visitors of all abilities.

Conclusion

This initiative represents a transformative investment in active transportation, accessibility, and sustainable infrastructure. By creating well-connected, inclusive, and environmentally sustainable trail networks, Smiths Falls will establish itself as a leader in active living, ecotourism, and community mobility.

With the support of municipal and external funding, this project will improve quality of life, economic vitality, and public health, ensuring that all residents and visitors can safely navigate and enjoy Smiths Falls' public greenspaces.



Budget/Financial Implications

The estimated total cost for the implementation of **Strategic Plan Item 6.1** is **\$950,000**, allocated over five years. The following budget breakdown outlines planned expenditures:

Year	Planned Activities	Estimated Cost
2025	Minor trail repairs, accessible signage in play areas, trail condition review, Cataraqui Trailhead parking lot preparations	\$60,000
2026	Walkway and sidewalk improvements, wayfinding signage, pedestrian crossing enhancements	\$250,000
2027	Trail resurfacing, installation of benches, lighting, and rest areas, tree- planting initiative	\$500,000
2028	Addressing connectivity gaps, expansion of pedestrian-friendly areas	\$300,00
2029	Completion of Cataraqui Trailhead Facility, washroom and water station installation, community stewardship program launch, final assessment	\$175,000
Total		\$1,285,000

The funding sources for this initiative will include:

- Municipal capital reserves
- Provincial and federal grants (Active Transportation Fund, Green Infrastructure Fund, etc.)

Annual capital and operating budget allocations will be **subject to Council approval** as part of the Town's municipal budgeting process.

Year	Planned Activities
2025	Minor repairs to trails; Accessible signage installation in play areas; Trail condition review; Preparatory work for Cataraqui Trailhead parking lot; Funding applications for future infrastructure upgrades.



2026	Walkway and sidewalk enhancements; Wayfinding and directional signage improvements.
2027	Resurfacing of trails; Installation of benches, lighting, and rest areas; Tree- planting initiative; Business and stakeholder engagement for eco-tourism.
2028	Addressing final connectivity gaps; Expansion of pedestrian-friendly areas; Initial work on trailhead facility enhancements.
2029	Completion of Cataraqui Trailhead Facility; Installation of washroom and water station; Community stewardship program launch.



Trail Standards Guide

Department of Community Services Version Date: December 2024

Stephanie Clark, Director of Community Services

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Trail Standards Guide, Town of Smiths Falls

1. Introduction

The Trail Standards Guide for the Town of Smiths Falls is a document created to guide the Town and its partners in establishing a high-quality, interconnected path and trail network that serves the diverse needs of our community. This guide is crafted with the intention of promoting yearround outdoor recreation, fostering connectivity, and preserving the rich natural environment of Smiths Falls. As our community grows, it is essential to create trails that are safe, accessible, and enjoyable for all users, from casual walkers and families to avid cyclists and nature enthusiasts.

This document will outline a clear vision, detail various trail types, and establish design standards to ensure that our trails not only meet current needs but also adapt to future demands. By following these guidelines, we will cultivate a trail system that enhances the quality of life for residents and attracts visitors to our beautiful town.

2. Trail Types and Uses

When designing and maintaining trails and paths of travel throughout Smiths Falls, it is important to remember that the network features several distinct types of trails. Ensuring that there are a variety of trail types throughout the network allows a broader number of users to find spaces suited to their preferences, while also promoting safe and responsible use of the trails.

2.1 Multi-Use Trails

Multi-use trails will form the backbone of our trail network, designed to accommodate pedestrians, cyclists, and other non-motorized users. These trails will be a minimum of 3.5m wide, allowing for safe two-way traffic and ensuring ample space for a variety of activities.

The surface of these trails will consist of durable materials, primarily crushed stone or asphalt. Crushed stone offers a natural aesthetic while providing excellent drainage and minimizing erosion, making it an ideal choice for areas with high foot traffic. Asphalt, on the other hand, will be utilized in sections where a smoother, more even surface is needed, particularly for cyclists seeking a faster ride. Both materials will be chosen to withstand the elements, ensuring that the trails remain accessible and safe in various weather conditions.

To enhance user experience and safety, signage will be a vital element along the multi-use trails. Clear, visible signs will provide guidance on permitted activities, trail etiquette, and safety tips. For instance, signs will remind users to keep to the right to facilitate smooth passing, alert



Trail Standards Guide, Town of Smiths Falls

cyclists to maintain a safe speed, and encourage everyone to yield to pedestrians. Additionally, educational signage will highlight the importance of sharing the trail and respecting fellow users. By fostering an environment of shared respect and awareness, we aim to enhance the overall trail experience for everyone, encouraging responsible use and enjoyment of our outdoor spaces.

This comprehensive approach to the design and implementation of multi-use trails will ensure they serve as inviting and safe pathways for all members of the community.

2.2 Hiking Trails

Smiths Falls serves as a vital connecting link and/or terminus within several regional and national trail systems, including the Ottawa Valley Recreational Trail (OVRT), the Eastern Ontario Rail Loop, the Cataraqui Trail, and the Trans Canada Trail. These networks provide extensive opportunities for recreation, active transportation, and tourism, linking Smiths Falls to broader hiking and cycling corridors. Each of these trails falls under the jurisdiction of various trail authorities, which are responsible for establishing and maintaining their respective trail standards.

The Smiths Falls Trail Standards Guide is intended to support the development, maintenance, and enhancement of local trails, ensuring they are accessible, well-integrated, and reflective of the needs of residents and visitors. While aligning with best practices from these larger trail networks, the Plan also acknowledges that Smiths Falls is an urban environment, requiring a balanced approach to trail design that considers both connectivity and the unique demands of a town setting.

Hiking trails are intended to provide an immersive experience, inviting users to explore the natural beauty of the area. These trails may vary in width from 0.9m to 1.5m, allowing for single-file hiking while preserving the landscape, depending on the trail authority. The surfaces will be primarily natural, utilizing packed earth or gravel to maintain ecological integrity and minimize human impact.

Where possible, directional signage for off-trail activities, businesses and attractions will be supported and/or installed. Educational signage may also be installed along these trails to inform hikers about local flora and fauna, enhancing their connection to the environment. Trailhead signage will always include safety guidelines, encouraging hikers to stay on marked paths to protect sensitive areas, and to provide warnings and updates as required.

3. Trail Design Standards



3.1 Accessible Trails

The Town of Smiths Falls is committed to ensuring its trail network is inclusive, accessible, and compliant with the Accessibility for Ontarians with Disabilities Act. Trail development and improvements will incorporate key accessibility considerations to enhance usability for individuals of all abilities.

Accessible trails will have a minimum width of 1.2 metres, expanding to 1.5 metres in hightraffic areas to accommodate mobility devices. Cross-slopes are not to exceed 2% grade, and slopes along the trail are not to exceed 5% grade, with level rest areas provided every 120 metres, where feasible. Trails will feature firm, stable, and slip-resistant surfaces such as permeable asphalt, stabilized engineered wood fibre, or compacted stone dust with stabilizing binders, chosen for durability, drainage, and ease of use.

To further support universal access, the Town will prioritize:

- AODA-compliant trail surfaces to ensure smooth navigation for users of all mobility levels.
- Rest areas with level, firm surfaces to accommodate mobility devices.
- Accessible trailhead signage and wayfinding markers to assist users with navigation.
- Adequate lighting in key areas, particularly near urban trailheads, high-traffic segments, and intersections, to improve safety and visibility.
- Benches and seating areas strategically placed along the network to provide resting opportunities for all users, including seniors and individuals with disabilities.
- **Ongoing maintenance** to address overgrowth, surface degradation, and safety hazards, ensuring that accessibility features remain functional and well-maintained.

3.2 Trail Width & Clearance

- **Minimum Trail Width**: Accessible trails must maintain a minimum clear width of 1.2 metres, expanding to at least 1.5 metres in high-traffic areas or locations where users may need to pass.
- **Overhead Clearance:** A minimum clearance height of 2.1 metres must be maintained to ensure that vegetation, signage, and structures do not obstruct the pathway.



• **Shoulder & Edge Treatment**: Where trails are adjacent to natural areas, appropriate edging (e.g., compacted stone or low barriers) shall be implemented to prevent surface erosion and ensure stability.

3.3 Slope & Grade Considerations

- **Maximum Running Slope:** Trails should maintain a slope of 5% or less to accommodate users with mobility impairments. Where steeper grades are unavoidable, alternative routes or additional rest areas must be provided.
- **Cross Slope:** A maximum cross slope of 2% will be maintained to prevent mobility devices from veering off the path.
- Drainage & Erosion Management: Proper grading and drainage systems shall be incorporated to prevent water pooling and surface degradation, which can create hazards for users.

3.4 Rest Areas & Seating

To accommodate users who require periodic breaks, rest areas should be strategically placed at key locations along accessible trails.

- **Rest Area Frequency**: Level resting areas will be provided every 120 metres, particularly in areas with slight inclines or extended trail segments.
- **Minimum Rest Area Size:** Rest areas must be at least 1.5 metres wide, allowing adequate space for individuals using mobility aids.
- **Benches & Seating:** Seating should be installed at designated rest points, providing backrests and armrests to assist users in transitioning from seated to standing positions.

3.5 Surface Materials & Stability

The selection of surface materials for trails in Smiths Falls will prioritize both accessibility and user comfort, ensuring that all community members can navigate the trails safely and easily. Careful consideration of both trail and surface type will enhance the user experience while minimizing maintenance needs. To ensure safe and comfortable navigation, trail surfaces must be firm, stable, and slip-resistant, in accordance with AODA standards.

3.5.1 Concrete Surfaces

For primary accessible trails, concrete may be the preferred surface material. Concrete should be considered for several reasons:

• **Smooth Finish**: Concrete provides a uniform and smooth surface, which is crucial for users of wheelchairs, mobility scooters, and other assistive devices. The absence of cracks or uneven areas significantly reduces the risk of tripping hazards.



- **Durability**: Concrete is highly durable and can withstand heavy foot and wheeled traffic without significant wear. It is also resistant to weather-related issues, such as erosion or deformation due to freeze-thaw cycles, making it an ideal choice for year-round accessibility.
- **Maintenance**: While concrete surfaces require periodic maintenance, such as cleaning and sealing, they are less susceptible to issues like overgrowth or surface degradation compared to natural materials. This low-maintenance requirement ensures long-term usability for all trail users.
- Accessibility Features: When constructing concrete surfaces, attention should be given to incorporate accessibility features, such as proper slope gradients and integrated drainage systems to prevent pooling water, which can create hazards.

3.5.2 Compacted Aggregate Surfaces

In areas where a more natural appearance is desired, including on multi-use, hiking and walking paths, compacted aggregate surfaces may be employed, provided they meet specific stability and accessibility requirements. Key considerations include:

- **Material Composition**: Compacted aggregate surfaces typically consist of a mixture of gravel, stone dust, or crushed stone. The selection of materials will focus on ensuring a firm and stable surface that can support mobility devices without risk of sinking or instability. Calcite is less favourable than limestone dust as a stone dust covering.
- **Surface Preparation**: The installation process will include thorough compaction of the aggregate material to achieve a dense, stable surface. This preparation minimizes the risk of ruts or unevenness that could hinder accessibility.
- Environmental Integration: The natural appearance of compacted aggregate can blend harmoniously with the surrounding landscape, making it an excellent choice for trails that traverse parks or natural areas. This approach respects the aesthetic and ecological aspects of the environment while providing accessible pathways.

3.5.3 Additional Surface Options

While concrete and/or compacted aggregate are the preferred choices, consideration may also be given to other surface types based on specific contexts:

• **Porous Pavements**: These surfaces allow for water infiltration and reduce runoff, making them environmentally friendly. They can be beneficial in areas prone to flooding or erosion but must be carefully evaluated for stability and accessibility. Smooth asphalt surfaces such as what porous pavement options provide are excellent options for walking, cycling and multi-use paths.



- **Permeable Pavers**: Interlocking pavers can provide a stable surface while allowing water to drain through, reducing puddles and mud. However, gaps between pavers must be kept to a minimum to avoid tripping hazards, with regular maintenance required to keep them clear of debris. Permeable pavers are less desirable in terms of accessibility, however in heritage locations, they may add to the overall look and feel of a location.
- Packed Earth/Natural Gravel: To maintain ecological integrity, hiking trails will utilize
 natural surfaces such as packed earth or gravel. These materials allow for better
 integration with the environment and support local vegetation, providing a more
 authentic hiking experience while facilitating drainage however they are not considered
 accessible.

3.6 Signage & Wayfinding

Accessible signage is critical for navigation, safety, and trail awareness. Signage along the trail network should:

- Be high-contrast with large, easy-to-read fonts.
- Include braille and tactile elements where possible to assist users with visual impairments.
- Feature pictograms and directional markers to guide users to amenities and accessible routes.
- Be placed at all trailheads, major intersections, and rest areas to provide clear and consistent information.
- Signage must meet contemporary Town of Smiths Falls design guidelines, and should consider drawing attention to local elements of safety, education and business and/or tourism information.

3.7 Lighting & Safety Features

To enhance safety and usability, lighting should be installed in key areas of the trail network, including:

- Trailheads and parking areas to provide clear visibility for users entering or exiting the trail.
- High-traffic trail segments and intersections where pedestrian movement is highest.
- Rest areas and seating locations, particularly in urban or semi-urban settings.

Lighting fixtures will be energy-efficient (e.g., LED or solar-powered options) and positioned to minimize light pollution while maintaining visibility for users.



3.8 Trail Access Points & Connectivity

To ensure seamless access to the trails network for all users, trail access points and areas of connectivity should be considered with equal importance as the trails themselves This should included consideration of:

- Accessible Entrances: All major trail access points must include barrier-free entry, ensuring smooth transitions from sidewalks, parking lots, or connecting paths.
- **Parking & Drop-Off Areas**: Where applicable, accessible parking spaces and drop-off zones will be provided near trail entrances, including designated spots for users requiring extra space for mobility devices.
- Linkages to Regional Trails: As a critical connection point for the OVRT (Ottawa Valley Recreational Trail), the Eastern Ontario Rail Loop, the Cataraqui Trail, the Rideau Trail and the Trans Canada Trail, Smiths Falls will prioritize creating and maintaining access points that integrate seamlessly with these regional networks while ensuring local accessibility standards are upheld.

4. Safety and Maintenance

The safety and maintenance of the trail network are paramount to ensuring a positive experience for all users. To achieve this, a comprehensive approach will be implemented that includes proactive safety measures and regular upkeep.

4.1 Ongoing Maintenance & Inspections

Accessibility is an ongoing commitment that requires regular maintenance and assessment. To ensure that trails remain safe and usable, the following will be taken into consideration:

- Safety Features: To enhance user safety, specific safety features will be integrated throughout the trail network. Barriers may be installed at hazardous locations, such as sharp turns, steep drop-offs, or areas near road crossings. These barriers should be designed to guide users safely and prevent accidents. Additionally, adequate lighting should be considered for all high-use areas, such as entrances, intersections, and popular gathering spots. This lighting will improve visibility during early morning or evening hours, ensuring that users feel secure while enjoying the trails.
- **Regular Inspections**: A systematic approach to trail inspections will be established, with inspections conducted annually to assess overall trail conditions. Ongoing checks will occur in spring, and as soon as is feasible following adverse weather events like heavy rain or windstorms. These inspections will focus on identifying hazards, such as fallen branches, erosion, surface degradation, and other potential risks.



Community Engagement in Maintenance: Community involvement is a cornerstone of the maintenance strategy. Trail users will be invited to participate in maintenance; as good stewards of the trails network, trail users will be invited to clean up refuse and detritus as they go, and will be asked to report issues to the maintenance team.
 Engaging users in the stewardship of the network can go a long way to fostering a sense of ownership and pride in the trail network. Additionally, trail users may be invited to participate in planned activities that may include trail clean-ups, surface repairs, and planting native vegetation to enhance the ecological value of the trails. Engaging the community not only improves the trails but also builds connections among residents, encouraging a collaborative spirit in caring for shared public spaces.

5. Determination of Need

Understanding the community's needs is vital for creating a relevant and user-friendly trail network that evolves alongside the community. A comprehensive approach to assessing trail needs will ensure that development is aligned with user preferences and environmental considerations.

5.1 Community Assessment

To effectively gauge the needs of the community, a thorough assessment will be conducted, incorporating user feedback and traffic pattern analysis. Ahead of the development of any new trails, a comprehensive understanding of not only the need for a new trail connection for the community, but also how the trail itself will connect, and enhance the existing trail network.

5.1.1 Walksheds & Community Connectivity

Walksheds are a key planning consideration in the development and enhancement of Smiths Falls' trail network. A walkshed refers to the 400-metre radius surrounding key public spaces, such as community greenspaces, schools, and high-traffic public areas, which represents approximately a 5-minute walking distance for an average pedestrian. Understanding and prioritizing walksheds ensures that trail development supports accessibility, safety, and active transportation, while encouraging broader community engagement with public spaces.

Incorporating walkshed analysis into trail planning helps achieve several critical objectives:

- Enhancing Accessibility: Ensuring that all residents, regardless of mobility level, can easily and safely access parks, schools, and other key destinations.
- Encouraging Active Transportation: Supporting walkability and cycling by connecting neighborhoods with recreational spaces, transit hubs, and essential services.



- **Promoting Social Inclusion:** Providing equitable access to greenspaces and public amenities, reducing barriers to participation in outdoor recreation.
- **Improving Public Health and Well-being:** Encouraging regular physical activity through well-connected, inviting, and safe pedestrian corridors.

5.2 Land Use & Connectivity

Evaluating local land use will reveal opportunities for new trails that connect key destinations within Smiths Falls, such as parks, schools, commercial areas, and residential neighborhoods. By mapping existing land uses and identifying gaps in the current trail network, planners can propose new routes that facilitate active transportation options, such as walking, cycling, or jogging. Enhancing connectivity between these destinations will not only improve usability but also encourage healthier lifestyle choices among residents, contributing to a more active community.

5.2.1 Priority Areas for Connectivity

Trails should be strategically developed and enhanced within the 400-metre walkshed of:

- Community parks and greenspaces.
- Schools and childcare centres.
- Senior and accessible housing developments.
- Major pedestrian crossings.
- Cultural, recreational, and civic facilities.

5.3 Acceptable Modes of Transportation

Clearly defining acceptable modes of transportation on each trail type is necessary for maintaining safety and enhancing the user experience within the trail network. This clarity will prevent conflicts among different user groups and ensure that everyone is informed about where specific activities are permitted.

• **Designated Uses**: Each trail type will have clearly marked signs at entry points and along the trails indicating acceptable modes of transportation. For example, multi-use trails will permit pedestrians, cyclists, and non-motorized vehicles, while dedicated cycling trails will exclusively accommodate bicycles. Hiking trails will be designated for foot traffic only.



- User Education: Educational materials, such as brochures and online resources, will be developed to inform users about the various trail types and the corresponding acceptable activities. This information will emphasize the importance of adhering to designated uses to promote safety and respect among users.
- **Conflict Resolution**: In areas where multiple trail types intersect or share space, clear guidelines will be established to manage user interactions. This might include specific signage reminding cyclists to slow down when approaching pedestrians or advising hikers to yield to faster-moving users.

6. Partner Engagement

Engaging our partners throughout the planning and development process is essential for fostering strong partnerships, ensuring that the trail network meets all user needs. A collaborative approach will create a sense of community investment in the network of trails across the community.

6.1 Ongoing Engagement with Parks Canada

Given the proximity and connection of Smiths Falls' trail network to Parks Canada properties, maintaining open communication is vital for effective collaboration.

- 1. **Collaborative Planning**: Early and ongoing engagement with Parks Canada during the planning phases of trail development or modifications will be essential. This collaboration ensures that trail designs respect the ecological integrity of Parks Canada lands and comply with their policies and regulations.
- 2. Interconnected Trail Design: Close collaboration with Parks Canada will enable the design and upkeep of trails that provide seamless connectivity between the local trail network and their properties. Consistency in trail surfaces, signage, and user experiences will be prioritized to create a cohesive network.
- 3. Shared Maintenance Responsibilities: Establishing a maintenance agreement with Parks Canada will coordinate efforts on trails that overlap or connect with their property. This may involve shared resources, tools, or volunteer days to ensure that trails remain in optimal condition.

7. Implementation and Maintenance



Effective implementation and maintenance strategies are necessary for the longevity and usability of the trail network. A structured approach will ensure that the trails are developed, maintained, and improved over time.

7.1 Maintenance Strategies

Routine maintenance will be scheduled to ensure the trail network remains safe and usable. This will include biannual inspections and seasonal upkeep to address issues such as erosion, overgrowth, and surface degradation.

• Maintenance Protocols: A protocol for addressing maintenance issues promptly will be established, allowing for quick response to hazards or damage. Community members may also be encouraged to report maintenance concerns through an easily accessible online platform.

8. Environmental Considerations

Environmental sustainability will be a guiding principle in the development of the trail network, ensuring that natural resources are protected and preserved.

8.1 Environmental Assessments

Thorough environmental assessments will be conducted prior to any trail development. These assessments will evaluate potential impacts on local ecosystems, including wildlife habitats and vegetation. The findings will inform design decisions, ensuring that the trail network minimizes negative effects on the environment.

• **Mitigation Strategies**: Where potential impacts are identified, mitigation strategies will be developed to address these concerns, such as creating buffer zones or rerouting trails away from sensitive areas.

8.2 Sustainable Practices

Sustainable practices should be integrated into trail development and maintenance efforts. Erosion control measures, such as vegetative buffers and water bars, will be implemented to protect natural resources and reduce runoff.

• **Native Plant Use**: The use of native plants in landscaping efforts will be prioritized to support local biodiversity. This approach not only enhances the ecological health of the



area but also creates a harmonious relationship between the trails and their surroundings.

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