

Connecting Dundas through the Spencer Creek Trail

A White Paper by Nicole Graziano and Brian Baetz



(Spencer Creek Trail, n.d)

Introduction:

Referred to as “an ideal Canadian town” (Sponagle, 2020), Dundas is an amalgamation of stunning natural lands, culturally rich civic elements and vibrant social spaces. Dundas’ allure is in part thanks to its vast number of trails that connect a variety of natural creeks, old growth forests and marshes. This land simultaneously warrants both exploration and ongoing conservation efforts. Despite the beauty of the existing trail system, many trails are fragmented and divided by urban infrastructure and residential areas. Despite these divisions, creating a continuous trail system within Dundas that connects the eastern and western portions of the community is still possible. Within most of Dundas, the trail infrastructure already largely exists, and the only remaining task involves connecting the gaps and fostering better linkages between trails. The Spencer Creek Yellow Diamond Trail system is the perfect candidate for such a project. The Spencer Creek Trail, which runs from Cootes Drive to just beyond the intersection of Creighton Road and Mill Street, follows along the impressive Spencer Creek but is interrupted at several points. This white paper will explore the existing trail and indicate where the trail can be improved and better connected. By creating a continuous trail system, more people from Dundas and beyond, will be able to access and enjoy the beautiful, natural world around them. Additionally, more people will be able to experience the vast benefits that outdoor recreation and exposure to nature can offer. Connecting the trails is of the utmost importance if Dundas wishes to enhance and maintain its status as home to an accessible and diverse mix of urban and natural infrastructure.

Better Connecting the Spencer Creek Trail:

The eastern section of the Spencer Creek Trail begins at the intersection of McMurray Street and Hope Street and proceeds along Spencer Creek behind a mix of urban shopping centers and residential areas (see Figure 1). The trail undergoes a brief break and is fragmented by the surrounding built infrastructure, before continuing east of Main Street. Despite the existing trail connectivity issues, there is ample space to allow for the completion and enhancement of the Spencer Creek Trail. Behind the Tim Hortons located at 94 Main Street (pictured in Figure 1) there is a small, triangular portion of forested land, bordered by Main Street, Ogilvie Street and Governors Road. To the southwest of this parcel is the Lower Spring Creek Trail and to the northeast is a continuation of the Spencer Creek Trail. Despite the many

trails already surrounding it, this parcel lacks its own trails and thus fails to connect the existing paths. In order to better connect the surrounding trail systems, simple trails lined with gravel should be built through this triangular parcel. One trail would connect the two existing portions of Spencer Creek Trail and the other, shorter trail, would lead to the Lower Spring Creek Trail. In addition to constructing gravel paths, a bridge that connects trail sections within the triangular parcel is needed. This will allow visitors to safely cross over Spencer Creek and its related flood plains at point A on Figure 1. Slightly beyond this, in order to cross Main Street, visitors will need to use a small under-bridge, at point B on Figure 1, that follows along the creek and allows them to proceed underneath Main Street before emerging onto the Spencer Creek Trail going eastward (the presence of a storm sewer at this point under Main Street may constrain the feasibility of such an under-bridge passage). Continuing the trail through the triangular piece of land would make the trail uncomplicated and complete. In turn, this more unambiguous trail system will appeal to experienced and beginner hikers alike. This will also ensure that the land is protected as recreational conservation space and well-integrated into the surrounding natural infrastructure. As an already-accessible alternative to this route, signs could direct visitors along the sidewalk south on Ogilvie Street, east on Governors Road and south on Main Street. This modification relies on existing paved infrastructure, is relatively accessible and avoids any possible limited encroachment behind the Town Centre Plaza (see Appendix A).

After continuing south of Dundas Street, the Spencer Creek Trail once again stops, before restarting by the intersection of Dundas Street and Cootes Drive at point C on Figure 1 . There is a significant gap in between these parcels, without adequate directional signage. Hikers who are unfamiliar with the area may be reluctant to take this trail due to the frequent breaks and lack of connectivity. By connecting the middle and last portion of the eastern Spencer Creek Trail, this section will be completed and significantly more accessible. At this portion of the trail system, the Spencer Creek Trail can continue by one of two ways: First, hikers can continue walking along the road on Dundas Street, until the trail resumes. Second, a trail could be constructed through the forested area which follows behind a small residential townhome cluster. Although the second option allows for a more natural and integrated journey, the first option provides a smoother, paved path, which may be optimal for those with mobility challenges. Moreover, the second option would lead to the construction of a trail that is closely proximate to the residential townhouses, which may make building a sufficiently wide trail difficult, especially if home

residents are encroaching into the natural lands. According to the City of Hamilton Zoning Map, the townhouses fall within zoning code RM1/S-61 for Low Density Multiple Dwellings, while the space behind the homes that borders Spencer Creek, is considered an Open Space Conservation zone. Thanks to this zoning, this land should not be encroached upon by private landowners and instead can be used for hiking trails:

“The purpose of this zone is to protect lands unsuitable for general urban development due to their physiographic characteristics or their ecological significance. With the exception of special public works for conservation purposes and limited development which enhances the cultural, recreational and natural resources of the zone, these lands are intended to be maintained in their natural state.”

Although this zoning theoretically ensures use of this land there may be significant encroachment issues at point D on Figure 1, that must be addressed if a trail is to be constructed. Additionally, it is proposed that signage be established to direct walkers and hikers south on Thorpe and west on South Quay on existing trails, with an additional new trail element being proposed north of the townhomes at 30 Osler Drive back to point B on Figure 1, to create a loop trail from Point B to Thorpe Street on the north side of Spencer Creek and back on the south side.

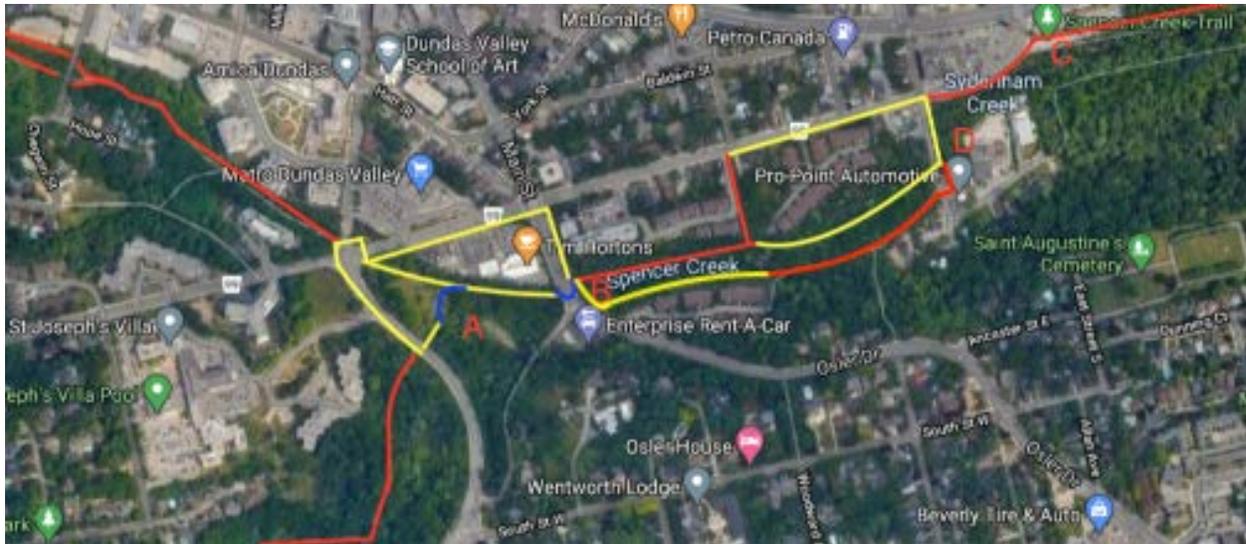


Figure 1: Eastern portion of Spencer Creek Trail. Red Lines demonstrate where an existing trail is located while yellow lines demonstrate proposed connections and blue lines indicate where potential bridges should be constructed.

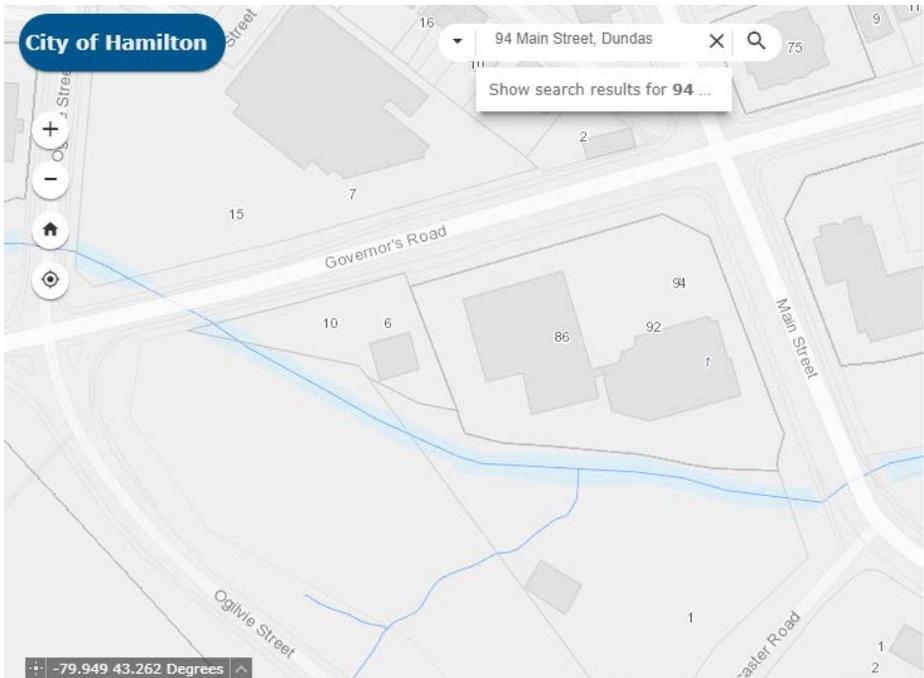


Figure 2: GIS mapping illustrates the property lines of the businesses within Town Centre Plaza. The property depths do

not include the Creek and therefore, any use of the land beyond their property line can be classified as encroachment.



Figure 3: GIS mapping provided by the City of Hamilton illustrates the property line of the townhouses on Dundas Street (see Appendix B for analysis of encroachment at 34 Thorpe Street).

The second and middle portion of the Spencer Creek Trail system connects the eastern-most and western-most ends of the Spencer Creek Trail and lies south of Mill Street (see Figure 4). While the official Spencer Creek Trail continues above the Spencer Creek, there is another trail that lies slightly below it. This portion of the trail ends beyond the intersection of Mill Street and Wellington Street and will require significantly less work than the aforementioned trail sections, as the necessary trail infrastructure already exists. Here, paths should be widened wherever possible and lined with gravel so that they are more accessible. Additionally, clear and enhanced signage should be displayed, especially where the Spencer Creek Trail forks into two separate paths.

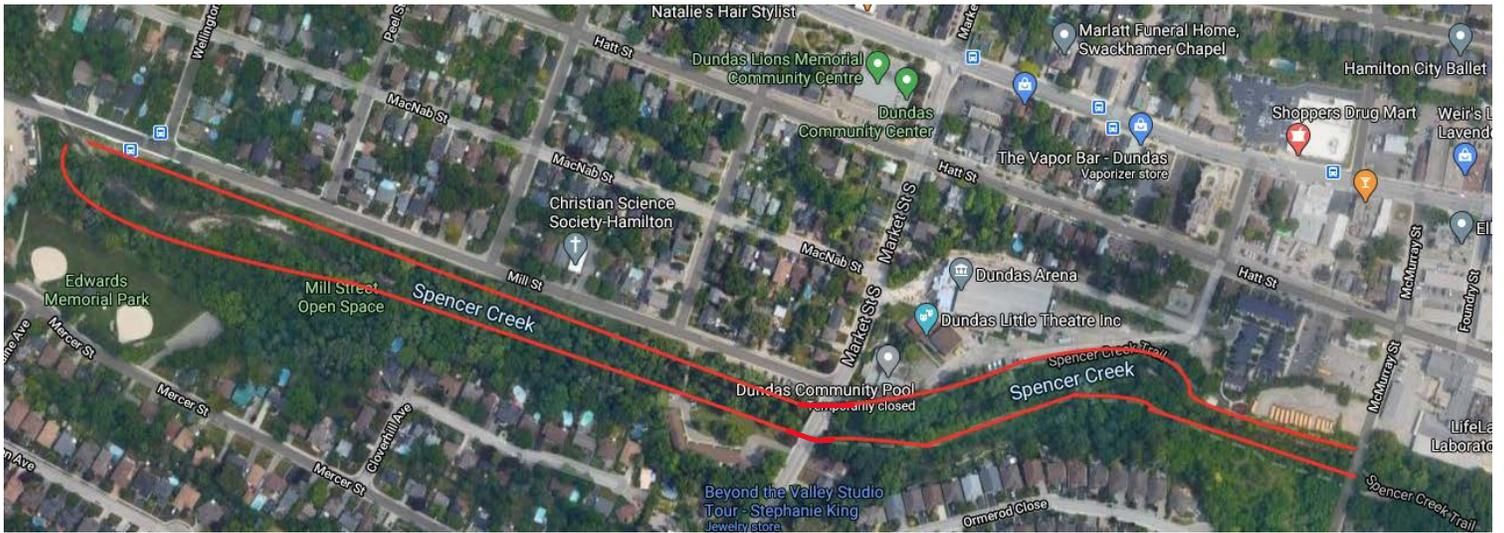


Figure 4: Middle portion of Spencer Creek Trail system.

The western portion of the Spencer Creek Trail system has yet to be developed. However, there is a significant need to extend the trail system from its currently abrupt end (pictured in Figure 4), so that it is able to reach Fisher's Mill Park. Admittedly, due to the commercial and industrial infrastructure that exists around this portion of the trail system, extending the trail along Spencer Creek may prove difficult. As such, there are two trail expansions options, each with a unique set of benefits;

1. The trail is made to continue along the western side of Spencer Creek, aligning with the surrounding mid-sized industrial area. This approach is uncomplicated and flows naturally from the existing trail, while also providing continuous views of the creek. However, commercial properties own significant portions of land that sometimes include up to and beyond the creek. As such, each individual company must grant permission for the development of a trail on their land (see yellow line in Figure 5). Although the potential trail itself is uncomplicated, its creation may prove difficult. It may be time-consuming to consult the landowners and some or all of them may refuse to allow the trail to be constructed. Additionally, as a significant portion of this land is used for industrial purposes, it may be unsafe to install an adjacent trail.

2. The trail continues through the surrounding neighborhood, using existing sidewalks to move towards Fisher's Mill Park. This approach is more complicated as it veers away from the natural forested areas and cuts through residential neighborhoods. As such, this trail will require ample directional signage that clearly leads participants through the neighborhood. Moreover, this trail does not consistently follow the creek and is somewhat separated from the beauty of the natural lands. To compensate for this issue, a viewing platform is proposed to be established at the end of MacNab Street. However, despite its difficulties, creating this trail does not require the creation of new trail infrastructure and relies on the existing paved sidewalks and roadways, unlike the first option. After constructing a viewing platform and adding additional signage, little additional work would be needed. This is a potentially safer, time and cost-effective option, that will allow the Spencer Creek Trail to continue to Fisher's Mill Park.

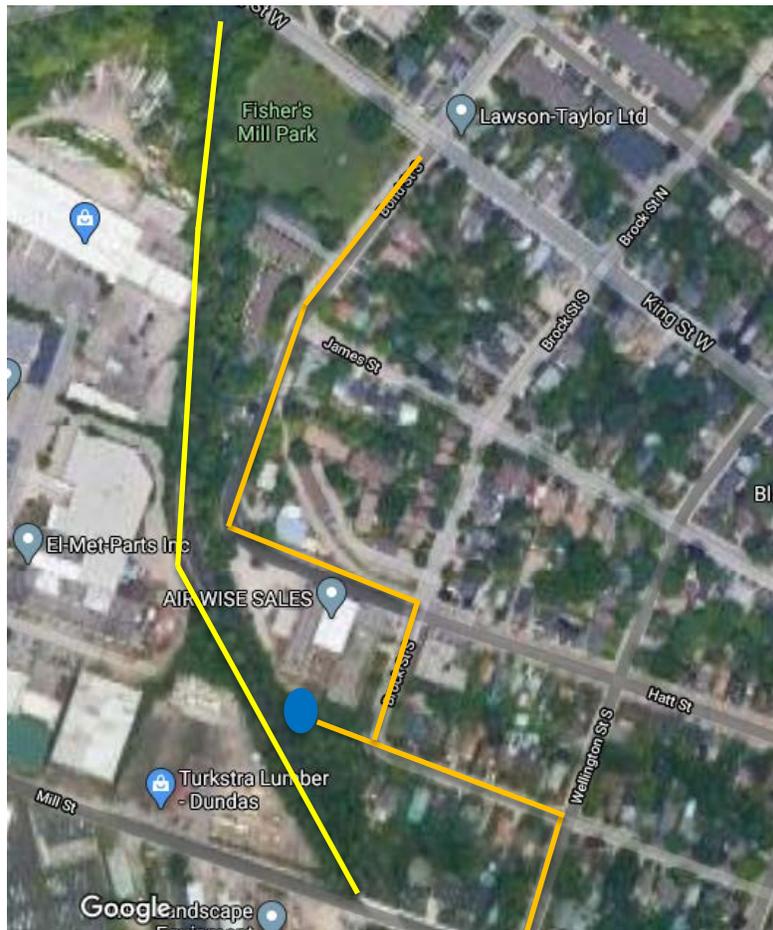


Figure 5: The western and final section proposed for the Spencer Creek Trail. The yellow line represents trail option one. The orange lines represent trail option two and the blue circle represents the proposed viewing platform.

Due to constraints around using privately owned land, the second option, which relies on pre-existing public infrastructure, provides a simpler way of improving trail continuity.

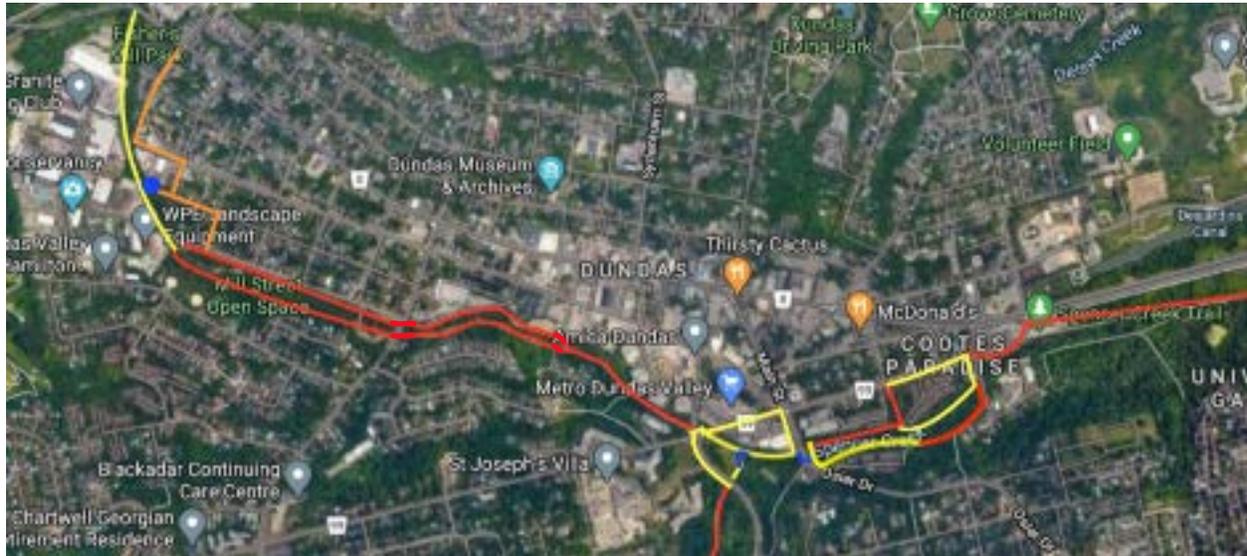


Figure 6: Overview of the Spencer Creek Trail system and proposed additions.

Better Connecting the Spring Creek Trail:

The first piece of proposed trail connections (as shown in Figure 1) will create a continuous connection between the Spencer Creek Trail and the Lower Spring Creek Trail, which eventually serves as a portal to the Dundas Valley. Both trails extend across Dundas and bring a unique set of benefits to the community. These benefits will be enhanced if the two trail systems are better connected and improved. Currently, the Lower Spring Creek Trail and the Spring Creek Trail are disconnected from each other and separated by residential areas. To better connect these trails, the Lower Spring Creek Trail should be linked up to the Spring Creek Trail, which begins in Warren Park. At the end of the Lower Spring Creek Trail, before looping back eastward, small steppingstones would allow visitors to cross Spring Creek. Once crossing the creek, visitors will follow along the creek bed into Warren Park, where they can cross the existing bridge onto the Spring Creek Trail.

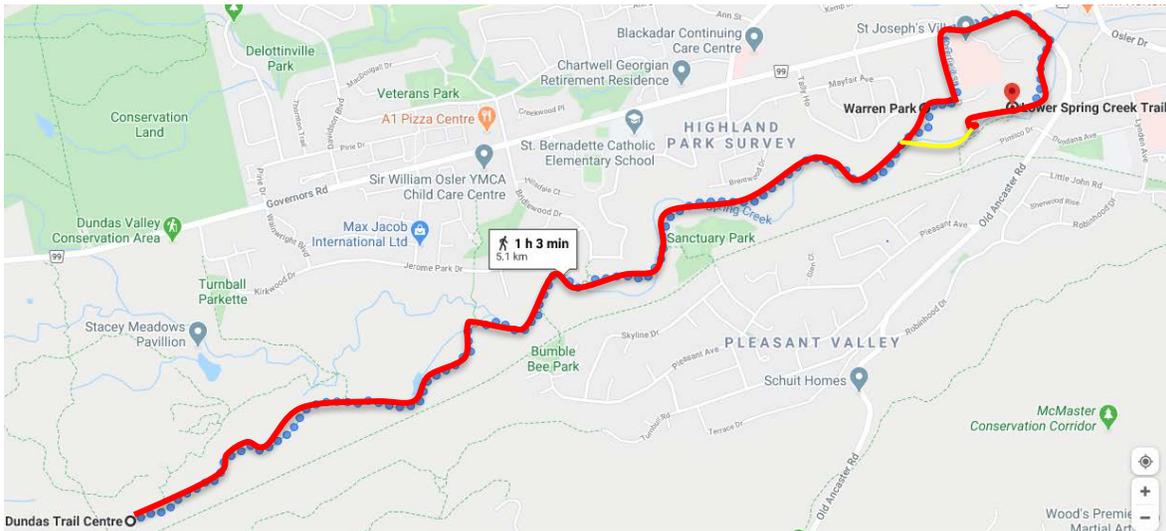


Figure 7: The Lower Spring Creek Trail is in close proximity to the Spring Creek Trail which begins at the Dundas Trail Centre and leads to Warren Park as shown in red. Currently there is no formal trail connection between the Lower Spring Creek Trail and the Spring Creek Trail but by placing steppingstones across Spring Creek, visitors can walk along the creek bed (as shown in yellow) before using the bridge in Warren Park to continue westward along the Spring Creek Trail.

Accessibility Concerns:

In its current form, some sections of the trail are wide and lined with gravel and thus are relatively accessible for those with mobility concerns. However, a significant portion of the trail is inaccessible and limits many people from enjoying this natural land. Some trail issues can be rectified by slightly widening the path and laying down fresh gravel. This is a cost effective means of promoting accessibility but can only be applied to existing portions of the trail that have enough excess space to expand upon. Where the trail cannot be made any wider or where the ground is particularly steep or twisting, signage can redirect visitors to sidewalk connections. Visitors can follow signs along the sidewalks and roadways that run perpendicular to the creek trail. Once the trail flattens out, signs will direct visitors back onto the trail. This will require ample signage and new accessible entrance and exit points for the trail. This method should be implemented for the Lower Spring Creek Trail and Spring Creek Trail, which will be connected

by steppingstones across the creek. Unfortunately, steppingstones are not accessible and those with mobility challenges may need to access Warren Park with sidewalk and roadway connections. Although this is a cost-effective solution that relies upon existing resources, it fails to create a continuous trail system. Moreover, this separation between accessible paths and the traditional trail may worsen the divide between differently abled and able-bodied people in the outdoors. In any case, the most equitable option should be strongly considered, in addition to monetary and time constraints. This plan closely aligns with the City of Hamilton's Recreational Master Plan which aims to create "connected, comprehensive, accessible and sustainable multiuse trails network throughout the City of Hamilton and to surrounding communities to improve health and wellness for pedestrians, cyclists and trail users" (City of Hamilton, 2017).

The stairs at Point B in Figure 1 should be updated to include a ramp for accessibility considerations. Other areas, such as the steeper ascent on the south side of the Yellow Diamond Trail at the Creighton Street Bridge, should be assessed for the possibility of a switchback addition to allow for easier climbing by hikers with a full range of accessibility needs.

Stakeholders:

The broad spectrum of land uses including recreation, conservation and travel, introduces a number of stakeholders into this policy space. Many stakeholders, especially those with a history of environmental protection and outdoor recreation initiatives must be engaged and consulted. The City of Hamilton, which intends to "strengthen partnerships with other trail organizations and groups" can do so by uniting local agencies to better connect the Spencer Creek and Spring Creek trail systems.

- City of Hamilton: Unless additional land is acquired and actively used by non-governmental agencies such as the Royal Botanical Gardens or Hamilton Conservation Authority, the lands housing trails must be maintained by the City of Hamilton. Formerly, the Town of Dundas would be responsible for the trail but due to amalgamation, responsibility now falls to the City of Hamilton. Improving the continuity of Spencer Creek and Spring Creek Trails closely aligns with Hamilton's *Recreational Trails Master Plan* which aims to incorporate new trail initiatives with existing trail systems, thus alleviating gaps in the overall system. Moreover,

improving the continuity of Spencer Creek Trail will “encourage inter-regional trail connections” as it connects Dundas to Cootes Paradise, Burlington and the surrounding communities.

- Main Role: Manage and improve existing trail systems

- Hamilton Conservation Authority: Hamilton Conservation Authority (HCA) holds and manages “4,400 hectares (10,872 acres) in public trust and is responsible for approximately 56,800 hectares (140,355 acres) of watershed area” including Spencer Gorge in Dundas. When improving the continuity of Spencer Creek Trail, the HCA should be continually consulted. The HCA has intimate knowledge of the region and a long history of protecting the natural environment, making them well suited to consult on this trail completion project.

- Main Role: Consultation

- Hamilton Burlington Trail Council: The Hamilton Burlington Trails Council (HBTC) aims to “facilitate trail development, linkages and networks and trail accessibility for all people” (Hamilton Burlington Trails Council, n.d.). HBTC supports the creation of integrated, accessible and well-connected trails that foster “environmental conservation, progressive recreation and sustainable tourism” . These values closely align with project goals and can ensure that the expansions to Spencer Creek and Spring Creek Trails better connect existing trail systems and the Dundas and Burlington communities.

- Main Role: Advocacy and consultation

- Dundas Rotary Club: The Dundas Rotary Club supports projects that better the surrounding community including the eastern portion of the Spencer Creek Trail, and the Creekside Parkette (About us, n.d.). Their history in Dundas and continual support of the community suggests that they may support the ongoing development of the Spencer Creek Trail.

- Main Role: Advocacy

- Bruce Trail Conservancy: The Bruce Trail Conservancy is committed to stewardship of the land, preserving the natural environment and collaborating with local communities. As the Bruce Trail has significant portions throughout the Hamilton and Dundas region, there is ample opportunity to connect this larger network to the Spencer Creek and Spring Creek trail systems. Doing so will allow Bruce Trail hikers to explore Dundas through the surrounding trails. The Bruce Trail headquarters and storefront is located within Dundas, on Mill Street, and is close to the western-most end of the Spencer Creek Trail, thus making them an appropriate and powerful potential partner with a long history of serving the local community. The history of the Bruce Trail Conservancy, its dedication to the neighbouring areas and the proximity of its head office may encourage property owners, like those in the western, industrial end of Dundas, to allow the trail to pass through their land.
- Main Role: Advocacy, consultation and support

Timeline:

Trail construction will begin in a staged approach, ideally starting from the easternmost portions and moving westward. Doing this will allow development to begin with the simplest sections, before working towards the more challenging western portions. Additionally, performing trail completion projects in a staged approach will ensure that the majority of the trail system remains functional and ready to use. While construction is ongoing, signs should direct visitors towards alternative routes along sidewalks and roadways so that they can bypass construction and continue onward on the trail. Some routes will use the existing public infrastructure including sidewalks and will only rely on the creation of new directional signs. Other trails (like those displayed in Figure 1) require the creation of completely novel routes that will be constructed with gravel. The western portion of the Spencer Creek Trail leading to Fisher's Mill Park will require the most significant construction. Although most of the trail will fall on existing sidewalks and roadways, one viewing platform is proposed adjacent to the creek. In addition to gathering supplies, a workforce and building permits, the structural stability of the creek slope must be examined, before any structure is placed upon them. As this will be a

relatively small viewing platform, it should not be overly challenging to construct. Once approval is obtained, this project would be completed in one construction season.

Cost:

As with the proposed timeline, total project cost will also vary, based on the finalized paths. Trail extensions that rely on existing public infrastructure, like roadways and sidewalks, require no novel construction and only need additional directional signage. This is a relatively low cost means of connecting and completing the trail system. However, it is more removed from the natural, forested environment and may be a significant distance from Spencer or Spring Creeks. To construct completely new trail systems, planning must account for the cost of labour, clearing small portions of land to make space for new trails, cost of gravel, and the cost of constructing bridges and viewing platforms. Finally, in addition to constructing new trails, portions of the existing trails should be refreshed with new gravel and widened, wherever possible.

-Assuming this project requires approximately five new signs with two at the eastern portion of the Spencer Creek Trail, two at the western portion of the Spencer Creek Trail and one at the connections between the Lower Spring Creek Trail and main Spring Creek Trail, the cost for signage is approximately \$1500. This price accounts for the cost of designing and constructing signage, logos and posts, plus the cost of labour. Some additional costs may be incurred to update existing Yellow Diamond Trail signage, as some existing panels have become weathered due to considerable exposure to the elements over time (some signs still refer to the Town of Dundas, and may have been put into place in the 1970s/1980s).

-A single lookout point, with foundations and support, decking, railing, interpretive panels and a map, will cost approximately \$20,000. This lookout point must be secured above the bed of the creek and be able to support significant weight. The total cost accounts for materials and installation. The lookout point will be about 5 meters wide and 5 meters long.

-Assuming all proposed novel trails are constructed, there will be about 1.6km of new trails. This accounts for the eastern portions and the western portion that runs on the west side of the Spencer Creek that is bordered by industrial land. Lining the trails with crushed stone is a cost-

effective alternative to pavement. If there is approximately 2500 square meters of trail and the cost of gravel placement is \$20/square meter, associated material and placement costs will be approximately \$50,000.

- Assuming only 500m of existing trails need to be cleared and improved it will cost about \$1000 for a two person crew to enhance existing trails.

Total estimated cost of this project is \$90,000, assuming 25% contingencies. These funds could be potentially sought from a number of governmental and service club sources. For example, the Minister of Infrastructure and Communities, Katherine McKenna, announced on August 5th 2020 that there will be renewed support of the Investing in Canada Infrastructure Program, so that more communities can act quickly to develop a wider range of pandemic-resilient infrastructure. This program is worth up to \$3.3 billion and funds “building new parks, cycling and walking paths to help Canadians get access to nature to stay healthy, active and safe, or disaster mitigation projects that protect against floods and fires” (Infrastructure Canada, 2020). Enhancing trail systems will provide preventive healthcare, encourage mental and physical health, and create more resilient and protected ecosystems.

Summary:

By enhancing the existing trails and increasing connectivity between the Spencer Creek Trail and the Spring Creek Trail, many people will be encouraged to visit and explore this community and all that nature has to offer. Although there is significant, existing trail infrastructure, improving upon it will better connect the community through nature. Uniting all of Hamilton through its natural environment, will allow for improved recreation and conservation. Both the Spencer Creek Trail and the Spring Creek Trail must be completed and better connected, thus ensuring that their benefits and accessibility are maximized.

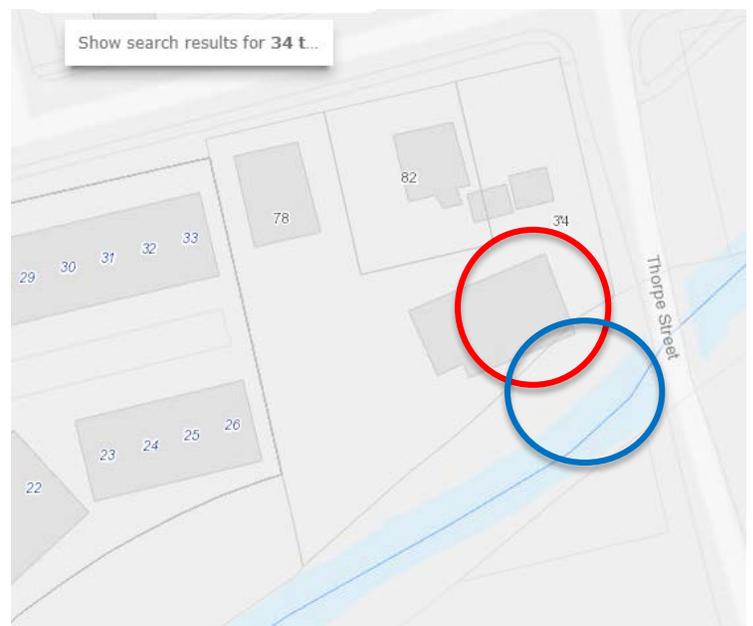
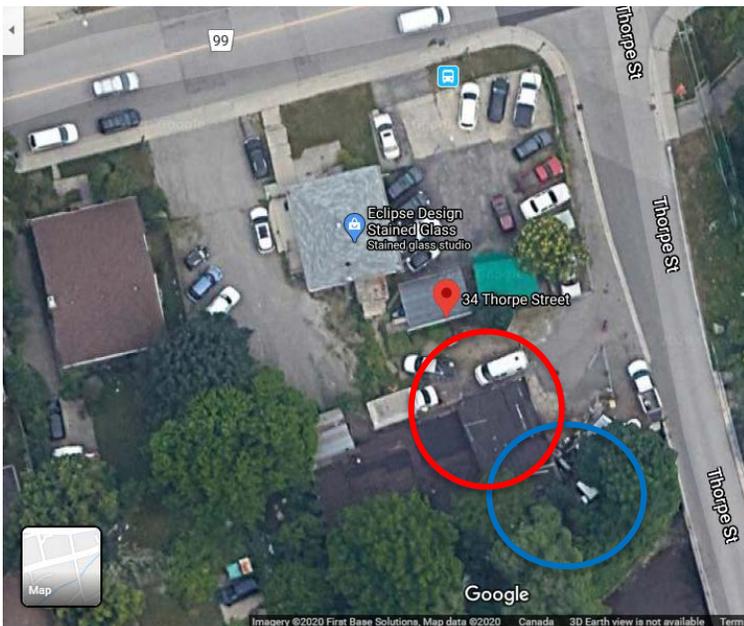
Appendix A

Photos captured at parking area behind Town Centre Plaza. It appears that there is little encroachment beyond the fence which divides commercial property from natural space.





Appendix B



According to City of Hamilton GIS mapping, the southern property line of 34 Thorpe Street ends directly below the large fourth building (circled in red). This indicates that any use of property beyond the bottom right corner of this building can be classified as encroachment (circled in blue). Areas of possible encroachment are circled in blue on both the satellite photo and the GIS

map. The following photos were taken at 34 Thorpe Street and indicate where there may be encroachment.



The chain link fence goes to the top of the creek bank and is surrounded by gas cylinders and chemical drums. These items and the fence encroach upon Spencer Creek and appear to fall outside of 34 Thorpe Street's official property lines. Moreover, the contents of these barrels may be dangerous to plant, animal, and human life, especially when located in such close proximity to Spencer Creek.



More photos taken along the perimeter of 34 Thorpe Street.

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