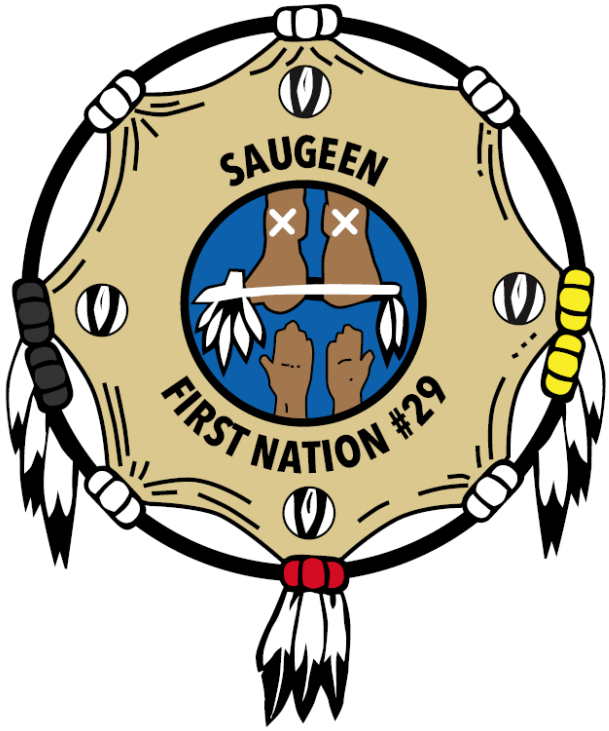
Saugeen First Nation
Trail Development Plan



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March 1st, 2022

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Saugeen First Nation Trail Development Plan

Saugeen First Nation is located along the Saugeen River and Bruce Peninsula in Ontario, Canada. The original peoples of Saugeen are Ojibway. Traditional territory also includes the Saugeen River watershed. The Saugeen First Nation lent its name to the region, called Zaageeng, Ojibway meaning "mouth of river", and its people. The Saugeen River is located in one of the highest points in Southern Ontario and flows through beautiful countryside to Lake Huron, in Southampton. The river begins in the Osprey Wetland Conservation Lands and travels North-West 160 kilometres before exiting into Lake Huron. It is bordered by beautiful mixed scenic forest shoreline. The river is navigable for some distance and was once an important barge route. The Saugeen First Nation is home to Sauble Park located on the of South Sauble Beach which is a very popular beach destination. The community is also home to the Saugeen Amphitheatre & Gardens which is one of the most beautiful and scenic gardens in Southwestern Ontario.

This trail project will enhance the trails around Saugeen First Nation's amphitheatre, one of the largest dry-stone projects in North America. The Amphitheatre's original construction was a collaboration between Chief James Mason and Reverend Earl Stotesbury of Saugeen First Nation's Wesley United Church, starting in 1972. They wanted to create a place for First Nations and non-First Nations people to gather that demonstrated the strong relationship between the church and the community. The Amphitheatre is being revitalized through a training program for drystone masons creating a unique skill for our community. These skills will be applied to the drystone bridge to be built as part of the trail system.

This interpretation aspect of this trail development project focuses on transformative placemaking at the Saugeen Amphitheatre and implementation of regenerative tourism strategies through trail development at Saugeen First Nation.

> *"Transformative placemaking is an aspirational endeavour to transform spaces into meaningful places through a process of deliberate and thoughtful engagement – such as transformative placemaking is fundamentally connected to sense of place"* [1]

With the development and enhancement of the trails, there is a greater opportunity to deliver interpretive programming through guided tours to tell our story as Anishinaabek people with an emphasis on potential for these educational programs and cross-cultural communication to led to reconciliation. Programing and product development like this leverages placemaking to foster reconciliation through trails while providing a mechanism for the Saugeen First Nation to share their shared histories and lived experiences of colonization with Canadians and international visitors.

Project Overview

The scope of the project has evolved from first conception when the numerous potential trails were acknowledged. Over 18 different trails were identified during the field work and was focused down to 3 main areas plus the County Road 13 Corridor.
The deliverables of the report are as follows:

[1] Transformative Placemaking, Regenerative Tourism, and Trails (trailresearchhub.com)

- A detailed proposed stack trail route for tourism attraction as well as enhancement of current trail offerings within the community
- Tying in trail routes for Active Transportation within the community including links to the Health Centre and other important community services that is Accessibility for Ontarians with Disabilities Act (AODA) compliant
- Costing of trail development, identification of potential funding sources for construction with grant writing support
- Development of a trail crew training program working with Wikwemikong's Trail Builders
- Creation of an annual budget and schedule for ongoing maintenance
- Recommendations and costing for a Signage Plan including interpretive signage in two languages (Ojibway, French & English)
- Detailed mapping including digital GPS coordinates
- Scope of work defined for County Road 13 Active Transportation Corridor Study including Trails Tourism Strategy

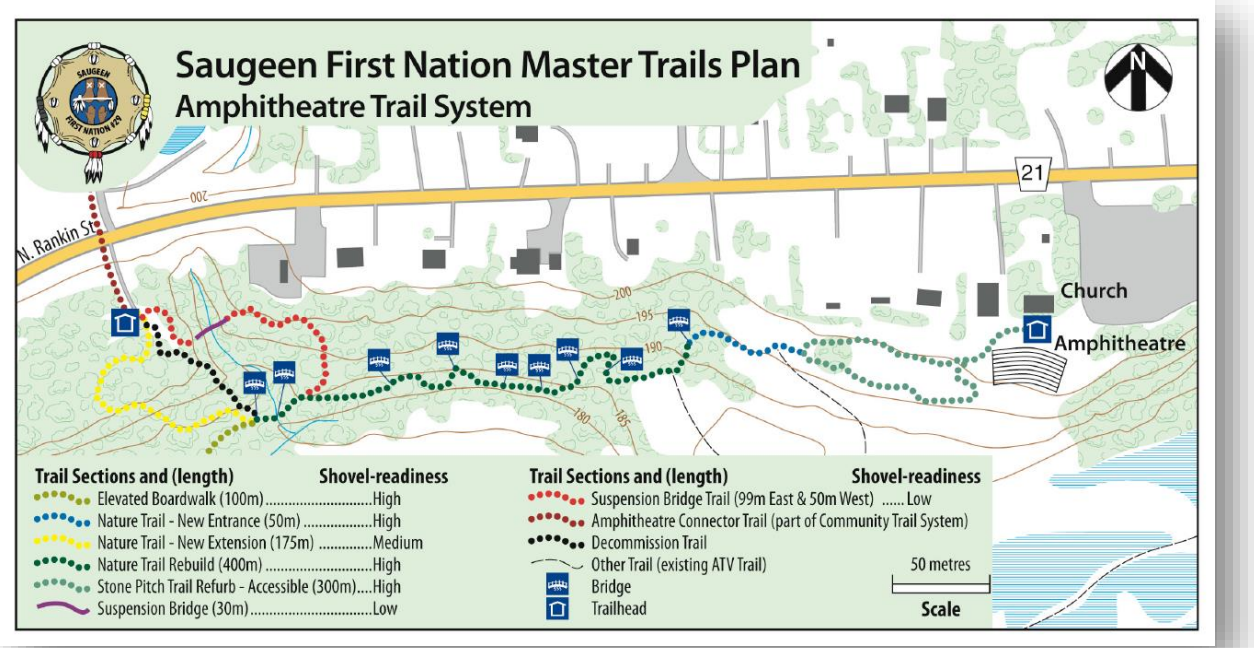
Proposed Trail Development

The overall goal of this development is to establish a trail network for the community, another tourism trail network for economic development and an active transportation route along Country Road 13. Over 18 different trails have been identified and will require various levels of stakeholder engagement, planning and design. This report has been separated into 3 sections: the amphitheatre development (tourism focused), the Community Heath and Wellness Trail development, , and recommended scope of work for County Road 13 Corridor Assessment including the trail linkages for the Economic Hub at Charles Street and the connection of Cameron Drive to Country Road 13 . The targeted user for the first three projects is walking and hiking while the County Road 13 route will also include cycling. For the community and amphitheatre networks we propose a stacked loop trail system from easy to difficult with 3 of the trails complying with accessibility standards. As a result, each trail has been given a shovel readiness and priority scale.

- Shovel Readiness- refers to the expected timeline to acquire permits, permission, stakeholder input and professional assistance if required
- Trails designated with "high" could be expedited whereas "low" will likely take more time, research and investment
- Priority- each trail section has been given a priority level based on how pivotal it is to the overall trail network priority 1 should be considered priority

Amphitheatre Trail

The amphitheatre location, although still under construction, is stunning. The potential to create a tourism and educational trail experience to completement this location is unlimited. The current development proposal consists of 7 different sections of varying difficulty to create a stacked loop system. This development proposal tries to consider budget but is not determined by it. Instead, it is written as a best-case scenario with a focus on utilizing the drystone experience and craftsmanship already found on-sight. Having the opportunity to utilize professional trail builders and drystone craftsmen will create a trail network and experience unlike anything in Ontario.



Stone Pitch Loop Refurbishment

Length- 300 Metres **Classification-** Type 2 Accessible **Rating-** Easy/Beginner **Width-** 1.5 Metres **Average Grade- <**5% **Maximum Grade-** 5% targeted 10% permissible **Outslope Grade (Cross Slope, Crossfall)-** 2-5%

Shovel Readiness- High- The existing corridor and some materials are already in place. The costs associated with a fully accessible trail that is stone pitched is high but pending the budget it is shovel ready.

Priority- 1- The trail is pivotal to creating a stacked loop experience at the Amphitheatre. The potential to have an accessible experience in this location with the Amphitheatre development makes this high priority.

The concept behind this loop is to provide an accessible trail and experience to complement the magnificent amphitheatre. Approximately 150 metres of new trail will be needed which will meander down the embankment from the entrance of the amphitheatre behind the church steeple. Once the embankment has been traversed the loop will follow an existing corridor which was previously painstakingly built and has been overgrown. Approximately 150 Metres of the tread has insitu stone on the tread and can be re-leveled or reset. The remaining 150 metres and the entrance/exit will need a new build to ensure proper grade and sustainability. This not an easy build and will take an enormous amount of time, resources, and effort. If done properly, however, it will be once of the most unique experiences in Ontario.

Build Recommendations

- Stone pitch/rock armouring will be needed along the whole tread
- Sections of insitu stone will need rebuilt and new sections should have approximately 4-6" of aggregate base to help level and stabilize the stone
- Avoid sharp root and rock transitions to remove tripping hazards
- Sections which are steep should have the downslope armour stones raised 1.9" (50 mm) to act as edge protection for the trail user

- Stone must have a flat and stable surface to ensure sure footing

Material Quantity Estimates

Please consider the following as a rough estimate based on the expected conditions

1. "B" gravel base crushed aggregate- 45 Yards or 70 tons
2. Stone dust- 30 Yards or 60 tones
3. Flag/Armour Stone Mix Stone- 150 metres or 1614 sq. ft- Approx. 7-10 Skids

Hourly Labour Estimates- 1780 worker Hours

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Planning and Mobilization	3 Days	30 worker hours
Rough-In Trail Corridor	1 Day	10 worker hours
Excavate Trail Tread (where required)	6 Days	60 worker hours
Transportation of Material	15 Days	150 worker hours
Rock Armour/Stone Pitching	150 Days	1500 worker hours
Finish Trail Corridor	2 Days	20 worker hours
Finish Trail Tread	<1 Day	10 worker hours

Nature Trail Rebuild- Drystone and/or Traditional Structures

Length- 400 Metres **Classification-** Type 2 **Rating-** Easy/Beginner **Width-** 1 metre (39")
Average Grade- <5% **Maximum Grade-** 10% **Outslope Grade (Cross Slope, Crossfall)-** 2- 5%
Shovel Readiness- High- The existing corridor is already in place and the trail can easily be started pending budget and desire.
Priority- 1- The trail will complement the stacked loop experience at the Amphitheatre and allow users to complete a more intimate trail experience. The unlimited potential for this trail is only hindered by budget and desire. The conceptual drystone work comes to fruition it will easily be one of the most interesting and holistic experiences in Ontario. This trail will also help connect into the elevated boardwalk and provide more options for trail development in the future.

The existing nature trail should be rebuilt to increase the experience, safety and sustainability of the tread. The existing structures show the most degradation and are currently the largest threat to visitor safety. These structures can either be rebuilt with wood or a more sustainable and desirable option would be stone. Using stone over wood would completement the amphitheatre and proposed Stone-pitched loop. The most labour-intensive section will be building a 10-metre bridge to cross the creek. There is no structure currently in place and the user is expected to wade through the creek. While the structures are being refurbished, the trail should be top-dressed with aggregate at the same time. Like the Stone Pitched Loop, if this trail is rebuilt using stone it will easily become on of the best trails in Ontario. Two separate estimates are given for either wood or stone.

Build Recommendations

- try to incorporate the trail into the terrain and topography
- try to incorporate stone pitched sections as much as possible to replace the wood structures

- the sections which have significant elevation changes have drystone steps recommended to reduce slippery grades
- areas that are predominantly wet and currently have degraded boardwalks should be replaced with a stone pitching/rock armouring (drystone benchcut) technique where possible and feasible
- the bench cut sections should be outsloped slightly with a smooth and consistent shoulder

Build Details

Map Number	Description	Design Section	Length	Est. Materials
1	Consider this bridge a keystone to the whole refurbishment. There is currently no bridge or crossing in place although remnants exist. Users are expected to wade across the creek to access the nature trail or trails in the flood plain. Building a structure will help create cohesive network while complementing the existing topography and scenery. A drystone structure is recommended if possible and feasible given the local access to the drystone craftsmen. It would easily be the focal point of the trail and complement the amphitheatre well. A wooden structure has also been quoted if the drystone option cannot be completed	**Drystone Bridge**	10 Metres	Use the onsite drystone craftsmen to provide oversight and advise if its possible or feasible.
		OR		
		Traditional Bridge	10 Metres	Constructed onsite to a type 2 standard. Materials - 26- 2x10x16- Stringers - 2- 6x6x8- Sleepers - 20- 2x6x8- Decking - 2- 4x4x8- Railing Posts - 12-2x6x12- Railing Labour
2	Due to the slope of >25-30% and insitu clay soils it is recommended to use stairs instead of bench cutting and grade reversals. Using stone instead of wood is advantageous because it will not degrade.	**Drystone Steps**	10 Metres	5-7 large armour stones Labour
3	Due to the slope of >25-30% and insitu clay soils it is recommended to use stairs instead of bench cutting and grade reversals. Using stone instead of wood is advantageous because it will not degrade	**Drystone Steps**	40 Metres	20-25 large armour stones Labour
4	This section is predominately wet and seeps all year round. It is recommended to either rebuilt the existing boardwalk or if the desire and budget exists then utilize a drystone	**Drystone Benchcut**	9 Metres	Materials Labour
		OR		

	benchcut technique to harden the tread. Hardening the tread with a drystone benchcut will eliminate the ongoing maintenance and degradation involved with a wood structure.	**Traditional Boardwalk**	9 Metres	Materials - 7- 4x4x8- Stringers - 4- 6x6x8- Sleepers - 28- 2x6x8- Decking - 8- 2x4x8- Toe Rails - 7- 2x4x12"- Section Ties Labour
5	Due to the slope of >25-30% and insitu clay soils it is recommended to use stairs instead of bench cutting and grade reversals. Using stone instead of wood is advantageous because it will not degrade	**Drystone Steps**	20 Metres	10-15 large armour stones Labour
6	A drystone structure is recommended if possible and feasible given the local access to the drystone craftsmen. A wooden structure has also been quoted if the drystone option cannot be completed	**Drystone Bridge**	5 Metres	Use the onsite drystone craftsmen to provide oversight and advise if its possible or feasible.
		OR		
		Traditional Bridge	5 Metres	Materials - 6- 2x10x16- Stringers - 2- 6x6x8- Sleepers - 8- 2x6x8- Decking - 2- 4x4x8- Railing Posts - 12-2x6x10- Railing Labour
7	Due to the slope of >25-30% and insitu clay soils it is recommended to use stairs instead of bench cutting and grade reversals. Using stone instead of wood is advantageous because it will not degrade	**Drystone Steps**	25 Metres	Place 10-13 large armour stones Labour
8	This section is predominately wet and seeps all year round. It is recommended to either rebuild the existing boardwalk **or** if the desired and the budget exists then utilize a drystone benchcut technique to harden the tread. Hardening the tread with a drystone benchcut will eliminate the ongoing maintenance and degradation involved with a wood structure.	**Drystone Benchcut**	18 Metres	Materials Labour
		OR		
		Traditional Boardwalk	18 Metres	Materials - 14- 4x4x8- Stringers - 7- 6x6x8- Sleepers - 56- 2x6x8- Decking - 16- 2x4x8- Toe Rails - 14- 2x4x12"- Section Ties Labour

9	A drystone structure is recommended if possible and feasible given the local access to the drystone craftsmen. A wooden structure has also been quoted if the drystone option cannot be completed	**Drystone Bridge**	9 Metres	Use the onsite drystone craftsmen to provide oversight and advise if its possible or feasible.
		OR		
		Traditional Bridge	9 Metres	Materials - 20- 2x10x16- Stringers - 2- 6x6x8- Sleepers - 15- 2x6x8- Decking - 2- 4x4x8- Railing Posts - 12-2x6x10- Railing Labour
Trail Tread Resurfacing	The existing tread has degraded and needs refurbishing. The purpose of this upgrade is to re-establish a Type 2 Easy walking tread. -integrate the principles of sustainable trail design/building when possible and feasible - raised tread method is recommended in areas where the grade of the slope is less than 10% - bench cut method is recommended where the grade of the slope is greater then 10%	**Crushed Aggregate**	254 Metres	Crushed "A" gravel- 61 Yards or 91.5 tons "B" Gravel Base- 18 Yards or 36 tons

Hourly Labour Estimates- 570-675 worker Hours (Excluding drystone bridges)

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Planning and Mobilization	3 Days	30 worker hours
Rough-In Trail Corridor	1 Day	10 worker hours
Excavate Trail Tread	3 Days	30 worker hours
Transportation of Material	15 Days	150 worker hours
Drystone Steps	19 days	190 worker hours
Construction of Boardwalk	3 Days	30 worker hours
OR Construction of Drystone Benchcut	13 Days	135 worker hours
Traditional Bridges	9 Days	90 worker hours
Finish Trail Corridor	<1 Day	10 worker hours
Finish Trail Tread	3 Days	30 worker hours

Nature Trail New Entrance

Length- 50 Metres **Classification-** Type 2 **Rating-** Easy/Beginner **Width-** 1 metre (39")
Average Grade- <5% **Maximum Grade-** 10% **Outslope Grade (Cross Slope, Crossfall)-** 2- 5%
Shovel Readiness- High- The new design is easily attainable and will create a more positive, safe and sustainable entrance to the nature trail
Priority- 1- If the nature trail is being refurbished then the new entrance should be done at the same time.

It is recommended to change the entrance which follow more of the terrain and topography by creating a sustainable curvilinear trail. This will also allow the existing entrance to be redeveloped into a sitting area if desired.

Build Recommendations

- try to incorporate the trail into the terrain and topography
- stone pitch/drystone benchcut the entrance to act as a filter and distinguish it from the accessible trail
- the bench cut should be outsloped slightly with a smooth and consistent shoulder

Design Section	Description	Length	Est. Materials
Drystone Benchcut Filter with 2 rock armour steps	This section should match the hardest section within the refurbished nature trail. The concept is to act as a filter and allow any users from the accessible trail to self-test their skills and abilities before continuing	5 Metres	Materials Labour
Crushed Aggregate Curvilinear Trail	Design/build a new sustainable curvilinear entrance making sure to match the hardest part of the existing nature trail refurbishment. Excavate 6" and backfill with 4" of "B" gravel and 2" of "A" gravel	45 Metres	Crushed "B" gravel- 9 Yards or 13.5 tons "A"Gravel Top Dress- 4.5 Yards or 9 tons

Hourly Labour Estimates- 85 worker Hours

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Planning and Mobilization	1 Day	10 worker hours
Rough-In Trail Corridor	0.5 Day	5 worker hours
Excavate Trail Tread	1 Days	10 worker hours
Transportation of Material	2 Days	20 worker hours
Drystone Benchcut	3 days	30 worker hours
Finish Trail Corridor	0.5 Day	5 worker hours
Finish Trail Tread	0.5 Days	5 worker hours

Elevated Boardwalk

Length- 100 m **Classification-** Type 2 **Rating-** Easy/Beginner **Width-** 1.2 m (4ft) with 2- 2.4 (8 ft) rest areas **Average Grade**- <5% **Maximum Grade- 5**% **Outslope Grade (Cross Slope, Crossfall)-** 2%

Shovel Readiness- Medium- The Elevated boardwalk will likely need a helicial pile structure. For this reason the shovel readiness is medium.

Priority- 1- Completing the elevated boardwalk will allow an excellent option for trail user and create an excellent stacked loop with the existing trails in the floodplain and along the Saugeen River.

The purpose of the elevated boardwalk is to connect the existing trails in the flood plain and along the Saugeen River together. This will create a cohesive trail network with a series of stacked loops that would begin and end at the Amphitheatre. The purpose of this boardwalk is to provide the option of completing a longer loop if desired. The purpose of elevating the boardwalk off the ground is for two reasons;

1) Viewing- elevating the boardwalk will allow ample viewing opportunities of the flood plain, creek and dykes. Typically, in areas like the vegetation can grow very tall and having the opportunity to have an unobstructed view would create a more positive experience
2) Flood Events- having the boardwalk elevated off the ground will allow it to be more resistant to flood events. Ideally the only portion submerged during typical seasonal flooding is the helical piles

The rest areas are essential to provide areas for users to pass and allow different users the opportunity to take in the experience at their own pace. The rest areas will also allow to comply with accessibility standards for future trail developments.

Estimated Materials

Stringers- Pressure Treated or Hemlock 176- 2"x6"x8'
Posts- Pressure Treated or Hemlock- 50- 6"x6"x6'
Cross-braces- Pressure Treated or Hemlock- 100- 2"x6"x6'
Sleepers/Beams- Pressure Treated or Hemlock 50- 6"x6"x5
Boards- Pressure Treated or Cedar 700- 2"x6"x4'
End Ties (AKA Simpson Ties)- Galvanized Steel**-** 210- 2"x6"
Toe Rails/Bumpers- Pressure Treated or Cedar 90**-** 2"x4"x8' (or Fabricated Galvanized Steel or Aluminium)
Helical Piles- Galvanized Steel 50
Should be designed and spec'd using a specialized installation company such as Goliath, Postech etc.

Hourly Labour Estimates- 195 worker Hours

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Rough-In Trail Corridor	2 Days	10 worker hours
Helical Pile Install	5 Days	50 worker hours

Transportation of Material	3 Day	15 worker hours
Build Boardwalk Structure, Decking and Railings	10 Days	100 worker hours
Finish Trail Corridor	2 Day	20 worker hours

Nature Trail- New Extension

Length- 175 Metres **Classification-** Type 3 **Rating-** More Difficult/Intermediate **Width-** 0.6 m (24") or more **Average Grade- <**8% **Maximum Grade-** 10% **Outslope Grade (Cross Slope, Crossfall)-** 5%
Shovel Readiness- High- This trail is shovel ready pending approval. Pending budget, it would easily be buildable on an accelerated timeline
Priority- 2- The priority of this trail segment depends on the decision of the suspension bridge.

This design utilizes the natural topography of the area by creating a sustainable curvilinear trail with insitu mineral soil. The build construction will be challenging due to the steep grade which is why the difficulty rating is limited at more difficult/intermediate. Trying to create a type 2 or easy trail would be exponentially more difficult and the costs associated with this would be high. This new build would also allow the current fall line trail to be closed and rehabilitated. It should be closed if the nature trail is refurbished as the increased user traffic would also increase the risks associated with this trail. The new trail design will provide a safer, more positive, and sustainable option for users to access flood plain and nature trail from the west. It will also provide the access link to the community network and suspension bridge in the future.
Build Recommendations

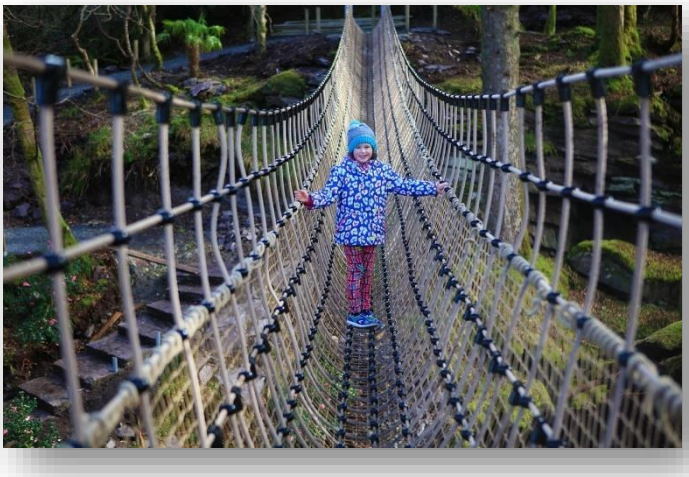
- try to incorporate the trail into the terrain and topography instead of forcing the trail into the terrain
- careful attention must be given to following the principles of sustainable trail design and building
- try to avoid the existing fall line trail to ensure the trail has a better chance of rehabilitation

Hourly Labour Estimates- 80 worker hours

Trail Construction Phases/Tasks	**Typical Timeline**	**Typical Level of Effort**
Consulting/Design	1 Day	10 worker hours
Mobilization	0.5 Day	5 worker hours
Rough-In Trail Corridor	0.5 Day	5 worker hours
Excavate Trail Tread	3 Days	30 worker hours
Finish Trail Corridor	1 Day	10 worker hours
Finish Trail Tread	2 Days	20 worker hours

Suspension Bridge

Length- 30 Metres **Classification-** Type 3 **Rating-** More Difficult/Intermediate **Width-** 0.6 m (24") **Shovel Readiness- Low –** The suspension bridge hinges (pun intended) on engineered designs and drawings to ensure its possible. Various permissions and permits will also be needed.
Priority- 2- The potential for the suspension bridge as a standalone destination is huge. If the potential investment and desire is available then it should be given priority.



The suspension bridge is probably the largest unknown for the whole development but easily has the most potential for a quintessential experience like nothing else. The key is to have a design that offers a perceived high risk with low actual risk- akin to the glass floor at the CN tower. The photo shows a modern engineered rope crossing in Ireland called the Skywalk at Kells Bay House and Gardens.

Suspension Bridge Trail

Length- 149 Metres (99 m East/50 m West) **Classification-** Type 3 **Rating-** More Difficult/Intermediate **Width-** 0.6 m (24") or more **Average Grade- <**8% **Maximum Grade-** 10% **Outslope Grade (Cross Slope, Crossfall)-** 5%
Shovel Readiness- Low- The proposed trail is shovel ready but is only dependant on the approval of the suspension bridge.
Priority- 2- Dependent on the suspension bridge.

A series of 2 connector trails to facilitate a stacked loop with the suspension bridge which would begin and end off the nature trail. The technical terrain constitutes a more difficult type 3 trail that will complement the perceived risk of the suspension bridge. This design utilizes the natural topography of the area by creating a sustainable curvilinear trail with insitu mineral soil. The build construction will be challenging due to the steep grade but completely feasible.

Build Recommendations

- try to incorporate the trail into the terrain and topography instead of forcing the trail into the terrain
- careful attention must be given to following the principles of sustainable trail design and building

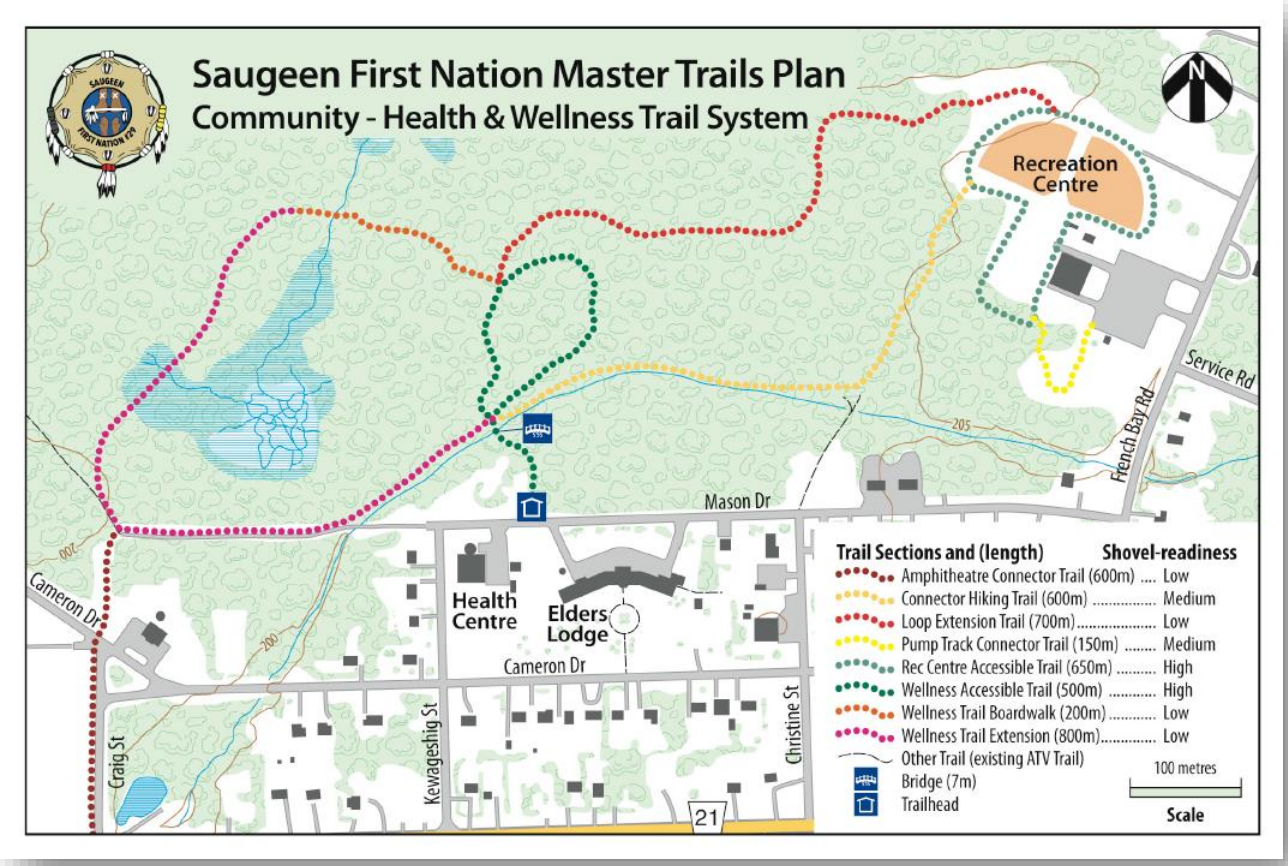
Hourly Labour Estimates- 80 worker hours

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Consulting/Design	1 Day	10 worker hours
Mobilization	.5 Day	5 worker hours
Rough-In Trail Corridor	.5 Day	5 worker hours

Excavate Trail Tread	3 Days	30 worker hours
Finish Trail Corridor	1 Day	10 worker hours
Finish Trail Tread	2 Days	20 worker hours

Community Health and Wellness Trail

The need for two separate trail networks was identified at the plenary session in October of 2021. There was a lot of positive reception towards creating a cohesive trail network to connect some community-based services. The current development proposal for this section consists of nine different trails. The stacked loops range in difficulty from the easiest rating of Type 1 Accessible to more difficult Type 3. Three of the nine trails are high priority and shovel ready, two are quickly possible based on community interest, and the remainder a more conceptual for future development.



Wellness Accessible Trail

Length- 500 Metres **Classification-** Type 1 Accessible **Rating-** Easy/Beginner **Width-** 2 Metres **Average Grade- <**5% **Maximum Grade-** 5% targeted 10% permissible **Outslope Grade (Cross Slope, Crossfall)-** 2-5%

Shovel Readiness- High- The challenges encountered on this trail should be minimal pending the approval of a bridge and final alignment.
Priority- 1- The trail is pivotal for creating an accessible experience for the Wellness Centre and Elders Residence.

The concept behind this loop is to provide an accessible trail experience for the Wellness Centre and Elders Residence. A spur trail will meander along the property boundary of a vacant lot which will eventually become a Spiritual Ceremony Centre. The loop will begin after crossing a 7-metre bridge to access the desired property. A 4 ft width on the bridge is recommended to mitigate any motorized use. Utmost care should be given to creating the most accessible experience that is possible and feasible while respecting the natural environment through sustainable trail practices.

Build Recommendations

- The trailhead should be built with supporting infrastructure such as pavilion and benches to provide a welcoming trail experience
- The terrain is predominately flat so the raised tread method must be utilized
- Ensure a 4-6" aggregate base to help level and stabilize the tread
- The entire tread needs to be top-dressed with 2" of stone dust
- Avoid sharp root and rock transitions to remove tripping hazards to ensure the easiest walking/hiking experience possible
- The tread must have a flat and stable surface to ensure sure footing

Material Quantity Estimates

Please consider the following as a rough estimate based on the expected conditions

1. "B" gravel base crushed aggregate- 182 Yards or 364 tons
2. Stone dust- 60 Yards or 120 tons
3. Bridge- 7 metres long and 1 metre wide with railings
   Materials
   - 20- 2x10x16- Stringers
   - 2- 6x6x8- Sleepers
   - 30- 2x6x4- Decking
   - 2- 4x4x8- Railing Posts
   - 12-2x6x10- Railing

Hourly Labour Estimates- 300 worker Hours

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Planning and Mobilization	3 Days	30 worker hours
Rough-In Trail Corridor	1 Day	10 worker hours
Excavate Trail Tread	4 Days	40 worker hours
Transportation of Material	15 Days	150 worker hours
Build Bridge	4 Days	40 worker hours
Finish Trail Corridor	1 Day	10 worker hours
Finish Trail Tread	2 Days	20 worker hours

Recreation Centre Accessible Trail

Length- 650 Metres **Classification-** Type 1 Accessible **Rating-** Easy/Beginner **Width-** 2 Metres
Average Grade- <5% **Maximum Grade-** 8% targeted 10% permissible **Outslope Grade (Cross Slope, Crossfall)-** 2-5%
Shovel Readiness- High- The corridor already exists and limited grubbing/clearing is needed.
Priority- 1- The trail will add to the amenities available at the recreation centre

The concept behind this loop is to provide an accessible trail which will add to the amenities available at the Recreation Centre. If built properly, it should cater to all ages and help connect the recreation building, ball diamonds, Pow-Wow grounds, and proposed pump track refurbishment

Build Recommendations

- Care should be taken with the trail design to ensure the terrain and topography is maximized
  - Utilize the dykes and berms which will allow a sustainable bench-cut technique
  - Flat sections should utilize a raised tread method
- Ensure a 4-6" aggregate base to help level and stabilize the tread
- Top-dress with 2" of stone dust
- The tread must have a flat and stable surface to ensure sure footing

Material Quantity Estimates

Please consider the following as a rough estimate based on the expected conditions

1. "B" gravel base crushed aggregate- 200 Yards or 400 tons
2. Stone dust- 80 Yards or 160 tons

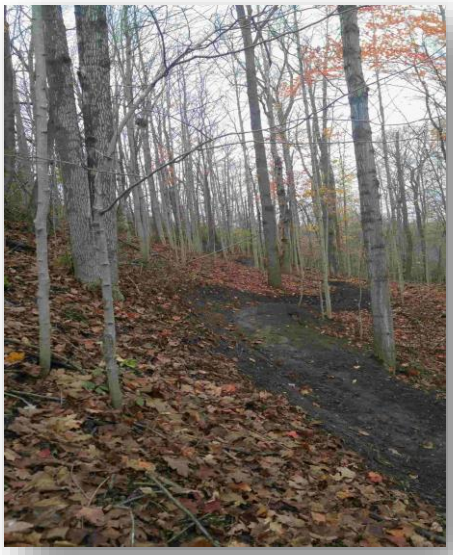
Hourly Labour Estimates- 200 worker hours

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Planning and Mobilization	2 Days	20 worker hours
Rough-In Trail Corridor	1 Day	10 worker hours
Excavate Trail Tread (where needed)	4 Days	40 worker hours

Transportation of Material	10 Days	100 worker hours
Finish Trail Corridor	1 Day	10 worker hours
Finish Trail Tread	2 Days	20 worker hours

Connector Hiking Trail

Length- 600 Metres **Classification-** Type 3 **Rating-** Easy/Beginner **Width-** 0.6 m (24") or more
Average Grade- <8% **Maximum Grade-** 10% **Outslope Grade (Cross Slope, Crossfall)-** 5%
Shovel Readiness- High- This trail is shovel given its minimal footprint
Priority- 2- It would provide an excellent link between both accessible trails.



This design utilizes the natural topography of the area by creating a sustainable trail using insitu mineral soil. The build construction will be challenging due to the flat terrain and care should be taken to avoid cupping. This new trail would provide a safer, more positive, and sustainable option for users instead of using the road or existing motorized trail.

Build Recommendations

- try to incorporate the trail into the terrain and topography instead of forcing the trail into the terrain
- utilize the microtopography in the terrain to maximize elevation and drainage
- careful attention must be given to following the principles of sustainable trail design and building

Hourly Labour Estimates- 105 worker hours

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Consulting/Design	2 Days	20 worker hours
Mobilization	0.5 Day	5 worker hours
Rough-In Trail Corridor	1 Day	10 worker hours
Excavate Trail Tread	5 Days	50 worker hours
Finish Trail Corridor	1 Day	10 worker hours
Finish Trail Tread	3 Days	30 worker hours

Pump Track Connector Trail

Length- 150 Metres **Classification-** Type 2 **Rating-** Easy/Beginner **Width-** 1 metre (39")
Average Grade- <5% **Maximum Grade-** 8% **Outslope Grade (Cross Slope, Crossfall)-** 2- 5%
Shovel Readiness- Medium- This trail is dependent on the desire to connect the accessible trail to the playground, pump-track, and parking lot.

Priority- 2- The accessible trail should be higher priority but if the pump-track is being refurbished then this should also be given priority.

The pump-track connector trail will connect the playground, Pow-Wow grounds, proposed pump-track and parking lot to the accessible trail. If the budget and desire exist it could be upgraded to an accessible trail as well.

Build Recommendations

- try to create as direct route a possible to avoid users from trail cutting
- given the flat terrain a raised tread technique will be needed
    - if additional soil is need utilize "B" gravel or the mineral soil from the pump-track

Material Quantity Estimates (if required)

Please consider the following as a rough estimate based on the expected conditions

1. "B" gravel base crushed aggregate- 60 Yards or 120 tons
2. Stone dust- 12 Yards or 24 tons

Hourly Labour Estimates- 80 worker Hours

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Consulting/Design	1 Day	10 worker hours
Mobilization	0.5 Day	5 worker hours
Rough-In Trail Corridor	0.5 Day	5 worker hours
Excavate Trail Tread	3 Days	30 worker hours
Finish Trail Corridor	1 Day	10 worker hours
Finish Trail Tread	2 Days	20 worker hours
Transportation of Material (if required)	3 Days	30 worker hours

Pump Track

Length- 200 Metres **Classification-** N/A **Rating-** More Difficult/Intermediate **Width-** 0.6 metre (24")
Average Grade- TBD **Maximum Grade-** TBD **Outslope Grade (Cross Slope, Crossfall)-** TBD
Shovel Readiness- Medium- The pump track footprint is already in place. If the invasive weeds can be mitigated properly then it is shovel ready.
Priority- 2- This is dependant on the needs, wants and desires for the Recreation Centre. Consideration should be given to refurbishing the pump-track now that more

investment is being put into the Recreation Centre. The new ballpark will undoubtedly draw the targeted demographic which potentially didn't exist in the past. Pump tracks are safe, fun and sustainable if built properly to a targeted user. The next step is to create more detailed design to better understand the needs, wants and desires for a targeted user and budget.

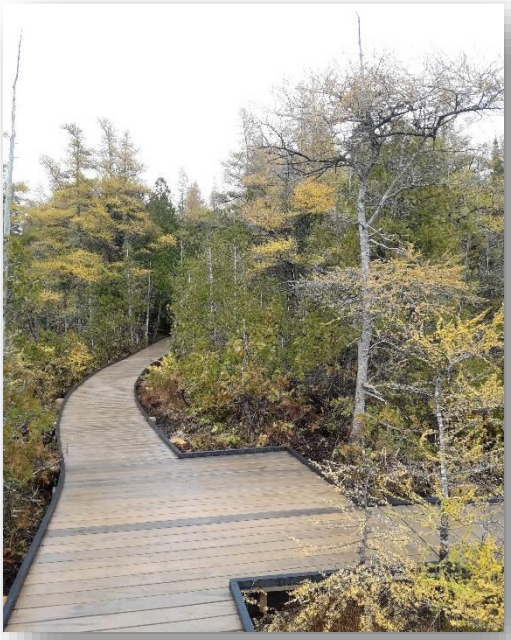
Some great programming to get the youth of Saugeen using the Pump Track again would be to have Bike Smart come into the Community and run a bike riding safety workshop. Ride Smart — New Hope Community Bikes

Wellness Trail Extension Boardwalk

Length- 200 m **Classification-** Type 2 Accessible **Rating-** Easy/Beginner **Width-** 1.2 m (4ft) with 2- 2.4 (8 ft) rest areas **Average Grade**- <5% **Maximum Grade- 5**% **Outslope Grade (Cross Slope, Crossfall)-** 2%

Shovel Readiness- Low- The proposed boardwalk will need a final design and route exploration due to the sensitive environment and potential for provincially significant species.

Priority- 3- The Accessible Wellness Trail should be completed first



This boardwalk will provide a vital connection on the Wellness Extension Trail and provide the user the option to complete an additional loop if desired. The rest areas are essential to provide areas for users to pass and allow different users the opportunity to take in the experience at their own pace. The ideal purpose of the boardwalk would be to act as a connector link for the proposes loop, however, it could also act as a spur trail off the Wellness Accessible Trail. In this case care must be taken to provide the most accessible experience possible. A 4 ft width is recommended to mitigate any motorized use.

Estimated Materials

Stringers- Pressure Treated or Hemlock 352- 2"x6"x8'
Sleepers/Beams- Pressure Treated or Hemlock 100- 6"x6"x5
Boards- Pressure Treated or Cedar 1400- 2"x6"x4'
End Ties (AKA Simpson Ties)- Galvanized Steel**-** 420- 2"x6"
Toe Rails/Bumpers- Pressure Treated or Cedar 180**-** 2"x4"x8'- $2700 (or Fabricated Galvanized Steel or Aluminium)
Helical Piles- Galvanized Steel 100, should be designed and spec'd using a specialized installation company such as Goliath, Postech etc.

Hourly Labour Estimates- 400 worker Hours

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Consulting/Designing/Engineering	4 Days	40 worker hours
Rough-In Trail Corridor	2 Days	20 worker hours
Helical Pile Install	10 Days	100 worker hours
Transportation of Material	4 Days	40 worker hours
Build Boardwalk Structure, Decking and Railings	20 Days	200 worker hours
Finish Trail Corridor	4 Day	40 worker hours

Wellness Trail Extension

Length- 800 Metres **Classification-** Type 2 Accessible **Rating-** Easy/Beginner **Width-** 1.5 Metres **Average Grade- <**5% **Maximum Grade-** 8% targeted 10% permissible **Outslope Grade (Cross Slope, Crossfall)-** 2-5%
Shovel Readiness- Low- Requires more assessment and permits for boardwalk to cross the wetland.
Priority- 3- The Wellness Accessible Trail should be given priority

This trail would create an accessible stacked loop which would be longer and more challenging than the Wellness Accessible Trail. Preliminary scouting and consultation with Saugeen First Nation identified a potential route. A follow-up visit confirmed the topography, terrain and hydrology need further investigation before being shovel ready. The potential to create an excellent wilderness experience for an accessible user is high. The trail would pass through a coniferous stand, wetland and deciduous bush with gently rolling terrain. Most of the trail would be shovel ready except for the Wellness Trail Extension Boardwalk detailed above.

Build Recommendations

- The terrain is predominately flat so the raised tread method must be utilized
- Ensure a 4-6" aggregate base to help level and stabilize the tread
- The entire tread needs to be top-dressed with stone dust
- Avoid sharp root and rock transitions to remove tripping hazards to ensure the easiest walking/hiking experience possible
- The tread must have a flat and stable surface to ensure sure footing

Material Quantity Estimates

Please consider the following as a rough estimate based on the expected conditions

1. "B" gravel base crushed aggregate- 200 Yards or 400 tons
2. Stone dust- 80 Yards or 160 tons

Hourly Labour Estimates- 290 worker hours

Trail Construction Phases/Tasks	Typical Timeline	Typical Level of Effort
Planning and Mobilization	2 Days	20 worker hours

Rough-In Trail Corridor	1 Day	10 worker hours
Excavate Trail Tread (where needed)	4 Days	40 worker hours
Transportation of Material	20 Days	200 worker hours
Finish Trail Corridor	1 Day	10 worker hours
Finish Trail Tread	2 Days	20 worker hours

Loop Extension Trail

Length- 700 Metres **Classification-** Type 3 **Rating-** Easy/Beginner **Width-** 0.6 m (24") or more **Average Grade- <**8% **Maximum Grade-** 10% **Outslope Grade (Cross Slope, Crossfall)-** 5% **Shovel Readiness- Low-** This trail has only been identified as potential for future development **Priority- 3-** The other trails should have priority but the potential is there.

The loop extension trail would facilitate a stacked loop experience for the connector hiking trail. This is a proposed trail with low priority. The terrain/topography does allow it to be upgraded to an accessible standard if desired. The identified line was scouted in late fall and some predominately wet areas proved challenging to mitigate. Further site surveys and scouting should be done in the future to assess the wet sections in case the hydrology has changed.

Amphitheatre Connector Trail

Length- 600 Metres **Classification-** Type 3 **Rating-** Easy/Beginner **Width-** 0.6 m (24") or more **Average Grade-** <8% **Maximum Grade-** 10% **Outslope Grade (Cross Slope, Crossfall)-** 5% **Shovel Readiness- Low-** The proposed line is currently on Saugeen Shores property **Priority- 3-** Focus should be placed on developing the Community and Amphitheatre Sections separately and connecting them in the future.

The purpose of this trail is to connect the community trails to the amphitheater trails. The current line is not on Band Land but in consultation there was a desire to potentially create this connector. Other options may be available to create this connector if it is desirable to the community. It is proposed as a type 3 trail but could be upgraded to type 2 accessible.

County Road 13 Active Transportation Corridor and Sauble Park Plan

County Road 13 between Sauble Beach and Southampton is a desirable route for residents, cottagers, travellers, and tourists. The road does have a paved shoulder but it is becoming increasingly dangerous for non-motorized users. Saugeen First Nation has indicated an interest in developing an alternate trail or pathway along County Road 13. Further, as the community begins to implement the Suable Park Plan the need to explore safe pedestrian routes and access to Sauble beach from the Charles Street Economic Hub will be required to address the increase in pedestrian volume. The purpose of this report is to provide some guidance notes and best practices. This will help create a more focused approach for the consulting, design and route exploration.

County Road 13 Section (Targeted User- Walking, Hiking and Cycling)	
Trail	Active Transportation Route
Trail Type	Type 1 Accessible

Symbol	 Easiest Accessible (White Circle)
Length	13 KM
Tread Surface	Firm and Stable Crushed Aggregate or Hardened Asphalt
Tread Width	2-3 metres
Corridor Clearing	1m either side
Average Grade	5% or less
Maximum Grade	5%

We recommend a detailed County Road 13 Active Transportation Corridor Assessment Plan inclusive of the Sauble Park Plan, be completed to determine how best to connect people to attractions, providing safe alternative transportation options and capitalize on the millions of visitors that Sauble Beach attracts annually. The Trail Corridor Development Strategy will be completed with input from regional stakeholders to provide a safer alternative for trail users and cyclists travelling along County Road #13. The plan will address the connection and flow of people accessing popular natural attractions by other means than County Road #13 improving tourist, visitor and resident safety.

Scope of Work

- Investigate an Active Transportation Corridor/Trail from the Saugeen Economic Hub to alleviate traffic control issues at Sauble Beach South
- Investigate potential off road trail options within the County Road 13 Right-of-way
- Investigate Active Transportation Corridor from Cameron Drive to County Road 13 for local community members as well as to attract cycling tourism from the Great Lakes Waterfront Trail and Ontario By Bike program
- Investigate alterative access options of the leased properties to the beach areas along County Road #13
- Trail development routing and costing for all viable options
- All options will support the Sauble Park Beach Operational Strategy 2019 and the Sauble Park Plan


Saugeen First Nation Master Trails Plan
County Road 13 Active Transportation Corridor and Sauble Park Plan - Assessment Area
legend
Sauble Park Beach Access - Assessment Plan Area
Active Transportation Corridor - Assessment Plan Area
Lake Access
Economic Hub
Sauble Park Beach Access
French Bay Rd
Charles St
Active Transportation Corridor
13
Thompson Ave
2nd Ave S
French Bay Rd
Williams St
Pashwood Dr
Nipissing St
Eagle St
Lake Huron
Scotch Settlement Rd
Active Transportation Corridor
Anaquot Rd
French Bay Rd
Mandawoub Rd
Keewaydin Rd
13
Keewaydin Rd
Onja Gah Bo Rd
Nawash Dr
Active Transportation Corridor
Scotch Settlement Rd
Mandawoub Rd
French Bay Rd
21
Cameron Dr
Recreation Centre
Elder's Lodge
Health Centre
Amphitheatre
Eckford Ave
13
Tyendinaga Dr
21
Saugeen River
B Line
500 metres
Scale

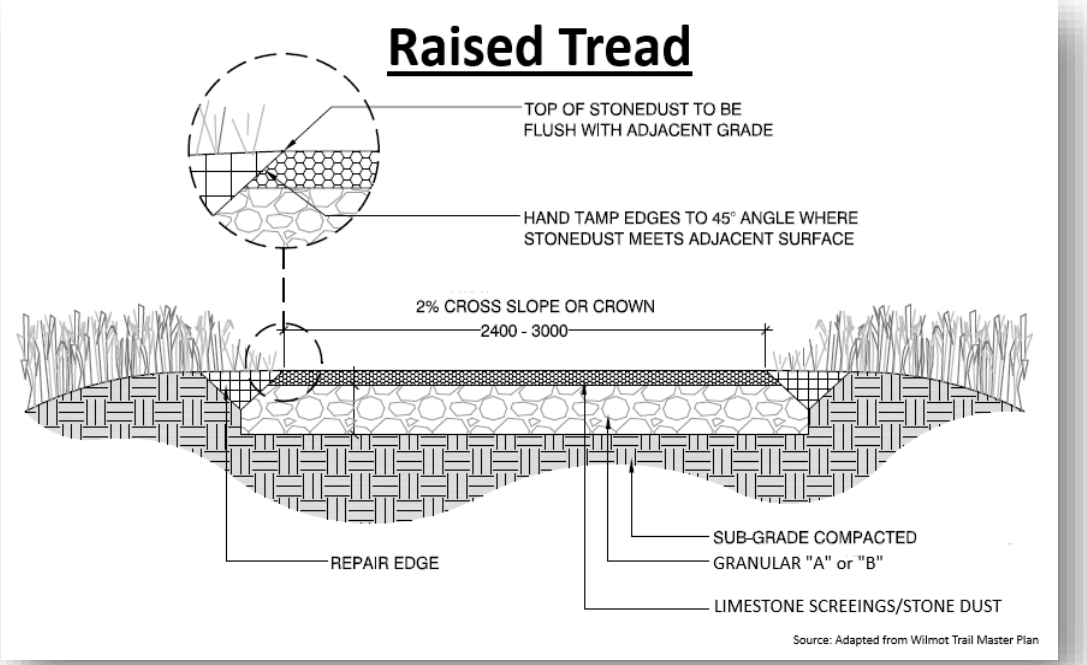
Trail Development Construction Techniques

The development utilizes three different techniques of sustainable trail construction. The topography and geomorphology of the terrain dictates when the three techniques that will be needed;

- Full bench (typically in >20% slope)
- Partial bench (typically in 10-20% slope)
- Raised tread construction (typically in <10% slope)

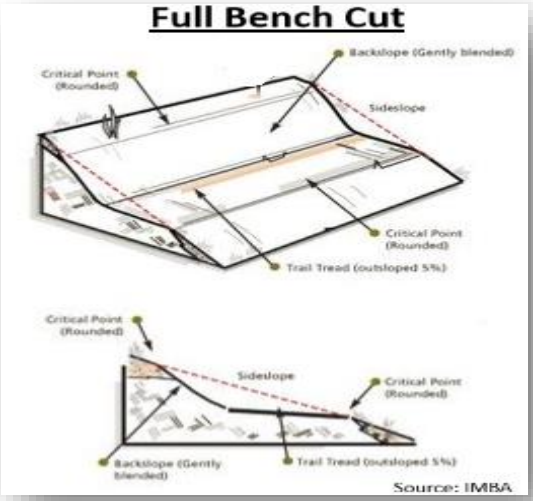
Raised Tread Construction

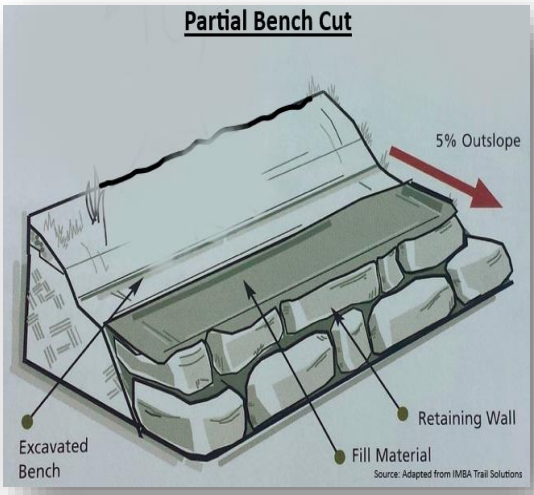
Raised tread should be utilized on slopes less then 10% grade. Care should be taken to either crown the tread on flat terrain or outslope it to one side at 2-5%. The outer edges of the trail should be compacted at 33% slope or less and shed water.



Full Bench Cut vs. Partial Bench Cut Construction

Bench cuts should be utilized on slopes exceeding 10%. Care should be taken to avoid the potential for water to pool or flow down the trail. The backslope and downslope should be compacted between 33-45% grade and provide gradual transitions for sheet water flow to pass across the trail tread.





Management of Saugeen's Trail System

Trails need to be maintained, insured and signed before promotion takes place and a large part of any Risk Management Strategy. Trail Management includes trail maintenance of the corridor and keeping records of all work completed, and ensuring signage is still in place and not obstructed by vegetation or vandalism. A sample Trail Maintenance Report can be found under APPENDIX B. All staff should complete the report for all inspections and be stored in one central location. The maintenance reports are important if there is a lawsuit against the Trail Managers as you would be able to demonstrate Due Diligence of trail maintenance. All reported trail condition issues should be responded to immediately. The trails should be inspected weekly during the summer months to ensure all is in order.

Trail Maintenance Budget

A full Maintenance Budget for all of Saugeen's trails can be found in APPENDIX C.

Ontarians with Disabilities Act

The Accessibility for Ontarians with Disabilities Act (AODA) provides general requirements for new accessible trails in Ontario. Often the benchmark for an accessible standard is created by comparing similar trail networks and identifying what is reasonable and foreseeable for the user.

The Ontario Trails Council has worked closely with the Ministry of Economic Development, Employment, & Industry to clarify the Act and what the implications are for trails in Ontario. Existing trails are exempt from the legislation unless they are refurbished. New trails or refurbished trails require an assessment to either comply with the Act or provide the rationale for exemption. If trails are classed as Wilderness (natural surface, slope more than 5º) they may be exempt from being compliant. All the trails at Saugeen should be assessed for accessibility. Many sections will not be able to reach compliance due to the rugged terrain of the trail. Some sections of trail will meet the AODA standards and will be promoted as being accessible. The Ontario Trails Council has the proper equipment (UTAP system) for capturing the data required to either comply or be exempt from the legislation so we are planning on utilizing their equipment to complete the audit. APPENDIX D outlines the Difficulty Ratings for trails.

Accessible Trail Guidelines

Below are a set of specifications which are generally seen as attainable and permissible for accessible trails. If it is not attainable then it should be documented as to the reasoning and proper signage should clearly identify to whom the trail is accessible for.

Tread Surface

The tread surface must be firm and stable. The current minimum standard is 5 cm (2") of compacted stone dust.

Cross Slope Grades

Crowned 2-5%. Outsloping and crowning ensures proper drainage.

Trail Grades (Running Slope)

The AODA does not specifically define a trail grade because not all users require or desire a trail with less than 5% slope. If the accessibility committee within your organization is fine with steeper slopes, then as long as it is signed properly it still complies with the AODA. However, best practices generally dictate that 5% or less is preferred. If the trail grade exceeds 5-10% then resting intervals should be incorporated;

- 5-8% grades will have resting intervals spaced every 30 metres
- 8-10% grades will have resting intervals spaced every 9 metres

Corridor

The corridor is determined by the targeted user. There is currently no set standard for shoulders, however, best practices are showing 1.5 metres (5ft) is generally accepted as a good target. Areas along the corridor that have a consistent shoulder less then 1.5 metres is fine. Sections where the shoulder abruptly changes should have signage to let the user know, potentially be remediated, or have some sort of barrier installed.

Barriers, Guard Rails and Edge Protection

The purpose of barriers, guard rails and edge protection are to shield the user from any hazards beside the trail. Typically, this means a steep drop-off or water. The AODA **does not** provide a definition or standard for a steep slope or drop-off. Best practices are showing a steep slope is considered anything over a ratio of 1:3 or 33% where a hazard exists. Each area should be evaluated on a case-by-case basis to see if a natural barrier already exists. Existing natural shrubbery does suffice as a barrier if the slope is in excess of 33%. If edge protection is needed then the AODA specifically states it must be at minimum 50 mm high and allow water to drain.

Signage

Signage is a large part of trails. As Saugeen's trails are being built as a tourism product of the area, signage is paramount for safety, information and education. Trails typically have three types of signage on trails– Trailhead, Wayfinding and Interpretive Signage. The fourth type of signage is roadway signage to direct people to the trailheads which is also called wayfinding signage by the tourism industry but we'll call Directional Road Signage in this report. All signage should be designed around the same branding as the logo of Saugeen (look, feel, colours etc.).

Trailhead Signages

Trailhead Signage is generally found at the parking lot or access area of trails. Trailhead signage can range from a pavilion, kiosk, billboard or smaller size. Most are larger billboard size signs, both sides could be used as well. It should be consistent with other signage that is currently installed, or new branding should be incorporated into a new signage program.

The signs should have high visual contrast with the background and sans serif font. At minimum the AODA legally requires trail head entrances to have signage that contains the following;

i) Trail length
ii) Type of surface
iii) Average and minimum trail width
iv) Average and maximum trail grade (running slope) and cross slope
v) Location of amenities

In addition to the elements required under the AODA signage should also identify;

i) A map of the trail(s)
ii) A short description of the trail and the history of the area
iii) Length of time to hike
iv) Users permitted and non-users prohibited on the trail
v) Clearly stated that this is a Recreational Trail (has risk management implications)
vi) Post an assumption of risk provided by your insurance company or legal representative
vii) Warn of obvious hazards
viii) Clearly identify emergency contact information with exact location markings
ix) Provide a clear trail standard or skill level required on the trail
x) Any other information users should be aware of before they head out (Species at Risk)
xi) Funders of the trail (agencies that contributed to the project)

Example of a Trail Code of Conduct

- Obey all trail signs.
- Stay on the trail
- Expect and respect other trail users
- Help keep our trail beautiful - carry out all litter
- Show courtesy to other trail users at all times.
- Keep dogs on leash at all times
- Clean up after pets - stoop and scoop!
- No fires or camping allowed
- Hunting is not allowed on or across the trail

Wayfinding Signage

Wayfinding signage typically consists of some sort of arrow, blaze or symbol to help users identify the direction of the trail. More trail groups are using their logo as wayfinding signage as it also brands the trail. Wayfinding is usually installed at a set distance apart depending on the length of the trail. Some trails have them every 100m -500m apart. Wayfinding signage should be installed at every intersection/juncture where there might be some confusion of what way the trail follows. "You are Here" signs at trail intersections are very helpful for trail users as it helps them quickly identify where they are as well as help them make decisions of continuing or turning back. These signs help reduce rescues and injuries of trail users.

Interpretive Signage

Interpretive signage would be the largest component of the signage program. Researching information for the interpretive signage takes time especially when other partners are involved. Projects like this are great ways to engage youth and elders to come together to determine the content of the interpretive signage that ties in with the interpretation programming on the trails (See Product Development and Marketing) History, cultural education, medicinal plants, geography are all topics of interest.

Directional Road Signage

Directional signage that matches the trailhead signage should be placed along roads to help direct visitors to the correct access and parking areas. This is a good resource for roadway/directional signage guidelines RT07 Signage Manual (rto7data.ca).

Regional Tourism Organization 7 provides funding ($1 partner- $0.50 RTO7) for road directional signage as well as trail signage (which is called wayfinding signage in this report). It would be worth a conversation with them to discuss partnering on community signage for tourism growth. They also have funding available for French Translation services. [2]

Sign Costings

Signage	Unit Cost
Trailhead Signage	$3,500.00
Wayfinding Signage	$6.00
Interpretive Signage	$1,000.00-$2,500.00
Directional Road Signage	$1,500.00

*All prices are per sign

Trail Counters

Trail counters should be integrated along the various trail loops so an accurate count can be captured. They can also be incorporated into the parking lot to track number of vehicles and other important trail metrics data that helps with management decisions. The specs for the trail counters are found under APPENDIX E

Trails Reconciliation and Cultural Reclamation

"Reconciliation between Indigenous and non-Indigenous peoples in Canada is not just about the legacy of residential schools. It is a multi-faceted process that restores lands, economic self-sufficiency, and political jurisdiction to First Nations, and develops respectful and just relationships between First Nations and Canada." [3]

Reconciliation through trail development focuses heavily on interpretation and reconnecting communities to their lands. Trails play an important role in reconnecting Indigenous people to the land, teachings and stories that may have been lost as a result of the residential school era. There are several trails that are being either reinterpreted or developed to educate about the rich history of indigenous culture and the continuing story and journey of reconciliation.

[2] 2021/22 Tourism Wayfinding Signage (wufoo.com)
[3] http://fngovernance.org/news/news_article/what_does_reconciliation_look_like_in_ontario

The Amphitheatre Trail is an excellent candidate to provide a space for visitors to engage in reconciliation through trails. School groups are an important first step in the reconciliation process. Teaching youth is the pathway to the future and school programming is inclusive of reconciliation currently. Wikwemikong Tourism has been working with school boards in the Greater Toronto Region to provide a 5 day education field trip to Manitoulin Island as part of the reconciliation programing of the school boards. Not only do trails provide a space for non-residents to engage in reconciliation but they also promote cultural reclamation and language retention within the community. Programs such as Wikwemikong Tourism's 16-week Cultural Guide Training Program utilize the Bebamikawe Memorial Trail to bring together industry certified training, land based learning and traditional knowledge carriers to share, teach and train participants to become Cultural Guides and entrepreneurs. Participants walkaway with a not only an opportunity to become more employable, but now have a deeper connection to the teachings of their nation.

Point Grondine Park- A-mik-zii-bi Interpretive Trail-

The A-Mik-Zii-Bi Interpretive Trail at Point Grondine Park encourages visitors to learn about the history, treaties and traditional plants that connect the Anishnaabek to the land of Point Grondine. Pedestal signs are mounted throughout the trail detailing Treaty relationships, Anishinaabek Clans and Governance, Pictograph knowledge and a variety of plant medicines found throughout the route.

This interpretive experience engages the visitor to open their mind and connect to the land through the lens of the Anishinaabe. Partnerships with Killarney Provincial Park allow for collaborations for Nature heritage and education programming with users from both Parks including visits from schools and tour operators. Wikwemikong's School Itinerary can be found as APPENDIX F

Bebamikawe Memorial Trail- Interpretive Trail

In 2021, Wikwemikong Tourism added cultural installations, culinary station, interpretive signage, and a digital tour on the Driftscape App to add to the user experience at the Bebamikawe Memorial Trail. Users can take a self guided 6km hike along the trail and learn about the clan systems, Anishinabemowin, traditional plant knowledge and Wiikwemkoong' rich history. The Bebamikawe Memorial Trail has become a key product offering in Wikwemikong Tourism's group and F.I.T. itineraries by

providing a safe outdoor learning space for visitors to engage in land-based learning, reconciliation and experiential tourism programming.

West Coast Trail – Pacific Rim National Park Reserve

Pacific Rim National Park Reserve's First Nation program was created in 1996. This is when engagement with the nine Nuu-chah-nulth First Nations in projects and relationships began to be established. One of Pacific Rim's priorities has been to work together with these First Nations to have a trusting, honest relationship. Parks Canada and Ditidaht, Huu---ay--- ht, Pacheedaht First Nations have access agreements that respect identified land boundaries.

A Management Plan was created for Pacific Rim National Park Reserve in 2010 with heavy input from First Nations. The Plan identifies strategies for conserving ecology and culture, and how to "continue work with First Nation partners and ensure opportunities for active involvement and collaboration." Pacific Rim National Park Reserve and the First Nations have recently begun to follow a Cooperative Management Model. This means that Indigenous groups work collaboratively with Parks Canada on the management of collective places. Cooperative Management Boards are created with each of the partnering First Nations to advise and provide advice to Parks Canada.

Guardian Program

Pacific Rim National Park Reserve established the Guardian Program in collaboration with Ditidaht, Huu-ay-ht, and Pacheedaht First Nations as a way to maintain the trail and provide cultural interpretation opportunities. The Ditidaht, Huu-ay-aht, and Pacheedaht First Nations are each responsible for maintaining 25 km of the total 75 km of the West Coast Trail. Two Guardians from each of the three First Nations are on the trail at all times to maintain the trail and educate and assist hikers, employing twelve people each season. The Guardian Program is managed and Coordinated by Parks Canada. Each Guardian is given formal training and receives certifications. Both Parks Canada and the First Nations provide money towards the Guardian program and their wages. Recently the Guardian's have identified the need for more cultural training as hikers have a lot of interest in local First Nations.[4] https://www.theglobeandmail.com/news/british-columbia/west-coast-trail-guardians-blaze-a-path-to-reconciliation/article25050920/

Oakville informs hikers about its Indigenous heritage

In Ontario, the City of Oakville, a member of the Canadian Coalition of Municipalities Against Racism and Discrimination, (CCMARD), has launched several reconciliation initiatives since 2016.

To begin with, the city officially recognized that it is located on treaty lands. This acknowledgement gave rise to the idea of having official flags to pay tribute to the Indigenous presence. These flags have since been raised at Oakville City Hall.

Also, a marked walking trail honouring Indigenous heritage will soon be opened, along with a First Nations information kiosk on the Bronte Creek Heritage Trail. Two Moccasin Trails will feature a series of 13 plaques giving visitors a deeper understanding of Indigenous heritage. Content for the kiosk and the plaques will be developed in partnership with Indigenous community members, including Mississaugas of the New Credit First Nation.Oakville will consider other initiatives to promote reconciliation through an advisory committee. [5]

[4] Partners West Coast Trail FAM Tour October 2012
[5] https://en.ccunesco.ca/blog/2017/12/three-examples-of-reconciliation-in-action

Links to other examples:
Reconciliation isn't unique to Canada. Reconciliation through trails is occurring is Australia and in the United States. https://myallcreektoreconciliation.weebly.com

Trail Sovereignty

The term "Trail Sovereignty" has been coined as First Nation Communities begin the journey of reclamation of their traditional territories. As many trails are on Crown Land/Traditional Lands, consultation is required and the Crown (represented by MNRF) has a duty to consult prior to any decisions regarding lands is made. Trail sovereignty may lead to many unique trail partnerships especially in Northern Ontario where there are vast tracts of Traditional Territory and a greater number of First Nation Communities. Trails allow First Nations to assert jurisdiction in their traditional territory through partnerships that foster reconciliation and promote environmental stewardship, economic development and employment opportunities.

Recommendations & Implementation

The following is the list of recommendations for implementation of the trail Development Plan. There are many moving parts with trail development but many can be actioned simultaneously. Securing funds for the different elements will the biggest influencer of the project schedule. Luckily, there is quite a few different funding portfolios available which are applicable to all the aspects of this plan.

#1 - Trail Building

All the trail segments have been graded by investment ready or shovel ready. Shovel ready projects are ready for a funding application to support their completion.

Trail Segment	Priority
Amphitheatre Trail	
Stone Pitch Loop Refurbishment	1
Nature Trail New Entrance	1
Elevated Boardwalk	1
Nature Trail – New Extension	2
Suspension Bridge	2
Suspension Bridge Trail	2
Community Trail	
Wellness Accessible Trail	1
Recreation Centre Accessible Trail	1
Connector Hiking Trail	2
Pump Track Connector Trail	2
Pump Track	2
Wellness Trail Extension Boardwalk	3
Loop Extension Trail	3
Amphitheatre Connector Trail	3
County Road 13 Active Transportation Corridor Study	1

Application for funding should focus on priority 1 projects to start. Depending on successful funding securement, construction of these projects could start in 2022.

Trail Design Standards

The Parks Canada and International Mountain Bike Association (IMBA) trail design standards are the most commonly recognized standards. We recommend that all Saugeen's trails be built to Parks Canada's standard classification system. More details of the Classification System can be found in APPENDIX G

Maintenance Standards

Saugeen's trails should be maintained to the Ontario Trail Council's Maintenance classification APPENDIX H. The trail will be built and maintained for hiking. If other trail users are accessing the trail, should actively work with them to educate users to access trails where their activity is an allowable use. Maintenance records will be completed and kept on file.

#2 - First Nation Trail Guardians

The establishment of a Trail Guardian Program will provide ongoing employment opportunities. Duties would include trail development, trail maintenance and could include trail programing around stories, and other interpretation aspects. Could be tied into the Amphitheatre as well as part of the larger Tourism Team.

Trail Building Training Program - Mechanized Trail Build-Training Plan

OBJECTIVES	ACTIVITIES/ACTION	DURATION	LEAD	EVALUATION
1. Introduction into sustainable trail development Classroom theory	Trail Design, The 5 Rules, Hand vs. Mechanized, Armoring, Natural vs. Soft vs. Hard Surface, Trail Maintenance	1 day	Ontario Parks Association	Practical Trail Design
2.Trail Design	Practical onsite exercise identifying the challenges, providing solutions, pin flagging a final alignment and recommending a build plan	1 day	Ontario Parks Association	Successful pin flag design and assessment of proper trail design control points Successfully Complete Trails Specialist Workshop for 4 Trainees.
3.Wellness Accessible Trail - 500 Meter Trail Construction	a. Trail Design b. Widening corridor, removing detritus, assessing hazards and creating a rough trail tread. b. Roughing in trail with the use of Mini excavator. Trainees will get some operation time on machines Laying Granular material Hand finishing surface	30 Days	WDC	Successful completion of accessible trail. Training in mechanized equipment. Trail maintenance training
5. Accessible Bridge/Boardwalk Construction		8 days	WDC	Carpentry skills in accessible

	a. Construct accessible Bridge and boardwalks as required			bridge/boardwalk construction

#3 - Product Development and Marketing

There is so much potential for product development with this project. The Amphitheatre is already a destination. Completion of this project tied in with trail development will allow more people to visit and have a transformative cultural experience. It's important as Saugeen begins to develop their cultural tourism products that alignment with the Indigenous Tourism Association of Canada's Market-readiness guidelines is carried out. The development of packages and itineraries for the travel trade for Free Independent Travellers and Group Travel is one of the mechanisms to capture trail tourism. A sample of the tourism packages that Wikwemikong Tourism has developed for attraction can be found in APPENDIX I.

Working with Indigenous Tourism Ontario (ITO) would help bring profile to Saugeen First Nation, the trails and the Amphitheatre. ITO's newly developed website will "become the first stop for travellers when searching for Indigenous tourism experiences in Ontario. This website provides an inventory of recognized Indigenous tourism operators throughout the province and features best practices for Indigenous cultural experiences. [6] ITO also provides marketing support for Indigenous led programming and products. There is a chance to package this product for various distribution networks including travel trade, motor coach and school groups. Having school groups visit the trails, starting with Saugeen Students is a great way to start knowledge transfer with youth. Providing educational opportunities for schools from the surrounding communities is part of reconciliation. APPENDIX F

Trails Tourism Strategy: Trail Tourism is becoming one of the leading sources of tourism spending in North America. Many trail organizations, destination marketing organizations and provincial governments have begun to understand that the trail economy has the potential to help communities and regions bounce back after significant losses as a result of the pandemic. In order to for Saugeen First Nation to benefit from the trail economy, the development of a Trail Tourism Strategy with the focus on creating a trail culture in the community and surrounding communities is a crucial first step. The purpose of the strategy will be to create a bicycle friendly program that not only works with the businesses in the region to meet the needs of the trail users, but also encourages collaboration and partnership opportunities that will not only benefit tourists but also the residents of the region. The strategy will provide Saugeen First Nations with the tools needed in order to work directly with accommodations, food & beverage operator and tourism related businesses, along with working with the local economic development agency and community services such as the library, recreation centres etc. A training program will be developed so that this program becomes sustainable and allows for a strong foundation to be developed. The Trail Tourism Strategy will take into consideration the work of Ontario-By-Bike and the Waterfront Regeneration Trust but ensuring that there is a strong communication loop with all key trail stakeholders. The development of the strategy will align with the Corridor Study and will help inform some of the decision making, to ensure that the trail is looked at through the lens of the trail user by using a destination trail assessment tool. The third component of the tourism Strategy will be to develop the content for Saugeen's website and other social media

[6] https://indigenoustourismontario.ca

platforms. This will allow immediate representation on these platforms for the trail destinations and the tie in with the Amphitheatre.

Further support from Regional Tourism Organization 7 will assist in building brand awareness as a premier Tourism Product. RTO7 has a gateway signage program that would provide directional signage on a cost sharing model as part of tourism development.

Interpretive Information

Interpretation of the trail will be the most important aspect of the project beyond construction. Sharing of history and stories is a large part of reconciliation and trails are the perfect venue to share. The focus will be on education of traditional medicines, indigenous history and stories, Species at Risk and language. The trails will be the venue to deliver the interpretation and make the cultural connections.

Indigenous History and Stories

We recommend that a Working Group be formed that comprised of First Nation Elders, community leaders, youth and community members research and designed the trail interpretive signage. They would also develop other story-telling and interpretive opportunities through guest speakers to share stories and deliver presentations to visitors at the Amphitheatre and guided hikes along the trails.

Traditional Medicines

There are a few examples of Medicine Walks along trails in Ontario. Wikwemikong Tourism and Point Grondine Park have developed an Anishnaabek Interpretive Trail with signage by local knowledge carriers, academics and language speakers. The trails complement existing products and packages for their cultural tourism experiences. This trail will complement existing products and packages for their cultural tourism experiences. Dokis First Nation developed a Medicine Walk Trail called the Chaudière Falls Trail after a windstorm toppled a large white pine tree and exposed a canoe shaped fissure in the rock which contained a medicine bundle. This guided hike experience allows trail users to visit the community and learn about the history, traditional plant uses, ceremony and stories.

We understand that Mr Pitawanakwat has visited the Amphitheatre area to discuss creating a medicine walk. We recommend that this be a high priority for Saugeen First Nation given the high interpretative value of having a medicine walk for the community members as well as visitors.

A good example of Mr Pitawanakwat work can be found at The Royal Botanical Gardens in Hamilton where he developed the Enji naagdowing Anishinaabe waadiziwin Trail which focuses on the story of Anishinaabe plant connections. https://www.rbg.ca/indigenoustrail APPENDIX I

Language

When Parks Canada at Pacific Rim National Park Reserve created the signage and exhibit messaging for the Kwisitis Visitor Centre, it was written in the local language first then translated to English then French. This provided the cadence of the local language to shape the narrative.
We recommend that all signage and trail pamphlets be tri-lingual (Anishnaabemowin, English and French). Anishnaabemowin words and phrases will be a large part of the interpretive opportunities for the Trail Guardians and other guests to share with trail visitors.

RTO7 has funding for French Translation Services. Ojibway translation services can be sourced through Wikwemikong Heritage Organization.

Mechanisms for Interpretation

There are many different mechanisms for delivering interpretative information. We recommend both digital as well as in-person methods. Digital interpretation through an app and Bluetooth beacon technology allows for interpretation services to continue outside of the operating season or afterhours. In-person interpretation is the preferred method as it creates personal relations and allows for greater interaction.

Bluetooth Beacons

Bluetooth Beacons are a non-intrusive method for interpretation. Bluetooth beacons are hardware transmitters - a class of Bluetooth low energy devices that broadcast their identifier to nearby portable electronic devices. The technology enables smartphones, tablets and other devices to perform actions when in close proximity to a beacon. An app needs to be developed that will use the beacons the method to deliver the information to the trail user rather than placement of interpretive signage. The beacons themselves are very affordable and have a long battery life of 18 or so months and have a temperature range for battery life from -40C to +40C. The information on the beacons is easily changeable. Beacons cost $50-$60 each and can also be used for tracking numbers of trail users who connect to them.

Interpretation Tours

Staff or students from Saugeen First Nation can be trained as Heritage Interpreters to offer Authentic Indigenous Experiences. Partnerships with the Ontario Tourism Education Council could assist in offering accredited Tourism Training. Groups and or Free Independent Travellers would be able to book a tour (different lengths or packages will be available) that could be packaged with partners such as local accommodation facilities and restaurants.

Indigenous Tourism Product Development and Packaging

The Indigenous Tourism Associations of Canada's five-year strategic plan has set important goals for Canada's Indigenous tourism industry to increase revenues, grow jobs and expand the number of successful businesses. This Trail Plan is aligned with the Development Pillar of the national strategy that will focus on developing quality experiences, training, education and quality assurance. Further ITAC has developed National Cultural Authenticity Guidelines to assist in developing authentic experiences, but it is equally important that Saugeen develop their own cultural protocols reflective of their Nation. Through provincial partnerships with the Indigenous Tourism Association of Ontario the First Nation partners can develop quality market ready product that will compliment the trails at Saugeen First Nation.

Wikwemikong Tourism has been packaging trails and other indigenous experiences on Manitoulin Island as well as at Point Grondine. They have a number of nature based cultural tourism experiences that are market ready and can assist the partners in developing product and packaging. APPENDIX I. The detailed framework for the packaging including the lessons and experience from Wikwemikong Tourism is a deliverable in the proposed Trail Tourism Strategy.

#4 – County Road 13 Active Transportation Corridor Study

French Bay and Charles Street Economic Hub is proposed as part of the Sauble Park Plan. The Economic Hub will include a Multi-use Visitors Centre, yurt camping, play areas including playground and skate park, a Market area, a specialty food grocery store with cafeteria and coffee shop. More exploration of potential trails or trail corridors needs to be completed to connect this area to Sauble Beach and investigation is included in the scope of work of the County 13 Corridor Strategy as well as the Cameron Drive connection from the Community to County Road 13.

Connections to Other Provincial Initiatives

Saugeen would benefit from developing the connections with other provincial initiatives like the Great Lakes Waterfront Trail and Ontario By Bike. Both organizations may potentially have funding but also other resources to assist with implementation and promotion of all product development.

Great Lakes Waterfront Trail

The Great Lakes Waterfront Trail is a signed 3600km route connecting 155 communities and First Nations along the Canadian shores of the Great Lakes region. It is a signature project of the Waterfront Regeneration Trust, a charity committed to protecting, connecting and celebrating the world's largest body of freshwater. The local route of this trail is from Southampton mainly on rural and residential roads, the Trail in Saugeen Shores also includes a lovely off-road forest trail between Gobles Grove and Port Elgin, the remarkable North Shore Trail, a 6km asphalt bi-directional multi-use trail connecting Port Elgin and Southampton right at the water's edge. [7]The route utilizes the bridge on County Road 21 to cross the Saugeen River then heads west on secondary roads before connecting back to County Road 13 near Cameron Drive. The route then heads north to Sauble Beach.

Ontario By Bike

Ontario By Bike develops and promotes cycling tourism in Ontario. The established a business network is a program certifying and promoting bicycle friendly businesses and cycle tourism in a growing number of regions across Ontario. The Network is open to accommodations, food services, attractions, cycling related businesses and organizations interested in cycle tourism. There are currently over 1,500 businesses certified as bicycle friendly, in regions spanning Ontario. [8] Saugeen has a map listing on the Ontario By Bike website that identifies a cycling loop through the territory. Saugeen-Shores-Nation-29.png (1033×1022) (ontariobybike.ca)

[7] The Trail | Great Lakes Waterfront Trail
[8] About the Network - Ontario By Bike

Trail Building Budget

Amphitheatre Trail			
Stone Pitch Loop Refurbishment		Consulting/Designing Services	$4,000.00
		Excavating/Building Services	$30,000.00
		Stonework Services	$150,000.00
		Stone and Aggregate Materials	$18,000.00
		Misc Materials	$3,000.00
		Total	**$205,000.00**
Nature Trail Rebuild		Consulting/Designing Services	$3,000.00
	#1 OR	Drystone Bridge	TBD
		Traditional Bridge	$7,000.00
	#2	Drystone Steps	$2,700.00
	#3	Drystone Steps	$11,000.00
	#4 OR	Drystone Bench Cut	$5,500.00
		Traditional Boardwalk	$2,500.00
	#5	Drystone Steps	$6,100.00
	#6 OR	Drystone Bridge	TBD
		Traditional Bridge	$3,400.00
	#7	Drystone Steps	$6,300.00
	#8 OR	Drystone Benchcut	$10,500.00
		Traditional Boardwalk	$4,800.00
	#9	Drystone Bridge	TBD
		Traditional Bridge	$5,500.00
		Trail Tread Resurfacing	$31,750.00
		Total	**$84,050.00+**
Nature Trail – New Entrance		Consulting/Designing Services	$500.00
		Excavating/Building Services	$10,000.00
		Stonework Services	$1,500.00
		Stone and Aggregate Materials	$1,500.00
		Total	**$13,500.00**
Nature Trail – New Extension		Consulting/Designing Services	$1,000.00
		Excavating/Building Services	$10,000.00
		Total	**$11,000.00**
Elevated Board Walk		Consulting/Designing Services	$2,000.00
		Excavating/Building Services	$22,500.00
		Materials	$53,670.00
		Total	**$78,170.00**
Suspension Bridge		Price if desired	TBD
Suspension Bridge Trail		Consulting/Designing Services	$1,000.00
		Excavating/Building Services	$10,000.00
		Total	**$11,000.00**
Community Health and Wellness Trail			
Wellness Accessible Trail		Consulting/Designing Services	$2,000.00
		Excavating/Building Services	$33,600.00
		Bridge Materials	$3,000.00

	Stone and Aggregate Materials	$9,000.00
	Misc Materials	$1,000.00
	Total	**$48,600.00**
Recreation Centre Accessible Trail	Consulting/Designing Services	$1,000.00
	Excavating/Building Services	$23,000.00
	Stone and Aggregate Materials	$10,000.00
	Misc Materials	$1,000.00
	Total	**$35,000.00**
Connector Hiking Trail	Consulting/Designing Services	$2,000.00
	Excavating/Building Services	$12,600.00
	Total	**$14,600.00**
Pump Track Connector Trail	Consulting/Designing Services	$1,000.00
	Excavating/Building Services	$7,000.00-$10,000.00
	Aggregate Materials (if required)	$2,400.00
	Total	**$10,400.00**
Pump Track	Consulting/Designing Services	$3,000.00
	Total	**$3,000.00**
Wellness Trail Extension Boardwalk	Consulting/Designing Services	$4,000.00
	Excavating/Building Services	$40,000.00
	Materials	$100,000.00
	Total	**$144,000.00**
Wellness Trail Extension	Consulting/Designing Services	$1,000.00
	Excavating/Building Services	$35,000.00
	Aggregate Materials	$10,000.00
	Misc Materials	$1,000.00
	Total	**$47,000.00**
Loop Extension Trail	Consulting/Designing Services	$2,000.00
	Total	**$2,000.00**
Amphitheatre Connector Trail		TBD
County Road 13 Active Transportation Corridor		
County Road 13 Active Transportation Corridor	Detailed Corridor Assessment	$50,000.00
	Tourism Strategy	$30,000.00
	Total	**$80,000.00**
Signage Program	Trailhead Signage	$7,000.00
	Wayfinding Signage	$5,000.00
	Roadway Directional Signage	$10,000.00
	Interpretive Signage	$20,000.00
	Total	**$42,000.00**
	Grand Total	**$829,320.00+**

Other Services		
Grant Writing	Cost depends on which grant is being applied for and how much information Saugeen provides	$1000.00-$2000.00/per grant
Joseph Pitawanakwat	Customized Medicine Trail Interpretive Design	$800.00/day

Potential Funding Sources

There are a few funding sources for trail development through both Provincial and Federal Governments as well as arm's length or other Foundations.

Government of Canada Grants

The Canada Community Revitalization Fund (CCRF) aims to help communities across Canada build and improve community infrastructure projects so they can rebound from the effects of the COVID-19 pandemic. With a national investment of $500 million over two years, the fund's purpose is to support not-for-profit organizations, municipalities and other community groups, as well as Indigenous communities:

- build new community infrastructure and revitalize existing assets
- bring people back to public spaces safely as health measures ease
- create jobs and stimulate local economies

The fund is being delivered by Canada's regional development agencies. Indigenous applicants are invited to apply through the process described below for projects of all types and sizes. Under the fund, RDAs can contribute up to 100% funding for projects with Indigenous groups. Canada Community Revitalization Fund - Innovation, Science and Economic Development Canada

Active Transportation Fund

Planning and Design Projects (Grant Program)

Planning and design projects refer to the development or enhancement of formal active transportation strategic planning documents or stakeholder engagement. This could entail the development of an Active Transportation Strategy, that could support the National Active Transportation Strategy, or the development of an active transportation component which can be added to other planning documents, such as Official Community Plans, Sustainability Plans, and Transportation Plans. Eligible projects include:

- Research, including case studies, data collection initiatives, mapping of walkability and bikeability, community audits/assessments;
- Public and/or stakeholder engagement and outreach, education programs;
- Policy development, including drafting objectives/actions for inclusion in community land use and/or transportation plans;
- Feasibility studies, business cases, and detailed costing estimates relating to the design of a project or program;
- Projects which support the implementation of Canada's national active transportation strategy, such as events raising awareness and encouraging adoption of active transportation.

Capital Projects (Contribution Program)

Capital projects refer to new infrastructure construction, enhancement of existing infrastructure, and fixed design and safety features that encourage increased active transportation. Eligible capital projects include:

- Building or enhancing infrastructure for active transportation, such as multi-use paths, sidewalks, footbridges, separated bicycle lanes, and connections to other roadways (this could include nature trails and other infrastructure which could support recreation, so long as this infrastructure can be demonstrated to reflect evaluation criteria);
- Enhancing active transportation infrastructure, including design considerations in which there may be no net gain in kilometers of infrastructure, but quality improvements that support greater usage;
- Building or enhancing design features and facilities which promote active transportation, such as storage facilities, lighting, greenery, shade, and benches;
- Building or enhancing safety features which promote active transportation, such as crosswalks, medians, speed bumps, and wayfinding signage.

Infrastructure Canada - Active Transportation Fund - Applicant Guide

Ontario Government Grants

Ontario Trillium Foundation - Would build an application around funds for trail development including signage and program funding to collect and interpret the stories of the community tied into Truth and Reconciliation. There are a few different streams to apply for. Recommend having a discussion with OTF to determine best fit.

Capital Grant to improve the infrastructure communities need to thrive. Capital grants support projects that provide people with suitable, accessible, and well-equipped buildings and spaces.
We support Capital grant projects that:

- Improve access to community spaces, programs, activities and services, and facilitate community members' full participation in the life of the community
- Improve and build community spaces
- Make programs better and more efficient
- Make better use of technology

Next In Take – August 3rd, 2022 Funding up to $150,000.00

Rural Economic Development (RED) – administered through the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). RED will fund projects up to 80% if a solid business case can be made but usually, they will fund projects at the 50% level. They have supported planning, signage, trail development etc. Guidelines can be found here https://www.ontario.ca/page/rural-economic-development-program-guidelines

Regional Tourism Organization 7 through their Partners Funding and Tourism Development Fund, RTO7 has funding for signage and translation services (English to French).

Indigenous Economic Development Fund (IEDF) through the Ontario Government provides grants and financing to Indigenous entrepreneurs, businesses, communities and organizations. The fund helps promote economic development and improve employment opportunities for Indigenous people.

The fund supports projects that:

- diversify Indigenous economies
- increase access to employment and training opportunities
- provide start-up and expansion financing for small and medium-sized businesses
- support financing, skills training and other economic development initiatives through collaboration between Indigenous communities and the private sector

The IEDF provides grants and financing through three funding streams:

- Economic Diversification Grant
- Business and Community Fund
- Regional Partnership Grant

Funding for Indigenous economic development | ontario.ca

Training Subsidies could also be also leveraged through local Employment and Training mechanisms. The Amphitheatre project has been very successful with these types of programs for employment and training.

Private Business and Foundation Grants

Bruce Power Generation - Indigenous Initiatives - Programs that support community, training, youth development, cultural, recreational and educational initiatives, and the health and wellness of Indigenous people. SPONSORIUM - Proposal Request Form

Waterfront Regeneration Trust

They have contributed to other feasibility studies, corridor studies in other parts of Ontario. We recommend a request to them be made for the County Road 13 Corridor Study as it is also their goal to have dedicated trail over road corridors.

Project Schedule

The project schedule depends on the funding available. Shovel ready projects could theoretically start Summer 2022 if funds are available.

APPENDICES

APPENDIX A – MAP OF PROPOSED TRAILS AT SAUGEEN FIRST NATION

APPENDIX B – SAMPLE TRAIL MAINTENANCE & INSPECTION FORM

TRAIL MAINTENANCE & INSPECTION FORM

Inspector: _____Date: _____

Trail Location From:
_____To_____

1. Trail surface in good repair?	Y	N
2. Signs in good repair and visible?	Y	N
3. Is the area clean and free of debris?	Y	N
4. Culverts and/or drainage operational?	Y	N
5. Trail free of obstructive trees and overhanging branches?	Y	N
6. Evidence of prohibited use?	Y	N
7. Barriers in place?	Y	N
8. Are you aware of any recent complaints?	Y	N

ACTION REQUIRED ACTION COMPLETED DATE/SIGNATURE

APPENDIX C – TRAIL MAINTENANCE SCHEDULE AND BUDGET FOR SAUGEEN'S TRAILS

Saugeen First Nation- Trail Maintenance Chart

Amphitheatre Section (Targeted User- Walking and Hiking)

Trail	**Proposed Ontario Trails Council Risk Management Classification**	**Proposed Difficulty Rating and Symbol**	**Length**	**Tread Surface**	**Tread Width**	**Corridor Width**	**Expected Maintenance Effort**	**Estimated Inspection and Seasonal Maintenance Costs** (vegetation removal, seasonal corridor clearing, leaf blowing, hazard removal, minor tread touchups)	**Estimated Annual Low Level Tread Maintenance Costs** (if minor tread repairs and/or minor user tread degradation is needed)	**Estimated Moderate to High Level Maintenance and Repairs Based on Frequency and/or Lifespan (**(If required due to user degradation, natural degradation, catastrophic weather events and/or vandalism)
Stone Pitch Loop Refurbishment	Type 2 Accessible	 Easy Beginner Green Circle	300 Metres	Firm and Stable Natural flagstone, stone pitching and/or pavers Aggregate and/or Mineral Soil as binder/filler and to connect sections	Trail- 1.5 m (5ft) or more Structures- 1.2 m (48") or more	0.5m (1-2 ft) either side	Seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor	$300-$1000/year	$0-$1000/year	$60/metre

Nature Trail Rebuild- Drystone or Aggregate Surface	Type 2	 Easy Beginner Green Circle	400 Metres	Firm and Stable Aggregate and/or Drystone Stone Pitching	Trail- 1 metre (39") or more Structures- 1.2 metres (48") or more	0.3 m (12") either side when possible	Seasonal as needed; commensurate with volume of use; seasonal maintenance of tread surface and corridor	$300-$550/year	$0-$1000/year	$25-$30/metre
Nature Trail- New Entrance	Type 2	 Easy Beginner Green Circle	50 Metres	Firm and Stable Aggregate and/or Drystone Stone Pitching	Trail- 1 metre (39") or more	0.3 m (12") either side when possible	Seasonal as needed; commensurate with volume of use; seasonal maintenance of tread surface and corridor as needed	$100-$300/year	$0-$500/year	$25-$30/metre
Elevated Boardwalk	Type 2	 Easy Beginner Green Circle	100 Metres	Wood, aluminum, steel or composite tread	Single width- 1.2 m (4 ft) or more with 2 turn-arounds/viewing areas **OR** Double Width- 2.4 m (8 ft)	0.5m (1-2 ft) either side	Seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor as needed	$550/year	$0-$500/year	$60-$500/metre
Nature Trail- New Extension	Type 3	 More Difficult Intermediate Blue Square	175 Metres	Mineral Soil Mostly Stable with some variability dependent on conditions	Trail- 0.6 m (24") or more	0.3 m (12") either side when possible	Seasonal as needed; commensurate with volume of use; minimal to no maintenance of tread surface and corridor unless needed	$200/year	$0-$300/year	$15-$20/metre
Suspension Bridge	Type 3	 More Difficult Intermediate Blue Square	30 Metres	Rope Wood, aluminum, steel or composite treads	Targeted width- 0.6 m (24")	N/A	Annual inspections and routine maintenance to prevent degradation	$550/year	$0-$300/year	$200-$500/metre
Suspension Bridge Trail	Type 3	 More Difficult Intermediate	99 Metres (East) 50 Metres (West)	Mineral Soil Mostly Stable with some variability dependent	Trail- 0.6 m (24")	0.3 m (12") either side when possible	Seasonal as needed; commensurate with volume of use; minimal to no maintenance of tread surface	$200/year	$0-$300/year	$15-$20/metre

		Blue Square		on conditions			and corridor unless needed			
Community Section (Targeted User- Walking and Hiking)										
Trail	**Proposed Ontario Trails Council Risk Management Classification**	**Proposed Difficulty Rating and Symbol**	**Length**	**Tread Surface**	**Tread Width**	**Corridor Width**	**Expected Maintenance Effort**	**Estimated Inspection and Seasonal Maintenance Costs** (vegetation removal, seasonal corridor clearing, leaf blowing, hazard removal, minor tread touchups)	**Estimated Annual Low Level Tread Maintenance Costs** (if minor tread repairs and/or minor user tread degradation is needed)	**Estimated Moderate to High Level Maintenance and Repairs Based on Frequency and/or Lifespan (**(If required due to user degradation, natural degradation, catastrophic weather events and/or vandalism)
Wellness Accessible Trail	Type 1 Accessible	 Easiest Accessible (White Circle)	500 Metres	Firm and Stable Crushed Aggregate	Trail- 2 m (78") or more Structures- 1 m (39") or more (to prevent motorized users from crossing the bridges)	0.5m (1-2 ft) either side	Monthly inspection preferred-seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor	$300-$1000/year	$0-$1000/year	$50-$80/metre
Recreation Centre Accessible Trail	Type 1 Accessible	 Easiest Accessible (White Circle)	650 Metres	Firm and Stable Crushed Aggregate	Trail- 2 m (78") or more Structures- 2 m (78") or more	0.5m (1-2 ft) either side	Monthly inspection preferred-seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor	$300-$1000/year	$0-$1000/year	$40-50/metre
Connector Hiking Trail	Type 3	 Easy	600 Metres	Mineral Soil Mostly Stable with some variability	Trail- 0.6 m (24") or more	0.3 m (12") either side when possible	Seasonal at minimum; commensurate with volume of use; seasonal maintenance of	$300-$550/year	$0-$550/year	$20-$30/metre

		Beginner (Green Circle)					tread surface and corridor as needed			
Pump Track Connector Trail	Type 2	 Easy Beginner (Green Circle)	150 Metres	Mineral Soil Firm and Stable	Trail- 1 metre (39") or more Structures- 1 metre (39)" or more	0.3 m (12") either side when possible	Seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor as needed	$100/year	$0-$550/year	$30-$40/metre
Pump Track Refurbishment	N/A	 More Difficult Intermediate Blue Square	Approx. 200 Metres	Mineral Soil Mostly Stable with some variability	Trail- 24" or more Structures- 36" or more	0.3 m (12") either side when possible	Monthly inspection preferred- seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor	$300-$550/year	$0-$550/year	$10-$30/metre
Loop Extension Trail	Type 3	 Easy Beginner (Green Circle)	700 Metres	Mineral Soil and crushed aggregate in low areas Widely Variable	Trail- 0.6 m (24") or more	0.3 m (12") either side when possible	Seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor as needed	$300-$550/year	$0-$1000/year	$15-$20/metre
Wellness Trail Extension	Type 2 Accessible	 Easy Beginner Green Circle	800 Metres	Firm and Stable Crushed aggregate	Trail- 1.5 m (60") or more Structures- 1.2 m (48") or more	0.5m (1-2 ft) either side	Seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor	$300-$1000/year	$0-$1000/year	$30-50/metre

Wellness Trail Boardwalk	Type 2 Accessible	 Easy Beginner Green Circle	200 Metres	Wood, aluminum, steel or composite treads	Single width- 1.2 m (4 ft) or more with 2 turnarounds/viewing areas	0.5m (1-2 ft) either side	Seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor as needed	$550/year	$0-$500/year	$60-$300/metre
Amphitheatre Connector Trail	Type 3	 Easy Beginner Green Circle	600 Metres	Mineral Soil and/or crushed aggregate Mostly Stable with some variability	Trail- 0.6 m (24") or more	0.3 m (12") either side when possible	Seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor as needed	$300-$550/year	$0-$1000/year	$15-$50/metre
County Road 13 Section (Targeted User- Walking, Hiking and Cycling)										
Trail	**Proposed Ontario Trails Council Risk Management Classification**	**Proposed Difficulty Rating and Symbol**	**Length**	**Tread Surface**	**Tread Width**	**Corridor Width**	**Expected Maintenance Effort**	**Estimated Inspection and Seasonal Maintenance Costs** (vegetation removal, seasonal corridor clearing, leaf blowing, hazard removal, minor tread touchups)	**Estimated Annual Low Level Tread Maintenance Costs** (if minor tread repairs and/or minor user tread degradation is needed)	**Estimated Moderate to High Level Maintenance and Repairs Based on Frequency and/or Lifespan (**(If required due to user degradation, natural degradation, catastrophic weather events and/or vandalism)
Active Transportation Route	Type 1 Accessible	 Easiest Accessible (White Circle)	13 KM	Firm and Stable Crushed Aggregate or Hardened Asphalt	Trail- 2-3 metres Structures- 2-3 metres	1m either side	Monthly inspection preferred- seasonal at minimum; commensurate with volume of use; seasonal maintenance of tread surface and corridor	$3000-$7000	$1000-$7000	$120-$350/metre

APPENDIX D - TRAIL DIFFICULTY RATING

TRAIL DIFFICULTY RATINGS

TRAIL SIGN ICONS	 Easiest White Circle	 Easy Beginner Green Circle	 More Difficult Intermediate Blue Square	 Very Difficult Advanced Black Diamond	 Extremely Difficult Expert Double Black Diamond	 Extremely Dangerous Professional Double Orange Diamond
BASIC DESCRIPTION	Fairly flat, wide, possibly paved but can be a hardened surface. Suitable for users of all skill levels.	May have gentle climbs and avoidable or optional obstacles such as rocks, roots, and small drops. Trail is relatively wide.	Steeper slopes and some unavoidable obstacles such as roots, rocks, and medium drops. Trail is beginning to narrow.	Increasingly steeper slopes on a much narrower trail. Trail surface may be loose and have many difficult obstacles such as roots, rock gardens, larger drops, jumps, and sharp corners.	Very steep and technical, requiring highly advanced skills and balance to clear obstacles safely.	Very dangerous conditions requiring very highly advanced skills, balance, and bike control to traverse safely. Not recommend for most riders—even seasoned mountain bikers.
TRAIL WIDTH	72" or wider	36" or wider	24" or wider	12" or wider	6" or wider	3" or wider
TRAIL SURFACE	Hardened or paved	Firm and stable	Mostly stable with some variability	Widely variable	Widely variable and unpredictable	Extremely variable and unpredictable
TRAIL GRADE	Average: Less than 5% Max: 10%	Average: 5% or less Max: 15%	Average: 10% or less Max: 15% or greater	Average: 15% or less Max: 15% or greater	Average: 20% or more Max: 15% or greater	Average: 20% or more Max: 20% or greater
TECHNICAL TRAIL FEATURES (TTFs)	None	Avoidable obstacles may be present Some unavoidable obstacles 2" tall or less Unavoidable bridges 36" or wider	Avoidable obstacles may be present Unavoidable obstacles 8" tall or less Unavoidable bridges 24" or wider TTFs 2" high or less, width of deck is greater than 1/2 the height	Avoidable obstacles may be present Unavoidable obstacles 15" tall or less Unavoidable bridges 24" or wider TTFs 4" high or less, width of deck is less than 1/2 the height May include loose rock Short sections may exceed above criteria	Avoidable obstacles may be present Unavoidable obstacles 15" tall or greater Unavoidable bridges 24" or narrower TTFs 4" high or greater, width of deck is unpredictable May include loose rock Many sections may exceed above criteria	Avoidable obstacles may be present Unavoidable obstacles 20" tall or greater Unavoidable bridges 12" or narrower TTFs 8" high or greater, width of deck is highly unpredictable May include loose rock Most sections may exceed above criteria

APPENDIX E TRAIL COUNTERS

TRAFx
Count on us! ™

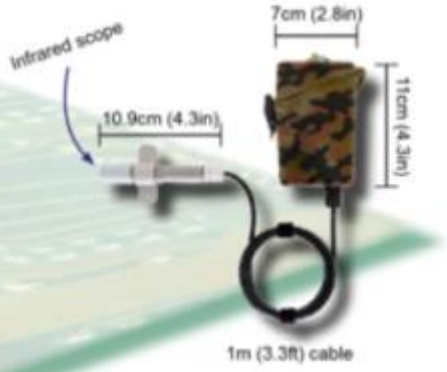
Page 1 of 2

INFRARED TRAIL COUNTER

Generation III

Key Features

- *Advanced Microelectronic Design*
- *Detects and Counts Trail Traffic*
- *High-Quality Infrared Scope*
- *Small and Easy to Hide — Reduces Vandalism Risk*
- *Quick to Install*
- *Long Battery Life (approx. 3 years)*
- *Large Memory Capacity (store > 400 million counts)*
- *Optional Locking Steel Box*
- *Field-Proven, Generation III Design (> 10 year history)*



Compact, Unobtrusive Design

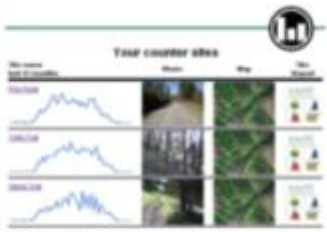
The TRAFx Infrared Trail Counter is designed to count general traffic on trails and paths — hikers, joggers, horseback riders, snowmobiles, cyclists, etc. Unlike other infrared trail counters, it does not require a receiving unit or reflector to operate. This results in a very compact, easy-to-hide design, that reduces risk of vandalism. Using a small, high-quality infrared scope mounted on a tree or post and pointed towards the trail, the TRAFx Infrared Trail Counter detects and counts the infrared signature associated with people.

Easy Installation

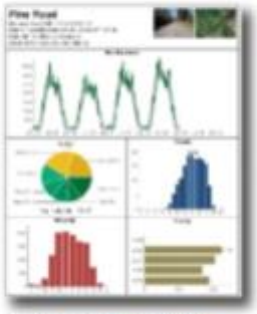
A camouflage "skin" superbly hides the unit and blends it in with the forest environment. In busy, open areas (e.g., urban areas), a low-cost locking steel box can be used. The TRAFx Infrared Trail Counter also works well in winter conditions on hiking, ski, snowshoe, or snowmobile trails. It is quick and easy to install, and uses three small "AA size" alkaline batteries.

Connect the counter to a PC with the TRAFx Dock to configure it.

Or, use the Dock as a stand-alone "shuttle" to download data in the field.



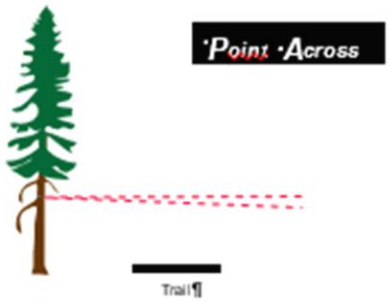
Use TRAFx DataNet to view and manage your data and produce professional reports in seconds.

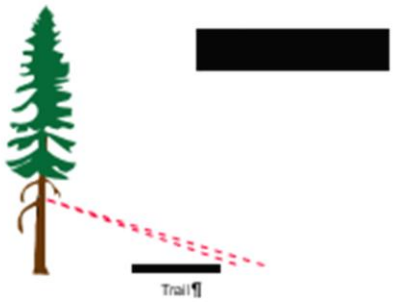


Try the free Demo at www.trafx.net

Installation·Options → Page·1·of·1 → INFRARED·TRAIL·COUNTER¶

Generation·III¶





features¶

- Hourly or daily totals, or timestamps¶
  - → -14 000 hourly or daily totals => 400 million counts¶
  - → -14 000 timestamps ¶
- Flexible installation options (see above). User programmable modes/settings → Programmable settings include:¶
  - → → *Real-time clock → *Start date/time¶
  - → *Delay after event → *Site/counter name¶
- Three colour-coded LEDs indicate status of operation¶
  - green light flashes upon detection¶
- Digital readout of battery voltage level (e.g., 4.2V)¶
- Automatic low battery warning¶
- User replaceable parts¶

In busy or open areas, use a locking box. We supply detailed instructions how to turn a low-cost electrical box into a locking box for the TRAFx counter.¶
CASE: 11cm x 7cm x 3cm (4.3in x 2.8in x 1.2in); weatherproof¶
TOTAL WEIGHT: 170g (6oz) (without batteries) ¶
CABLE: 1m (3.3ft)¶

specifications¶

POWER: Three "AA size" alkaline batteries (e.g., Energizer)¶
BATTERY LIFE: Approx. 3 years¶
DIGITAL MEMORY DESIGN: Data and settings are retained even ¶
when batteries are removed or die¶
TIME KEEPING: Quartz clock; 20ppm accuracy¶
OPERATING TEMPERATURE: -40C (-40F) to +50C (122F)¶
SENSOR TYPE: Thermal infrared microsensor¶
DETECTION RANGE: 6m (20ft) ¶
COMMUNICATIONS: RS232 serial; 115,000 baud¶
DATA TYPE: ASCII; .TXT file type¶
OTHER: Gold-plated PCB; silicon conformal protected electronics; electrostatic discharge protection; short circuit protection; RoHS (leadfree)¶
WARRANTY: One year parts and labour. Learn more about the warranty at www.trafx.net/legal¶
EMI COMPLIANCE: FCC, IC, CE¶

accessories/options¶

- LCD tally display¶
- Extended 5-year warranty → ¶

TRAFx Research Ltd.¶
6A Bowness Road, Calgary, Alberta, Canada T1W 1J2¶
T: (403) 678-1502 F: (403) 451-1561¶
E: info@trafx.net www.trafx.net¶

January 2014¶

APPENDIX F - SCHOOL BOARD ITINERARY FOR WIKWEMIKONG UNCEDED INDIAN RESERVE PROGRAMMING

Our story.
Through our lens.

Day 1 Itinerary:

8:00am	Depart Toronto (about 6 hour straight drive to Manitoulin Island)
10:15am-10:35am	Rest stop Parry Sound (2hrs 15mins from Toronto)
12:15pm	Arrive in Sudbury, ON (1hr 40 mins from Parry Sound)
12:15pm-1:15pm	Lunch in Sudbury (coordinated by school contact)
1:15pm-3:15pm	Travel to Manitoulin Hotel & Conference Centre
3:15pm-4:15pm	Arrive at Hotel Check-in/settle in, break
4:30pm-5:00pm	Welcoming remarks, opening prayer, and introductions with Wikwemikong Tourism
5:00pm-6:00pm	Dinner at hotel (coordinated by school contact)
6:00pm-8:00pm	"Welcome to Odawa Mnis" Interactive Community Social at hotel Includes MC, drum group, dance demonstrations (dancers in full regalia), and catered appetizers partway through evening
9:00pm	Sharing circle/personal reflection/evaluations (Optional. Lead by school contact)
11:00pm	Lights out

Day 2 Itinerary:

7:00am	Wake
8:00am-8:50am	Breakfast at hotel (coordinated by school contact)
9:00am	Depart hotel
9:45am	Arrive at 1836 Treaty Historic Plaque Site, Wiikwemkoong Unceded Territory: met by Wikwemikong Tourism step-on guides
9:45am-11:45am	"The Unceded Journey": learn the true history of Odawa Mnis (Manitoulin Island) and Wiikwemkoong Unceded Territory—Canada's only officially recognized Unceded Territory. Includes stops at three historic sites including 1836 Treaty historic site, Holy Cross Mission Ruins (residential school site), Smith Bay trading site
12:00pm-12:45pm	Catered Lunch (included)
1:00pm-2:30pm	Archery: Hear about the traditional uses of bows and arrows and how they were made, then learn how to use a modern recurve bow including target practice using 3D archery targets (Nimkii Bineshii Kaaning, outdoor park)
2:30pm-2:45pm	Depart to Bebamikawe Memorial Trail
3:00pm-5:00pm	"Making Footprints" Guided Hike: An interpretive hike through the ecologically diverse Bebamikawe Memorial Trail while learning about medicinal plant teachings, historical encounters and battles, and our relationships with settlers (TBD based on trail conditions) ALTERNATE rain out activity: The Seven Grandfathers-Painting Experience: Listen to some of our oldest teachings and the lessons within as you create your very own piece of art
5:15pm-6:00pm	Depart Wiikwemkoong Unceded Territory. Travel to hotel
6:30pm	Dinner at hotel (coordinated by school contact)
7:00pm-9:00pm	Free evening
9:00pm	Sharing circle/personal reflection/evaluations (Optional. Lead by school contact)
11:00pm	Lights out

Day 3 Itinerary:

7:00am	Wake
8:00am-8:50am	Breakfast at hotel
8:45am	Wikwemikong Tourism step-on guides arrive at hotel
9:00am-9:30am	Depart hotel. Travel to M'Chigeeng First Nation
9:30am-10:10am	Lillian's Crafts: Gift shop & Museum
10:15am-11:45am	Ojibwe Cultural Foundation guided tour: Healing Lodge, Museum, Residential School Exhibit, and Gift shop (and/or optional: craft-making activity in their workshop room)
12:00pm-1:00pm	Lunch in M'Chigeeng (included)
1:00pm-1:20pm	Depart to Kagawong, ON
1:20pm-4:00pm	Bridal Veil Falls and walk nature trail—medicinal plant teachings along the trail (walk trail weather permitting) Kagawong History: Old Mill Heritage Centre, Kagawong Lighthouse, St. John the Evangelist Anglican Church Shop: Manitoulin Chocolate Works, Bare Naked Beauty, Boo-Bah-Lou Candy Cabin
4:00pm-4:45pm	Depart. Travel to hotel
5:00pm	Dinner at hotel (coordinated by school contact)
6:00pm-8:00pm	Medicine Pouch Making & Teachings
9:00pm	Sharing circle/journaling/personal reflection (Optional. Lead by school contact)
11:00pm	Lights out

Day 4 Itinerary:

7:00am	Wake
8:00am-9:00am	Breakfast at hotel (+ check out—hand in keys)
9:00am	Wikwemikong Tourism step-on guides arrive at hotel
9:00am	Board bus and pack luggage
9:15am-9:45am	Depart to Cup & Saucer Trail, Hwy 540 ALTERNATE activity (unsafe conditions on trail): Anishnaabek storytelling at hotel
9:45am	Arrive at Trail
9:55am-12:00pm	Guided Hike to Bluffs
12:00pm	Arrive back at bus. Hike concludes Brown bag lunch on bus by Manitoulin Hotel and Conference Centre (coordinated by school contact) Wikwemikong Tourism evaluations completed on bus
12:00pm-12:30pm	Depart to hotel Drop-off tour guides
12:30pm	Depart Manitoulin Island. Travel home to Toronto Rest stop(s) along way Dinner en route (coordinated by school contact) Safe travels home!

Sample Menu
Included meals —please advise of any dietary needs/restrictions/allergies

Day 1 Community Social	Mini Scone dogs: deep fried hot dogs wrapped in a bread dough Bison Sliders: bison sliders with carmelized onions	By Manitoulin Hotel and Conference Centre
Day 2 Lunch	Corn soup: pork based soup with hominy corn, potatoes, beans	By local community caterer
Day 3 Lunch	Moose meat balls, wild rice casserole, green salad, dessert, drinks	By local community caterer

Address information:
Wikwemikong Tourism http://wikwemikong.ca/
(705) 859-3477, 2102 Wikwemikong Way, Wikwemikong, ON P0P 2J0
Naomi Mishibinijima, Tourism Arts Development Officer: nmish@wikydevcom.ca, 705-282-7789 (personal cell)
Luke Wassegijig, Tourism Manager: lwassegijig@wikydevcom.ca

Manitoulin Hotel & Conference Centre, Little Current http://www.manitoulinhotel.com/
(705) 368-9966, 66 Meredith St E, Little Current, ON P0P 1K0
Corey Stacinski, General Manager: gm@manitoulinhotel.com

1836 Treaty Historic Plaque Site, Wiikwemkoong Unceded Territory
Two O'clock Lookout, Wikwemikong, ON P0P 2J0

Nimkii Bineshii Kaaning: Park Ave. @ Kaboni Rd., Wikwemikong, ON

Bebamikawe Memorial Trail "Making Footprints" Guided Hike, Wiikwemkoong Unceded Territory
Beach Rd, Wikwemikong, ON P0P 2J0
https://www.facebook.com/BebamikweMemorialTrail/

Lillian's Crafts http://lilliansindiancrafts.com/
(705) 377-4987, 5950, ON-540, M'Chigeeng, ON P0P 1G0
Lillian Debassige, Owner

Ojibwe Cultural Foundation https://ojibweculture.ca/
(705) 377-4902, 15, Old Highway 551 Rd, M'Chigeeng, ON P0P 1G0

Bridal Veil Falls http://www.gowaterfalling.com/waterfalls/bridalveilmanitoulin.shtml
Hwy 540 at Kagawong, ON P0P 1J0

Old Mill Heritage Centre http://www.kagawongmuseum.ca/
(705) 282-1442, 15 Old Mill Rd, Kagawong, ON P0P 1J0
Rick Nelson, Curator

St. John the Evangelist Anglican Church: Kagawong (next door to Old Mill Heritage Centre)

Manitoulin Chocolate Works http://manitoulinchocolate.ca/
160 Main St, Kagawong, ON P0P 1J0

Bare Naked Beauty https://www.facebook.com/bnbSusie/
62 Main St, Kagawong, ON P0P 1J0

Boo-Bah-Lou Candy Cabin https://www.facebook.com/BooBahLou/
67 Main St, Gore Bay, ON P0P 1H0, (705) 282-9999

Cup & Saucer Hiking Trail http://www.ontariotrails.on.ca/trails/view/cup-saucer-trail
4880 Hwy 540, North Eastern Manitoulin and the Islands

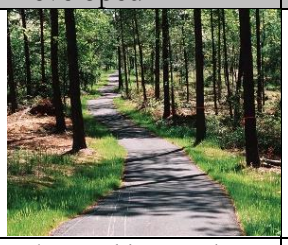
APPENDIX G– PARKS CANADA TRAIL DESIGN SPEFICATIONS

Trail Type Classification *(for Asset, Resource Conservation, and Visitor Experience Management)*

General Description and Technical Details

	Element / Trail Type	TYPE 1	TYPE 2	TYPE 3	TYPE 4
Trail Type Definition	**Definition**	• Paved or hard packed surfaced double track trail, all weather use, with no obstacles in surface. • Use compacted crushed rock, mineral soil, asphalt or chip-seal coat surface. • Minimum trail width of 1.5 metre. • Provide interpretive and directional signs, benches, and viewing areas where appropriate. • Machine- or hand-built and maintained.	• Natural surfaced packed single track trail or double track trail. • Use natural mineral soils or rock for surfacing, or native material from site. May be a paved surface • Minimum trail width of one metre. • Provide interpretive and directional signs, benches, viewing areas where appropriate. • Machine- or hand-built and maintained.	• Natural surface single track trail. • Trail tread may be constructed or established by clearing a corridor and marking the route. • Whenever possible use natural native material from site. • Minimum trail width of 0.25 metre. • Provide minimal signage. • Hand-built and maintained.	• No construction. • Suggested trail route. • Trail tread may consist of wildlife paths or may not exist. • Provide minimal or no signage or facilities. • Not maintained.
	Park Zone ***(applies to National Parks only)***	Zone III, IV, and V (Natural Environment, Outdoor Recreation, and Park Service). *May be found in Zone II (Wilderness) under special circumstances.*	Zone II, III, IV, V (Wilderness, Natural Environment, Outdoor Recreation and Park Service)	Zone II, III, IV, V (Wilderness, Natural Environment, Outdoor Recreation and Park Service). *May be found in Zone I (Special Preservation) under exceptional circumstances.*	Zone I, II, III, and IV (Special Preservation, Wilderness, Natural Environment, and Outdoor Recreation).
	Typical Visitor Type	Suitable for all visitors including those with no trail experience. Visitor may be prepared for trail or may not be prepared *(proper equipment and water).*	Suitable for most visitors with some basic trail experience who are generally prepared *(proper equipment and water).*	Suitable for visitors who have trail experience and are prepared *(proper equipment and water).*	Suitable for visitors who have exceptional trail and navigation experience and are well prepared *(proper equipment and water).*
	Trail Rating	Easy or Moderate	Easy, Moderate, or Difficult	Moderate, Difficult or Unrated	Difficultor Unrated
	Image	 *Crushed rock or natural mineral soil surface*	 *Crushed rock or natural mineral soil surface*	 *Natural mineral soil surface*	 *Suggested trail route*
Technical Details	**Distance (km / m)**	Typical distance of trail does not exceed 10 km. *In certain cases a Type 1 trail may exceed 10 km.*	Typical distance of trail does not exceed 20 km. *In certain cases a Type 1 trail may exceed 20 km.*	May exceed 20 km.	N/A
	Trail Profile ***(general description and typical elevation gain)***	Flat to gently rolling	Gently rolling with short steep sections	Rolling with steep sections that may continue for long periods	N/A
		Typical Elevation Gain	Typical Elevation Gain	Typical Elevation Gain	Elevation Gain
		0 – 100 metres *May be greater in certain situations.*	0 – 1,000 metres	0 - 1,000+ metres	N/A
	Trail Surface ***(Material Type and Typical Average Width)***	Paved or surfaced •Hard packed and stable	Surfaced or natural •Firm and stable	Natural •May be loose in areas	N/A
		Typical Average Width	Typical Average Width	Typical Average Width	Average Width
		1.5 – 3.0 metres	1.0 – 1.5 metre	0.25 – 1.0 metre	N/A
	Quality of Marking ***(General Signage and Information Provided)***	Trailhead information, interpretive panels, route markers, trail orientation maps • *Maximum information provided*	Basic trailhead information, route markers, and trail orientation maps • *Moderate information provided*	Basic trail head information and minimal route markers, or no signage provided • *Minimal or no information provided*	N/A
	Obstacles or Stairs	Few or no obstacles, no stairs or minimal use of stairs	Infrequent obstacles, stairs may be present	Obstacles common, stairs may be present	N/A
	Visitor Facilities	Parking lot, washroom, bridges, benches • *Maximum visitor facilities*	Parking lot, outhouse/pit toilet, bridges • Moderate visitor facilities	Bridges or other water crossing including fording • *Minimal visitor facilities*	N/A • *No visitor facilities*
	Level of Use	High to Very High	Moderate to High	Low to Moderate	Low

APPENDIX H- ONTARIO TRAILS COUNCIL MAINTENANCE STANDARDS

Parameter Sub-class	Class/Type 1 Developed	Class/Type 2 Semi-developed	Class/Type 3 Single Track	Class/Type 4 Undeveloped
Sample image				
Type described as	Urban multi use path; non motorized; rail trail	Urban, natural env or wilderness multi use path with constructed tread; rail trail; reclaimed roadway; motor or non; (inc groomed xc ski trail and sno-mo trail in winter)	Single track width, developed or semi-developed trail in natural env or wilderness; hike, bike, horse, atv/moto; motor or non; (inc xc ski trail in winter, groomed or non)	Undeveloped natural environment pathway; or wilderness or backcountry trail, path or portage; unmaintained or low level maintenance; includes unauthorized pathways in populated areas
Corridor	Typically +1m either side tread, 3m tall	Typically 0.5m either side tread, 2.5m tall	Typically 0m either side tread, 2.5m tall	Variable
Tread	2+m wide or wider, hardened (asphalt, concrete or stone dust) or compacted surface	1+m wide or wider, aggregate soft surface, natural or compacted surface	0.25-1m wide singletrack, natural surface	Unsurfaced natural environment
Surface obstruction	Hardened surface cracks and bumps; minimal effect on user	Variable natural or compacted loose surface; minimal obstruction	Roots, rocks, variable surface	Rough surface
Maintenance effort	Commensurate with volume of use: High for high traffic trails, lower for low traffic trails	Seasonal as needed; commensurate with volume of use; maintenance of tread surface and corridor	Seasonal as needed; commensurate with volume of use to low maintenance; minimal to no maintenance of tread surface and corridor	No maintenance of tread; low to no maintenance of corridor
Risk mitigation effort	Commensurate with volume of use and proximity to population; commensurate with severity of emergent hazard	Commensurate with volume and type of use and proximity to population; commensurate with severity of emergent hazard	Commensurate with volume and type of use and proximity to population; commensurate with severity of emergent hazard; low effort for wilderness environment	Low to no effort
Inspection interval (regular visual inspection)	Commensurate with volume of use and proximity to population; approximately monthly (when open) for high volume/close proximity trails; approx. seasonal for low volume/distant trails	Commensurate with volume of use and proximity to population; approximately monthly (when open) for high volume/close proximity trails; approx. annual for low volume/distant trails	Annual	No

Parameter Sub-class	Class/Type 1 Developed	Class/Type 2 Semi-developed	Class/Type 3 Single Track	Class/Type 4 Undeveloped
Hazard marking	Yes i.e. road crossing signs, warning signs	Yes in close proximity to population; little to no otherwise	No	No
Difficulty rating	Suitable for all permitted users	Close proximity to population suitable for all permitted users; natural env or wilderness may have difficulty rating for intended activity	May have difficulty rating for intended activity or no rating	May have difficulty rating for intended activity or no rating
Installed features (where they exist i.e. bridge, trailhead, parking)	Engineered	Engineered when or where warranted; otherwise overbuilt for intended use	Rustic, minimalist construction	Minimalist construction to no
AODA compliance considerations	Yes, consideration required	Yes in close proximity to population, otherwise no in wilderness or designated use (i.e. ATV trail, xc ski trail)	No	No

APPENDIX I- SAMPLE WIKWEMIKONG TOURISM PACKAGES

Wikwemikong TOURISM

2017 EDITION

Experiences Guide Book

OUR STORY. THROUGH OUR LENS.

Bebamikawe "Making Footprints"

Embark on an interpretive hike through the Bebamikawe Memorial Trail leading to stunning views along the Niagara Escarpment. Manitoulin is known as being one of the most plant diverse areas in North America and we have designed our hiking trail to flow through this diverse ecological habitat. While taking part on this tour, you will experience:

- First Class Trail system with scenic hiking routes, complete with educational signage;
- Replicas of lodges and hunting shelters depicting how our woodland ancestors used to live;
- How Anishnaabek people harvest plants for edibility, and medicinal purposes.

Our knowledgeable guide will connect you with nature by showing you the uses and science behind the teachings. Walk away with a new way of thinking, understanding and appreciation of our culture; experience our territory through the lens of our ancestors.

(Cancellations will be made in the event of inclement weather)

Duration..... 4 hrs
Cost..... $50.00 adults / $45.00 Elders & *Students
Includes..... Water
Available..... June - September

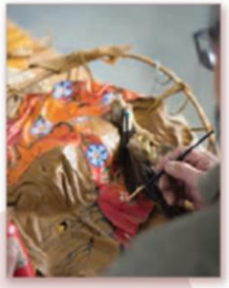
Minimum (2) - 24 hr advance booking • *Must present valid student card upon arrival

WWW.WIKWEMIKONG.CA

Authentic Indigenous Experiences

Our Story. Through Our Lens.

Wikwemikong Tourism offers an array of authentic Indigenous experiences that reflect the cultural lifestyles and traditions of the Anishnaabek people of the Three Fires Confederacy – Ojibwe, Odawa, and Pottawatomi. As Manitoulin Island's largest First Nation community and Canada's only officially recognized Unceded Indian Reserve, we welcome you to delve into our rich culture and history through our nature based and cultural tourism experiences. Our guides will take you on a journey through time as you learn of the legends of our people while exploring the vast lands and waters of Wikwemikong.



WWW.WIKWEMIKONG.CA

APPENDIX J- ENJI NAADGOWING ANISHINAABE WAADIZIWIN

ROYAL BOTANICAL GARDENS

Open to the Public Starting September 18, 2017
Enji naagdowing Anishinaabe waadiziwin
The Journey to Anishinaabe Knowledge

Native plants provided indigenous peoples with almost all of life's essentials. Starting in the Arboretum near the Nature Interpretive Centre, this new trail explores plants used by the Anishinaabe peoples, and their connections to culture, language, ecology and history.

Download Trail Map

This trail is located in a nature sanctuary. *Picking, collecting, harvesting or gathering of any plant or plant part is prohibited. The plant uses described on the trail reflect traditional Anishinaabe knowledge and cultural beliefs. Like any medicine, plant remedies should be only be used under the direction of a trained professional*

Introduction to the Trail

Ontario has a rich indigenous history, involving many different cultures. Royal Botanical Gardens lays within the traditional territory of both the Anishinaabe and Haudenosaunee Nations. This trail focuses on the story of Anishinaabe plant connections. The Anishinaabeg were semi-nomadic hunters, fishers and gatherers who moved with nature's cycles — from trapping and hunting in winter, to harvesting and processing useful plants through the growing season. Medicine plants were not only their sustenance but were also widely traded. The people's survival depended on intimate knowledge of the plants found in many habitats over a large area.

This primal connection to native plants remains a key part of Anishinaabe culture, where a plant's value or importance is measured in its usefulness, rather than its rarity. Come and walk the trail to learn more!

The Trail Experience

Several theme-based interpretive nodes offer traditional perspectives on plants of the area, with content by Joseph Pitawanakwat, traditional plant use educator and consultant, and Elders from Mississaugas of the New Credit First Nation. Reflecting the oral nature of Indigenous cultures, plant teachings are provided by audio devices at two waterside teaching areas along the trail.

The trail follows the route of the former Captain Cootes Trail for 1.1 kilometres from the Nature Interpretive Centre to Hickory Valley. The land is hilly with packed earth, gravel and wood mulch surfaces. Muddy trails are slippery when wet, and the trails are often icy in winter — use at your own risk.

Plants and People ∞ People and Plants

Joseph Pitawanakwat, plant educator from Wikwemikong Unceded Nation, and consultant for our trail content.

"In my Anishinaabe culture and tradition, we teach that every plant is telling you a story, and in that story, the plant is teaching why it is here, its purpose — all we have to do is listen.

Medieval Europeans followed a concept like ours: plants show people their medicinal use, usually by looking like the body part that they are designed to heal.

Though this interpretation has been dismissed in the past, with the help of new technologies we now better understand what our bodies look like at a molecular level — the level at which many plants speak to us. Scientists are also testing indigenous medicine plants and discovering active compounds that legitimize their use.

As you walk this trail, you'll see examples of how this works, some easy to spot, and some hidden in the plants."

This trail was created in collaboration with representatives of Mississaugas of the New Credit First Nation, and Creator's Garden.

Funding for the trail provided by The Government of Ontario, and Earl and Ora Douglas.

ANISHINAABE WAADIZIWIN — THE TRAIL EXPERIENCE

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The trail follows the route of the former Captain Cootes Trail for 1.1 kilometres from here to Hickory Valley. The land is hilly with packed earth, gravel and wood mulch surfaces. Muddy trails are slippery when wet, and the trails are often icy in winter — use at your own risk.

Reading our tree labels

We have labelled some of the native trees along the trail. You'll find the scientific name in the middle in italics, and the common name in four languages.

Anishinaabemowin	Oakwemish
English	Black Cherry
Scientific Name	*Prunus serotina*
French	Cerisier noir
Kanien'kéha (Mohawk)	Erihkówa

MAP KEY

- Wide, Open Trails
- Narrow, Dirt Trails
- Lookout
- Canoe Launch
- Boardwalks
- Trail Heads
- Washrooms
- Pay and Display Parking (free for RBG members displaying valid pass)
- Interpretive Node
- Teaching Area

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ONTARIO 1510

ROYAL BOTANICAL GARDENS
www.rbg.ca

APPENDIX K – GLOSSARY OF TERMS

Average overall grade: The average steepness of the trail over its entire length. Generally recorded as percent slope (%).

Corridor: The full dimension of the trail which includes the space over-head and on the sides of the tread.

Cross slope: The angle for which the tread is sloped either uphill (Insloped) or downhill (Outsloped). A 5% outslope is normally desired.

Crown: The angle for which the tread is sloped on flat terrain. A 2-5% slope is normally desired.

Duty of Care: A legal reference pertaining to the amount of effort (set by a trail standard) owed to the trail user with regards to legal liability.

Due Diligence: reasonable steps taken by Ontario Nature in order to satisfy a legal requirement for trail user safety

Emergent hazard: Hazards, typically identified through inspections and assessments, which present themselves over time and need to be continually mitigated (Vegetation, site dumping, bear dens etc.)

Hazard: Natural or human generated objects/features posing a risk or danger to the trail user above and beyond the accepted trail standard.

Hazard Marking: A risk mitigation technique for identifying a hazard

Hybrid Management: A trail management structure utilizing volunteers, professional trail contractors and land managers.

Maximum grade: The steepest section of trail. Often recorded as a percentage (%).

Professional Trail Contractor: Upholding a high standard of knowledge and professionalism for consulting, designing, building and maintenance specific to trail development

Risk Management: The documents, policies and procedures that are put in place to ensure a safe trail network, accept a level of risk, control the associated risks and eliminate risks that exceed the resources available to Ontario Nature.

Risk Mitigation: The act of utilizing the documents, policies and procedures to identify and evaluate hazards and then determining to accept, eliminate and/or mitigate them.

Sustainable Trail Theory: The art and science of low maintenance trails while creating a positive and safe user experience with minimal disturbance to the natural ecosystem.

Tread: The actual surface portion where the trail-user travels.

Tread surface: The composition of the traveled portion the trail which can be hardened, soft, or natural.

Trail blazing: The act of marking the trail using signs or symbols

Trailhead: An access point to a trail or the trail system which is normally accompanied by information signage, legal liability and wayfinding maps at minimum.

Trail assessments: The process of evaluating hazards and defects identified by the trail inspections. Should only be completed by properly trained staff, volunteers and professional trail contractors.

Trail inspections: The process of identifying hazards and defects of the trail subsurface, tread, drainage, corridor, and infrastructure (i.e. gate, fence, bridge)

Trail standard: The level of quality and attainment for the design, construction and maintenance of each trail in the network.

Volume of use: relative to other trails in the management jurisdiction; a spectrum or grouping of trails from highest use/volume to lowest use/volume