



1200 Fuhrmann Blvd  
Buffalo, NY 14203  
[www.tifft.org](http://www.tifft.org)

*valuing nature's wisdom*

## TIFFT ACCESSIBLE TRAIL

Niagara River Greenway Commission  
Consistency Consultation and Review

To Whom it May Concern:

I respectfully submit this application on behalf of the Buffalo Society of Natural Sciences to request a project review from the Niagara River Greenway Commission for the final planning and construction of the Tiff Nature Preserve Accessible Trail.

Your consideration and continued support of improvements to Tiff Nature Preserve is greatly appreciated. I would be happy to provide any additional information or documentation you believe would be helpful in your assessment.

Sincerely,

A handwritten signature in black ink that reads "Marisa Wigglesworth".

Marisa Wigglesworth  
President & CEO  
Buffalo Society of Natural Sciences



**PROJECT INFORMATION**

Project Name: Tifft Nature Preserve Accessible Trail

Location: Tifft Nature Preserve

Site Address: 1200 Fuhrmann Boulevard, Buffalo

State: New York Zip Code: 14203

Minor Civil Division(s): City of Buffalo

County: Erie

Project Proponent Property Interest (own, lease, easement or other): Management agreement with the City of Buffalo that gives management authority and responsibility to the Buffalo Society of Natural Sciences for Tifft Nature Preserve.

**AUTHORIZED OFFICIAL**

Name: Marisa Wigglesworth Title: President & CEO

Business Address: 1020 Humboldt Parkway, Buffalo

State: New York Zip Code: 14211

Telephone Number: 716-896-5200 x332 Cell Number: \_\_\_\_\_

Fax Number: 716-897-6723

E-Mail Address: mwigglesworth@sciencebuff.org

**PROJECT POINT OF CONTACT**

Name: Melanie Jaskolka Title: Chief Development Officer

Organization/Firm: Buffalo Society of Natural Sciences

Business Address: 1020 Humboldt Parkway, Buffalo

State: New York Zip Code: 14211

Telephone Number: 716-896-5200 x314 Cell Number: \_\_\_\_\_

Fax Number: 716-897-6723

E-Mail Address: mjaskolka@sciencebuff.org

**PROJECT NARRATIVE**

***1. In a brief paragraph, describe the project and its purpose, how and when it will be accomplished, and why it is important.***

The Buffalo Society of Natural Sciences (BSNS) requests funds to transform an existing three-quarter mile trail loop at Tifft Nature Preserve into a trail accessible to all visitors. The trail begins at the Herb and Jane Darling Environmental Education center (whose recent improvements to update and make ADA accessible were in part funded by previous Greenway support) and leads visitors through woods and around the Heritage Boardwalk to enjoy the cattail marsh. Currently, the entrance to the Education Center is uninviting and the trails are uneven and seasonally wet, making them difficult to impossible for visitors with strollers, wheelchairs, or limited mobility to traverse. Navigation is challenging due to inconsistent and dated signage in poor condition, there are infrequent rest areas, and the boardwalks and trails are narrow. The plans for improvement include concrete walkways leading to the entrance and emergency exits of the Education Center, a welcome kiosk at the trailhead, a compacted stone dust trail surface, simplified trail intersections, a complete rebuild of the Heritage Boardwalk to make it wider with helical pile support, and a viewing platform above the Heritage Boardwalk. The accessible trail project is driven by visitor request; one of Tifft prospective and new visitors' most frequent questions is whether the Preserve is wheelchair, walker, and stroller-friendly. As we work to ensure our offerings are as inclusive and accessible as possible, the project will position Tifft as a valued quality of life asset for *all* members of the Western New York community. The BSNS conducted a feasibility study in 2020 with funds from the Ralph C. Wilson Jr. Legacy Funds for Design and Access furnished by the Community Foundation for Greater Buffalo, and the trail described above was identified as the most practical and desirable trail to modify.

***2. Referring to the Niagara River Greenway Plan, clearly document and describe how the proposed project will advance the Niagara River Greenway vision including the goals, principles, and criteria that define that vision.***

The Tifft Nature Preserve Accessible Trail project advances the vision of the Niagara River Greenway and aligns with the principles, goals, and criteria of that vision.

***Goals – Improve Access, Make Connections, Protect and Restore Environmental Systems, Spark Revitalization and Renewal, Promote Long Term Sustainability, Extend the Legacy of Frederick Law Olmsted, Celebrate History and Heritage***

***Improve Access*** – The grounds of Tifft Nature Preserve are open to the public, at no cost, seven days a week during daylight hours and the Education Center is open to the public, at no cost, Wednesday to Sunday. By expanding access to the Center and a portion of Tifft's trails by improving ease of use and navigation, more guests will be afforded the ability to take advantage of the Preserve.

***Make Connections*** – As the southern gateway to the Niagara River Greenway, Tifft Nature Preserve provides a valuable site to connect area residents and visitors of all ages with the environment and natural resources of the Greenway. This project will allow Tifft to further develop these connections and expand Tifft's audience and visitors. It is the vision of the BSNS that visitors to Tifft and participants in Tifft's programs will have a deeper understanding of their place in and connection to the natural world and become the environmental stewards of today and tomorrow.

***Protect and Restore Environmental Systems*** – Tifft Nature Preserve is a reclaimed brownfield and its restoration and transformation into a nature preserve is highlighted within the Education Center and through environmental education programming for all audiences. All aspects of this project prioritize the environment, using environmentally conscious, natural, and recycled materials where possible to the minimal disruption of the landscape. Additionally, this project will include a modest amount of invasive species removal and natural landscaping with native plants.

***Spark Revitalization and Renewal*** – Tifft Nature Preserve provides valuable natural and recreational amenities that improve the quality of life of area residents, as well as attract tourists and new investment to the area. We anticipate that this project will increase attendance at the Preserve as well as allow us to offer programs to a wider variety of guests of all abilities.

***Promote Long Term Sustainability*** – Continued investment in the aging infrastructure at Tifft Nature Preserve is necessary to maintain this resource for the community. The creation of an accessible trail at Tifft will build on recent improvements to the Education Center, made possible, in part, through funding from the Buffalo & Erie County Greenway Fund Standing Committee.

***Extend the Legacy of Frederick Law Olmsted*** – Although not an Olmsted park, Tifft Nature Preserve is a valued piece of the network of parks and open spaces throughout the City of Buffalo. Tifft has been designated as the southern gateway to the Niagara River Greenway, helping to provide a path of green space and parks along the Niagara River corridor.

***Celebrate History and Heritage*** – Tifft Nature Preserve has a rich history as a commercial and industrial site. How this history and past land use affect the current environment and management of the site will be communicated to students and the public through interpretive materials and programs throughout the Preserve, including via improved signage.

***Principles – Excellence, Sustainability, Accessibility, Ecological Integrity, Public Well-Being, Connectivity, Restoration, Authenticity, Celebration, Partnerships, Community Based***

***Excellence/Sustainability*** – The proposed project will allow for the continuation of over 40 years of quality environmental education provided at Tifft Nature Preserve and build upon the over 150 year history of research and science education that the Buffalo Society of Natural Sciences provides to the community through the Buffalo Museum of Science and Tifft Nature Preserve.

***Accessibility*** – Tifft Nature Preserve trails are accessible daily during daylight hours for public use at no cost. The Education Center is open to the public, also at no cost, Wednesday through Sunday. Programming is offered seven days a week to a wide variety of audiences such as schools, scouts, and families year-round. The Preserve is easily accessed by car from Route 5 and by public transit via NFTA bus routes and visitors to the Outer Harbor have easy walking and biking access to the Preserve. One of the most common questions staff at Tifft receives regards wheelchair, walker, and stroller access. This project will expand usage of the Preserve to visitors of all physical abilities and their families.

***Ecological Integrity*** – All aspects of this project prioritize the environment, using environmentally conscious, natural, and recycled materials where possible and special considerations made for minimal disruption of the landscape.

**Public Well-Being** – Tifft Nature Preserve provides a location for residents of and visitors to Western New York to expand their knowledge and understanding of their environment, as well as a place to relax and unwind on a peaceful walk in a natural setting. Similar to other natural spaces, Tifft has experienced a higher volume of general visitors – those visiting the Preserve for self-guided exploration and not participating in a facilitated program – since March 2020 as individuals and families looked for safe places to visit during the pandemic.

**Connectivity** – This project will help to maintain Tifft Nature Preserve’s position as the southern gateway to the Niagara River Greenway, providing public green space on Buffalo’s Outer Harbor and connecting South Buffalo to the rest of the Niagara River Greenway.

**Restoration** – Tifft Nature Preserve is a model for nature’s ability to reclaim itself and the potential for turning former brownfields into recreational green space and beneficial habitat for local wildlife. Educational displays and interpretation of the onsite restoration of an industrial brownfield are highlighted and on display in the Education Center and signage on the trails, keeping Tifft relevant to the citizens of Western New York.

**Authenticity/Celebration** – Tifft Nature Preserve promotes stewardship and preservation of the natural resources of the Niagara River Greenway through place-based environmental education and interpretation of the rich industrial history of the area and helping to make connections between environments of the past and present.

**Community Based** – Tifft Nature Preserve serves the entire community of the Niagara River Greenway including school children, youth groups, community organizations, colleges and universities, families, bird watchers, seniors, and nature lovers of all types. This project will make Tifft more accessible to Western New Yorkers of all ability levels.

**Criteria – Consistency with the NRG Principles, Priority Status, Focus Area, Environmental Soundness, Implementable, Economic Viability, Availability of Local Sponsors or Partners, Ability to Match or Leverage Funds, Consideration of Other Planning Efforts, Clear Benefits**

**Consistency with the Principles** – The Tifft Accessible Trail is consistent with all the principles of the Niagara River Greenway and makes significant contributions to Ecological Integrity, Sustainability, and Public Well-Being.

**Priority Status** – This project incorporates several priorities identified in the Niagara River Greenway Plan including providing access to waterfront resources, interpretation and education about the region’s cultural, natural and historic resources, and revitalization of urban centers. Tifft Nature Preserve is used as an example of an ‘Ecological Center’ in the NRG plan. With its location only three miles from downtown Buffalo and as the southern gateway to the Niagara River Greenway, Tifft Nature Preserve is a strategic location in an ‘Interpretive Center Network’.

**Focus Area** – Tifft Nature Preserve is within the focus area delineated in the plan and is termed the “southern gateway to the Niagara River Greenway” in the NRG plan.

**Environmental Soundness** – All aspects of this project prioritize the environment, using environmentally conscious, natural, and recycled materials where possible and special considerations made for minimal disruption of the landscape. For example, helical piles were chosen as the support for the new boardwalk to minimize introduction of new materials and disruption the marsh. Landscaping and plantings will be completed using native species that support local wildlife.

**Implementable** – The Tifft Accessible Trail is fully implementable and feasible as outlined in this proposal. The feasibility study and design, funded by Ralph C. Wilson, Jr. Legacy Funds and conducted by Stantec, affirmed and refined the feasibility of the idea and produced a project budget.

**Economic Viability** – The Accessible Trail will allow the Buffalo Society of Natural Sciences to pursue additional uses and revenue sources to maintain and operate the Preserve.

**Availability of Local Sponsor or Partners** – The Buffalo Society of Natural Sciences has managed and operated the City of Buffalo-owned Tifft Nature Preserve since 1982 under a lease/management agreement as a high quality educational and environmental resource for the region. The City of Buffalo was consulted throughout this project as Tifft property owner and provided helpful feedback and insight throughout the process. CHC Learning Center, a frequent visitor to Tifft, was also consulted to better understand the needs of visitors of all abilities. The Erie County Office for People with Disabilities visited Tifft to review the scope of the project and will continue to be engaged throughout implementation of this project.

**Ability to Match or Leverage Funds** – Funding from Ralph C. Wilson, Jr. Legacy Funds supported the feasibility study and initial trail design. Additional funding has been secured from the Montgomery Family Foundation for the construction phase and the comprehensive funding strategy for the project includes projected additional funding from the Margaret L. Wendt Foundation, the Ralph C. Wilson, Jr. Foundation, and the John R. Oishei Foundation. Capital improvements at Tifft have historically been supported by a diversified revenue stream, including support from the Buffalo and Erie County Greenway Fund Standing Committee.

**Considerations of Other Planning Efforts** – Improvements to trails and infrastructure at Tifft is consistent with, and would help achieve, the vision and goals of many other planning efforts including the City of Buffalo Comprehensive Plan, New York State Significant Coastal Fish & Wildlife Habitat, and the South Buffalo Brownfield Opportunity Area (BOA) Plan.

**Clear Benefits** – Clear benefits of this project include expanded access to Tifft Nature Preserve for visitors of all physical abilities.

**3. Define the budget for the total proposed project and include costs for the following:**

Planning	\$	<u>50,000</u>
Construction	\$	<u>1,020,828</u>
Acquisition	\$	<u>N/A</u>
Administration	\$	<u>50,000</u>

Operation and Maintenance / Year \$ N/A

TOTAL PROJECT COST \$ 1,120,828

The project cost summary is included in Appendix A, pages 12 - 14.

**Identify all sources of funding and the amount of funding expected from each source. Identify and quantify funds that are already on hand or have been allocated for the proposed project. Explain how the project will be operated and maintained.**

<u>Funder</u>	<u>Amount</u>	<u>Purpose</u>	<u>Status</u>
Buffalo & Erie County Greenway Fund	\$500,000	Construction	This request
Montgomery Family Foundation	\$25,000	Construction	Awarded
Ralph C. Wilson, Jr. Legacy Funds	\$50,000	Planning, research, and design	Awarded
Ralph C. Wilson, Jr. Legacy Funds	\$50,000	Signage	Pending / to be requested
Community Foundation for Greater Buffalo 21 <sup>st</sup> Century Fund	\$100,000	Construction	Pending / to be requested
Margaret L. Wendt Foundation	TBD	Construction	Pending / to be requested
Ralph C. Wilson, Jr. Foundation	TBD	Construction	Pending / to be requested
The John R. Oishei Foundation	TBD	Construction	Pending / to be requested

Once the project is completed, maintenance will be built into Tifft’s annual operating costs. The stone dust maintenance plan in Appendix A, pages 15 - 16 was submitted to the City of Buffalo to outline the BSNS’ commitment to maintain the trail surface.

**4. Describe the measures taken at the local level to gain community and government support for this project (hearings, petitions, public surveys, resolutions of support or other methods). Describe the role of municipal agencies, stakeholder groups, consultants, volunteers or others who will be involved in the proposed project.**

The Buffalo Society of Natural Sciences operates under a ten-year agreement with the City of Buffalo for the care and maintenance of the Tifft Nature Preserve property as a unique nature preserve, environmental education center, and recreation area. The City of Buffalo Department of Public Works, Division of Parks and Recreation has been engaged throughout the design process to create an accessible trail at Tifft and will continue to be involved through implementation.

This project lends itself well to opportunities for collaboration and consultation with outside organizations. The Association of Nature Center Administrators network that includes managers and directors of preserves throughout North America and the world will be used as a resource, and key learnings of constructing an Accessible Trail at Tifft will be shared back with community of leaders. The original concept for an Accessible Trail was the result of feedback from visitors from a variety of audiences, and that initial feedback was incorporated into the initial designs for the trail. To further ensure that the needs of the members of the community that would most benefit from an accessible trail at Tifft are met, organizations such as Suburban Adult Services, People Inc., Summit Center, CHC Learning Center, UB Center for Inclusive Design and Environmental Access, and Erie County Office for People with Disabilities will be invited to give feedback to the plans before they are finalized.



The City of Buffalo was consulted throughout this project as Tifft property owner and provided helpful feedback and insight throughout the process. The BSNS staff hopes that the City of Buffalo Parks Department uses this as an opportunity to consider inclusivity and accessibility when designing upgrades at other City-owned parks and properties.

The Accessible Trail project has also been presented to elected officials across the region to garner support for this project at all levels of government. The plan has been shared with members of the following elected officials' offices – Congressman Brian Higgins, Senator Tim Kennedy, Assembly Majority Leader Crystal Peoples-Stokes, Assemblymember Jonathan Rivera, County Executive Mark Poloncarz, Mayor Byron Brown, and City Council President Pro Tempore Christopher Scanlon.

***If this project has been cited or described in a local planning document or some equivalent thereof, attach copies of that documentation highlighting the sections that are relevant to the proposed project.***

Tifft Nature Preserve is specifically noted in the Niagara River Greenway Plan as an example of an 'Ecological Center' (pg. 100). With its location only three miles from downtown Buffalo and also functioning as the southern gateway to the Niagara River Greenway (pg. 102), Tifft Nature Preserve is a strategic location in an 'Interpretive Center Network' (pg. 100).

Tifft Nature Preserve is also mentioned and highlighted in the following local and statewide documents:

City of Buffalo Comprehensive Plan – Tifft Nature Preserve is cited as part of the City's "Green Infrastructure" (Fig. 32) and as a "Destination Park" (Fig. 35), a distinction given to only 16 of Buffalo's 120 parks. (See Appendix B, pages 30 - 31)

New York State Significant Coastal Fish & Wildlife Habitat – Tifft Nature Preserve is designated by the Department of State as a Significant Coastal Fish & Wildlife Habitat with an extremely high significance score of 84 points (the highest in Western New York). The rating form also states that the Preserve "...is the most heavily used environmental education center in the region." (See Appendix B, pages 32 -34)

South Buffalo Brownfield Opportunity Area (BOA) Plan – The South Buffalo BOA plan highlights the importance of Tifft Nature Preserve as an asset to the region and integral piece of the revitalization of South Buffalo. The SBBOA includes the vision for an enhanced interpretive center at Tifft Nature Preserve. This document is available upon request.

***5. Describe and document the environmental setting and existing conditions at the proposed project site. If you are not the owner of the property include a letter(s) or resolution(s) evidencing support for the project by the owner. Provide photographs, conceptual plans and drawings that show the site as it presently exists and how the site will change with the addition of the proposed project.***

Located in South Buffalo, the area was formerly used as a transshipment facility and dump until a group of concerned citizens successfully petitioned the City to create a nature preserve on the 264-acre property in the early 1970s. Despite the industrial history of the site, this brownfield provides valuable wildlife habitat and needed green space within the city limits. Major habitats of Tifft Nature Preserve include a 75-acre remnant cattail marsh, woodlands, grasslands, and three ponds. The cattail marsh, which is the largest remnant wetland in Erie County, provides nesting habitat for rare marsh birds and the woodlands are an important stop-over site for migrating birds. The Buffalo Society of Natural

Sciences is committed to protecting the significant natural resources on the Preserve and achieving the full potential of Tifft Nature Preserve as a destination for scientific research, environmental education, and outdoor recreation in Western New York. An Accessible Trail will increase the BSNS' capacity to achieve this goal by allowing all residents of and visitors to our region to enjoy an experience at Tifft regardless of physical ability.

Photographs of the existing trail and boardwalk conditions can be viewed in Appendix A, page 17. As depicted in the photos, the trails and boardwalk appear relatively flat and compacted; however, someone that relies on the assistance of a mobility device or a family with a stroller will be challenged to traverse the trail conditions. The current trails and boardwalk are too narrow to allow for passing other visitors, portions of the trail are seasonally wet and soft, and areas to rest are infrequent. The Accessible Trail will also act as a top tier hierarchy trail that will allow all visitors to feel comfortable exploring nature without concern for navigation.

Concurrent with this project will be evaluation and revamp of the signage across the Preserve to be more cohesive and purposeful in messaging and approach. The Accessible Trail budget includes a new trailhead kiosk that will be located outside the front entrance of the Darling Environmental Education Center and new signage along the extent of the trail. Additional fundraising will take place to cover the cost of the Preserve-wide signage planning and implementation.

Current construction plans for the Accessible Trail prepared by Stantec are shown in Appendix A, pages 19 - 26. Highlights include connecting entrances and emergency exits of the Darling Environmental Education Center with concrete walkways, simplified trail intersections, benches consistently along the extent of the trail, wider boardwalk with toe kick for wheelchair and stroller safety, and a slightly elevated portion of the boardwalk to allow visitors seated in a wheelchair and children the same view of the magnificent marsh that other visitors experience.

Tifft Nature Preserve is owned by the City of Buffalo and has been operated by the Buffalo Society of Natural Sciences (i.e. Buffalo Museum of Science) under a lease/management agreement since 1982. The Society has management authority and responsibility for the property and works collaboratively with the City of Buffalo on all aspects of preserve management. This long-standing partnership with the City of Buffalo will continue through all aspects of the project including funding, design, construction, and maintenance. Although the process thus far has been led by the BSNS, the City has been engaged by the BSNS throughout the process. Attached in Appendix B, page 35 is a letter of support from South Buffalo District Councilmember Pro Tempore Christopher Scanlon that accompanied the BSNS application to the Ralph C. Wilson, Jr. Legacy Funds for Design and Access proposal.

***Describe how your project will comply with the State Environmental Quality Review Act (SEQRA). The existence of wetlands, significant upland and aquatic habitats, and plant or animal species that are classified as rare, threatened, or endangered should be noted. Explain how such natural resources will be protected and/or enhanced. Cite any relevant project-related studies.***

The proposed timeline and approach are intended to minimize impact to the surrounding habitat and wildlife — including beginning construction after nesting season and as plants begin to enter winter dormancy. Most of the plants that will be removed during construction are invasive species such as European buckthorn. Native seeds and plants will replace these invasive species and be used as low maintenance, natural landscaping around the Center entrances and along the trail. The use of helical piles as the support for the boardwalk and boardwalk decking and railing materials were also chosen

with the marsh in mind. Helical piles do not require concrete footings, reduce substrate disturbance, and have a longer lifespan than wood.

Through the continued planning process, all relevant environmental regulations and permits will be identified. A preliminary permitting analysis was completed during the design process and is attached in Appendix A, page 27 - 28. The boardwalk and a portion of the trail is within a state-regulated Freshwater Wetland, BU-15, and may require an Article 24 Freshwater Wetlands permit. Initial feedback was also obtained from the NYS Department of Environmental Conservation regarding the Article 24 permit and handling of soil that will be removed to prepare the trail surface. Additional required permits will be identified through the NYS SEQRA process. Due to Tifft's status as Significant Coastal Fish & Wildlife Habitat, DOS will complete a coastal consistency review through the joint application process. Tifft has an existing soil/fill management plan that will require excavation observation and soil material testing and segregation during excavation and the costs associated with testing and proper disposal is included in the project budget.

***6. Please attach the proposed project timeline, identify any relevant milestones, and provide an estimated date for project completion/opening. If funded, it is expected that the project sponsor or point of contact will notify the Commission of the project opening date as it nears completion. (Note: This addition to the application was made September 2018. All projects submitted for review after the November 20th meeting are to include a project timeline.)***

The exact timeline of this project will be dependent on securing the necessary funding.

Estimated/preferred timeline for this project is as follows:

- Prepare permitting – December 2021 – February 2022
- Permitting review – February – July 2022
- Construction bidding- May – August 2022
- Construction of trail and boardwalk – September – November 2022
  - Demo & site prep
  - Clear new path
  - Concrete work around Center
  - Lay subbase on entire trail
  - Existing Boardwalk removal
  - Boardwalk Installation
  - Stone dust installation
- Signage Design and Installation – winter 2022 – spring 2023
- Planting around Center and trail – spring 2023



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## APPENDIX A

- Project Cost Summary
- Stone Dust  
Maintenance Plan
- Photos of Existing  
Conditions
- Construction Plans
- Permitting Analysis

## Tift Accessibility Trail

Final Opinion of Probable Construction Phase Costs - 2022 Escalation

7/30/2020 rev. 9/23/2021



### Base Bid - Opinion of Probable Construction Costs - Summary

ITEM	TOTAL
A General / Temporary	\$22,610
B Demolition, Removals, Site Preparation	\$27,238
C Regulated Soil Management, and Environmental	\$14,069
D Earthwork and Grading (except subbases)	\$26,502
E Geogrids, Subbase, Pavements	\$83,157
F Marsh Boardwalk - Main Trail with Dip Netting Dock	\$442,291
G Marsh Boardwalk - Elevated Overlook Segment	\$72,888
H Landscape, Seeding and Planting	\$28,932
I Furnishings, Boulders, Signage, and Amenities	\$84,984
J Miscellaneous (Contingency 5%, Survey, Mobilization, Bonds and Insurance)	\$92,307
<hr/>	
Total Opinion of Probable Construction Costs - Base Bid	\$894,978

### Bid Alternates - Opinion of Probable Construction Costs - Summary

ITEM	TOTAL
1 Forest Floodplain Spur Boardwalk Extension (SYP) - ADD	\$45,850

### Soft Costs - Rough Estimate of Fees for BSNS Advancement Purposes \*\*\*

ITEM	TOTAL
1 Permitting and Wetland Delineation	Approx. \$6,000
2 Bidding Assistance, Construction Administration, Construction Phase Design	\$28,000
3 Construction Inspection, Part-time On Site (~30% time, 16 - 20 weeks)	\$26,000
4 Environmental / Soils Monitoring and Testing (2 weeks excavation activities)	\$15,000
5 Materials Special Inspections and Testing (Concrete, Compaction)	\$5,000
<hr/>	
Rough Estimate of Fees for BSNS Advancement Purposes	\$80,000

\*\*\* Note formal fee proposal and scope TBD / in development.

Tiftt Nature Preserve Accessible Trail Funding Proposal to the Niagara River Greenway Commission

**Tiftt Accessibility Trail**

Final Opinion of Probable Construction Phase Costs - 2022 Escalation  
7/30/2020 rev. 9/23/2021



**Schematic Level Opinion of Probable Construction Costs**

ITEM	QTY	UNIT	UNIT COST	2022 ESCALATION	TOTAL
<b>A General / Temporary</b>			<b>Subtotal</b>	<b>\$</b>	<b>22,609.95</b>
Erosion Control, Silt Fencing, Temporary	3,395	LF	\$ 2.50	10%	\$ 9,336.25
Erosion Control, Check Dam, Temporary	3	EA	\$ 85.00	10%	\$ 280.50
Stabilized Construction Staging Area, CR2, Temporary	1	EA	\$ 2,700.00	10%	\$ 2,970.00
Work Zone Traffic Control, Trail Detour Signage / Fencing, Temporary	1	LS	\$ 1,000.00	10%	\$ 1,100.00
Construction Limits Fence, Temporary, Select Areas	400	LF	\$ 5.20	10%	\$ 2,288.00
Tree Protection Fencing, Temporary	1,160	LF	\$ 5.20	10%	\$ 6,635.20
<b>B Demolition, Removals, Site Preparation</b>			<b>Subtotal</b>	<b>\$</b>	<b>27,238.20</b>
Clear and grub site / trail area, light trees to 6" dia., grub stumps and remove	0.70	AC	\$ 9,300.00	10%	\$ 7,161.00
Strip and Stockpile Topsoil, Stockpile on site 500'+ haul, 4" depth	202	CY	\$ 26.00	10%	\$ 5,777.20
Tree Removals, > 12", w/ stump removal, leaving tree in area (no chipping)	3	EA	\$ 500.00	10%	\$ 1,650.00
Tree Transplant, 4" Ginkgo	1	EA	\$ 500.00	10%	\$ 550.00
Salvage signage, benches, misc. materials, transport on site, provide to owner	1	LS	\$ 1,000.00	10%	\$ 1,100.00
Remove and dispose kiosk and planter box	1	LS	\$ 200.00	10%	\$ 220.00
Boardwalk removal, cut posts at grade, transp./dispose on site (assume swamp mats)	1	LS	\$ 9,800.00	10%	\$ 10,780.00
<b>C Regulated Soil Management, and Environmental</b>			<b>Subtotal</b>	<b>\$</b>	<b>14,069.00</b>
Estimated Soil Segregation On Site, Excavated Materials, Per SFMP/QEP Direction	1.0	LS	\$ 1,900.00	10%	\$ 2,090.00
Dispose regulated excess soil not re-used on site (134 CY @ 1.8 TN per CY), assume daily cover	242	TN	\$ 45.00	10%	\$ 11,979.00
<b>D Earthwork, Grading, and Drainage (except subbases)</b>			<b>Subtotal</b>	<b>\$</b>	<b>26,502.17</b>
Excavation to trail subgrades, from Exist grade (14" boxout from FG) 388 CY less stripped topsoil	186	CY	\$ 28.00	10%	\$ 5,728.80
Other Excavation to subgrades, underdrain and drainage area, footings	54	CY	\$ 28.00	10%	\$ 1,663.20
Subgrade Compaction, Proof rolling	1,676	SY	\$ 0.85	10%	\$ 1,567.06
Finished Grading, ~16,000 SF	1,676	SY	\$ 1.53	10%	\$ 2,820.71
Backfill soil placement, Trail shoulders, re-use on stockpiled material, assume DEC approve	140	CY	\$ 32.00	10%	\$ 4,928.00
Topsoil Placement, Re-use Stockpiled, 4", tail shoulders + drain area, assume DEC approve	168	CY	\$ 32.00	10%	\$ 5,913.60
Curtain /under drain, North side of parking area, includes stone / fabric	126	LF	\$ 28.00	10%	\$ 3,880.80
<b>E Geogrids, Subbase, Pavements / Concrete</b>			<b>Subtotal</b>	<b>\$</b>	<b>83,156.70</b>
Geogrid installation, under subbases (~14,777 sf, stability, disturbed site soils)	1,642	SY	\$ 5.00	10%	\$ 9,031.00
Subbase, Compacted NYSDOT Type 2, Stone Dust Areas, 12,977 sf (8" extend), @ 8"	321	CY	\$ 68.00	10%	\$ 24,010.80
Subbase, Compacted NYSDOT Type 1, Stone Dust Areas, 12,977 sf (8" extend), @ 4"	160	CY	\$ 88.00	10%	\$ 15,488.00
Subbase Material, Compacted NYSDOT Type 2, Concrete Areas, 2613 sf (6" extend), @ 9"	73	CY	\$ 68.00	10%	\$ 5,460.40
Trail way Top course, Stone Dust, Paver Installed, 304.01940004, 11,351 sf, 2"	71	CY	\$ 80.00	10%	\$ 6,248.00
Concrete Paving, Reinforced Galv. WWM, @5", with Animal trial stamps	2,315	SF	\$ 9.00	10%	\$ 22,918.50
<b>F Marsh Boardwalk - Main Trail with Dip Netting Dock (811 LF, 6,488 SF; Dip netting 44 LF, 352 SF )</b>			<b>Subtotal</b>	<b>\$</b>	<b>442,291.30</b>
Helical Piles, HD Galv 10/12" DP, pile length ~21' FT (3-7' sect.), via Swamp Mat, to Torque	152	EA	\$ 750.00	10%	\$ 125,400.00
Helical Pile Calculations, Pile Installer NYS Engineer Review	1	EA	\$ 700.00	10%	\$ 770.00
Boardwalk Frame & Decking, 8' W, Pre-fab Galv. HSS, w/ Pile Saddle Caps, and SYP decking	811	LF	\$ 175.00	10%	\$ 156,117.50
Boardwalk Railing, SYP rails & posts, NIC top rail, both sides full L.	1,654	LF	\$ 34.00	10%	\$ 61,859.60
Railing Specialty Toprail, Thermory, Ash, Oiled	1,654	LF	\$ 18.00	10%	\$ 32,749.20
Engineered Shop Drawings, Boardwalk and Framing, NYS	1	EA	\$ 750.00	10%	\$ 825.00
Shipping - Boardwalk Framing, Decking, and Railing Units (3 trucks)	1	LS	\$ 14,700.00	10%	\$ 16,170.00
Boardwalk Installation, frame, decking, railing, Via Swamp mat, 4P crew, Apprx \$5/sf	1	LS	\$ 40,000.00	10%	\$ 44,000.00
Boardwalk to Trail Abutment Foundation, Reinforced Cip Conc., 8x2x4	5	CY	\$ 800.00	10%	\$ 4,400.00
<b>G Marsh Boardwalk - Elevated Overlook Segment (106 LF, 848 SF)</b>			<b>Subtotal</b>	<b>\$</b>	<b>72,887.65</b>
Helical Piles, HD Galv 10/12" DP, pile length ~28' FT (4-7' sect.), via Swamp Mat, to Torque	18	EA	\$ 975.00	10%	\$ 19,305.00
Helical Piles, Extensions and Cross Bracing - Approximate, if Required	18	EA	\$ 500.00	10%	\$ 9,900.00
Boardwalk Frame & Decking, 8' W, Pre-fab HSS, w/ Pile Saddle Caps, and SYP decking units	113	LF	\$ 175.00	10%	\$ 21,752.50
Boardwalk Railing, SYP rails & posts, NIC top rail, both sides full L.	227	LF	\$ 32.00	10%	\$ 7,990.40
Railing Specialty Toprail, Thermory, Ash, Oiled	227	LF	\$ 17.50	10%	\$ 4,369.75
Shipping - Boardwalk Framing, Decking, and Railing Units (1 added trucks)	1	LS	\$ 2,900.00	10%	\$ 3,190.00
Boardwalk Installation, frame, decking, railing, Via Swamp mat, 4P crew, 0.5 weeks + equip.	1	LS	\$ 5,800.00	10%	\$ 6,380.00

Tift Nature Preserve Accessible Trail Funding Proposal to the Niagara River Greenway Commission

**Tift Accessibility Trail**

Final Opinion of Probable Construction Phase Costs - 2022 Escalation  
7/30/2020 rev. 9/23/2021



H Landscape, Seeding and Planting		Subtotal			\$	28,931.82
Seeding, Wildflower Areas, w/ Soil Prep (NIC topsoil)	14,744	SF	\$ 1.00	10%	\$	16,218.40
Seeding, Lawn Restoration (NIC topsoil)	3,279	SF	\$ 0.35	10%	\$	1,262.42
Classroom Area / Trail Restoration Plantings, #1 Container	152	SF	\$ 38.00	10%	\$	6,353.60
Classroom Area / Trail Restoration Plantings, #1 Container	43	SF	\$ 38.00	10%	\$	1,797.40
Tree Planting, Allowance, B&B, TBD by City of Buffalo Calculation	4	EA	\$ 750.00	10%	\$	3,300.00
<b>I Furnishings, Boulders, Signage, and Amenities</b>		<b>Subtotal</b>			<b>\$</b>	<b>84,983.80</b>
Landscape Boulders, all areas	59	EA	\$ 350.00	10%	\$	22,715.00
Benches, Surface Mount, Installed, VS Homestead Model	6	EA	\$ 2,805.00	10%	\$	18,513.00
Split Rail Fence, 2-Rail Jumbo	222	LF	\$ 49.00	10%	\$	11,965.80
Trailhead Kiosk, NYS-OPRHP style	1	EA	\$ 15,000.00	10%	\$	16,500.00
Rustic Half Gate, incl. footing	2	EA	\$ 5,200.00	10%	\$	11,440.00
Existing Shade Structure, Reinstall on New Posts / w/ Foundations (NIC concrete)	1	LS	\$ 3,200.00	10%	\$	3,520.00
Reinstall / Provide to owner, Select Salvaged Signage (Tift Mon #2, etc.)	1	LS	\$ 300.00	10%	\$	330.00
<b>Construction Opinion of Probable Cost Subtotal</b>					<b>\$</b>	<b>802,670.58</b>
<b>J Miscellaneous</b>					<b>\$</b>	<b>92,307.12</b>
Trail and General Layout Survey (0.5%)					\$	4,013.35
Helical Pile Location Survey (1%)					\$	8,026.71
Bonds and Insurance (1%)					\$	8,026.71
Mobilization (4%)					\$	32,106.82
Construction Contingency (5%)					\$	40,133.53
<b>CONSTRUCTION OPINION OF PROBABLE COST TOTAL</b>					<b>\$</b>	<b>894,977.70</b>

**Bid Alternate Items**

ITEM	QTY	UNIT	UNIT COST	2022 ESCALATION	TOTAL	
<b>1.00 Forest Floodplain Spur Boardwalk Extension (SYP) - 78 LF</b>		<b>Subtotal</b>			<b>\$</b>	<b>45,850.20</b>
Tree Removals, + or >12", w/ stump removal, leaving tree in area (no chipping)	1	EA	\$ 500.00	10%	\$	550.00
Helical Piles, Installed, HD Galv 10/12" DP, pile length ~21' FT (3-7' sect.), Via Swamp Mat	14	EA	\$ 750.00	10%	\$	11,550.00
Boardwalk Frame & Decking, 8' W, Pre-fab HSS, w/ Pile Saddle Caps, and SYP decking units	78	LF	\$ 175.00	10%	\$	15,015.00
Boardwalk Railing, SYP rails & posts, NIC toprail, both sides full L.	166	LF	\$ 34.00	10%	\$	6,208.40
Railing Specialty Toprail, Thermory, Ash, Oiled	166	LF	\$ 18.00	10%	\$	3,286.80
Shipping - Boardwalk Framing, Decking, and Railing Units (1 added trucks)	1	LS	\$ 2,900.00	10%	\$	3,190.00
Boardwalk Installation, frame, decking, railing, Via Swamp mat, 4P crew, 0.5 weeks + equip.	1	LS	\$ 5,500.00	10%	\$	6,050.00



July 14, 2021

Andy Rabb  
Deputy Commissioner for Parks and Recreation  
City of Buffalo Department of Public Works, Parks and Streets

Stephen Buccilli  
Principal Engineer  
City of Buffalo Department of Public Works, Parks and Streets

Via Email

Dear Deputy Commissioner Rabb and Mr. Buccilli,

With planning for the installation of a trail that affords all individuals the ability to enjoy a visit to Tifft Nature Preserve and experience overlooking the impressive cattail marsh underway, I acknowledge the apprehension on the City's behalf of the use of stone dust as the trail surface. I am confident in Stantec's recommendation of stone dust as they have shown previous success with the method of application they have outlined for this project.

Therefore, please find below the Buffalo Society of Natural Science's (BSNS) commitment to maintain the proposed stone dust trail surface.

**Construction Specifications and Justification Summarized**

- Proposed stone dust top course utilizes NYSDOT item #304.0194 specification, requiring a machine paver applied process with optimum compaction and moisture content.
- The project implementation will include Construction Administration and Observation Inspection services during the construction phase to ensure that the correct materials are approved and the installation is per specification.
- The stability and longevity of the top course is directly correlated with good drainage management. The proposed trail is graded higher than all surrounding land and includes positive crowned drainage to mitigate the influence of storm water.
- Geogrid is proposed under all trail subbase materials to mitigate and protect against potential settlement due to known urban fill conditions.
- No edge restraint is proposed. Stone dust edge restraint is not something NYSDOT, Canal Corps, or Stantec have specified for other similar trails. Edge restraints in aggregate-based pavements will serve to block free passage of water from the tail edge and over time and contribute to increased drainage issues. Minor vegetation encroachment is anticipated over time but can be mitigated with regular maintenance. The highest concern for this specification in this context is edge failure due to burrowing animals, particularly turtles. This will be managed by Buffalo Society of Natural Sciences (BSNS) staff.







- Installations completed using the Item 304.0194 paver-applied top course specification combined with high attention to drainage management show great durability. We encourage the City to contact Mike Guyon, Commissioner of Public Works at the Town of Brighton, (585) 784-5225, or Howard Ressel at NYSDOT Region 4, (585) 272-3372, for a reference of how this specification has fared at the Brighton Brickyard Trail in a similar soils and vegetation context.

**Maintenance Plan**

To ensure the Tifft Nature Preserve Accessibility Trail continues to serve the public as intended, the following maintenance plan will be implemented by staff of the BSNS. This plan addresses expected maintenance needs, which include vegetation encroachment and minor damage to the trail surface from burrowing animals or periodic vehicle access, and which are achievable with existing staff and equipment resources. Significant damage from unforeseen events, including vandalism, windthrow, and other natural disasters are not within the scope of this plan. These events aside, regular observation and management should preclude deterioration and the requirement for major re-construction. The BSNS will make every effort to address significant damage, and will in good faith, make repairs to the best of its ability.

**The following maintenance will be performed:**

**Monthly**

- Remove vegetation encroaching into the trail edge
- Mow verges concurrent with regular mowing and other trail vegetation management work
- Survey for loose aggregate conditions and document

**Annually**

- Repair loose aggregate conditions:
- Add additional stone dust material (NYSDOT item #304.0194 specification) if/where necessary, grade, and compact until original grades are reestablished, and ensuring crown is maintained
- For repairs under 50 sqft, material may be compacted with a hand tamper or vibratory plate compactor
- For repairs over 50 sqft, material will be compacted with a vibratory plate compactor

The BSNS commits to the best of its ability to maintain the trail surface to continue to be used as designed for the duration of its Management Agreement with the City of Buffalo. However, age-related deterioration may prevent original specs and gradient from being restored, at which time an assessment will be done to determine the feasibility of replacing or repurposing the trail.

I welcome any further questions you may have.

Sincerely,

A handwritten signature in black ink that reads "Marisa Wigglesworth".

Marisa Wigglesworth  
President & CEO  
Buffalo Society of Natural Sciences

valuing nature's wisdom

1200 Fuhrmann Blvd  
Buffalo, NY 14203  
716.825.6397  
tifft.org





Conditions outside Darling Environmental Education Center are uninviting and coarse stone walkways are challenging for wheelchairs, walkers, and strollers.

Trails at each end of Heritage Boardwalk are seasonally flooded and soft preventing easy navigation by visitors.



Natural obstructions occur on the trails such as roots and rocks that create additional challenges for wheelchairs, walkers, strollers, and visually impaired guests.

Heritage Boardwalk is just wide enough to accommodate most wheelchairs, but does not allow adequate room for another visitor to pass or the ability to comfortably turn a wheelchair to face out into the marsh to enjoy the view.



**The Tift Accessible Trail project plan includes:**

- Concrete walkways to the doors of the Darling Environmental Education Center
- Welcome kiosk at more prominent location (trailhead near the Center entrance)
- Widened trails with compacted stone dust trail surface free of obstructions
- Simplifying trail intersections
- Complete rebuild of Heritage boardwalk that includes a wider boardwalk with helical pile supports, toe kicks for mobility aid safety, viewing platform ~3 feet above main boardwalk with ramped access, and partially shaded bench seating
- More frequent rest/bench locations

**Examples of treatments to be used in Tift Accessible Trail:**





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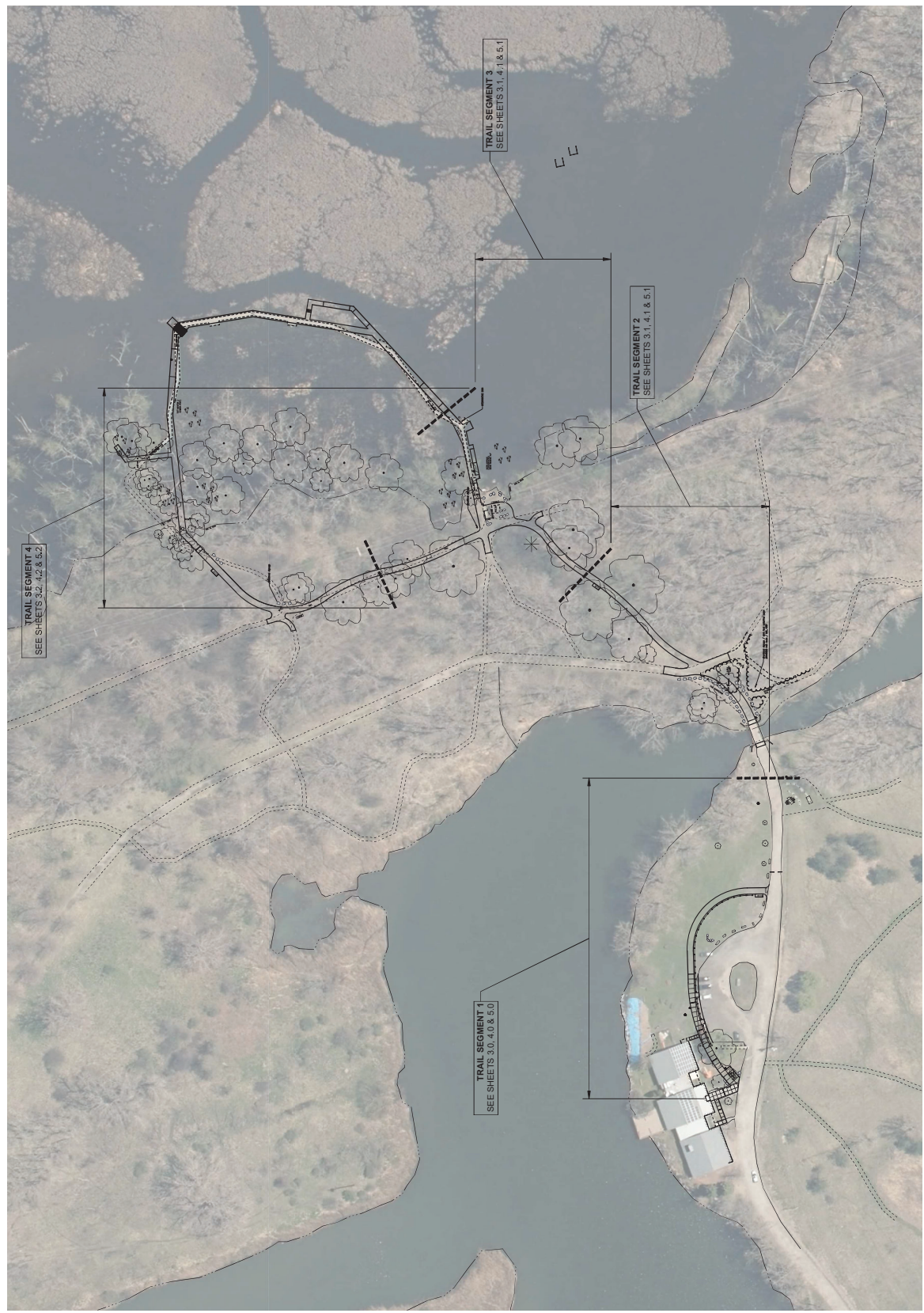
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Revision	No.	Description	Date	By	Appr.
1	001	ISSUE FOR PERMITS	07/30/2020	MM	MM
2	002	ISSUE FOR PERMITS	07/30/2020	MM	MM
3	003	ISSUE FOR PERMITS	07/30/2020	MM	MM
4	004	ISSUE FOR PERMITS	07/30/2020	MM	MM
5	005	ISSUE FOR PERMITS	07/30/2020	MM	MM
6	006	ISSUE FOR PERMITS	07/30/2020	MM	MM
7	007	ISSUE FOR PERMITS	07/30/2020	MM	MM
8	008	ISSUE FOR PERMITS	07/30/2020	MM	MM
9	009	ISSUE FOR PERMITS	07/30/2020	MM	MM
10	010	ISSUE FOR PERMITS	07/30/2020	MM	MM



**1 OVERALL PROJECT KEY PLAN**  
 SCALE: 1"=60'

Project No.	19280167	Scale	1"=60'
Drawing No.	1.1	Sheet	2 of 23
Revision	0		

**Client/Project**  
 Buffalo Society of Natural Sciences  
 Tiff Nature Preserve  
 1200 Furman Boulevard  
 Buffalo, New York, 14203

**Title**  
 GENERAL INFORMATION  
 AND KEY PLAN

# Tiff Nature Preserve Accessible Trail Funding Proposal to the Niagara River Greenway Commission



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 Rochester, New York, USA 14614  
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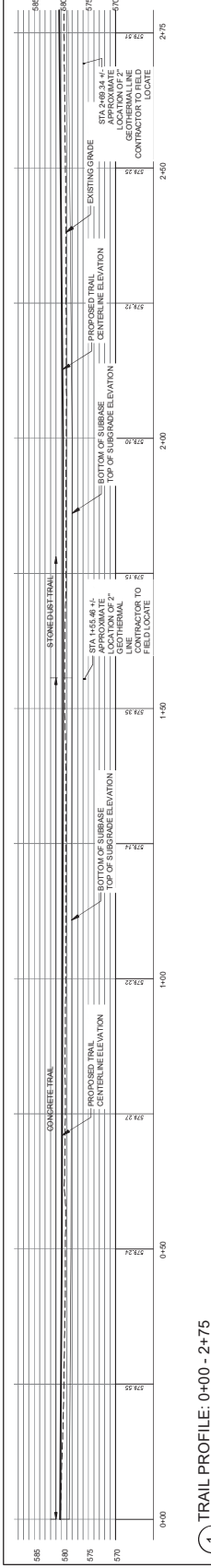
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3	003	ISSUE FOR PERMITS	07/30/2020
4	004	ISSUE FOR PERMITS	07/30/2020
5	005	ISSUE FOR PERMITS	07/30/2020
6	006	ISSUE FOR PERMITS	07/30/2020
7	007	ISSUE FOR PERMITS	07/30/2020
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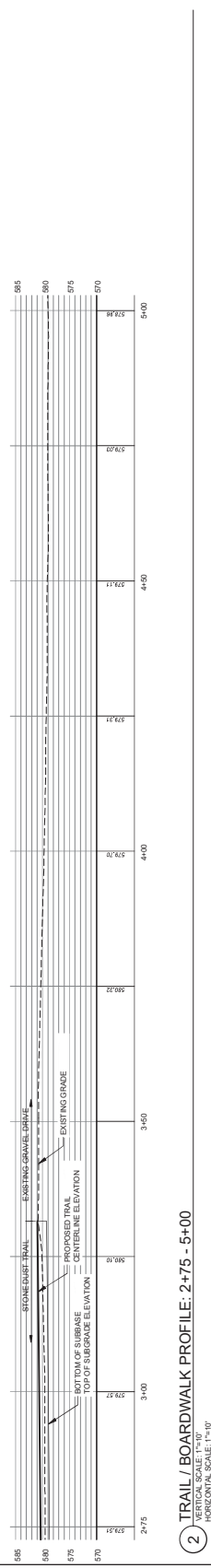
Client/Project  
 Buffalo Society of Natural Sciences  
 Tiff Nature Preserve Accessible Trail  
 1200 Furrmann Boulevard  
 Buffalo, New York 14203

Title  
 TRAIL AND BOARDWALK PROFILE

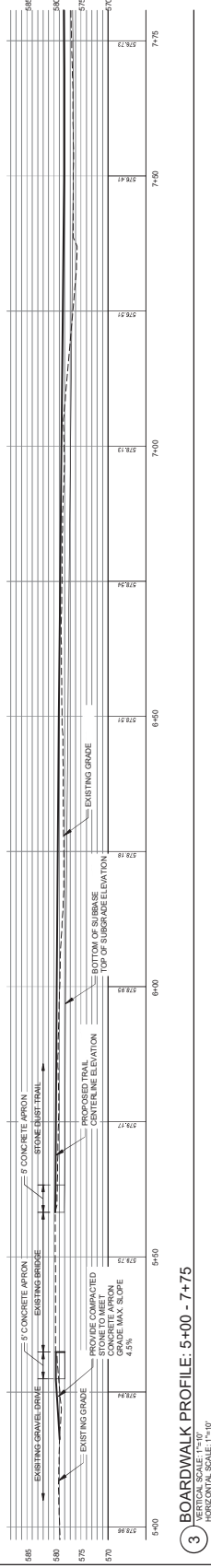
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 Drawing No.  
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 Sheet  
 15 of 23  
 Revision  
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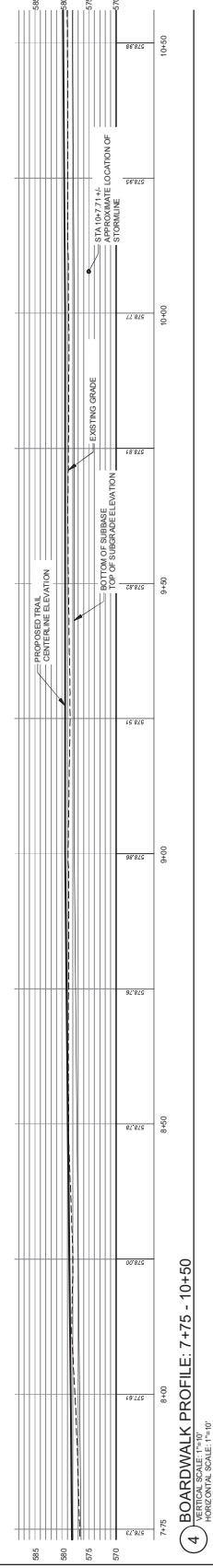
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 HORIZONTAL SCALE: 1"=50'



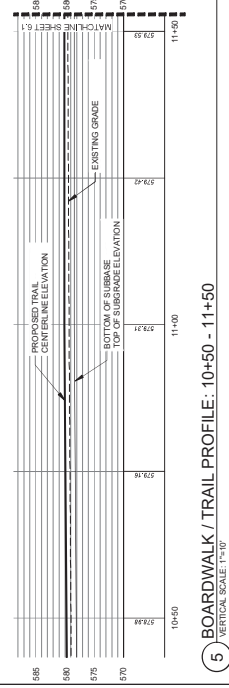
2 TRAIL / BOARDWALK PROFILE: 2+75 - 5+00  
 VERTICAL SCALE: 1"=10'  
 HORIZONTAL SCALE: 1"=50'



3 BOARDWALK PROFILE: 5+00 - 7+75  
 VERTICAL SCALE: 1"=10'  
 HORIZONTAL SCALE: 1"=50'



4 BOARDWALK PROFILE: 7+75 - 10+50  
 VERTICAL SCALE: 1"=10'  
 HORIZONTAL SCALE: 1"=50'



5 BOARDWALK / TRAIL PROFILE: 10+50 - 11+50  
 VERTICAL SCALE: 1"=10'  
 HORIZONTAL SCALE: 1"=50'

12/25/2020 10:20:23 AM Project: 192820167 - Tiff Nature Preserve Accessible Trail - TRAIL AND BOARDWALK PROFILE.dwg





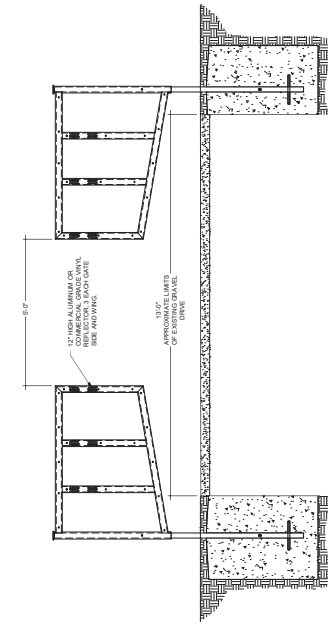
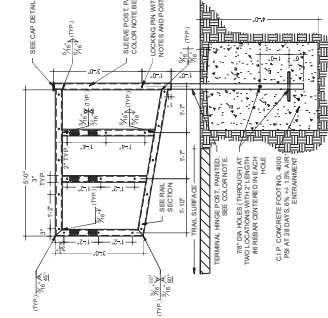
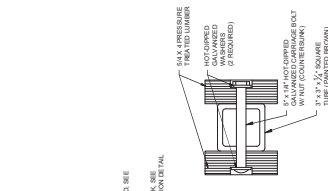
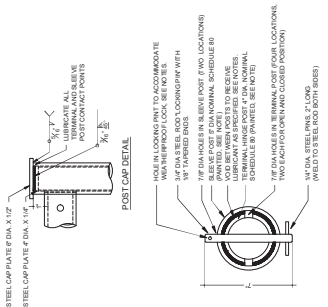


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1. ALL DIMENSIONS UNLESS OTHERWISE NOTED ARE IN FEET AND INCHES. DIMENSIONS IN PARENTHESIS INDICATE TOLERANCES. DIMENSIONS IN FEET AND INCHES SHALL BE ROUNDED UP TO THE NEXT LARGER DIMENSION. DIMENSIONS IN METERS SHALL BE ROUNDED UP TO THE NEXT LARGER DIMENSION.  
 2. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE NOTED.  
 3. ALL DIMENSIONS SHALL BE TO CENTERLINE UNLESS OTHERWISE NOTED.  
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 9. ALL DIMENSIONS SHALL BE TO CENTERLINE UNLESS OTHERWISE NOTED.  
 10. ALL DIMENSIONS SHALL BE TO SURFACE UNLESS OTHERWISE NOTED.

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POST WITH LOCKING PIN

RAIL SECTION

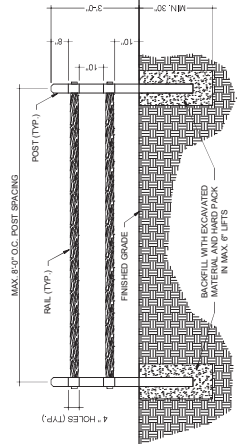
SECTION

ELEVATION

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 2. ALL DIMENSIONS SHALL BE TO CENTERLINE UNLESS OTHERWISE NOTED.  
 3. ALL DIMENSIONS SHALL BE TO SURFACE UNLESS OTHERWISE NOTED.  
 4. ALL DIMENSIONS SHALL BE TO CENTERLINE UNLESS OTHERWISE NOTED.  
 5. ALL DIMENSIONS SHALL BE TO SURFACE UNLESS OTHERWISE NOTED.  
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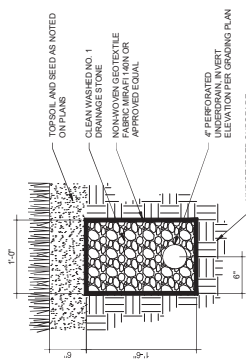
1. EACH GATE SHALL BE BUILT WITH A WEATHER PROOF LOCK WITH SELF-LATCHING MECHANISM. LOCK TO BE APPROVED BY LOCAL HEALTH DEPARTMENT.
2. FRAMING AND ALL HARDWARE AND FASTENERS TO BE GALVANNEZED STEEL AND ALL METAL COMPONENTS SHALL BE GALVANNEZED STEEL. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE NOTED.
3. ALL LUMBER FOR THE RAILS SHALL BE WESTERN RED CEDAR. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE NOTED.
4. GATES SHALL BE LOCATED TO PROVIDE 5' OF OPENING FOR VEHICLES TO PASS THROUGH.
5. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE NOTED.
6. NOTES SHALL APPLY TO ALL OTHER GATE SPECIFICATIONS AS NOTED.

1 RUSTIC VEHICLE HALF GATE  
 N.T.S.



- NOTE:
1. WOOD TO BE WESTERN RED CEDAR.
  2. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE NOTED.
  3. FENCE TO BE 7\"/>

3 SPLIT RAIL FENCE  
 N.T.S.



4 CURTAIN DRAIN  
 N.T.S.

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Revision	No.	Description	Date
1	001	ISSUED FOR PERMITS	07/30/2020
2	002	ISSUED FOR PERMITS	07/30/2020
3	003	ISSUED FOR PERMITS	07/30/2020
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6	006	ISSUED FOR PERMITS	07/30/2020
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8	008	ISSUED FOR PERMITS	07/30/2020
9	009	ISSUED FOR PERMITS	07/30/2020
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Client/Project  
 Buffalo Society of Natural Sciences  
 1200 Furrman Boulevard  
 Buffalo, New York, 14203

Title  
 MISCELLANEOUS DETAILS

Project No.  
 192820167

Scale  
 N/A

Drawing No.  
 7.2

Sheet  
 19 of 23

Revision  
 0





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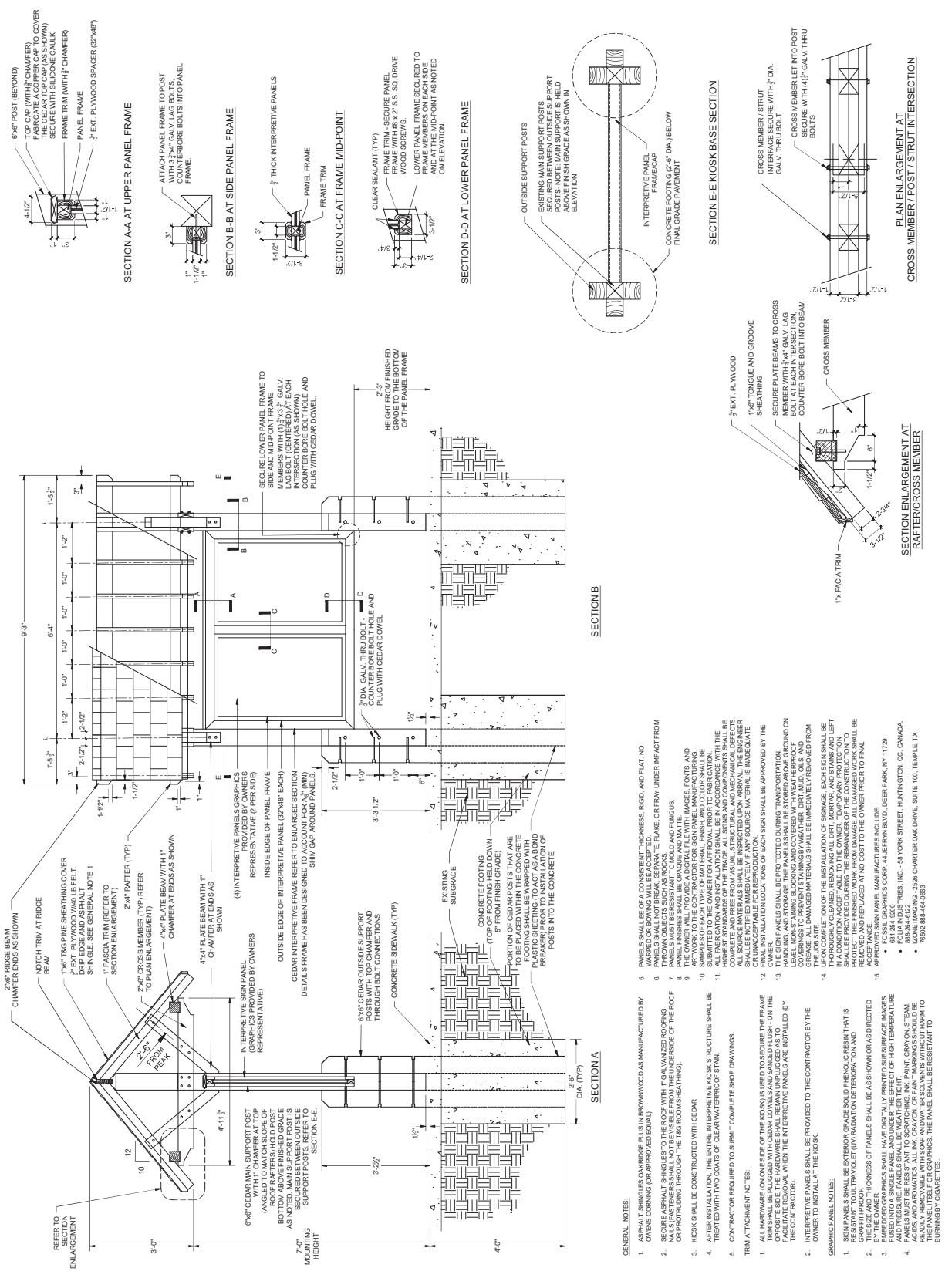
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2	AKP	07/30/20	AKP	AKP	
3	AKP	07/30/20	AKP	AKP	
4	AKP	07/30/20	AKP	AKP	
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9	AKP	07/30/20	AKP	AKP	
10	AKP	07/30/20	AKP	AKP	

Client/Project  
 Buffalo Society of Natural Sciences  
 1200 Furman Road  
 Buffalo, New York 14203

Project No  
 19280167  
 Scale  
 N/A  
 Drawing No.  
 7.3  
 Sheet  
 20 of 23  
 Revision  
 0



**SECTION A-A AT UPPER PANEL FRAME**  
 6"x6" POST (BEYOND)  
 TOP CAP (WITH CHAMFER)  
 THE CEDAR TOP CAP (AS SHOWN)  
 SECURE WITH SILICONE CALK  
 FRAME TRIM (WITH CHAMFER)  
 PANEL FRAME  
 3/4" EXT. PLYWOOD SPACER (32"x48")

**SECTION B-B AT SIDE PANEL FRAME**  
 ATTACH PANEL FRAME TO POST  
 COUNTERBORE BOLTS INTO PANEL  
 FRAME

**SECTION C-C AT FRAME MID-POINT**  
 CLEAR SEALANT (TYP)  
 FRAME TRIM - SECURE PANEL  
 FRAME WITH 3/8" S.S. DRILL TO  
 LOWER PANEL FRAME SECURED TO  
 FRAME MEMBERS ON EACH SIDE  
 AND AT THE MID-POINT AS NOTED  
 ON ELEVATION

**SECTION D-D AT LOWER PANEL FRAME**  
 OUTSIDE SUPPORT POSTS  
 EXISTING MAIN SUPPORT POSTS  
 SECURED BETWEEN OUTSIDE SUPPORT  
 POSTS - NOTE MAIN SUPPORT IS HELD  
 TO FINISH GRADE AS SHOWN IN  
 ELEVATION

**SECTION E-E KIOSK BASE SECTION**  
 INTERPRETIVE PANEL  
 FRAME/CAP  
 CONCRETE FOOTING (2'-6" DIA.) BELOW  
 FINAL GRADE FINISH

**PLAN ENLARGEMENT AT  
 CROSS MEMBER / POST / STRUT INTERSECTION**  
 CROSS MEMBER / STRUT  
 INTERFACE SECURE WITH 1/2" DIA.  
 GALV. THRU BOLT  
 SECURE WITH 6"x6" GALV. THRU  
 BOLT  
 CROSS MEMBER LET INTO POST  
 BOLTS

**SECTION ENLARGEMENT AT  
 RAFTER/CROSS MEMBER**  
 1"x6" TONGUE AND GROOVE  
 SHEATHING  
 SECURE PLATE BEAMS TO CROSS  
 MEMBER WITH 1/2" GALV. LAG  
 BOLT AT EACH INTERSECTION.  
 COUNTER BORE BOLT INTO BEAM  
 CROSS MEMBER

**GENERAL NOTES:**

- ASPHALT SHINGLES OVERSIDE PLUS IN BROWNWOOD AS MANUFACTURED BY OWENS CORNING OR APPROVED EQUAL
- SECURE ASPHALT SHINGLES TO THE ROOF WITH 1" GALVANIZED ROOFING NAILS FASTENERS SHALL NOT BE VISIBLE FROM THE UNDERSIDE OF THE ROOF OR THROUGHOUT THROUGH THE 160 ROOF SHEATHING.
- KIOSK SHALL BE CONSTRUCTED WITH CEDAR
- AFTER INSTALLATION, THE ENTIRE INTERPRETIVE KIOSK STRUCTURE SHALL BE TREATED WITH TWO COATS OF CLEAR WEATHERPROOF STAIN.
- CONTRACTOR REQUIRED TO SUBMIT COMPLETE SHOP DRAWINGS.

**TRIM ATTACHMENT NOTES:**

- ALL HARDWARE (ON ONE SIDE OF THE KIOSK) IS USED TO SECURE THE FRAME TRIM SHALL BE PLUGGED WITH CEDAR DOWELS AND SANDED FLUSH - ON THE OTHER SIDE OF THE KIOSK, THE HARDWARE SHALL BE PLUGGED WITH CEDAR DOWELS AND SANDED FLUSH - ON THE OTHER SIDE OF THE KIOSK.
- INTERPRETIVE PANELS SHALL BE PROVIDED TO THE CONTRACTOR BY THE OWNER TO INSTALL AT THE KIOSK.

**GRAPHIC PANEL NOTES:**

- SIGN PANELS (ON ONE SIDE OF THE KIOSK) SHOULD BE SOLID PLYWOOD RESIN THAT IS RESISTANT TO UV RADIATION (UV) RADIATION DETEIORATION AND WEATHERING.
- THE SIZE AND THICKNESS OF PANELS SHALL BE AS SHOWN OR AS DIRECTED BY THE ARCHITECT.
- EMBEDDED GRAPHICS SHALL HAVE DIGITALLY PRINTED SUBSURFACE IMAGES FUSED INTO A SINGLE PANEL AND UNDER THE EFFECT OF HIGH TEMPERATURE PANELS MUST BE RESISTANT TO SCRATCHING, INK, PAINT, CRAYON, STEAM, AND WATER. GRAPHICS SHALL BE DIGITALLY PRINTED ON A WATER RESISTANT PAPER. THE PANEL ITSELF OR GRAPHICS, THE PANEL SHALL BE RESISTANT TO BURNING BY COGNITES.

**6. PANELS SHALL BE A CONSISTENT THICKNESS, RIGID, AND FLAT. NO WARP OR BOWING WILL BE ACCEPTED.**

**7. PANELS MUST BE RESISTANT TO MOULD AND CLINGING.**

**8. THE OWNER WILL PROVIDE A DIGITAL FILE WITH IMAGES, FONTS, AND ARTWORK TO THE CONTRACTOR FOR SIGN PANEL MANUFACTURING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND INSTALLATION AND STORAGE OF THE SIGN PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS.**

**9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS.**

**10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS.**

**11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS.**

**12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS.**

**13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS.**

**14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MANUFACTURING AND STORAGE OF THE SIGN PANELS.**

**15. APPROVED CONTRACTOR: KIOSK GRAPHICS CORP., 44 AFRON BLVD., DEER PARK, NY 11759  
 601-254-0000  
 800-264-1122  
 1200 FURMAN ROAD, BUFFALO, NY 14203  
 716-874-9493**



61 Commercial Street, Suite 100  
 Rochester, New York, USA 14614  
 www.stantec.com

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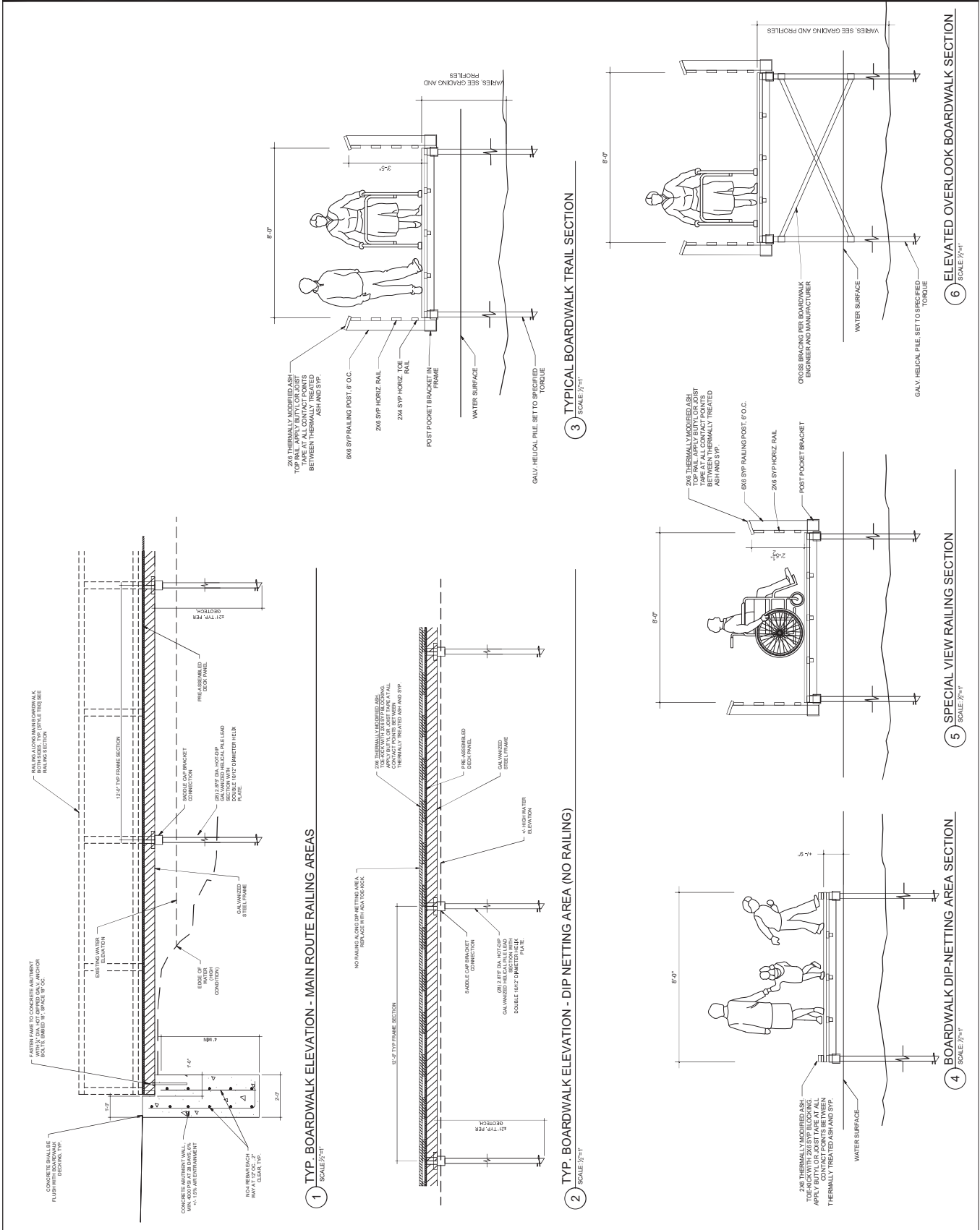
The Contractor shall verify and be responsible for all dimensions, DO NOT SCALE DRAWINGS. The Contractor shall verify and be responsible for all dimensions, DO NOT SCALE DRAWINGS. The Contractor shall verify and be responsible for all dimensions, DO NOT SCALE DRAWINGS.

**PROGRESS PRINT  
 NOT FOR  
 CONSTRUCTION  
 07/30/2020**

Revision	No.	Description	Date
1	001	ISSUE FOR PERMITS	07/30/20
2	002	ISSUE FOR PERMITS	07/30/20
3	003	ISSUE FOR PERMITS	07/30/20
4	004	ISSUE FOR PERMITS	07/30/20
5	005	ISSUE FOR PERMITS	07/30/20
6	006	ISSUE FOR PERMITS	07/30/20
7	007	ISSUE FOR PERMITS	07/30/20
8	008	ISSUE FOR PERMITS	07/30/20
9	009	ISSUE FOR PERMITS	07/30/20
10	010	ISSUE FOR PERMITS	07/30/20

Client/Project  
 Buffalo Society of Natural Sciences  
 Tift Nature Preserve  
 1200 Funnemann Boulevard  
 Buffalo, New York, 14203

Project No. 19280167  
 Scale: N/A  
 Drawing No. Sheet  
 8.1 22 of 23  
 Revision 0







---

To: Meghan Dye, Director of Tift  
Tift Nature Preserve  
1200 Fuhrmann Blvd  
Buffalo, NY 14203

From: Andy Smith, Senior Scientist  
Stantec  
61 Commercial St, Suite 100  
Rochester, NY 14614

File: Mem 002 Tift Nature Preserve,  
Accessibility Trail - Preliminary  
Permitting Analysis

Date: December 2, 2019

---

**Reference: Tift Nature Preserve, Accessibility Trail - Preliminary Permitting Analysis**

The proposed Tift Accessibility Trail requires review and potential permitting from several regulatory agencies including:

- **US Army Corps of Engineers** under the authority of Section 404 of the Clean Water Act for proposed work activities within wetlands/waters of the US. Section 404 regulates the discharge of fill in waters/wetlands. It is anticipated that the proposed accessibility trail will be authorized by Nationwide permit No. 42 for Recreational facilities. Nationwide Permit 42 - Recreational Facilities, authorizes discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of recreational facilities. Examples of recreational facilities that may be authorized by this NWP include playing fields (e.g. football fields, baseball fields), basketball courts, tennis courts, hiking trails, bike paths, golf courses, ski areas, horse paths, nature centers, and campgrounds (excluding recreational vehicle parks). This NWP also authorizes the construction or expansion of small support facilities, such as maintenance and storage buildings and stables that are directly related to the recreational activity, but it does not authorize the construction of hotels, restaurants, racetracks, stadiums, arenas, or similar facilities. The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. The discharge must not cause the loss of more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects. The loss of stream bed plus any other losses of jurisdictional wetlands and waters caused by the NWP activity cannot exceed 1/2-acre. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters. Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity.
- **US Fish and Wildlife Service**, under the authority of the Endangered Species Act (ESA) the project will be reviewed as part of the Joint Application process to ensure compliance with the ESA. Typically, the Army Corps of Engineers will contact the USFWS as part of their review process to request USFWS review and comment.
- **NYS Department of Environmental Conservation** under the Authority of NYSDEC Article 24 Freshwater Wetland Act. The development of hiking/recreational trails within wetlands and the regulated 100 ft. wetland adjacent area is exempt from requiring an Article 24 permit

December 2, 2019

Meghan Dye, Director of Tifft

Page 2 of 2

**Reference:** Tifft Nature Preserve, Accessibility Trail - Preliminary Permitting Analysis

but will be reviewed in a Joint Application for permit with the Army Corps specifically to authorize a Section 401 Water Quality Certification for the proposed activity.

- **The NYS Department of State** is responsible for reviewing and managing competing development and uses of waterfront resources. Tifft Nature Preserve falls within the NYS Coastal Boundaries and is subject to review. General guidance given by NYS DOS is that any time a federal permit is required (e.g. USACE Section 404), consistency review is likely required. Practically speaking, additions to buildings, living shoreline work, or extensive additions or replacement of boardwalks will most likely need to be submitted for Coastal Consistency Review. Ecological restoration work that is not subject to USACE permits generally is not subject to this review.

We suggest a pre-application meeting with the regulatory agencies to confirm jurisdiction when a concept plan has been developed,

**Stantec Consulting Services Inc.**

**Andy Smith**

Senior Scientist

Phone: 585 413-5279

Fax: 585 272-1814

andy.smith@stantec.com

Attachment:



1200 Fuhrmann Blvd  
Buffalo, NY 14203  
[www.tifft.org](http://www.tifft.org)

*valuing nature's wisdom*

## TIFFT ACCESSIBLE TRAIL

Niagara River Greenway Commission  
Consistency Consultation and Review

## APPENDIX B

- City of Buffalo  
Comprehensive Plan
- NYS Significant Coastal  
Fish & Wildlife Habitat
- Letters of Support

## Tiftt Nature Preserve Noted in Buffalo's Comprehensive Plan

Buffalo's Comprehensive Plan

### Parks

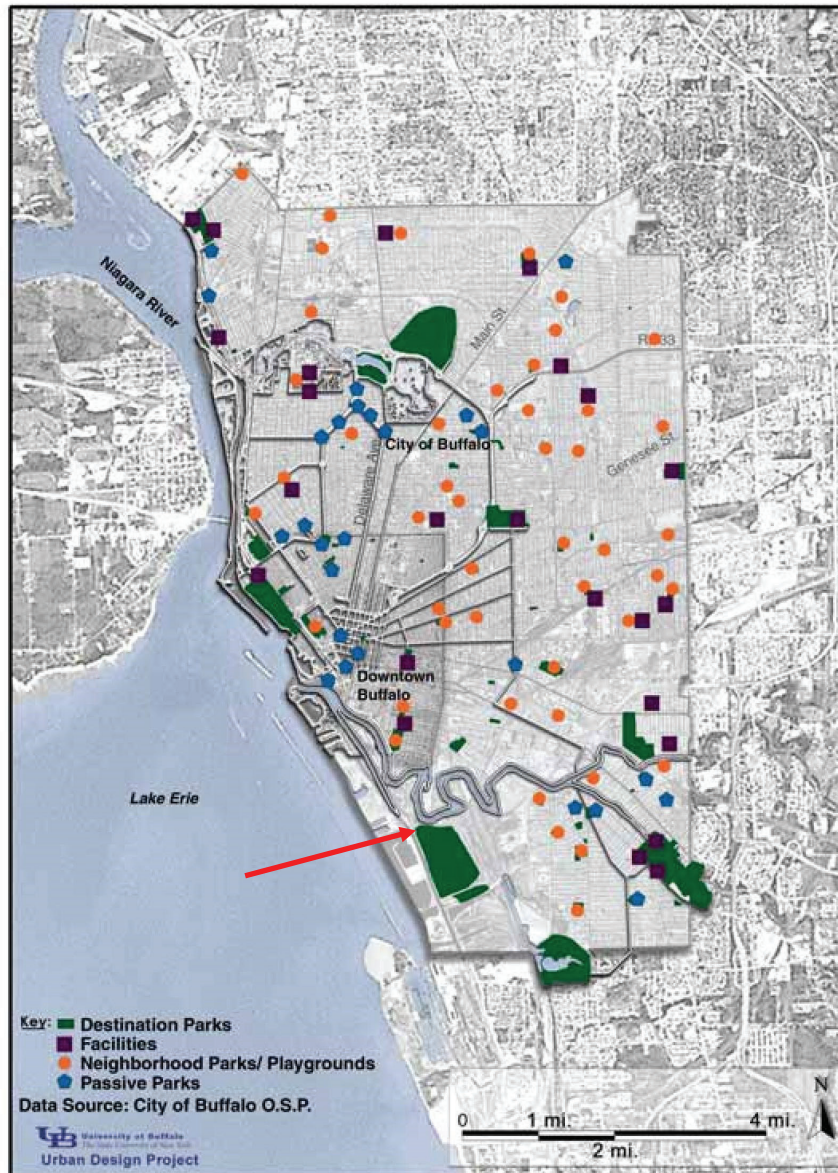


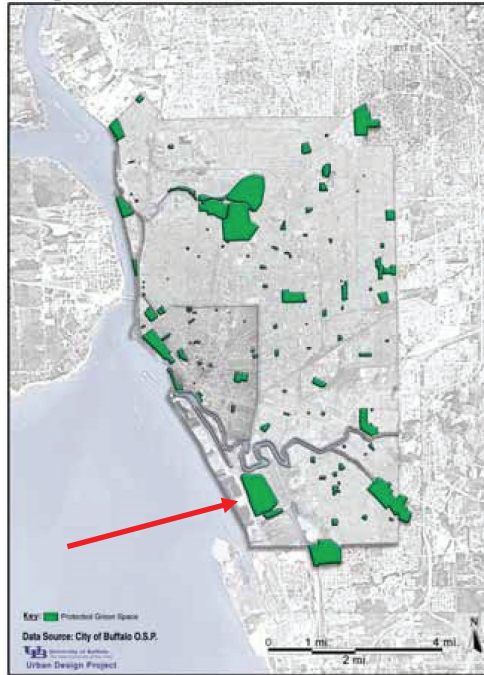
Figure 32. Key destination parks, facilities, neighborhood parks and playgrounds.

*Green infrastructure*

Public parks are only one part of what might be called the “green infrastructure” of a city. This “green infrastructure” includes not only public parks, parkways and playgrounds, but also institutional and private open spaces, rail and utility rights of way, highway margins, stream corridors, trailways, disused industrial land, vacant residential property and more. Because this infrastructure performs a range of ecological functions – providing wildlife corridors, urban habitat, support for biodiversity and more – it is important to the health of the ecosystem.

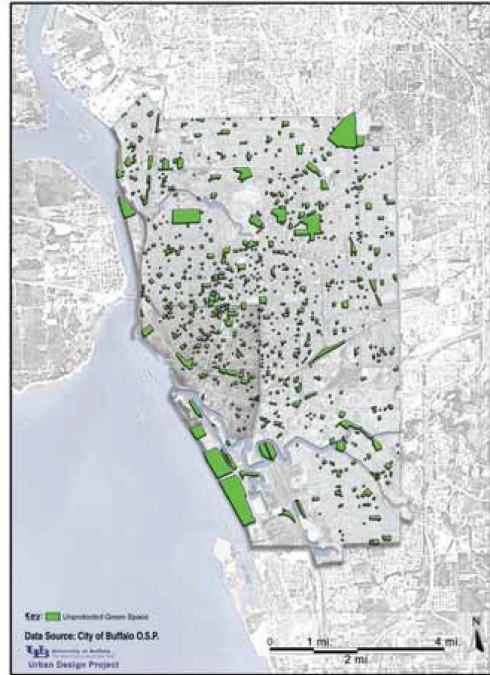
We can imagine a system of green infrastructure composed of several types of open spaces. The formally protected green spaces of the city such as parks, playgrounds, and recreational facilities in public ownership, as well as dedicated green spaces such as cemeteries, constitute one layer of the green infrastructure (See Figure 35).

Existing Protected - Green Infrastructure Figure 35



- Public Piers, Wharves & Docks
- Public Golf Courses
- Public Marinas
- Public Parks
- Public Playgrounds
- Public Athletic Fields
- Public Picnic Grounds
- Public Recreational Facilities
- Cemeteries
- Water
- City / Town / Village Parks

Existing Non-Protected - Green Infrastructure Figure 36



- Private Piers, Wharves & Docks
- Private Marinas
- Private Parks
- Private Playgrounds
- Private Athletic Fields
- Private Picnic Grounds
- Private Recreational Facilities
- Outdoor Riding Stables
- Libraries
- Schools
- Colleges & Universities
- Religious
- Welfare
- Hospitals & Other Health Facilities
- Cultural & Recreational Facilities
- Roads, Streets & Highways
- Transmission & Distribution Land
- Utility Corridors
- Water for Transportation
- Railroads
- Solid Waste Facilities
- Landfills & Dumps
- Sewage Treatment
- Water Pollution Control



**COASTAL FISH & WILDLIFE HABITAT RATING FORM**

---

Name of Area: **Tift Farm Nature Preserve**

Designated: **October 15, 1987**

County: **Erie**

Town(s): **Buffalo**

7½' Quadrangle(s): **Buffalo SE, NY**

---

<b><u>Score</u></b>	<b><u>Criterion</u></b>
<b>16</b>	Ecosystem Rarity (ER) This is the largest open space/wildlife habitat in the City of Buffalo; included is one of the largest remaining wetlands in the lake Erie coastal region.
<b>24</b>	Species Vulnerability (SV) Least Bittern (SC) nesting; Jefferson salamander (SC) found here. Additive division: 16 + 16/2
<b>14</b>	Human Use (HU) This is the most heavily used environmental education center in the region, attracting visitors for recreational and educational uses. Additive division: 9 + 9/2
<b>16</b>	Population Level (PL) One of only 3 known localities in New York State where burrowing crayfish exist; populations of many other wetland wildlife species are unusual in the region.
<b>1.2</b>	Replaceability (R) Irreplaceable

---

SIGNIFICANCE VALUE = [( ER + SV + HU + PL ) X R]

= **84**

## **Tift Nature Preserve Noted in New York State Significant Coastal Fish & Wildlife Habitat**

### **DESIGNATED HABITAT: TIFT FARM NATURE PRESERVE**

#### **LOCATION AND DESCRIPTION OF HABITAT:**

Tift Farm Nature Preserve is located approximately three miles south of downtown Buffalo, within the city limits, in Erie County (7.5' Quadrangle: Buffalo SE, N.Y.). The preserve is located adjacent to the Small Boat Harbor, bounded roughly by Fuhrmann Boulevard (N.Y.S. Route 5) to the west, and railroad right-of-ways to the north, east, and south. Tift Farm is a 264 acre nature preserve and environmental education center, owned by the City of Buffalo, and operated jointly by the City and the Buffalo Museum of Science. This area contains a diversity of fish and wildlife habitats, including an approximate 75 acre cattail marsh, small freshwater ponds and old canal remnants, old fields (partly covering a former solid waste transfer site), forested wetland, and shrub-sapling stages of succession. The land area surrounding Tift Farm is dominated by active and vacant industrial facilities and railroad properties.

#### **FISH AND WILDLIFE VALUES:**

Tift Farm Nature Preserve is the largest contiguous fish and wildlife habitat area within the City of Buffalo. Of special importance is the relatively undisturbed wetland area, which is the largest of its kind along the Lake Erie coastline. The site is inhabited by a diversity of fish and wildlife species that is unusual in this coastal region, especially within the urban area. A full complement of wetland wildlife species occurs in and around the marshes at Tift Farm: pied-billed grebe, green-backed heron, least bittern (SC), American bittern, mallard, blue-winged teal, Canada goose, Virginia rail, sora, common moorhen, American coot, American woodcock, spotted sandpiper, marsh wren, willow flycatcher, common yellowthroat, red-winged blackbird, and swamp sparrow nest here; black-crowned night herons roost and feed in the area during the nesting season; many species of waterfowl, shorebirds, herons, osprey (T), and passerine birds use the area as a stopover during spring and fall migrations; muskrat, mink, northern water snake, snapping and painted turtles, bullfrog, green frog, northern leopard frog, and Jefferson salamander (SC) are year-round residents; and at least two species of fish, the central mudminnow and brook stickleback, are present. Up until the late 1970's, black terns (SC) also nested in the marshes at Tift Farm; the reasons for their disappearance are unknown. Tift Farm also contains a population of burrowing crayfish, one of only 3 known localities for this species in New York State.

In addition to the wetlands, Tift Farm provides a diversity of other fish and wildlife habitats. Upland habitats at Tift Farm support most of the typical species in the region, such as raccoon, eastern cottontail, red fox, gray fox, meadow vole, ring-necked pheasant, various passerine birds, and common garter snake. The largest of the freshwater ponds is directly connected to Lake Erie via a culvert under Fuhrmann Boulevard to the Small Boat Harbor. Consequently, many warmwater fish species occur in the area, including black crappie, yellow perch, rock bass, pumpkinseed sunfish, bluegill, bullhead, carp, largemouth bass, gizzard shad, freshwater drum, northern pike, and longnose gar. The extent to which these fish occur in other aquatic habitats in the preserve is not well known. As an environmental education center, Tift Farm Nature Preserve is an outstanding facility in western New York, attracting some 18,000 visitors to the area in 1984. Public use of the area centers on bird observation and study (especially during spring and fall), fishing during the summer months, environmental education during the school year, and general nature study and outdoor recreation throughout the year. A visitors center and system of trails have been developed in the area. Most of the people using Tift Farm reside within the multi-county Buffalo metropolitan area.

#### **IMPACT ASSESSMENT:**

A **habitat impairment test** must be met for any activity that is subject to consistency review under federal and State laws, or under applicable local laws contained in an approved local waterfront revitalization program. If the proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

## Tift Nature Preserve Noted in New York State Significant Coastal Fish & Wildlife Habitat

The specific **habitat impairment test** that must be met is as follows.

In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would:

- destroy the habitat; or,
- significantly impair the viability of a habitat.

*Habitat destruction* is defined as the loss of fish or wildlife use through direct physical alteration, disturbance, or pollution of a designated area or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

*Significant impairment* is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include but are not limited to reduced carrying capacity, changes in community structure (food chain relationships, species diversity), reduced productivity and/or increased incidence of disease and mortality.

The *tolerance range* of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the species population or has the potential to support a restored population, where practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

The range of parameters which should be considered in applying the habitat impairment test include but are not limited to the following:

1. physical parameters such as living space, circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;
2. biological parameters such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and,
3. chemical parameters such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxics and hazardous materials).

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed below to assist in applying the habitat impairment test to a proposed activity.

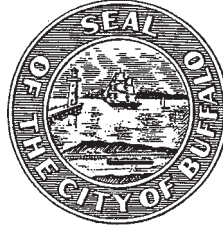
Despite its current status as a nature preserve and environmental education center, Tift Farm's fish and wildlife habitats remain vulnerable to a number of potential impacts. Surrounding land uses may be the most important factor affecting the wildlife resources of this area. Encroachment of human disturbance, including industrial, commercial, or residential development could have significant impacts on species using the area. Discharges of polluted runoff (or migration of contaminated groundwater) from adjacent areas could seriously degrade the wetland and aquatic habitats in Tift Farm Nature Preserve. Maintenance of the high quality urban fishery in this area is dependent upon keeping the connection to Lake Erie open and accessible for fish passage. Opportunities for compatible public use of the area should be maintained or enhanced to utilize this valuable fish and wildlife resource.

# The Buffalo Common Council

**CHRISTOPHER P. SCANLON**  
**PRESIDENT PRO TEMPORE**  
**SOUTH DISTRICT COUNCIL MEMBER**

65 NIAGARA SQUARE, 1401 CITY HALL  
BUFFALO, NY 14202-3318

PHONE: (716) 851-5169 ♦ FAX: (716) 851-4294  
E-mail: cscanlon@city-buffalo.com



**CHAIRMAN**  
FINANCE  
TRANSPORTATION  
WATERFRONT DEVELOPMENT

**COMMITTEES**  
BUDGET  
CIVIL SERVICE

**LEGISLATIVE ASSISTANTS**  
PEGGY SHEA  
RACHEL REID

January 3, 2019

Ms. Marisa Wigglesworth  
Buffalo Society of Natural Sciences  
1020 Humboldt Pkwy  
Buffalo, NY 14211-1208

Dear Ms. Wigglesworth:

I want to express my full support of the Buffalo Society of Natural Sciences for the *Tifft Nature Preserve Accessibility Trail* being submitted to the Ralph C. Wilson, Jr. Legacy Funds.

Tifft Nature Preserve, a fixture on our valued Outer Harbor for over 30 years, highlights the power of nature to reclaim itself while offering an opportunity for visitors to experience and learn about local wildlife and the importance of protecting our natural resources. Through educational programming Tifft provides valuable natural and recreational amenities that add to the quality of life of area residents. Improvements of the existing visitor center were completed to create the Herb and Jane Darling Environmental Education Center, adding to the quality of amenities available at Tifft and ensuring Americans with Disabilities Act of 1990 compliance for entries and restrooms. This serves as terrific foundation for improving the outdoor experience for individuals with physical limitations to enjoy Tifft's trails.

Located only three miles from downtown Buffalo and free to all visitors, Tifft Nature Preserve is the most publicly accessible nature preserve for City of Buffalo residents. All residents should have the ability to equally enjoy the beauty and experience of a walk on Tifft's trails. The more individuals that have the opportunity to experience this terrific area asset, the more community support there will be for preserving it.

As representative of the South District on the Buffalo Common Council, I fully support this worthwhile project and look forward to the Buffalo Society of Natural Sciences' continued support for the Western New York environmental and economic future.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Scanlon".

Christopher P. Scanlon

South District Councilmember



**MICHAEL J. FINN, P.E.**  
Commissioner

**BYRON W. BROWN**  
Mayor of Buffalo

**ANDREW R. RABB**  
Deputy Commissioner

---

**DEPARTMENT OF PUBLIC WORKS, PARKS & STREETS**  
**DIVISION OF PARKS AND RECREATION**

---

November 16, 2021

Ms. Marisa Wigglesworth  
Buffalo Museum of Science  
1020 Humboldt Parkway

Buffalo, NY 14211-1208

Dear Ms. Wigglesworth,

On behalf of the City of Buffalo Division of Parks and Recreation, owners of the land that comprises Tiff Nature Preserve, I am writing to offer my staunch support to the Buffalo Society of Natural Sciences for the Tiff Nature Preserve Accessible Trail being submitted for consideration to the Niagara River Greenway Commission's Buffalo and Erie County Greenway Fund. Tiff is an invaluable resource for residents of the City of Buffalo and the Western New York area. It is a destination for rejuvenation and locus of environmental education that all residents deserve equitable opportunity to benefit from. The Accessible Trail project will create a fully accessible  $\frac{3}{4}$  mile trail on the Preserve, expanding Tiff's offerings and its service as a resource to all Buffalonians and Western New Yorkers.

Under the Buffalo Museum of Science's stewardship, the 264-acre urban nature sanctuary provides unparalleled opportunities for residents to observe wildlife and learn about ecology and conservancy. Approximately 15,000 visitors participate in a Tiff program each year and an additional 25,000 visitors come to the Preserve to walk, engage in passive recreational activities, and generally enjoy nature.

The accessible trail was conceived by global design firm Stantec, working in partnership with the City and the BSNS. The result is a layout that will be approachable and accessible for visitors who use wheelchairs, walkers, strollers, and other means of assistance. Lack of comparable experiences in our region makes improved accessibility for guests regardless of mobility – as well as for visitors overall – a timely and critical concern.

I wholeheartedly support this project and thank the Niagara River Greenway Commission in advance for their thoughtful consideration of this request.

Sincerely,

A handwritten signature in blue ink, appearing to read "Andrew Rabb".

**Andrew Rabb**  
Deputy Commissioner  
DPW/Parks and Recreation

**Internal Revenue Service  
District Director**

**Department of the Treasury**

**P. O. Box 2508  
Cincinnati, OH 45201**

Date: May 24, 1999

**Person to Contact:**  
Robert Molloy 31-04023  
Customer Service Representative

Buffalo Society of Natural Sciences  
1020 Humbolt Pky.  
Buffalo, NY 14211-1208

**Telephone Number:**  
877-829-5500

**Fax Number:**  
513-684-5936

**Federal Identification Number:**  
16-6000178

Dear Sir:

This letter is in response to your request for a copy of your organization's determination letter. This letter will take the place of the copy you requested.

Our records indicate that a determination letter issued in June 1935 granted your organization exemption from federal income tax under section 501(c)(3) of the Internal Revenue Code. That letter is still in effect.

Based on information subsequently submitted, we classified your organization as one that is not a private foundation within the meaning of section 509(a) of the Code because it is an organization described in sections 509(a)(1) and 170(b)(1)(A)(vi).

This classification was based on the assumption that your organization's operations would continue as stated in the application. If your organization's sources of support, or its character, method of operations, or purposes have changed, please let us know so we can consider the effect of the change on the exempt status and foundation status of your organization.

Your organization is required to file Form 990, Return of Organization Exempt from Income Tax, only if its gross receipts each year are normally more than \$25,000. If a return is required, it must be filed by the 15th day of the fifth month after the end of the organization's annual accounting period. The law imposes a penalty of \$20 a day, up to a maximum of \$10,000, when a return is filed late, unless there is reasonable cause for the delay.

All exempt organizations (unless specifically excluded) are liable for taxes under the Federal Insurance Contributions Act (social security taxes) on remuneration of \$100 or more paid to each employee during a calendar year. Your organization is not liable for the tax imposed under the Federal Unemployment Tax Act (FUTA).

Organizations that are not private foundations are not subject to the excise taxes under Chapter 42 of the Code. However, these organizations are not automatically exempt from other federal excise taxes.

**RECEIVED MAY 27 1999**

Buffalo Society of Natural Sciences  
16-6000178

Organizations that are not private foundations are not subject to the excise taxes under Chapter 42 of the Code. However, these organizations are not automatically exempt from other federal excise taxes.

Donors may deduct contributions to your organization as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to your organization or for its use are deductible for federal estate and gift tax purposes if they meet the applicable provisions of sections 2055, 2106, and 2522 of the Code.

Your organization is not required to file federal income tax returns unless it is subject to the tax on unrelated business income under section 511 of the Code. If your organization is subject to this tax, it must file an income tax return on the Form 990-T, Exempt Organization Business Income Tax Return. In this letter, we are not determining whether any of your organization's present or proposed activities are unrelated trade or business as defined in section 513 of the Code.

Because this letter could help resolve any questions about your organization's exempt status and foundation status, you should keep it with the organization's permanent records.

If you have any questions, please call us at the telephone number shown in the heading of this letter.

This letter affirms your organization's exempt status.

Sincerely,



C. Ashley Bullard  
District Director