Re-Imagine RedGate Park Master Plan

ROM Cost Analysis Mahan Rykiel Associates Whitman Requardt Associates

October 5, 2022

General

RedGate Park is envisioned to be a predominantly passive park, emphasizing natural habitat and pathway enhancements throughout. In addition to the existing parking lot and entry drive, the central park area will include features and amenities interwoven with the natural habitat areas, including a new visitor center, community gardens, amphitheater and associated deck overlook, picnic area, playground, and dog park. The entire park will be developed (over time) as an arboretum with arboretum specimens, collections, and signage integrated into the natural environments and park features with access along the pathway network.

This document serves as a Rough Order of Magnitude (ROM) Cost Analysis for the master plan. The ROM Cost Analysis is preliminary in nature and has been provided to enable initial planning for the redevelopment of the site. It is based upon the elements shown within the master plan and costs at the time of the analysis. More detailed estimates are required as part of the future design efforts for each phase of the master plan implementation. Except for the new visitor center building and existing building renovation options, a 40% construction contingency has been included for each feature to account for items that have yet to be determined during the master planning phase or are unanticipated at the time of the estimate. Such items include but are not limited to permit fees, hazardous materials, unsuitable soils, unknown subsurface utility relocations, contractor overhead and profit, and contractor bonds. Unit costs are based upon historical data, previous similar projects, and gross square foot/linear foot costs. A separate cost analysis was prepared for the new visitor center building and existing building renovation options. This separate cost analysis utilized a 30% construction contingency. The totals for each of these options is included for reference as part of this analysis. In addition to the construction contingency, a 15% design allowance has been added for all features to arrive at the subtotal for each project/park feature.

Following is a description of each park feature, followed by the cost analysis summary and breakdown by feature. If it is desired to consider a cost range for each project/park feature, a range of 20% in each direction (lower or higher) was also included on the cost analysis summary page.

All costs are in today's dollars.

PARK FEATURES

Environmental Site Design

Environmental Site Design (ESD) approaches to development of RedGate Park to reduce impacts on its watershed by conserving natural areas, limiting impervious cover and integrating stormwater management into the overall landscape. Stormwater management features including bioretention facilities will be located throughout the park near or as part of the park features described below.

Visitor Center Building

RedGate Park will include a new visitor center, centrally located in the general vicinity of the existing clubhouse building. The new visitor center will provide a universally accessible building, similar in scale to the existing clubhouse. The new building, however, will be simpler in plan and roof form, supporting more functional, flexible multi-purpose space for a variety of activities and events. It will include efficiently configured restrooms, accessible from both inside and outside, and support spaces. It may accommodate standalone events and/or serve as a base for park-related activities such as nature-walks and environmental programs, utilizing both indoor and associated outdoor spaces.

As an alternative to a new visitor center building, the existing clubhouse building may be renovated into a visitor center to bring it up to current codes and make it more useable, however, the cost of doing this would exceed the cost of demolishing the existing clubhouse building and constructing a new visitor center as described above.

Visitor Center Site

The visitor center site is the area associated with the new visitor center and includes outdoor gathering spaces associated with the new building and pathways connecting it to the parking lot. The site improvements will integrate the visitor center building and its associated programming into the park site, with outdoor gathering spaces that can support independent programming or support programming that is occurring within the visitor center. Amenities will include paved and lawn gathering areas, accessible sidewalks and ramps (connecting parking to the building), seating in the form of benches and moveable tables and chairs, bike racks, tree and ornamental plantings, and stormwater management integrated into the landscape design as a landscape feature. Site improvements may also include public art in coordination with the City's art in public places program. Electric and water hookups will also be included to facilitate outdoor programming and everyday use of the spaces adjacent to the visitor center. Other site utilities include storm drain, sanitary sewer, water, and electric connections.

Existing Parking Lot

The existing parking lot will be improved, not expanded. The purpose for maintaining the existing footprint is to minimize impervious coverage within the park. Additional parking spaces will be available at the Cityowned 6 Taft Court during evenings and weekends. Improvements to the existing parking lot include removal of the existing chain link fence, pavement removal of approximately 25% of the surface area and replacement

with full depth pavement and crushed stone sub-base*, pavement mill and overlay for the balance of 75% of the surface area, new curb and gutter, pavement markings, new concrete ADA parking spaces and signage, tree pruning and removal of damaged trees, new tree planting, and new pedestrian-scaled ornamental lighting should it be required for evening use of the visitor center. This lighting could include solar-powered lighting.

*Note: A detailed assessment of the parking lot was not conducted. Some areas were observed to be in poor condition. Additionally, the drop-off loop may need to be reconfigured depending on where the new visitor center is constructed. For master planning purposes, the team assumed 25% of the surface area.

Entrance Road

The park will continue to be served by the existing entrance road extending off Avery Road, however, the entrance road will be improved to accommodate increased park usage, amenities, and events. Improvements include removal of existing pavement along the entire length and replacement with full depth asphalt over a crushed stone base and realignment of the entrance road at the intersection with Avery Road to create a safer 90-degree intersection. This realignment will require some regrading, assuming an average of 6' of earthwork over the intersection area and a manual swing gate will be provided to restrict vehicles from entering the park when closed. A new entrance monument sign is proposed and bioretention and associated storm drain will be incorporated into the landscape design. While detailed traffic studies have not been conducted, the plan provides for an exit turn lane and a signalized intersection, should that be required in the future.

Community Gardens

New community gardens are located near the lower end of the existing parking lot, to the east. The new gardens will provide opportunities for Rockville residents to lease a plot for the growing of flowers and vegetables in a community-oriented setting. The gardens will be enclosed by an ornamental fence and will include approximately 25 individual plots, with the ability to add additional plots within the fenced area. The area will be served by a paved drive and service area extending from the park entry drive, providing access to a storage shed, compost bin, and mulch bin. Other support services provided within the fenced area include water and electrical hookups, bio-retention, and a storm drain. Crushed stone pathways will provide access to the individual garden plots and raised accessible beds will be provided near the paved service drive. Picnic tables will be provided within the fenced area to accommodate social interaction and small garden-related gatherings and workshops.

Amphitheater

A new amphitheater is proposed to the west of the existing parking lot, adjacent to the largest existing pond and to the southeast of 6 Taft Court where additional parking will be available for amphitheater activity. New pathway access, as part of the park-wide enhancements described below, will be provided and low impact lighting (low bollards, potentially solar-powered) will be provided for pathways leading to parking areas. The amphitheater will accommodate daytime and early evening performances and events.

The amphitheater will be graded slightly to accentuate the natural landform and include an area of fixed seating, including accessible seating, and a larger area of lawn seating where audience members can set up blankets or folding chairs. The stage area will include a covered stage that can also serve as a pavilion for events. An access drive and service area will be provided near the stage to accommodate loading and unloading, potential food trucks and vendor tents, and accessible parking. This service area will only be open to vehicles during events, with a gate located where the access drive connects to the park entry road. When not used to support performances, this service area can also serve as a gathering area during events. The amphitheater area will be planted with new canopy trees to frame views and provide shade along the perimeter of the viewing lawn. Other support services include electric and water hookups, and bioretention areas incorporated into the overall landscape design.

Deck Overlook at Amphitheater

A low deck overlook is proposed as part of the amphitheater area, wrapping behind the stage and extending along the pond shoreline. The overlook will provide opportunities to engage in the waterfront habitats and provide gathering space during performances and events. Concrete supports will be constructed on land adjacent to the pond; the deck may cantilever slightly over the waters edge. Park users will be protected by a railing along the edge of the deck and interpretive signage will be provided at key locations.

Playground

A playground is proposed to the northeast of the existing clubhouse building, atop an existing knoll with park views in all directions. The playground will also be located adjacent to the new visitor center area so that it can be served by the restroom facilities and amenities provided in the new visitor center. The playground will provide opportunities for nature-based play in a comfortable and accessible environment that is complementary to the overall natural qualities of the park.

The knoll will be graded to create interesting and interactive landforms as part of the playground and paved pathways of varying textures will provide tactile experiences and accessibility to different playground areas. Other playground amenities include a rubberized safety surface contained by a flush concrete curb; a variety of nature-based play equipment that serves children of all abilities; shade sails and new tree plantings to provide shade; site furnishings such as seating and trash/recycle receptacles; and some deer-resistant native accent planting. A storm drain, stormwater management and bioretention will be integrated into the landscape design as a landscape feature. Improvements may also include public art in coordination with the City's art in public spaces program.

Picnic Area

A picnic area is proposed adjacent to the playground and new visitor center area, providing picnic shelters and individual picnic tables around the perimeter of a central lawn area. The picnic area will provide opportunities for park users to have small park gatherings near the playground and visitor center amenities. This proximity allows for picnics and gatherings in conjunction with visitor center or playground programming in addition to standalone picnicking. Amenities include two small to medium sized covered pavilions; individual picnic tables on concrete pads, including accessible tables; covered individual picnic tables;

fixed grills; water and electric hookups; and bioretention areas. New tree planting will supplement existing trees and help integrate picnic amenities into the overall park landscape.

Dog Park

A dog park, including separate fenced exercise areas for small and large dogs will be provided just to the east of 6 Taft Court allowing park users opportunities to have their dogs exercise off-leash within a contained area. Dog park amenities anticipated include fencing; paved concrete accessible pathways near the entrances; a small pavilion accessible from both the large and small dog parks; benches; signage; and water and electric hookups.

Park-Wide Enhancements

In addition to the park features described above, there will be park-wide enhancements throughout the park, most of which will be located between the features described above, however, some will interface with the features described above. They are accounted for separately for purposes of this cost analysis, however. For example, pathways that connect to and throughout the amphitheater are included here as part of the overall pathway network as opposed to be included as part of the amphitheater project.

Park-wide enhancements primarily consist of natural habit areas; the pathway network; and amenities associated with the pathways such as benches and signage (including arboretum tree labeling). These features will facilitate passive recreations such as walking and hiking, general exercise, enjoyment of nature and the arboretum, and connectivity among park features.

Improvements to natural habit areas include invasive plant species control for an average of 10 acres within the park; the creation of approximately 29 acres of new forest to link disconnected stands of forest and the restoration of 45 acres of meadow and passive lawn. The creation of new forest and restoration of meadows/lawns includes invasive species control, initial seeding and planting, and reseeding and planting and minor grading. New tree planting will be provided throughout the park in addition to new forest and will augment forest edges; provide shade near use areas; and serve as arboretum specimen trees or as part of arboretum collections.

Improvements to the pathway network include removal of redundant or unnecessary existing pathways; repair to existing pathways (assuming repair to approximately one third of the existing network); the creation of new pathways including asphalt, natural, and boardwalk surfaces; and pedestrian bridges across drainage channels. The pathway system will be augmented with benches and interpretive signage.

Summary

The park features and associated costs outlined above and on the following pages describes the features anticipated for RedGate Park. It is important to note that these features will be implemented in phases, particularly for park-wide enhancements such as new forest, meadows, collections associated with the arboretum, and new pathways. Funding and implementation of the improvements can come from a variety of sources such as grants, partnerships, volunteers, etc.

COST ESTIMATE WORKSHEET- DRAFT

Project: RedGate Park Master Plan Prepared by: TM, BJ

Proj. No.: 21006 Checked by:

Date: 9/2/2022

Project Area	Ва	se Cost	% design	nstruction	Su	ıb-Total	Cost Range	(20°	∕₀ Ea	ch Wav)
Visitor Center Building	\$	3,876,100	\$ 581,415	\$ -	\$	4,457,515	\$ 3,566,012	to	\$	5,349,018
Visitor Center Site	\$	654,770	\$ 98,216	\$ 261,908	\$	1,014,894	\$ 811,915	to	\$	1,217,872
Existing Parking Lot	\$	266,958	\$ 40,044	\$ 106,783	\$	413,785	\$ 331,028	to	\$	496,542
Community Gardens	\$	249,194	\$ 37,379	\$ 99,678	\$	386,251	\$ 309,001	to	\$	463,501
Amphitheater	\$	2,227,201	\$ 334,080	\$ 890,880	\$	3,452,162	\$ 2,761,729	to	\$	4,142,594
Deck Overlook at Amphitheate	\$	1,159,500	\$ 173,925	\$ 463,800	\$	1,797,225	\$ 1,437,780	to	\$	2,156,670
Playground	\$	1,095,950	\$ 164,393	\$ 438,380	\$	1,698,723	\$ 1,358,978	to	\$	2,038,467
Entrance Road	\$	563,150	\$ 84,473	\$ 225,260	\$	872,883	\$ 698,306	to	\$	1,047,459
Picnic Area	\$	252,950	\$ 37,943	\$ 101,180	\$	392,073	\$ 313,658	to	\$	470,487
Dog Park	\$	176,400	\$ 26,460	\$ 70,560	\$	273,420	\$ 218,736	to	\$	328,104
Park-Wide Enhancements	\$	3,624,508	\$ 543,676	\$ 1,449,803	\$	5,617,987	\$ 4,494,390	to	\$	6,741,585
GRAND TOTAL	\$	14,146,681	\$ 2,122,002	\$ 4,108,232	\$	20,376,916	\$ 16,301,532	to	\$	24,452,299

^{*} Note: 30% Construction Contingency included in Visitor Center Costs shown above.

COST ESTIMATE WORKSHEET- Draft

Project: RedGate Master Plan

Proj. No.: 20031

Prepared by: TM, BJ Checked by: Date: 9/2/2022

ITEM DESCRIPTION SIZE/COND. REMARKS QTY. UNIT COST TOTAL RedGate Improvements

Vicitor	Contar	Ruil	ldina

Demolition of Existing Club House (Assume 2026)	1 LS	79,100.00	\$ 79,100.00
New Visitor Center Building *	1 LS	3,797,000.00	\$ 3,797,000.00
New Visitor Center Building (See Separate Estimate)			\$ 3,876,100.00
Design Allowance		15%	\$ 581,415.00
Construction Contingency **		** 30%	\$ _
		Subtotal	\$ 4 457 515 00

^{*} Note: Renovation Cost of the existing building inclusive of internal demolition and 30% Construction Contingency = \$4,063,900

^{**} Note: 30% Construction Contingency included in Demolition and Building Costs shown above and as part of separate estimate for Clubhouse Assessment.

Site Improvements/Landscape				
Terrace Permeable Paving/Special Paving	12,000	SF	30.00	\$ 360,000.0
ADA Ramp from Parking	1	LS	10,000.00	\$ 10,000.0
Paving to Remove	7,900	SF	2.80	\$ 22,120.0
Tables/Chairs/Umbrellas (Moveable)	14	EA	2,500.00	\$ 35,000.0
Water Hookup	1	EA	3,500.00	\$ 3,500.0
Electric Hookup	1	EA	3,500.00	\$ 3,500.0
Sewer Hookup	1	EA	3,500.00	\$ 3,500.0
Benches	12	EA	1,800.00	\$ 21,600.0
Trash/Recycle Receptacles	6	EA	1,500.00	\$ 9,000.0
Bike Racks	20	EA	500.00	\$ 10,000.
Public Art Allowance	1	LS	25,000.00	\$ 25,000.
Tree Planting	20	EA	750.00	\$ 15,000.
Ornamental Planting	3,000	SF	20.00	\$ 60,000.
Bio Retention/SWM	3	EA	8,500.00	\$ 25,500.0
Civil/Site Work				
Grading / Earthwork (Assume 2' over site area)	1,530	CY	15.00	\$ 22,950.
Site Utilities				
Storm Drain Utilities	80	LF	70.00	\$ 5,600.
Sanitary Sewer Utilities (Includes bends and cleanouts)	100	LF	70.00	\$ 7,000
Water Utilities (Includes bends and valves)	100	LF	85.00	\$ 8,500
Electric Utilities	1	LS	7,000.00	\$ 7,000
Subtotal			_	\$ 654,770
Design Allowance			15%	\$ 98,215
Construction Contingency			40%	\$ 261,908

Project Subtotal \$ 1,014,893.50

Existing Parking Lot				
Demolition of Existing Fence (16' HT)	720		5.00	3,600.00
Pavement Removal (Assume 1/4 of lot)	1,403	SY	8.00	\$ 11,224.00
New Pavement (Assume 1/4 of lot)	1,403	SY	18.00	\$ 25,254.00
Pavement Mill and Overlay (Assume 3/4 of lot)	4,208	SY	10.00	\$ 42,080.00
ADA Parking Signage	1	LS	3,000.00	\$ 3,000.00
ADA Parking Pad (2-3 Spaces)	1	LS	10,000.00	\$ 10,000.00
New Curb and gutter	2,200	LF	35.00	\$ 77,000.00
Tree Limbing/Removal of Damaged Trees	1	LS	8,000.00	\$ 8,000.00
Tree Planting	8	EA	750.00	\$ 6,000.00
Pavement Markings	1	LS	800.00	\$ 800.00
Lighting (Pedestrian Scale)	20	EA	4,000.00	\$ 80,000.00
Subtotal				\$ 266,958.00
Design Allowance			15%	\$ 40,043.70
Construction Contingency			40%	\$ 106,783.20
			Project Subtotal	\$ 413,784.90

Community Gardens Minimal Grading (29 000 SE Area 11 average)		1 400 0	/ 45.00	¢	24.000
Minimal Grading (38,000 SF Area-1' average)		1,400 C			21,000.0
6' Ornamental Fence		900 LF			58,500.0
Water Hookup, water lines and hose bib connection	ons (3 assumed)	1 LS			15,000.0
Electrical Hookup		1 LS			3,500.0
Storage Shed (8'x12')		1 LS	20,000.00	\$	20,000.0
Compost Bin (Assume cedar, prefabricated)		1 LS	4,000.00	\$	4,000.0
Mulch Bin (Assume cedar, prefabricated)		1 ls	4,000.00	\$	4,000.0
Garden Beds and Soil Prep (Assume some raised))	25 E/	3,000.00	\$	75,000.0
Crushed Stone Pathways		292 C	30.00	\$	8,760.0
Paved Access Drive		713 S			12,834.0
Picnic Tables		3 E/			3,600.0
Signage		1 LS			7,500.0
		100 LF			
Storm Drain					7,000.0
Bio-Retention/SWM		1 LS	8,500.00	\$	8,500.0
Subtotal				\$	249,194.0
Design Allowance			15%	\$	37,379.1
Construction Contingency			40%	\$	99,677.6
			Project Subtotal	\$	386,250.7
Amphitheater					
Grading/Earhwork (Assume 4' over area)		10,880 C			163,200.0
Permeable/special Paving		13,000 SF			390,000.0
Water Hookup, water lines and hose bib connection Sewer Hookup	on	1 LS 1 E/			8,000.0 3,500.0
Sanitary Sewer Utilities		150 LF			10,500.0
Electrical Hookup		1 LS	3,500.00	\$	3,500.0
Fixed Seating (18" terrace walls, 5' rows,including	ADA seating)	1,500 LF			600,000.0
Lawn Seating Covered Stage (open sides, custom design, steel,	lighting Johor)	1 E/ 1 LS			1.0 800,000.0
Gate (Manual swing gate)	lighting, labor)	1 E/			3,500.0
Paved Access Drive		1,400 S			35,000.0
ADA Parking Pad and Signage (4-6 Spaces)		1 LS			23,000.0
Lighting (Bollards over 2000 LF of pathways to par	rking)	100 E/ 1 LS			120,000.0
Signage New Trees		20 E/			35,000.0 15,000.0
Bio-Retention/SWM		2 LS			17,000.0
Subtotal			450/	\$	2,227,201.0
Design Allowance Construction Contingency				\$	334,080. ² 890,880. ⁴
			Project Subtotal	\$	3,452,161.
Deck Overlook at Amphitheater					
Boardwalk (Tropical grade hardwoods)		10,800 SF		\$	1,080,000.0
Minor Grading		500 C			12,500.0
Boardwalk Concrete Supports Railing		40 EA 350 LF			32,000.0 35,000.0
Kalling		330 LF	100.00	φ	33,000.0
Subtotal				\$	1,159,500.0
Design Allowance			15%		173,925.0
Construction Contingency			40% Project Subtotal		463,800.0 1,797,225.0
Playground Nature-Based Play Equipment		1 LS	370,000.00	\$	370,000.0
Concrete/Special Paving		1,200 SF			11,400.0
Benches		8 E/			14,400.0
Concrete Curb Edge Rubberized Safety Surface		700 LF 12,000 SF			13,300.0 336,000.0
Tree Planting		25 E/			18,750.0
Accent Landscaping		1 LS	10,000.00	\$	10,000.0
Signage		1 LS			15,000.0
Trash and Recycle Cans		6 E/			9,000.0
Shade Sails (Assume 3) Public Art Allowance		1 LS 1 E/			100,000.0 15,000.0
SWM		2 LS			17,000.0
Grading/Earthwork (Average 4' over site, hilltop loc	cation)	6,400 C	15.00	\$	96,000.0
Storm Drain		100 LF	701.00	\$	70,100.0
				\$	1,095,950.0
Subtotal			4.50/	¢	464 200 1
Subtotal Design Allowance Construction Contingency			15% 40%		164,392. 438,380.

Entrance Road		0.000	***	
	ement Removal	3,200 SY	8.00	
	Pavement (Assume replacement of all pavement)	3,400 SY	18.00	
	ding/Earthwork (Average 5' over area of entrance)	4,590 CY	15.00	
	fic Control	1 LS	3,000.00	
	Retention/SWM	3 LS	8,500.00	
Sigr		1 LS	250,000.00	
	alanes	1 LS	100,000.00	
	e (Manual swing gate)	1 EA	3,500.00	
	ance Monument Sign	1 LS	15,000.00	
Stor	m Drain	150 LF	70.00	\$ 10,50
	total			\$ 563,1
	ign Allowance struction Contingency		15% 40%	
	struction Contingency		Project Subtotal	
Dog Park				
	in Link Fence (6' height)	1,300 LF	70.00	
Gat		4 EA	1,500.00	
Con	cret/Special Paving	1,800 SF	9.50	
Wat	er Hookup, waterl lines, and hose bib connection	1 LS	8,000.00	
Elec	tric Hookup	1 LS	3,500.00	\$ 3,50
Pre-	Fabricated Covered Pavilion	1 EA	30,000.00	\$ 30,0
Ben	ches	6 EA	1,800.00	\$ 10,8
Sigr	nage	1 LS	10,000.00	\$ 10,00
Sub	total		:	\$ 176,4
Des	ign Allowance		15%	\$ 26,4
Cor	struction Contingency		40%	\$ 70,50
			Project Subtotal	\$ 273,42
5				
Picnic Area	ic Tables on Concrete Pad	10 EA	2,000.00	\$ 20,00
	eable Picnic Tables on Lawn	16 EA	1,200.00	
	ered Picnic Tables on Concrete Pad	6 EA	12,000.00	
	d Grills	10 EA	500.00	
	fabricated Picnic Shelter	2 EA	50,000.00	
	er Connection	1 LS	3,500.00	
	tric Connection	1 LS	3,500.00	
	mal Grading	500 CY	20.00	
	Retention/SWM	1 LS	8,500.00	
	/ Trees	15 EA	750.00	
Sub	total		9	\$ 252,9
	ign Allowance		15%	
	struction Contingency		40%	
	Struction Contingency		Project Subtotal	
Park-Wide Enhar	r Forest (Invasive control, initial seeding and planting, reseeding/planting)	29 AC	52,500.00	\$ 1,522,5
Nev	sive Species Control (39 Acres Forest-Assume 25%)	10 AC	8,000.00	
		45 AC	26,500.00	
Inva				
Inva Mea	dow/Passive Lawns (Invasive control, initial seeding and planting, reseeding/planting)		/50.00 9	3 9010
Inva Mea New	dow/Passive Lawns (Invasive control, initial seeding and planting, reseeding/planting) r Tree Planting	120 EA	750.00	
Inva Mea Nev Pati	dow/Passive Lawns (Ìnvasive control, initial seeding and planting, reseeding/planting) r Tree Planting way Removal (5')	120 EA 5,088 SY	6.00	\$ 30,5
Inva Mea New Pati Pati	dow/Passive Lawns (Invasive control, initial seeding and planting, reseeding/planting) 'Tree Planting iway Removal (5') iway Repair (5') (Assume repair to 1/3 of pathways)	120 EA 5,088 SY 2,805 SY	6.00 S	\$ 30,55 \$ 44,86
Inva Mea Nev Pati Pati Nev	dow/Passive Lawns (Invasive control, initial seeding and planting, reseeding/planting) in Tree Planting in Removal (5') inway Repair (5') (Assume repair to 1/3 of pathways) in Pathways-Asphalt (6')	120 EA 5,088 SY 2,805 SY 11,100 SY	6.00 \$ 16.00 \$ 16.00 \$	\$ 30,5 \$ 44,8 \$ 177,6
Inva Mea New Pati Pati New New	dow/Passive Lawns (Invasive control, initial seeding and planting, reseeding/planting) r Tree Planting iway Removal (5') iway Repair (5') (Assume repair to 1/3 of pathways) r Pathways-Asphalt (6') r Pathways-Natural Surface (3' Wide)	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY	6.00 \$ 16.00 \$ 16.00 \$ 25.00 \$	\$ 30,55 \$ 44,86 \$ 177,66 \$ 2,56
Inva Mea Nev Patl Patl Nev Nev	dow/Passive Lawns (Invasive control, initial seeding and planting, reseeding/planting) 'Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) 'Pathways-Asphalt (6') 'Pathways-Natural Surface (3' Wide) 'Pathways-Boardwalk (6' Wide)	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF	6.00 \$ 16.00 \$ 16.00 \$ 25.00 \$ 40.00 \$	\$ 30,5: \$ 44,8i \$ 177,6i \$ 2,5i \$ 240,0i
Inva Mec Nev Patit Pati Nev Nev Swi	dow/Passive Lawns (İnvasive control, initial seeding and planting, reseeding/planting) 'Tree Planting iway Removal (5') iway Repair (5') (Assume repair to 1/3 of pathways) 'Pathways-Asphalt (6') 'Pathways-Natural Surface (3' Wide) 'Pathways-Boardwalk (6' Wide) chback Pathways and Grading	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA	6.00 \$ 16.00 \$ 25.00 \$ 40.00 \$ 10,000.00 \$	\$ 30,5: \$ 44,8: \$ 177,6: \$ 2,5: \$ 240,0: \$ 40,0:
Inva Mee Neve Patl Patl Nev Nev Swi Bio	dow/Passive Lawns (Invasive control, initial seeding and planting, reseeding/planting) Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) Pathways-Asphalt (6') Pathways-Natural Surface (3' Wide) Pathways-Boardwalk (6' Wide) chback Pathways and Grading Retention/SWM	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS	6.00 \$ 16.00 \$ 25.00 \$ 40.00 \$ 20,000.00 \$	\$ 30,5: \$ 44,8: \$ 177,6: \$ 2,5: \$ 240,0: \$ 40,0: \$ 20,0:
Inva Mec Nev Patt Patt Nev Nev Swi Bio Ped	dow/Passive Lawns (İnvasive control, initial seeding and planting, reseeding/planting) 'Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) Pathways-Asphalt (6') Pathways-Asphalt (6') Pathways-Boardwalk (6' Wide) Pathways and Grading Retention/SWM estrian Bridges/Crossings	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS 3 EA	6.00 \$ 16.00 \$ 25.00 \$ 40.00 \$ 20,000.00 \$ 40,000.00 \$ 40,000.00 \$ 40,000.00 \$	\$ 30,5: \$ 44,8: \$ 177,6: \$ 2,5: \$ 240,0: \$ 40,0: \$ 20,0: \$ 120,0:
Inva Mec Nev Patit Pati Nev Nev Swi Bio Ped Ben	dow/Passive Lawns (Invasive control, initial seeding and planting, reseeding/planting) Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) Pathways-Asphalt (6') Pathways-Natural Surface (3' Wide) Pathways-Boardwalk (6' Wide) chback Pathways and Grading Retention/SWM	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS 3 EA 20 EA	6.00 6 16.00 5 25.00 6 40.00 6 10,000.00 5 20,000.00 6 40,000.00 6	\$ 30,5: \$ 44,8: \$ 177,6: \$ 2,5: \$ 240,0: \$ 40,0: \$ 20,0: \$ 120,0: \$ 36,0:
Inva Mee Nev Patl Patl Nev Nev Swiv Bio Ped Ben Signage	dow/Passive Lawns (İnvasive control, initial seeding and planting, reseeding/planting) 'Tree Planting iway Removal (5') iway Repair (5') (Assume repair to 1/3 of pathways) 'Pathways-Asphalt (6') 'Pathways-Natural Surface (3' Wide) 'Pathways-Boardwalk (6' Wide) chback Pathways and Grading Retention/SWM estrian Bridges/Crossings ches	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS 3 EA	6.00 \$ 16.00 \$ 25.00 \$ 40.00 \$ 20,000.00 \$ 40,000.00 \$ 40,000.00 \$ 40,000.00 \$	\$ 30,5: \$ 44,8: \$ 177,6: \$ 2,5! \$ 240,0: \$ 20,0: \$ 120,0: \$ 36,0: \$ 30,0:
Inva Mee Neve Patt Patt Nev Nev Swi Bio Ped Ben Signage	dow/Passive Lawns (İnvasive control, initial seeding and planting, reseeding/planting) 'Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) Pathways-Asphalt (6') Pathways-Asphalt (6') Pathways-Astural Surface (3' Wide) Pathways-Boardwalk (6' Wide) Pathways-Boardwalk (6' Wide) Chack Pathways and Grading Retention/SWM estrian Bridges/Crossings ches	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS 3 EA 20 EA	6.00 s 16.00 s 25.00 s 40.00 s 10,000.00 s 40,000.00 s 1,800.00 s	\$ 30,53 \$ 44,81 \$ 177,66 \$ 2,57 \$ 240,00 \$ 40,00 \$ 120,00 \$ 36,00 \$ 3,624,5
Inva Mez Nev Patt Patt Patt Nev Nev Swi Bio Ped Ben Signage Sut Des	dow/Passive Lawns (İnvasive control, initial seeding and planting, reseeding/planting) 'Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) 'Pathways-Asphalt (6') 'Pathways-Asphalt (6') 'Pathways-Boardwalk (6' Wide) 'Pathways-Boardwalk (6' Wide) chback Pathways and Grading Retention/SWM esetrian Bridges/Crossings ches total ign Allowance	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS 3 EA 20 EA	6.00 1 16.00 2 25.00 4 40.00 3 10,000.00 3 20,000.00 3 40,000.00 3 30,000 3	\$ 30,5: \$ 44,8: \$ 177,6! \$ 2,5: \$ 240,0! \$ 40,0! \$ 20,0! \$ 120,0! \$ 36,0! \$ 3,624,5: \$ 543,6
Inva Mez Nev Patt Patt Patt Nev Nev Swi Bio Ped Ben Signage Sut Des	dow/Passive Lawns (İnvasive control, initial seeding and planting, reseeding/planting) 'Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) Pathways-Asphalt (6') Pathways-Asphalt (6') Pathways-Astural Surface (3' Wide) Pathways-Boardwalk (6' Wide) Pathways-Boardwalk (6' Wide) Chack Pathways and Grading Retention/SWM estrian Bridges/Crossings ches	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS 3 EA 20 EA	6.00 s 16.00 s 25.00 s 40.00 s 20,000.00 s 20,000.00 s 40,000.00 s 1,800.00 s 30,000 s 15% 40%	\$ 30,5: \$ 44,8: \$ 177,6: \$ 2,5! \$ 240,0: \$ 20,0: \$ 120,0: \$ 36,0: \$ 36,0: \$ 3,0: \$ 543,6: \$ 1,449,8:
Inva Mez Nev Patt Patt Patt Nev Nev Swi Bio Ped Ben Signage Sut Des	dow/Passive Lawns (İnvasive control, initial seeding and planting, reseeding/planting) 'Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) 'Pathways-Asphalt (6') 'Pathways-Asphalt (6') 'Pathways-Boardwalk (6' Wide) 'Pathways-Boardwalk (6' Wide) chback Pathways and Grading Retention/SWM esetrian Bridges/Crossings ches total ign Allowance	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS 3 EA 20 EA	6.00 1 16.00 2 25.00 4 40.00 3 10,000.00 3 20,000.00 3 40,000.00 3 30,000 3	\$ 30,5: \$ 44,8: \$ 177,6: \$ 2,5! \$ 240,0: \$ 20,0: \$ 120,0: \$ 36,0: \$ 36,0: \$ 3,0: \$ 543,6: \$ 1,449,8:
Inva Mee Neve Patt Patt Neve Neve Swi Bio Ped Ben Signage Sub Des	dow/Passive Lawns (İnvasive control, initial seeding and planting, reseeding/planting) 'Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) Pathways-Asphalt (6') Pathways-Asphalt (6') Pathways-Astural Surface (3' Wide) Pathways-Boardwalk (6' Wide) Pathways-Boardwalk (6' Wide) Chack Pathways and Grading Retention/SWM estrian Bridges/Crossings ches total ign Allowance struction Contingency	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS 3 EA 20 EA	6.00 s 16.00 s 25.00 s 40.00 s 20,000.00 s 20,000.00 s 40,000.00 s 1,800.00 s 30,000 s 15% 40%	\$ 30,5: \$ 44,8: \$ 177,6: \$ 2,5: \$ 240,0: \$ 40,0: \$ 20,0: \$ 120,0: \$ 36,0: \$ 3,624,5: \$ 543,6: \$ 5,617,9:
Inva Mez Mev Patt Patt Patt Nev Nev Nev Swiv Bio Ped Ben Signage Sut Des Cor	dow/Passive Lawns (İnvasive control, initial seeding and planting, reseeding/planting) 'Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) 'Pathways-Asphalt (6') 'Pathways-Asphalt (6') 'Pathways-Boardwalk (6' Wide) chback Pathways and Grading Retention/SWM estrian Bridges/Crossings ches total ign Allowance struction Contingency	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS 3 EA 20 EA	6.00 s 16.00 s 16.00 s 25.00 s 40.00 s 20,000.00 s 40,000.00 s 1,800.00 s 30,000 s Project Subtotal s	\$ 30,5: \$ 44,8: \$ 177,6: \$ 2,5! \$ 240,0: \$ 20,0: \$ 120,0: \$ 36,0: \$ 36,0: \$ 3,0: \$ 543,6: \$ 1,449,8:
Inva Mee Neve Patt Patt Patt Neve Nev Nev Swiv Bio Ped Ben Signage Sut Des Cor	dow/Passive Lawns (İnvasive control, initial seeding and planting, reseeding/planting) 'Tree Planting way Removal (5') way Repair (5') (Assume repair to 1/3 of pathways) 'Pathways-Asphalt (6') 'Pathways-Asphalt (6') 'Pathways-Astural Surface (3' Wide) 'Pathways-Boardwalk (6	120 EA 5,088 SY 2,805 SY 11,100 SY 100 SY 6,000 SF 4 EA 1 LS 3 EA 20 EA	6.00 1 16.00 2 16.00 2 16.00 3 16.00 3 16.00 3 16.00 3 10.00	\$ 30,5: \$ 44,8: \$ 177,6: \$ 2,5: \$ 240,0: \$ 40,0: \$ 20,0: \$ 36,0: \$ 36,0: \$ 36,0: \$ 543,6: \$ 543,6: \$ 5,617,9: