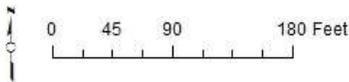
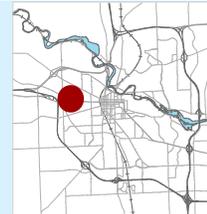


Veterans Memorial Park Skatepark Rain Gardens

Approximate Address: 2150 Jackson Rd.



Year Built: 2014

Designer: Charles H. Strawter Design, Inc.

Aesthetic Level Required: High

DESCRIPTION:

Large formal rain garden designed to capture run-off from the adjacent concrete skate park. Consists of multiple basins tiered to slow stormwater. A controlled burn was conducted in the spring of 2017 by PlantWise.

MAINTENANCE NOTES:

Cut standing dead yearly for a neater look. Vegetation near the inlet was slow to germinate and may need to be replaced in future years. Trash accumulates quickly. Currently few invasive species in area.



July 2014

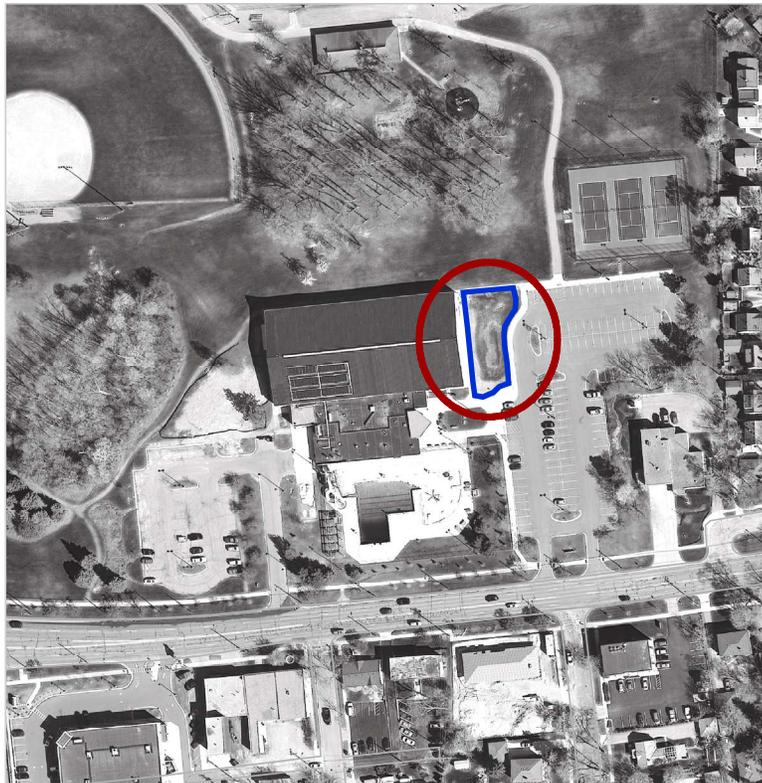
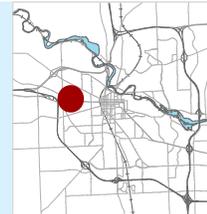
ACTIVITY	Monthly	Biannually	Annually	As Needed
Remove Trash	X			
Remove Invasives	X			
Remove Sediment				X
Controlled Burns				X
Herbicide				X
Add/Divide Plants				X
Collect Seeds		late summer & fall		

YEARLY ESTIMATE	HOURS	COST
Supervisor Labor	27	\$1,081
Volunteer Labor	40	\$800
Equipment		\$118
Controlled Burns*		\$92
Herbicide	0.25	\$9
Contingency (10%)		\$210
SUM		\$2,310

*per estimate from PlantWise. Burn every three years so cost spread across years

Veterans Memorial Park: Ice Arena East Rain Garden

Approximate Address: 2150 Jackson Rd.



Year Built: 2011

Designer: InSite Design Studio, Inc.

Aesthetic Level Required: High

DESCRIPTION:

This large rain garden replaced a paved area. It receives runoff from sidewalks and the roof of the ice arena building. A controlled burn was conducted in the spring of 2016. The garden was replanted with short plants and trees in the fall of 2016 for a simpler aesthetic.

MAINTENANCE NOTES:

Cut down standing dead between late fall and early spring. Invasives include Phragmites, Canada Thistle, Curly Dock and common yard weeds like Plantain and Dandelion.



July 2014

ACTIVITY	Monthly	Biannually	Annually	As Needed
Remove Trash	X			
Remove Invasives	X			
Remove Sediment				X
Controlled Burns				X
Herbicide				X
Add/Divide Plants				X
Collect Seeds			fall	

YEARLY ESTIMATE	HOURS	COST
Supervisor Labor	31	\$1,244
Volunteer Labor	145	\$2,900
Equipment		\$165
Controlled Burns*		\$67
Herbicide	0.25	\$9
Contingency (10%)		\$459
SUM		\$4,844

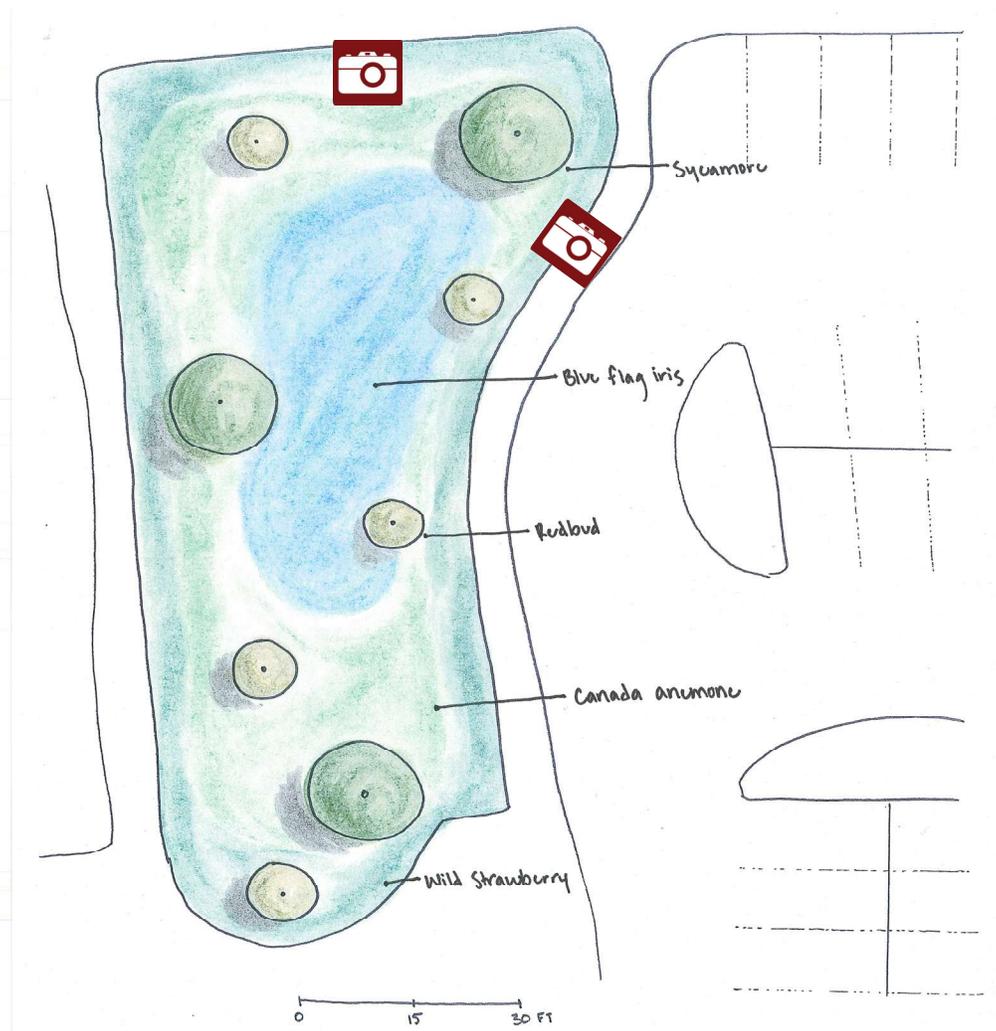
**per estimate from PlantWise. Burn every three years so cost spread across years*

Veterans Memorial Park: Ice Arena East Rain Garden

Site Plan

Acres: 0.09

SF: 4,000



NATIVE PLANTS TO LOOK FOR:

Perennials:

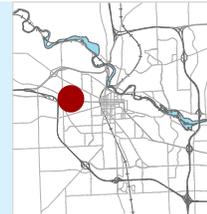
Blue Flag Iris (*Iris virginica*)
Canada Anemone (*Anemone canadensis*)
Fox Sedge (*Carex vulpinoidea*)
Sensitive Fern (*Onoclea sensibilis*)
Wild Strawberry (*Fragaria virginiana*)

Shrubs and Trees:

Redbud (*Cercis canadensis*)
Sycamore (*Platanus occidentalis*)

Veterans Memorial Park: Zamboni Rain Garden

Approximate Address: 2150 Jackson Rd.



Year Built: 2008

Designer: Conservation Design Forum

Aesthetic Level Required: Medium

DESCRIPTION:

West of the ice arena, this rain garden receives runoff from the parking lot. Often ice from the Zamboni is dropped uphill of the rain garden and melts into the garden. As one of Ann Arbor's older rain gardens, there are many well established plants growing. A controlled burn was conducted in the spring of 2016.

MAINTENANCE NOTES:

Native seeds can be collected from this site. The inlets need to regularly be maintained. Cut down standing dead in late fall because vegetation is very tall. Invasives include Field Bindweed, Canada Thistle, Curly Dock, Burdock and Buckthorn. Communicate with mowers to mow upland areas.



July 2014

ACTIVITY	Monthly	Biannually	Annually	As Needed
Remove Trash	X			
Remove Invasives	X			
Remove Sediment		X		
Controlled Burns				X
Herbicide				X
Add/Divide Plants				X
Collect Seeds			fall	

YEARLY ESTIMATE	HOURS	COST
Supervisor Labor	17	\$674
Volunteer Labor	30	\$600
Equipment		\$118
Controlled Burns*		\$77
Herbicide	0.25	\$10
Contingency (10%)		\$156
SUM		\$1,635

*per estimate from PlantWise. Burn every three years so cost spread across years

Veterans Memorial Park: Zamboni Rain Garden

Site Plan

Acres: 0.1
SF: 4,570



NATIVE PLANTS TO LOOK FOR:

Beardtounge (*Penstemon digitalis*)
 Beebalm (*Monarda fistulosa*)
 Blue Flag Iris (*Iris virginica*)
 Blue Vervain (*Verbena hastata*)
 Canada Anemone (*Anemone canadensis*)
 Canada Wild Rye (*Elymus canadensis*)
 Early Goldenrod (*Solidago juncea*)
 Fox Sedge (*Carex vulpinoidea*)
 Green Bulrush (*Scirpus atrovirens*)
 Green-Headed Coneflower (*Rudbeckia laciniata*)
 Hoary Vervain (*Verbena stricta*)
 Indian Grass (*Sorghastrum nutans*)
 Joe-Pye Weed (*Eupatorium purpureum*)
 Little Bluestem (*Schizachyrium scoparium*)
 Missouri Ironweed (*Vernonia missurica*)
 Mountain Mint (*Pycnanthemum tenuifolium*)
 New England Aster (*Aster novae-angliae*)

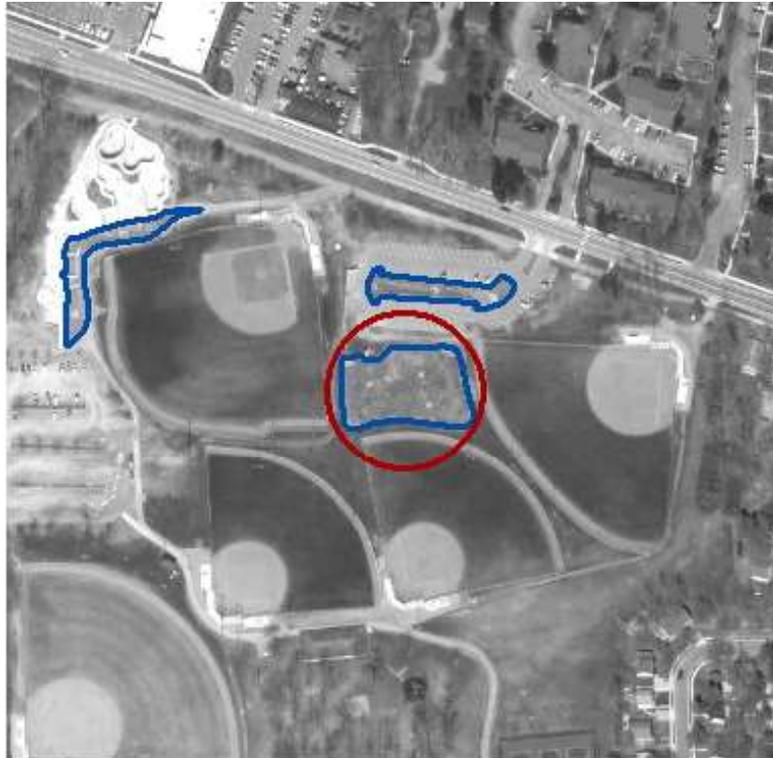
Nodding Bulrush (*Scirpus pendulus*)
 Prairie Dock (*Silphium terebinthinaceum*)
 Riddell's Goldenrod (*Solidago riddellii*)
 Rough Blazing Star (*Liatris aspera*)
 Swamp Goldenrod (*Solidago patula*)
 Sweet Flag (*Acorus calamus*)
 Switch Grass (*Panicum virgatum*)
 Thimbleweed (*Anemone virginiana*)
 Tussock Sedge (*Carex stricta*)
 Woolgrass (*Scirpus cyperinus*)
 Yellow Coneflower (*Ratibida pinnata*)

Veterans Memorial Park Dexter Ave Rain Garden

Approximate Address: 2150 Jackson Rd.



SW



0 120 240 480 Feet

Year Built: 2012

Designer: Susan Bryan & Chris Carson, City of Ann Arbor

Aesthetic Level Required: Medium

DESCRIPTION:

South of the softball parking lot, this rain garden receives water piped from Dexter Road. A large stormwater inlet at the northwest corner was engineered to send overflow water directly into the stormwater system, which means that the rain garden won't overflow. The rain garden has tiered sections with reinforced rock steps. A controlled burn was conducted in the spring of 2016 by PlantWise.

MAINTENANCE NOTES:

This rain garden is dominated by invasives like Canada Thistle and Phragmites. This garden should be replanted.



July 2014

ACTIVITY	Monthly	Biannually	Annually	As Needed
Remove Trash	X			
Remove Invasives	X			
Remove Sediment				X
Controlled Burns				X
Herbicide				X
Add/Divide Plants				X
Collect Seeds				X

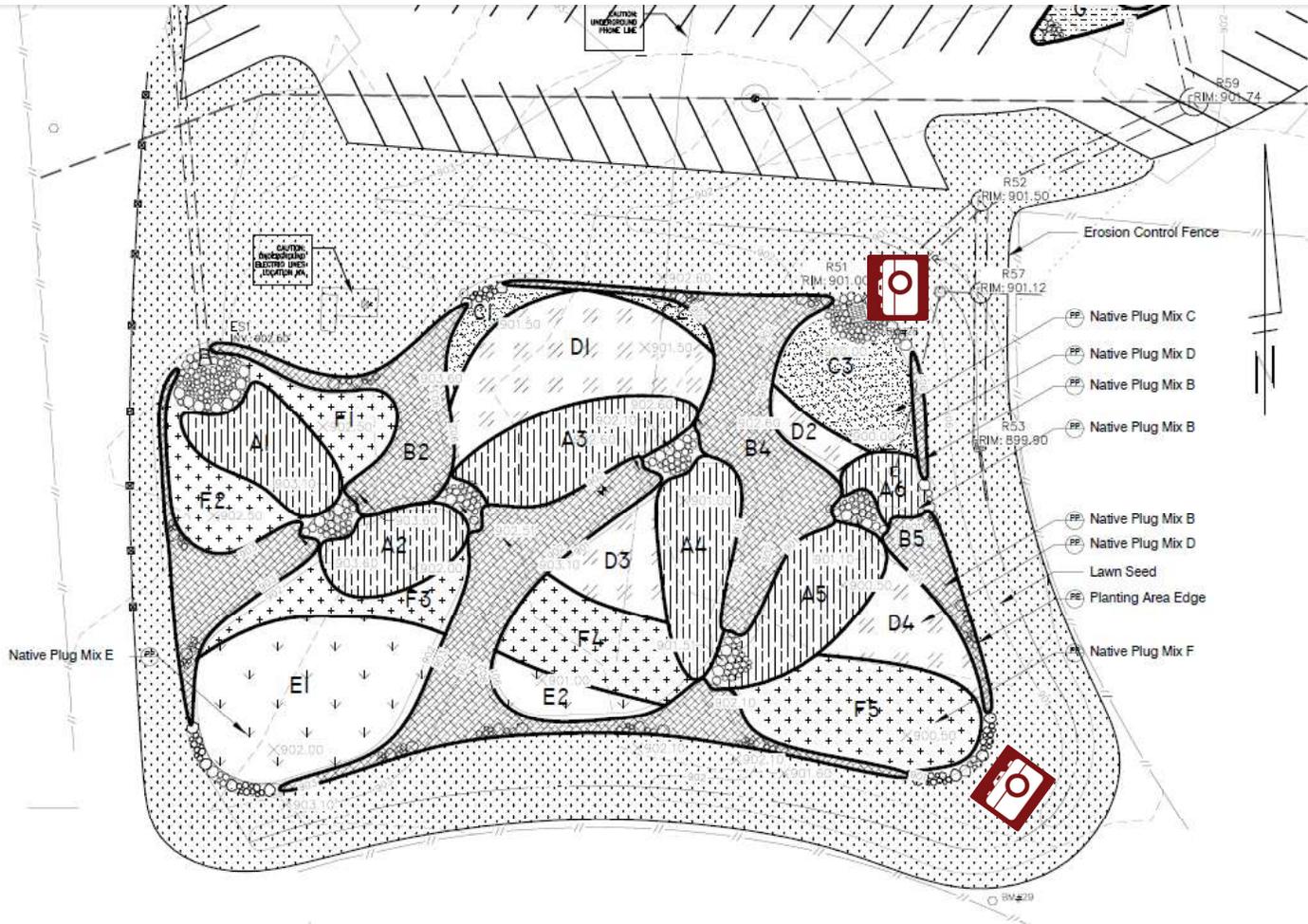
YEARLY ESTIMATE	HOURS	COST
Supervisor Labor	30	\$1,207
Volunteer Labor	20	\$400
Equipment		\$118
Controlled Burns*		\$386
Herbicide	8	\$293
Contingency (10%)		\$249
SUM		\$2,653

*per estimate from PlantWise. Burn every three years so cost spread across years

Veterans Memorial Park: Dexter Ave Rain Garden

Site Plan

Acres: 0.53
SF: 23,046



NATIVE PLANTS TO LOOK FOR:

Perennials:

Big Bluestem (*Andropogon gerardii*)
 Blue Flag Iris (*Iris virginica*)
 Canada Anemone (*Anemone canadensis*)
 Common Cinquefoil (*Potentilla simplex*)
 Fox Sedge (*Carex vulpinoidea*)
 Golden Alexanders (*Zizia aurea*)
 Green-Headed Coneflower (*Rudbeckia laciniata*)
 Indian Grass (*Sorghastrum nutans*)
 Muskingum Sedge (*Carex muskingumensis*)
 Prairie Dock (*Silphium terebinthinaceum*)
 Prairie Dropseed (*Sporobolus heterolepis*)
 Riddell's Goldenrod (*Solidago riddellii*)
 Swamp Buttercup (*Ranunculus hispidus*)
 Swamp Milkweed (*Asclepias incarnata*)
 Switch Grass (*Panicum virgatum*)

Tall Coreopsis (*Coreopsis tripteris*)
 Wild Strawberry (*Fragaria virginiana*)

Shrubs and Trees:

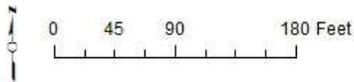
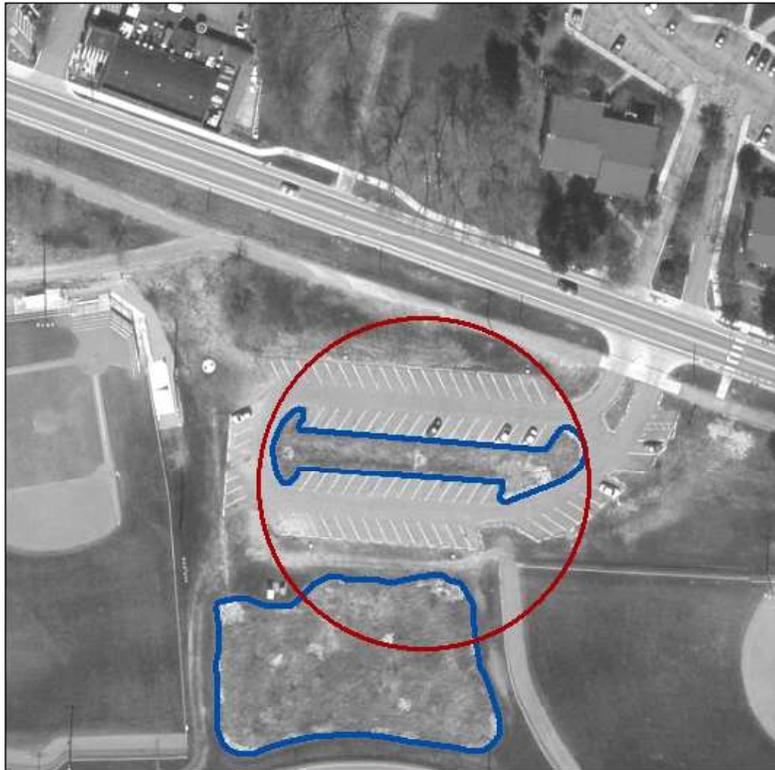
Bur Oak (*Quercus macrocarpa*)
 Swamp White Oak (*Quercus bicolor*)

Veterans Memorial Park North Parking Bioswale

Approximate Address: 2150 Jackson Rd.



SW



Year Built: 2012

Designer: Susan Bryan & Chris Carson, City of Ann Arbor

Aesthetic Level Required: Medium

DESCRIPTION:

Located in the center of the parking lot off of Dexter Road, this bioswale receives water from the surrounding lot. Few of the original plugs survived which allowed invasives to dominate. A controlled burn was conducted in the spring of 2016.

MAINTENANCE NOTES:

Dominated by invasives, this garden should be re-planted. When burned, it should be done two years in a row to remove Crown Vetch. Invasives include Canada Thistle, Bittercress and Phragmites, Field Bindweed, Yellow Sweet Clover and Reed Canary Grass.



July 2014

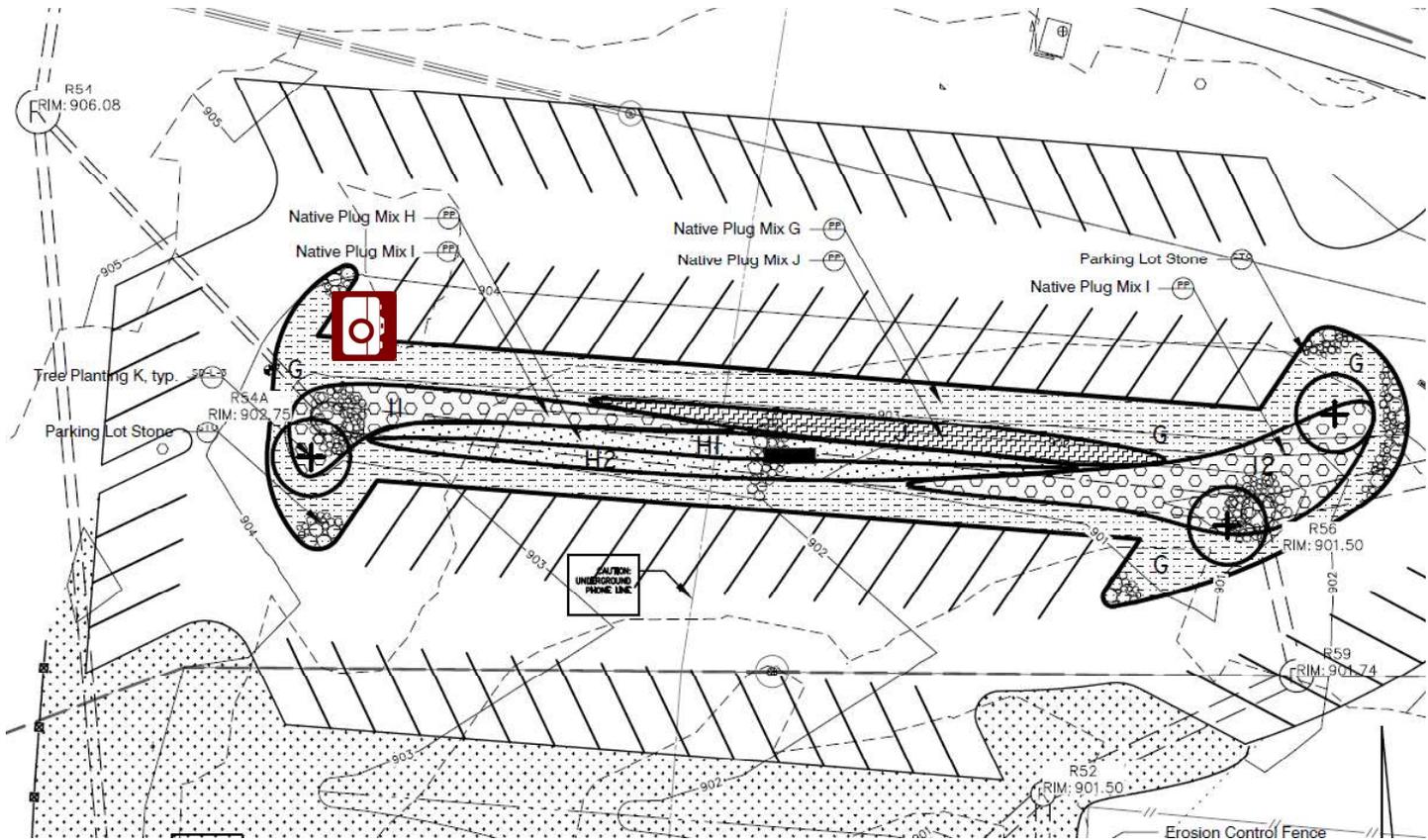
ACTIVITY	Monthly	Biannually	Annually	As Needed
Remove Trash	X			
Remove Invasives	X			
Remove Sediment			X	
Controlled Burns				X
Herbicide				X
Add/Divide Plants				X
Collect Seeds				X

YEARLY ESTIMATE	HOURS	COST
Supervisor Labor	32	\$1,289
Volunteer Labor	30	\$600
Equipment		\$118
Controlled Burns*		\$122
Herbicide	0.25	\$10
Contingency (10%)		\$223
SUM		\$2,362

*per estimate from PlantWise. Burn every three years so cost spread across years

Veterans Memorial Park North Parking Bioswale Site Plan

Acres: 0.17
SF: 7,303



NATIVE PLANTS TO LOOK FOR:

Perennials:

Blue Flag Iris (*Iris virginica*)
Common Cinquefoil (*Potentilla simplex*)
Prairie Dock (*Silphium terebinthinaceum*)
Purple Love Grass (*Eragrostis spectabilis*)
Swamp Milkweed (*Asclepias incarnata*)
Switch Grass (*Panicum virgatum*)
Wild Strawberry (*Fragaria virginiana*)

Shrubs and Trees:

Bur Oak (*Quercus macrocarpa*)