

Gallup Shoreline Project

Scope: Plant a shoreline area of 30 ft x 12 ft. Include all the materials needed-core log, soil erosion fabric, stakes (if sold separately), live plugs

Budget: \$1000 for materials and \$1000 for plants.

Deadline: April 11th

Site Description

Gallup Park Playground

Observations:

Degraded shoreline on the Huron River that provides people open access to the water. There is a planting buffer west of the proposed site. Tree stumps are present. Looks like some iris is present on the shoreline. Upland is relatively flat. Full Sun. 4 inch water depth present on 4/5/22 (USGS 13.44 ft). Recent high water event 3/24/22 (USGS 14.65 ft.) Stone/gravel underwater. Silty/clay rocks. Distance from shoulder to toe 1.5 -2 ft.

Photos



Photo 1: Shoreline at edge of buffer zone facing East



Photo 2: Upland at edge of buffer zone facing East

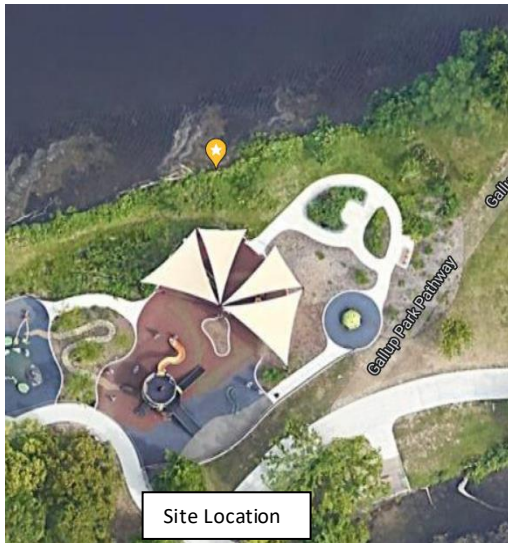


Photo 3: Upland about 30 feet from buffer facing West



Photo 4: Shoreline about 30 feet from buffer facing West

Map:



Design Ideas:

Could use woody plants to stabilize the shoreline and block access to the water. Lower growing shrubs could be used to still allow for view of the river. Upland planting of herbaceous perennials could be useful with thoughtful aesthetic considerations. Could plant the coir log with herbaceous emergent wetland plants to create more stability for the shoreline. Surround planting with exclusion fence to prevent trampling of new plants and discourage geese.

Plant Calculations:

Plant Spacing: 18" o.c.

Total Area: 360 ft²

38 plug flat = 75 ft²

Number of Flats needed: $360/75 = 4.8 \sim 5$ flats

Number of live plugs needed: $4.8 \times 38 = 182.4 \sim 182$

Materials Needed:

- Three 10 foot 16" coir logs.
- 60 Hardwood stakes
- 360 ft² of soil erosion fabric.
- Staples for erosion control fabric.
- 182 live plugs

Materials:

Material	Vendor	Unit	Unit Cost	Number Needed	Total Cost
Coir logs	Hanes Geo Components	16" x 10 ft coir log * Referred to Appendix 9.3 in Certified Natural Shoreline Professional Training Manual for material estimate	\$20 per linear ft	3	\$600
Nylon Rope	Home Depot	Everbilt ¼ in x 100 ft White Twisted Nylon Rope	\$18.98	1	\$18.98
Soil erosion fabric	Hanes Geo Components	Straw coconut ECB (8 ft x 112.5 ft) with biodegradable nettings	\$112	1	\$112
Hardwood Stakes	Stadium Hardware	#2 Grade Wood Stake, 2x2x48-in 12pk	\$25.99	5	\$129.95
Staples	SiteOne	Pro-Trade 6 in Sod Staple 100/Bag	\$17.06	1	\$17.06
Exclusion Fence	Home Depot	Tenex 4 x 100 ft Orange Guardian Safety Barrier Fence	\$35.86	1	\$35.86
Zip Ties	Home Depot	8 in UV Cable Tie, Black (100 Pack)	\$9.87	1	\$9.87
Fence Post	Home Depot	Everbilt 1.3 in x 1.3 in x 5 ft 14-Guage Powder Coated Steel Fence U-Post	\$6.38	12	\$76.56
Live plugs	Wildtype	38 cell flat: Liatris spicata Helenium autumnale Iris virginica Syphyotrichium novae-angliae	\$55.10	4	\$220.40
Live plugs	Wildtype	38 cell flat Carex vulpinoidea	\$49.40	1	\$49.40
Gallon pots	Wildtype	Gallon pots: Physocarpus opulifolius Spirea alba	\$9.95	5	\$49.75
					\$1,319.80

Plant Pallet:



Iris virginica
Southern Blue Flag Iris

- Blue Flower
- Blooms May– July
- Full to Part Sun
- Height: 2'-3'
- Moisture: Average to Wet

*Emergent Wetland Plant



Carex vulpinoidea
Fox Sedge

- Green Flowers
- Blooms May– June
- Full to Part Sun
- Height: 2'-3'
- Moisture: Average to Wet



Physocarpus opulifolius
Common Ninebark

- White Flowers
- Blooms May– June
- Full to Part Sun
- Height: 3'-9'
- Moisture: Average to Wet

* Nectar Source



Spiraea alba
Meadowsweet

- White Flowers
- Blooms June– August
- Full to Part Sun
- Height: 3'-6'
- Moisture: Average to Wet

* Nectar Source



Symphyotrichum novae-angliae
New England Aster

- Purple Flowers
- Blooms September– October
- Full Sun
- Height: 3'-6'
- Moisture: Average to Wet

* Readily reseeds



Liatris spicata
Marsh Blazing Star

- Pink Flower
- Blooms July– August
- Full Sun
- Height: 3'-4'
- Moisture: Average to Wet

* Nectar source



Helenium autumnale
Sneezeweed

- Yellow Flowers
- Blooms August– October
- Full Sun
- Height: 3'-5'
- Moisture: Average to Wet

Planting Plan:

