

**Grand Haven Township
Hofma Park & Preserve**

3/25/2019

MNRTF Grant Engineers Estimate

#2190182

Witteveen Property

| Hiking Trail | Units | Quantity | Cost/Unit | Totals |
|--|--------------|-----------------|------------------------|----------------------|
| Grubbing and tree removal (40' clr) | Acre | 6.0 | \$ 6,000.00 | \$ 36,000.00 |
| Chips & Fines Path (8' wide) | LF | 8,256.0 | \$ 7.00 | \$ 57,792.00 |
| Native Wildflower/Grass Seeding (40'wide) | Acre | 6.0 | \$ 1,500.00 | \$ 9,000.00 |
| Maple Woodlot Restoration (40'wide) | Acre | 1.5 | \$ 4,500.00 | \$ 6,750.00 |
| Oak Savanna (40'wide) | Acre | 3.0 | \$ 1,250.00 | \$ 3,750.00 |
| White Pine (40'wide) | Acre | 3.0 | \$ 900.00 | \$ 2,700.00 |
| | | | Subtotal | \$ 115,992.00 |
| Trailhead Parking & Drive | | | | |
| Paved Parking and Drive (30 cars) | SQ.FT | 15,250.0 | \$ 6.00 | \$ 91,500.00 |
| Lighting (LED) | EA | 3.0 | \$ 5,000.00 | \$ 15,000.00 |
| Irrigation (backflow, main, valves, zone piping and heads) | LS | 1.0 | \$ 20,000.00 | \$ 20,000.00 |
| Turf Restoration (1 acre) | Sq.Yd | 4,840.0 | \$ 1.50 | \$ 7,260.00 |
| Wildflowers/Grasses Landscaping | Acre | 2.0 | \$ 1,500.00 | \$ 3,000.00 |
| Native Trees/Shrubs | LS | 1.0 | \$ 10,000.00 | \$ 10,000.00 |
| | | | Subtotal | \$ 146,760.00 |
| Site Amenities | | | | |
| Benches | EA | 6.0 | \$ 850.00 | \$ 5,100.00 |
| Trash Receptacles | EA | 2.0 | \$ 1,000.00 | \$ 2,000.00 |
| Entry Sign | LS | 1.0 | \$ 15,000.00 | \$ 15,000.00 |
| Interpretive Signs | LS | 3.0 | \$ 1,500.00 | \$ 4,500.00 |
| | | | Subtotal | \$ 26,600.00 |
| Site Utilities | | | | |
| Electric (new pole at road and new underground service 250') | LS | 1.0 | \$ 15,000.00 | \$ 15,000.00 |
| Water (tap,curb box, meter pit, and 250' of 2" waterline) | LS | 1.0 | \$ 20,000.00 | \$ 20,000.00 |
| | | | Subtotal | \$ 35,000.00 |
| | | | Witteveen Total | \$ 324,352.00 |

Wolfe Property

| Hiking Trail | Units | Quantity | Cost/Unit | Totals |
|--|--------------|-----------------|---------------------------|----------------------|
| Grubbing and tree removal (40' clr) | Acre | 2.0 | \$ 6,000.00 | \$ 12,000.00 |
| Chips & Fines Path (8' wide) | LF | 2,250.0 | \$ 7.25 | \$ 16,312.50 |
| Turf Restoration | SYD | 2,600.0 | \$ 1.50 | \$ 3,900.00 |
| | | | Subtotal | \$ 32,212.50 |
| Site Amenities | | | | |
| Benches | EA | 4.0 | \$ 850.00 | \$ 3,400.00 |
| Trash Receptacles | EA | 3.0 | \$ 1,000.00 | \$ 3,000.00 |
| | | | Subtotal | \$ 6,400.00 |
| Boardwalk | | | | |
| 10' Boardwalk | LF | 625.0 | \$ 550.00 | \$ 343,750.00 |
| Overlook (20'x20') | LS | 1.0 | \$ 40,000.00 | \$ 40,000.00 |
| Interpretive Signs | EA | 2.0 | \$ 1,000.00 | \$ 2,000.00 |
| | | | Subtotal | \$ 385,750.00 |
| | | | Wolfe Total | \$ 424,362.50 |
| | | | Construction Total | \$ 748,714.50 |
| DNR Recognition Sign | | | | \$ 300.00 |
| Permitting (DEQ, Road Commission, Soil Erosion Control, Building Permit) | | | | \$ 1,000.00 |
| Engineering & Construction Administration (15%) | | | | \$ 112,307.18 |
| Grand Total | | | | \$ 862,321.68 |