Oak Street Biofiltration Basins Project Engineer's Opinion of Probable Cost

February 1, 2023 Emmons Olivier Resources, Inc.

Item	MnDOT Reference #	Unit	Estimated	Estimated Unit Cost	Extended Cost
Mobilization	2021.501	LS	1.00	10,000.00	\$ 10,000.00
Clearing	2101.505	ACRE	0.10	6,000.00	\$ 600.00
Tree Removal (> 6" DBH)	2104.502	EA	2.00	500.00	\$ 1,000.00
Remove Culvert Pipe (partial)	2104.503	LF	5.00	100.00	\$ 500.00
Common Excavation (139 CY CUT, 128 CY FILL)	2105.507	CY	139.00	35.00	\$ 4,865.00
Select Topsoil Borrow (80% Sand, 20% Peat Mix)	2105.526	CY	37.00	90.00	\$ 3,330.00
Dewatering	2105.601	LS	1.00	2,000.00	\$ 2,000.00
Rock Excavation Allowance	2105.607	CY	20.00	100.00	\$ 2,000.00
6" HDPE Pipe Drain - Solid Wall	2501.602	LF	14.00	30.00	\$ 420.00
CMP Apron, 15"	2501.502	EA	1.00	1,750.00	\$ 1,750.00
6" Gate Valve & Box	2502.502	EA	2.00	2,250.00	\$ 4,500.00
6" Perforated HDPE Pipe Drain	2502.503	LF	117.00	30.00	\$ 3,510.00
6" HDPE Pipe Drain Cleanout	2502.602	EA	2.00	650.00	\$ 1,300.00
Construct Drainage Structure, 30" Concrete	2506.503	EA	1.00	3,500.00	\$ 3,500.00
Hand-placed Riprap	2511.507	CY	10.00	150.00	\$ 1,500.00
Culvert Inlet End Control	2573.502	EA	2.00	250.00	\$ 500.00
12" Coir Log	2573.503	LF	255.00	30.00	\$ 7,650.00
Temporary Erosion Control Allowance	2575.601	ALLOW	1.00	5,000.00	\$ 5,000.00
Erosion Control Blanket, Category 25	2575.504	SY	323.00	3.00	\$ 969.00
Erosion Control Blanket, Category 35	2575.504	SY	6.00	10.00	\$ 60.00
Sod, Type Salt Tolerant	2575.504	SY	107.00	20.00	\$ 2,140.00
Seeding	2575.505	ACRE	0.10	5,000.00	\$ 500.00
Custom Native Seed Mix	2575.508	LB	2.00	100.00	\$ 200.00
Construction Totals					\$ 57,794.00
CONSTRUCTION CONTINGENCY 10.00%					5,779.40
TOTAL PROJECT COST					63,573.40
ESTIMATED ACCURACY RANGE***				\$	61,030.46
			6.5%	\$	67,705.67

***This design-level (Class 1, 50 to 100% design completion per ASTM E 2516-06) cost estimate is based on design-level alignments, quantities and unit prices. Costs will change with further design. Time value-of-money escalation costs are not included. A construction schedule is not available at this time. Contingency is an allowance for the net sum of costs that will be in the Final Total Project Cost at the time of completion of design, but are not included at this level of project definition. The estimated accuracy range for the Total Project Cost as the project is defined is -4.0% to +6.5%. The accuracy range is based on professional judgement considering the level of design completed, the complexity of the project and the uncertainties in the project as scoped. The contingency and the accuracy range are not intended to include costs for future scope changes that are not part of the project as currently scoped or costs for risk contingency. Operation and Maintenance costs are not included.

PARAMETERS FOR ACCURACY RANGE						
Estimate Class	LEVEL OF PROJECT DEFINITION (% ENGINEERING Complete)	ACCURACY RANGE				
5	0% to 2%	-25% to +40%				
4	1% to 15%	-15% to +25%				
3	10% to 40%	-10% to +15%				
2	30% to 70%	-7.5% to +7.5%				
1	50% to 100%	-4% to +6.5%				

PARAMETERS FOR CONSTRUCTION CONTINGENCY						
PHASE OF PROJECT	PERCENTAGE ENGINEERING COMPLETED	APPLICABLE CONSTRUCTION CONTINGENCY PERCENTAGE (%)				
FUNDING, SCOPE AND BUDGET	0 TO 5%	30.00%				
SCHEMATIC DESIGN	5% TO 15%	25.00%				
PRELIMINARY	15% TO 60%	20.00%				
FINAL	60% TO 100%	10.00%				
CONSTRUCTION	100%	5.00%				
***THIS PROJECT PHASE						