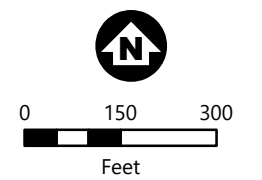



- New Structure
- ~ Creeks
- ➔ General Flow Paths
- ➔ Proposed Storm Sewer
- ➔ Existing Storm Sewer
- ☾ Proposed Stormwater Pond
- ☾ Existing Stormwater Pond
- Proposed Watersheds
- ☾ Drains to Low Flow Diversion Weir
- ☾ Drains to Northwest Neighborhood Diversion
- ☾ Park Area Contributing to Ponds A and C
- ☾ Drains to Pipe Through Park
- ☾ Park Area Draining Away from Ponds A and C
- ☾ Drains to Penn Pond
- ☐ Municipal Boundary



90% DESIGN - CONCEPT 3
 Northwest Neighborhood
 Diversion & Low Flow Diversion
 Bryn Mawr Meadows Park
 Water Quality Project BC-5

FIGURE 1



 PREPARED BY: BARR ENGINEERING COMPANY ENGINEER'S OPINION OF PROBABLE PROJECT COST PROJECT: Bryn Mawr Water Quality Improvements LOCATION: Bryn Mawr Park, Minneapolis PROJECT #: 23/27-1887.00	SHEET:	1	OF	1
	CREATED BY:	JPP	DATE:	3/2/2022
	CHECKED BY:		DATE:	
	APPROVED BY:		DATE:	
	ISSUED:	90% BCWMC Review	DATE:	3/10/2022
ISSUED:		DATE:		

Above and Beyond Water Quality Improvement by BCWMC - 90% Design - BASE DESIGN

ITEM NO.	ITEM DESCRIPTION	UNIT	EST. QUANTITY	UNIT COST	ITEM COST	NOTES
1	MOBILIZATION/DEMOLITION	LS	1	\$70,000.00	\$70,000.00	1,2,3,4,5,6,7
2	TRAFFIC CONTROL	LS	1	\$10,000.00	\$10,000.00	1,2,3,4,5,6,7
3	REMOVE CURB AND GUTTER	LF	171	\$8.00	\$1,368.00	1,2,3,4,5,6,7
4	SAWCUT PAVEMENT (FULL DEPTH)	LF	108	\$5.00	\$540.00	1,2,3,4,5,6,7
5	REMOVE CONCRETE SIDEWALK, 3.5" DEPTH	SY	60	\$15.00	\$900.00	1,2,3,4,5,6,7
6	REMOVE BITUMINOUS PAVEMENT, 4" DEPTH	SY	810	\$8.00	\$6,480.00	1,2,3,4,5,6,7
7	REMOVE MANHOLE OR CATCH BASIN	EA	9	\$700.00	\$6,300.00	1,2,3,4,5,6,7
8	CONSTRUCT BULKHEAD AT PIPE	EA	1	\$500.00	\$500.00	1,2,3,4,5,6,7
9	CONSTRUCT BULKHEAD AT STRUCTURE	EA	3	\$500.00	\$1,500.00	1,2,3,4,5,6,7
10	REMOVE SEWER PIPE (STORM)	LF	1,299	\$25.00	\$32,475.00	1,2,3,4,5,6,7
11	REMOVE SEWER PIPE (SANITARY)	LF	243	\$15.00	\$3,645.00	1,2,3,4,5,6,7
12	ENVIRONMENTAL TEST EXCAVATIONS	HR	8	\$150.00	\$1,200.00	1,2,3,4,5,6,7
13	EXCAVATION - PAVEMENT BASE MATERIALS	CY	142	\$12.00	\$1,704.00	1,2,3,4,5,6,7
14	EXCAVATION - COMMON	CY	15,436	\$9.00	\$138,924.00	1,2,3,4,5,6,7
15	HAUL AND DISPOSE OF CONTAMINATED MATERIAL	CY	4,631	\$55.00	\$254,705.00	1,2,3,4,5,6,7
16	HAUL AND DISPOSE OF SUBSURFACE DEBRIS	CY	772	\$55.00	\$42,460.00	1,2,3,4,5,6,7
17	HAUL AND DISPOSE OF EXCAVATED MATERIAL	CY	9,020	\$20.00	\$180,400.00	1,2,3,4,5,6,7
18	HAUL AND DISPOSE OF CONTAMINATED MATERIAL (STORM SEWER)	CY	1,155	\$55.00	\$63,525.00	1,2,3,4,5,6,7
19	EMBANKMENT - COMMON (STORM SEWER)	CY	1,155	\$5.00	\$5,775.00	1,2,3,4,5,6,7
20	ENVIRONMENTAL RESPONSE CONTINGENCY	LS	1	\$102,000.00	\$102,000.00	1,2,3,4,5,6,7
21	RANDOM RIPRAP CLASS II	TON	54	\$70.00	\$3,780.00	1,2,3,4,5,6,7
22	SUBGRADE CORRECTION FOR UTILITIES	LS	1	\$20,000.00	\$20,000.00	1,2,3,4,5,6,7
23	12" HDPE PIPE (DUAL WALL)	LF	762	\$45.00	\$34,290.00	1,2,3,4,5,6,7
24	15" RC PIPE SEWER, CL V	LF	235	\$80.00	\$18,800.00	1,2,3,4,5,6,7
25	15" PVC PIPE SEWER, SDR 26	LF	91	\$125.00	\$11,375.00	1,2,3,4,5,6,7
26	16" DUCTILE IRON PIPE SEWER, CL 52	LF	32	\$400.00	\$12,800.00	1,2,3,4,5,6,7
27	18" HDPE PIPE (DUAL WALL)	LF	572	\$70.00	\$40,040.00	1,2,3,4,5,6,7
28	18" HDPE PIPE APRON	EA	3	\$300.00	\$900.00	1,2,3,4,5,6,7
29	36" HDPE PIPE (DUAL WALL)	LF	231	\$400.00	\$92,400.00	1,2,3,4,5,6,7
30	36" HDPE PIPE APRON	EA	2	\$800.00	\$1,600.00	1,2,3,4,5,6,7
31	BENTONITE ANTI-SEEPAGE COLLAR	EA	4	\$3,200.00	\$12,800.00	1,2,3,4,5,6,7
32	30" RC POT CATCH BASIN	LF	9	\$500.00	\$4,500.00	1,2,3,4,5,6,7
33	30" NYLOPLAST MANHOLE	LF	14	\$500.00	\$7,000.00	1,2,3,4,5,6,7
34	48" REINFORCED CONCRETE MANHOLE	LF	40	\$800.00	\$32,000.00	1,2,3,4,5,6,7
35	60" REINFORCED CONCRETE MANHOLE	LF	9	\$1,200.00	\$10,800.00	1,2,3,4,5,6,7
36	60" DIAMETER OUTLET STRUCTURE WITH WEIR	LS	1	\$20,000.00	\$20,000.00	1,2,3,4,5,6,7
37	60" OVERFLOW TRASH GRATE	EA	1	\$5,000.00	\$5,000.00	1,2,3,4,5,6,7
38	CASTING ASSEMBLY	EA	14	\$1,000.00	\$14,000.00	1,2,3,4,5,6,7
39	ADJUST FRAME AND RING CASTING	EA	4	\$600.00	\$2,400.00	1,2,3,4,5,6,7
40	PILING	LF	960	\$60.00	\$57,600.00	1,2,3,4,5,6,7
41	CONNECT TO EXISTING STORM SEWER STRUCTURE	EA	2	\$1,200.00	\$2,400.00	1,2,3,4,5,6,7
42	CAST-IN-PLACE CONCRETE DIVERSION WEIR	EA	1	\$5,000.00	\$5,000.00	1,2,3,4,5,6,7
43	CONCRETE COLLAR	EA	1	\$1,500.00	\$1,500.00	1,2,3,4,5,6,7
44	PAVEMENT SUBGRADE PREPARATION	SY	810	\$2.00	\$1,620.00	1,2,3,4,5,6,7
45	AGGREGATE BASE, CLASS 5	CY	149	\$40.00	\$5,960.00	1,2,3,4,5,6,7
46	CONCRETE CURB AND GUTTER B612	LF	151	\$40.00	\$6,040.00	1,2,3,4,5,6,7
47	CONCRETE SIDEWALK, 3.5" DEPTH	SY	60	\$70.00	\$4,200.00	1,2,3,4,5,6,7
48	BITUMINOUS PAVEMENT, 4" DEPTH	SY	810	\$50.00	\$40,500.00	1,2,3,4,5,6,7
49	SEEDING - MNDOT MIX 33-261	AC	0.4	\$7,000.00	\$2,800.00	1,2,3,4,5,6,7
50	STRAW MULCH - MNDOT TYPE 1	AC	0.4	\$3,500.00	\$1,400.00	1,2,3,4,5,6,7
51	HYDROSEEDING - MNDOT MIX 25-151	SY	60	\$20.00	\$1,200.00	1,2,3,4,5,6,7
52	PLUGS	EA	5,000	\$4.00	\$20,000.00	1,2,3,4,5,6,7
53	SHRUBS, #2 CONTAINER	EA	50	\$70.00	\$3,500.00	1,2,3,4,5,6,7
54	ESTABLISHMENT MAINTENANCE (3 YEARS)	YEAR	3	\$5,000.00	\$15,000.00	1,2,3,4,5,6,7
55	RECORD SURVEY	LS	1	\$10,000.00	\$10,000.00	1,2,3,4,5,6,7
	CONSTRUCTION SUBTOTAL				\$1,448,000.00	1,2,3,4,5,6,7,8
	CONSTRUCTION CONTINGENCY (10%)				\$145,000.00	1,5,8
	ESTIMATED TOTAL CONSTRUCTION COST				\$1,593,000.00	1,2,3,4,5,7,8
	ESTIMATED ACCURACY RANGE		-10%		\$1,434,000.00	5,7,8
			15%		\$1,832,000.00	5,7,8

Notes

¹ Limited Design Work Completed (90%).

² Quantities Based on Design Work Completed.

³ Unit Prices Based on Information Available at This Time.

⁴ Limited Field Investigation Completed. Assumed 30% of excavated materials will be contaminated soils.

⁵ This Class 1 (65-100% design completion per ASTM E 2516-06) cost estimate is based on 90%-level designs, 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 the 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 -10% to +15%. 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.

⁶ No costs included for temporary erosion and sediment controls.

⁷ Estimate costs are to construct. The estimated costs do not include maintenance, monitoring or additional tasks following construction.

⁸ Estimate costs are reported to nearest thousand dollars.