

Schedule B - Estimate of entire cost of proposed improvements

Nagawicka Lake Channel Dredging and Restoration, City of Delafield

This estimate uses the apparent low bid received February 10 for all dredging work done, and incl. shared administrative costs, and with 10% contingency.

Revised 2/10/09

The estimated total cost of providing the dredging and restoration improvements in accordance with the plans and specifications in Schedule A is **\$3,780,000.00**

The cost is determined as follows.

Note: This estimate assumes that all of the work including shoreline and the Bark River sediment trap dredging and restoration is done.

ESTIMATED CONSTRUCTION COST (APPARENT LOW BID) INCL. SHORELINE DREDGING AND BARK RIVER SEDIMENT TRAP					
UNIT PRICE BID SCHEDULE "A"					
	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1.	Mobilization.	Lump Sum	1	\$145,000.00	\$145,000.00
2.	Upland Site Preparation	Lump Sum	1	300,000.00	300,000.00
3.	Dewatering Site Development	Lump Sum	1	1,211,181.00	1,211,181.00
4.	Project Management and Health and Safety	Lump Sum	1	74,000.00	74,000.00
5.	Dredging Sediments	Cubic Yards	109,000	9.00	981,000.00
6.	Sediment Dewatering	Cubic Yards	109,000	2.96	322,640.00
7.	Oversize Material Removal and Disposal	Ton	60	100.00	6,000.00
8.	Tube Management and Stockpiling	Cubic Yards	109,000	1.50	163,500.00
9.	Final Demobilization and Restoration	Lump Sum	1	90,000.00	90,000.00
APPARENT LOW BID CONSTRUCTION COST =					\$3,293,321.00
CONTINGENCY (10%) =					329,332.10
ESTIMATED TOTAL CONSTRUCTION COST =					\$3,622,653.10

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Dredging Volume

Total Dredged Volume (CY) =	109,000	100%
Shoreline Dredged Volume (CY) =	77,275	70.89%
Bark River Sediment Trap Dredged Volume (CY) =	31,725	29.11%
Total Estimated Dredging Cost =	\$4,305,000.00	100%
Shoreline Dredging portion cost =	\$3,052,008.03	70.89%
Bark River Sediment Trap Dredging portion cost =	\$1,252,991.97	29.11%
Total Restoration Cost Estimate =	\$250,000.00	100%
Shoreline Restoration portion cost =	\$177,236.24	70.89%
Bark River Sediment Trap Restoration portion cost =	\$72,763.76	29.11%

Estimated Construction Costs

Dredging and Restoration Work	Estimated Cost	Eligible Cost
Dredging shoreline areas portion (bidding Feb. 10)	\$3,052,008.03	\$3,052,008.03
Shoreline Restoration costs (per WDNR bonding requirements)	\$177,236.24	\$177,236.24
Dredging Bark River Sediment Trap portion	\$1,252,991.97	\$0.00
Bark River Sediment Trap Restoration portion cost =	\$72,763.76	\$0.00
Total Estimated Eligible Construction Costs =	\$4,555,000.00	\$3,229,244.27
Eligible costs as percentage of total costs (shoreline dredging portion) =		70.89%
Non-eligible costs as percentage of total costs (Bark River sediment trap portion) =		29.11%

Estimated Engineering, Permitting, Testing, Legal, and Administrative Expenses

Service or Fee	Estimated Cost	Eligible Cost	Incurred Cost
Engineering Design	\$306,300.00	\$306,300.00	\$306,300.00
Construction Administration Services	\$132,485.00	\$132,485.00	\$0.00
Legal Services	\$4,504.00	\$4,504.00	\$4,504.00
Testing Services to date	\$9,900.00	\$9,900.00	\$9,900.00
Testing services during dredging	\$10,000.00	\$10,000.00	\$0.00
Wisc. DNR fees	\$8,250.00	\$8,250.00	\$8,250.00
Special Assessment Services	\$20,030.00	\$20,030.00	\$12,000.00
City Attorney fees	\$2,000.00	\$2,000.00	\$500.00
Publications and Notices	\$850.00	\$850.00	\$850.00
City Administrative Costs (297 lots @ \$100 over ten years)	\$29,700.00	\$29,700.00	\$0.00
Total Estimated Service Costs and Fees =	\$775,205.00	\$775,205.00	\$342,304.00
Eligible costs allocated to shoreline dredging portion =	70.89%	\$549,577.67	
Non-eligible costs allocated to Bark River sediment trap portion =	29.11%	\$225,627.33	

Estimated Total Project Costs

Estimated total shoreline dredging portion costs =	\$3,778,821.94
For special assessment levy purposes, use =	\$3,780,000.00
Estimated total Bark River sediment trap portion costs =	\$1,551,383.06
check =	\$5,330,205.00

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Lake Nagawicka Channel Dredging and Restoration Project

City of Delafield

Cost Estimate Allocation per Area

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rev. 020409

Total estimated shoreline dredging cost = \$2,560,000.00

The estimated cost of dredging and restoration is allocated to each of the five Lake areas based on the proportion of volume in each area.

The benefit and cost associated with said benefit is determined to be allocated to each property based on the shoreline length of these properties.

The shoreline length used is taken from information provided by the City Assessor.

Each area's share of the estimated cost is divided by the total shoreline length in those areas, except for the Northeast Channels, to determine a cost per lineal foot (LF). See the following table of cost allocation.

The cost share for the Northeast Channels is allocated on a volume basis in the table below.

Flat fee (50%) = \$1,280,000.00
 Shoreline Dredging Remainder (50%) = \$1,280,000.00

Cost Allocation per Area Using City Assessor's lake shore lengths

Area	Dredging Volume by Area (CY)	Share of Cost	Area total length (LF)	Cost per LF
West channels =	16,485	\$260,503.70	2,876.45	\$59.99
Northwest channels =	46,502	\$734,846.42	8,889.59	\$82.66
Northeast channels =	4,277	\$67,587.16		see below
Bark River Area (w/o sediment trap) =	5,590	\$88,335.80	2,599.99	\$33.98
Zastrows Bay =	8,146	\$128,726.91	2,039.57	\$63.11
total estimated volume of dredging =	81,000	\$1,280,000.00		

Cost Allocation per Area Using City Assessor's lake shore lengths

Area	Dredging Volume by Area (CY)	Share of Cost	Cost per volume (\$/CY)	Private volume
West channels =	16,485	\$260,503.70	\$15.80	5,566.00
Northwest channels =	46,502	\$734,846.42	0.00	
Northeast channels =	4,277	\$67,587.16	0.00	
Bark River Area (w/o sediment trap) =	5,590	\$88,335.80	0.00	
Zastrows Bay =	8,146	\$128,726.91	0.00	
total estimated volume of dredging =	81,000	\$1,280,000.00		

Cost Allocation for Northeast Channels Area Using Dredging Volumes

	Dredging Volume by Area (CY)	Share of Cost	No. of channels	Cost per channel
NE 1 channel =	427	\$6,747.65	1	\$6,747.65
NE 2 channel =	600	\$9,481.48	1	\$9,481.48
NE 3 channel =	1,450	\$22,913.58	1	\$22,913.58
NE 4 channel =	1,000	\$15,802.47	1	\$15,802.47
NE 5 channel =	800	\$12,641.98	1	\$12,641.98
total estimated volume of dredging =	4,277	\$67,587.16		\$28,444.44

The cost in the Northeast channels is allocated proportional to the volume of dredging in each of the five channels.

The cost for dredging channels NE 4 and NE 5 is divided equally among the 34 units in the condominium property.

The cost for dredging channel NE 1 is divided equally between the two properties that use this channel.

The cost for dredging channel NE 2 is divided equally between the two properties that use this channel.

The cost for dredging channel NE 3 is divided equally among the three properties that use this channel.