

**Appendix I**  
**Project Cost Estimates**

**Metropolitan Water Reclamation District of Greater Chicago  
Poplar Creek Watershed Detailed Watershed Plan**

<b>Alternative Name</b>	PCMS-2
<b>Problem Description</b>	Structure flooding on Poplar Creek and Lord's Park Tributary.
<b>Strategy</b>	Construct new levee, improve channel for 1,700 feet, replace structures.
<b>District Minimum Criteria for Funding:</b>	Met
<b>Recommended</b>	Yes

	Unit	Quantity	Unit Cost	Base Cost	Maint. Cost	Replacement Cost	Notes/Issues
Embankment construction, grading and restoration: Additional fill	yd3	10000	\$13.88	\$138,800.00	\$0	\$0	Levee construction assuming 6 ft height, 8 ft top width, 3:1 side slopes, and a length of 1700 feet.
Embankment construction, grading and restoration: Compaction of fill	yd3	10000	\$5.34	\$53,400.00	\$0	\$0	
Embankment construction, grading and restoration: Material hauled from offsite	yd3	10000	\$10.68	\$106,800.00	\$0	\$0	
Channel treatment: Material to be hauled offsite	yd3	8200	\$11.75	\$96,350.00	\$0	\$0	Assumed 130 ft2 per foot, length equals 1700 feet (8185 yd3).
Channel treatment: Soil stabilization and vegetative cover	yd2	9000	\$13.88	\$124,920.00	\$116,174	\$29,912	
Pump Station: 10ac-ft per day interior drainage	each	3	\$800,000.00	\$2,400,000.00	\$2,231,963	\$0	
Paving: Asphalt Pavement Installation (24 ft wide, 2 ft C&G, 1 ft Excavation	lf	850	\$148.47	\$126,199.50	\$117,364	\$0	Access Road. Assume 1-lane so do half of distance.
Channel treatment: Excavation	yd3	2100	\$10.68	\$22,428.00	\$0	\$0	
Channel treatment: Material to be hauled offsite	yd3	2100	\$11.75	\$24,675.00	\$0	\$0	
Bridge: Bridge COnstruction (Medium Complexity)	SF	8550	\$300.00	\$2,565,000.00	\$2,385,411	\$0	\$200-\$400 per SF - Assume 300 for piers and dealing with water.
Channel treatment: Soil stabilization and vegetative cover	yd2	500	\$13.88	\$6,940.00	\$6,454	\$1,662	
Paving: Asphalt Pavement Installation (24 ft wide, 2 ft C&G, 1 ft Excavation	lf	600	\$148.47	\$89,082.00	\$82,845	\$0	Re-paving for the bridge (assume double width).
Channel treatment: Excavation	yd3	64000	\$10.68	\$683,520.00	\$0	\$0	
Channel treatment: Material to be hauled offsite	yd3	64000	\$11.75	\$752,000.00	\$0	\$0	
Channel treatment: Soil stabilization and vegetative cover	yd2	48000	\$13.88	\$666,240.00	\$619,593	\$159,533	
Paving: Asphalt Pavement Installation (24 ft wide, 2 ft C&G, 1 ft Excavation	lf	350	\$148.47	\$51,964.50	\$48,326	\$0	Pave new road for Kirk Ave., Kramer St., and Getty St.
Bridge: Bridge COnstruction (Medium Complexity)	SF	5719	\$300.00	\$1,715,700.00	\$1,595,575	\$0	\$200-\$400 per SF-Assume 300 for piers and dealing with water.
Channel treatment: Excavation	yd3	2000	\$10.68	\$21,360.00	\$0	\$0	
Channel treatment: Material to be hauled offsite	yd3	2000	\$11.75	\$23,500.00	\$0	\$0	
Channel treatment: Soil stabilization and vegetative cover	yd2	650	\$13.88	\$9,022.00	\$8,390	\$2,160	
Paving: Asphalt Pavement Installation (24 ft wide, 2 ft C&G, 1 ft Excavation	lf	150	\$148.47	\$22,270.50	\$20,711	\$0	Re-pave for new bridge.

**Note:** Small differences between the base cost and the reported product of quantity and unit cost due to rounding

**Alternative Name** PCMS-2  
**Problem Description** Structure flooding on Poplar Creek and Lord's Park Tributary.  
**Strategy** Construct new levee, improve channel for 1,700 feet, replace structures.  
**District Minimum** Met  
**Criteria for Funding:** Met  
**Recommended** Yes

						Maint. Cost	Replacement Cost	Notes/Issues
	Unit	Quantity	Unit Cost	Base Cost				
Channel treatment: Excavation	yd3	500	\$10.68	\$5,340.00		\$0	\$0	Excavate additional channel.
Channel treatment: Material to be hauled offsite	yd3	500	\$11.75	\$5,875.00		\$0	\$0	Excavate additional channel.
Embankment construction, grading and restoration: Material hauled from offsite	yd3	10000	\$10.68	\$106,800.00		\$0	\$0	Raise the IL 25 roadway.
Embankment construction, grading and restoration: Additional fill	yd3	10000	\$13.88	\$138,800.00		\$0	\$0	Raise the IL 25 roadway.
Embankment construction, grading and restoration: Compaction of fill	yd3	10000	\$5.34	\$53,400.00		\$0	\$0	Raise the IL 25 roadway.
Bridge: Bridge Construction (High Complexity)	SF	5185	\$400.00	\$2,074,000.00	\$1,928,788	\$0	\$0	\$200-\$400 per SF - Assume 400 for piers and dealing with water.
Channel treatment: Soil stabilization and vegetative cover	yd2	3000	\$13.88	\$41,640.00	\$38,725	\$9,971		
Paving: Asphalt Pavement Installation (24 ft wide, 2 ft C&G, 1 ft Excavation	lf	1000	\$148.47	\$148,470.00	\$138,075	\$0		Re-paving for the bridge (assume that this will raise the bridge deck too).
Channel treatment: Excavation	yd3	1000	\$10.68	\$10,680.00		\$0	\$0	Excavate additional channel.
Channel treatment: Material to be hauled offsite	yd3	1000	\$11.75	\$11,750.00		\$0	\$0	Excavate additional channel.
Bridge: Railroad Bridge Construction	sf	2231	\$1,305.00	\$2,911,455.00	\$2,707,609	\$0		97-ft by 23-ft bridge deck.
Channel treatment: Soil stabilization and vegetative cover	yd2	425	\$13.88	\$5,899.00	\$5,486	\$1,413		
Concrete: Cast in place	yd3	52	\$250.00	\$13,000.00	\$0	\$0		Headwall & Wingwalls.
Pipe under Pavement (City): Box Culvert (72 sf to 144 sf)	lf	153	\$2,500.00	\$382,500.00	\$355,719	\$0		3- 12ft x 6ft box culverts.
Channel treatment: Soil stabilization and vegetative cover	yd2	85	\$13.88	\$1,179.80	\$1,097	\$283		
Channel treatment: Material to be hauled offsite	yd3	200	\$11.75	\$2,350.00	\$0	\$0		
Channel treatment: Excavation	yd3	200	\$10.68	\$2,136.00	\$0	\$0		
Paving: Asphalt Pavement Installation (24 ft wide, 2 ft C&G, 1 ft Excavation	lf	50	\$148.47	\$7,423.50	\$6,904	\$0		
Buyout: Property *	dollar	4830191	\$1.00	\$4,830,191.49	\$0	\$0		
Bridge: Bridge Demolition-Concrete Removal	cf	10000	\$25.00	\$250,000.00	\$0	\$0		
Bridge: Bridge Demolition-Concrete Removal	cf	16000	\$25.00	\$400,000.00	\$0	\$0		
Bridge: Bridge Demolition-Concrete Removal	cf	8100	\$25.00	\$202,500.00	\$0	\$0		
Bridge: Bridge Demolition-Concrete Removal	cf	18000	\$25.00	\$450,000.00	\$0	\$0		

Note: Small differences between the base cost and the reported product of quantity and unit cost due to rounding

**Alternative Name** PCMS-2  
**Problem Description** Structure flooding on Poplar Creek and Lord's Park Tributary.  
**Strategy** Construct new levee, improve channel for 1,700 feet, replace structures.  
**District Minimum**  
**Criteria for Funding:** Met  
**Recommended** Yes

	Unit	Quantity	Unit Cost	Base Cost	Maint. Cost	Replacement Cost	Notes/Issues
* Indicates item excluded from subtotal (e.g. land acquisition, buyouts)							
<b>Subtotal (direct costs)</b>				<b>\$16,925,370</b>	<b>\$12,415,208</b>	<b>\$204,934</b>	
Utility Relocation			4 %	\$677,015			
Mobilization \ General Conditions			5%	\$846,268			
<b>Subtotal with Percent Allowances</b>				<b>\$18,448,653</b>			
Contingency			30%	\$5,534,596			
Profit			5%	\$1,199,162			
<b>Probable Construction Cost Estimate</b>				<b>\$25,182,411</b>			
Design Engineering, Geotechnical, and Construction Management			10%	\$2,518,241			
Property Acquisition Cost:				\$4,830,191			
<b>Total Conceptual Cost Estimate</b>				<b>\$45,150,986</b>			
<b>Additional Comments</b>							

Note: Small differences between the base cost and the reported product of quantity and unit cost due to rounding

**Metropolitan Water Reclamation District of Greater Chicago  
Poplar Creek Watershed Detailed Watershed Plan**

<b>Alternative Name</b>	PCMS-3
<b>Problem Description</b>	Bank erosion on the Poplar Creek Mainstem south bank on Villa Avenue.
<b>Strategy</b>	Stabilize 400' of bank with structural stabilization.
<b>District Minimum</b>	Met
<b>Criteria for Funding:</b>	
<b>Recommended</b>	Yes

	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Base Cost</b>	<b>Maint. Cost</b>	<b>Replacement Cost</b>	<b>Notes/Issues</b>
Channel treatment: Reinforced one sided concrete wall	yd3	415	\$587.35	\$243,750.25	\$226,684	\$58,367	Assume a 2x9 wall with a 5x2 toe. Re-bar not included in estimate. 400 foot length per discussion.
Channel treatment: Excavation	yd3	78	\$10.68	\$833.04	\$0	\$0	See backup calcs.
Channel treatment: Compaction	yd3	58	\$7.48	\$433.84	\$0	\$0	75% of excavation can be used as fill.
Channel treatment: Additional fill	yd3	101	\$13.88	\$1,401.88	\$0	\$0	
Channel treatment: Soil stabilization and vegetative cover	yd2	693	\$13.88	\$9,618.84	\$8,945	\$2,303	Calculated the distance from top of gabions to backyard grade (15.6). (15.6 x 400/9).
Embankment construction, grading and restoration: Material hauled from offsite	yd3	19	\$10.68	\$202.92	\$0	\$0	

\* Indicates item excluded from subtotal (e.g. land acquisition, buyouts)

<b>Subtotal (direct costs)</b>				<b>\$256,241</b>	<b>\$235,629</b>	<b>\$60,670</b>
Utility Relocation			4 %	\$10,250		
Mobilization \ General Conditions			5%	\$12,812		
<b>Subtotal with Percent Allowances</b>				<b>\$279,302</b>		
Contingency			30%	\$83,791		
Profit			5%	\$18,155		
<b>Probable Construction Cost Estimate</b>				<b>\$381,248</b>		
Design Engineering, Geotechnical, and Construction Management			10%	\$38,125		
Property Acquisition Cost:				\$0		
<b>Total Conceptual Cost Estimate</b>				<b>\$715,672</b>		

**Additional Comments**

Note: Small differences between the base cost and the reported product of quantity and unit cost due to rounding

**Metropolitan Water Reclamation District of Greater Chicago  
Poplar Creek Watershed Detailed Watershed Plan**

<b>Alternative Name</b>	PCMS-4
<b>Problem Description</b>	Bank erosion on the Poplar Creek Mainstem south bank, just north of Thorndale Dr.
<b>Strategy</b>	Stabilize 400' with structural stabilization.
<b>District Minimum</b>	Met
<b>Criteria for Funding:</b>	
<b>Recommended</b>	Yes

	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Base Cost</b>	<b>Maint. Cost</b>	<b>Replacement Cost</b>	<b>Notes/Issues</b>
Channel treatment: Reinforced one sided concrete wall	yd3	415	\$587.35	\$243,750.25	\$226,684	\$58,367	Assume a 2x9 wall with a 5x2 toe. Re-bar not included in estimate. 400 foot length per discussion.
Channel treatment: Material to be hauled offsite	yd3	237	\$11.75	\$2,784.75	\$0	\$0	See backup calcs.
Channel treatment: Compaction	yd3	178	\$7.48	\$1,331.44	\$0	\$0	75% of excavation can be used as fill.
Channel treatment: Additional fill	yd3	414	\$13.88	\$5,746.32	\$0	\$0	592-147.
Channel treatment: Soil stabilization and vegetative cover	yd2	1129	\$13.88	\$15,670.52	\$14,573	\$3,752	Calculated the distance from top of gabions to backyard grade (25.4). (25.4 x 400/9).
Channel treatment: Material to be hauled offsite	yd3	59	\$11.75	\$693.25	\$0	\$0	

\* Indicates item excluded from subtotal (e.g. land acquisition, buyouts)

<b>Subtotal (direct costs)</b>				<b>\$269,977</b>	<b>\$241,257</b>	<b>\$62,119</b>
Utility Relocation			4 %	\$10,799		
Mobilization \ General Conditions			5%	\$13,499		
<b>Subtotal with Percent Allowances</b>				<b>\$294,274</b>		
Contingency			30%	\$88,282		
Profit			5%	\$19,128		
<b>Probable Construction Cost Estimate</b>				<b>\$401,685</b>		
Design Engineering, Geotechnical, and Construction Management			10%	\$40,168		
Property Acquisition Cost:				\$0		
<b>Total Conceptual Cost Estimate</b>				<b>\$745,229</b>		

**Additional Comments**

Note: Small differences between the base cost and the reported product of quantity and unit cost due to rounding

**Metropolitan Water Reclamation District of Greater Chicago  
Poplar Creek Watershed Detailed Watershed Plan**

<b>Alternative Name</b>	PCMS-5
<b>Problem Description</b>	Bank erosion on the Poplar Creek Mainstem west bank, next to Campus Drive.
<b>Strategy</b>	Stabilize 450 feet of bank with structural stabilization.
<b>District Minimum</b>	Met
<b>Criteria for Funding:</b>	
<b>Recommended</b>	Yes

	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Base Cost</b>	<b>Maint. Cost</b>	<b>Replacement Cost</b>	<b>Notes/Issues</b>
Channel treatment: Reinforced one sided concrete wall	yd3	467	\$587.35	\$274,292.45	\$255,088	\$65,680	Assume a 2x9 wall with a 5x2 toe. Re-bar not included in estimate. 450 foot length per discussion.
Channel treatment: Excavation	yd3	2667	\$10.68	\$28,483.56	\$0	\$0	See backup calcs.
Channel treatment: Compaction	yd3	200	\$7.48	\$1,496.00	\$0	\$0	75% of excavation can be used as fill.
Channel treatment: Additional fill	yd3	200	\$13.88	\$2,776.00	\$0	\$0	
Channel treatment: Soil stabilization and vegetative cover	yd2	1270	\$13.88	\$17,627.60	\$16,393	\$4,221	Calculated the distance from top of gabions to backyard grade (25.4). Then 6 feet were added to for what was needed for grow areas for the gabion (30.7x450/9).
Channel treatment: Material to be hauled offsite	yd3	67	\$11.75	\$787.25	\$0	\$0	

\* Indicates item excluded from subtotal (e.g. land acquisition, buyouts)

<b>Subtotal (direct costs)</b>				<b>\$325,463</b>	<b>\$271,481</b>	<b>\$69,901</b>
Utility Relocation			4 %	\$13,019		
Mobilization \ General Conditions			5%	\$16,273		
<b>Subtotal with Percent Allowances</b>				<b>\$354,755</b>		
Contingency			30%	\$106,426		
Profit			5%	\$23,059		
<b>Probable Construction Cost Estimate</b>				<b>\$484,240</b>		
Design Engineering, Geotechnical, and Construction Management			10%	\$48,424		
Property Acquisition Cost:				\$0		
<b>Total Conceptual Cost Estimate</b>				<b>\$874,046</b>		

**Additional Comments**

Note: Small differences between the base cost and the reported product of quantity and unit cost due to rounding

**Metropolitan Water Reclamation District of Greater Chicago  
Poplar Creek Watershed Detailed Watershed Plan**

<b>Alternative Name</b>	PCSH-1
<b>Problem Description</b>	Barrington Road overtopped in the 50- and 100-year events.
<b>Strategy</b>	Reconstruct Barrington Road culvert to eliminate road overtopping.
<b>District Minimum Criteria for Funding:</b>	Met
<b>Recommended</b>	Yes

	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Base Cost</b>	<b>Maint. Cost</b>	<b>Replacement Cost</b>	<b>Notes/Issues</b>
Excavation, Structural (deep heavy soil & clay): Structural Excavation (12"-18" deep)	yd3	490	\$169.80	\$83,202.00	\$77,377	\$0	Structural excavation for new bridge. Includes removal of existing culvert.
Channel treatment: Material to be hauled offsite	yd3	490	\$11.75	\$5,757.50	\$0	\$0	
Bridge: Bridge Construction (High Complexity)	SF	2800	\$400.00	\$1,120,000.00	\$1,041,583	\$0	28-ft wide bridge opening, 6-ft high bridge opening, 100-ft length.
Concrete: Cast in place	yd3	125	\$250.00	\$31,250.00	\$0	\$0	Vertical Headwall/Wingwalls
Channel treatment: Soil stabilization and vegetative cover	yd2	500	\$13.88	\$6,940.00	\$6,454	\$1,662	
Paving: Asphalt Pavement Installation (24 ft wide, 2 ft C&G, 1 ft Excavation	lf	300	\$148.47	\$44,541.00	\$41,422	\$0	4 lane road - assume 150 ft x 2 for the quantity.

\* Indicates item excluded from subtotal (e.g. land acquisition, buyouts)

<b>Subtotal (direct costs)</b>				<b>\$1,291,691</b>	<b>\$1,166,836</b>	<b>\$1,662</b>	
Utility Relocation			4 %	\$51,668			
Mobilization \ General Conditions			5%	\$64,585			
<b>Subtotal with Percent Allowances</b>				<b>\$1,407,943</b>			
Contingency			30%	\$422,383			
Profit			5%	\$91,516			
<b>Probable Construction Cost Estimate</b>				<b>\$1,921,842</b>			
Design Engineering, Geotechnical, and Construction Management			10%	\$192,184			
Property Acquisition Cost:				\$0			
<b>Total Conceptual Cost Estimate</b>				<b>\$3,282,524</b>			

**Additional Comments**

Note: Small differences between the base cost and the reported product of quantity and unit cost due to rounding



**Metropolitan Water Reclamation District of Greater Chicago  
Poplar Creek Watershed Detailed Watershed Plan**

<b>Alternative Name</b>	PCRR-1
<b>Problem Description</b>	Golf Road (IL 58) overtopped in the 100-year event.
<b>Strategy</b>	Increase culvert size under EJ&E Railroad to eliminate the backwater responsible for this problem.
<b>District Minimum</b>	Met
<b>Criteria for Funding:</b>	
<b>Recommended</b>	Yes

	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Base Cost</b>	<b>Maint. Cost</b>	<b>Replacement Cost</b>	<b>Notes/Issues</b>
Channel treatment: Excavation	yd3	100	\$10.68	\$1,068.00	\$0	\$0	
Channel treatment: Material to be hauled offsite	yd3	1500	\$11.75	\$17,625.00	\$0	\$0	
Excavation, Structural (deep heavy soil & clay): Structural Excavation (12"-18" deep)	yd3	1500	\$169.80	\$254,700.00	\$236,867	\$0	Structural Excavation for the open-cut construction.
Channel treatment: Sheet piling	yd2	450	\$303.28	\$136,476.00	\$0	\$32,680	Stabilize open cut construction.
Embankment construction, grading and restoration: Additional fill	yd3	1200	\$13.88	\$16,656.00	\$0	\$0	Backfill over pipe.
Embankment construction, grading and restoration: Compaction of fill	yd3	1200	\$5.34	\$6,408.00	\$0	\$0	Backfill over pipe.
Embankment construction, grading and restoration: Material hauled from offsite	yd3	1200	\$10.68	\$12,816.00	\$0	\$0	Backfill over pipe.
Pipe under Pavement (City): Box Culvert (72 sf to 144 sf)	lf	72	\$2,500.00	\$180,000.00	\$167,397	\$0	12x6 box culvert - 72 ft long
Concrete: Cast in place	yd3	38	\$250.00	\$9,500.00	\$0	\$0	12x6 box culvert headwalls/wingwalls
Channel treatment: Soil stabilization and vegetative cover	yd2	250	\$13.88	\$3,470.00	\$3,227	\$831	

\* Indicates item excluded from subtotal (e.g. land acquisition, buyouts)

<b>Subtotal (direct costs)</b>				<b>\$638,719</b>	<b>\$407,491</b>	<b>\$33,511</b>	
Utility Relocation			4 %	\$25,549			
Mobilization \ General Conditions			5%	\$31,936			
<b>Subtotal with Percent Allowances</b>				<b>\$696,204</b>			
Contingency			30%	\$208,861			
Profit			5%	\$45,253			
<b>Probable Construction Cost Estimate</b>				<b>\$950,318</b>			
Design Engineering, Geotechnical, and Construction Management			10%	\$95,032			
Property Acquisition Cost:				\$0			
<b>Total Conceptual Cost Estimate</b>				<b>\$1,486,352</b>			

**Additional Comments**

Note: Small differences between the base cost and the reported product of quantity and unit cost due to rounding

**Metropolitan Water Reclamation District of Greater Chicago  
Poplar Creek Watershed Detailed Watershed Plan**

<b>Alternative Name</b>	SCTD-1
<b>Problem Description</b>	IL 62 is overtopped in the 5-, 10-, 25-, 50-, and 100-year events.
<b>Strategy</b>	Reconstruct culverts and raise the roadway elevation.
<b>District Minimum</b>	Met
<b>Criteria for Funding:</b>	
<b>Recommended</b>	Yes

	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Base Cost</b>	<b>Maint. Cost</b>	<b>Replacement Cost</b>	<b>Notes/Issues</b>
Excavation, Structural (deep heavy soil & clay): Structural Excavation (12"-18" deep)	yd3	375	\$169.80	\$63,675.00	\$59,217	\$0	
Channel treatment: Material to be hauled offsite	yd3	300	\$11.75	\$3,525.00	\$0	\$0	
Pipe under Pavement (City): Box Culvert (72 sf to 144 sf)	lf	90	\$2,500.00	\$225,000.00	\$209,247	\$0	Double 12x6 box culverts, 45 feet length.
Channel treatment: Soil stabilization and vegetative cover	yd2	4000	\$13.88	\$55,520.00	\$51,633	\$13,294	
Embankment construction, grading and restoration: Additional fill	yd3	6000	\$13.88	\$83,280.00	\$0	\$0	Raising IL 62.
Embankment construction, grading and restoration: Compaction of fill	yd3	6000	\$5.34	\$32,040.00	\$0	\$0	Raising IL 62.
Embankment construction, grading and restoration: Material hauled from offsite	yd3	6000	\$10.68	\$64,080.00	\$0	\$0	Raising IL 62.
Paving: Asphalt Pavement Installation (24 ft wide, 2 ft C&G, 1 ft Excavation	lf	1200	\$148.47	\$178,164.00	\$165,690	\$0	
* Indicates item excluded from subtotal (e.g. land acquisition, buyouts)							
<b>Subtotal (direct costs)</b>				<b>\$705,284</b>	<b>\$485,786</b>	<b>\$13,294</b>	
Utility Relocation			4 %	\$28,211			
Mobilization \ General Conditions			5%	\$35,264			
<b>Subtotal with Percent Allowances</b>				<b>\$768,760</b>			
Contingency			30%	\$230,628			
Profit			5%	\$49,969			
<b>Probable Construction Cost Estimate</b>				<b>\$1,049,357</b>			
Design Engineering, Geotechnical, and Construction Management			10%	\$104,936			
Property Acquisition Cost:				\$0			
<b>Total Conceptual Cost Estimate</b>				<b>\$1,653,372</b>			
<b>Additional Comments</b>							

Note: Small differences between the base cost and the reported product of quantity and unit cost due to rounding

**Metropolitan Water Reclamation District of Greater Chicago  
Poplar Creek Watershed Detailed Watershed Plan**

<b>Alternative Name</b>	BCMS-1
<b>Problem Description</b>	Structure damage at commercial building and mobile homes.
<b>Strategy</b>	Reconstruct the Bartlett Road culvert and the private driveway culvert. Provide 55 Ac-ft detention storage.
<b>District Minimum</b>	Met
<b>Criteria for Funding:</b>	
<b>Recommended</b>	Yes

	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Base Cost</b>	<b>Maint. Cost</b>	<b>Replacement Cost</b>	<b>Notes/Issues</b>
Channel treatment: Excavation	yd3	108900	\$10.68	\$1,163,052.00	\$0	\$0	Excavate storage area.
Channel treatment: Material to be hauled offsite	yd3	108900	\$11.75	\$1,279,575.00	\$0	\$0	Storage area material.
Channel treatment: Soil stabilization and vegetative cover	yd2	34350	\$13.88	\$476,778.00	\$443,396	\$114,166	Storage area.
Channel treatment: Dumped riprap	yd3	90	\$67.28	\$6,055.20	\$5,631	\$1,450	Storage area overflow.
Pipe in earth (city): 36 inches or less	lf	80	\$216.78	\$17,342.40	\$16,128	\$0	Storage area outlet.
Outlet structures (Headwall): 36 inches or less	each	2	\$2,600.34	\$5,200.68	\$4,837	\$0	Storage area outlet.
Concrete: Cast in place	yd3	36	\$250.00	\$9,000.00	\$0	\$0	10 x 6 Box Culvert - 130 feet long (Private Drive).
Pipe under pavement (city): Box culvert (51 to 60 ft2)	lf	130	\$661.03	\$85,933.90	\$79,917	\$0	10 x 6 Box Culvert - 130 feet long (Private Drive).
Pipe under pavement (city): 90 to 96 inches / box culvert (39 to 50 ft2)	lf	124	\$608.70	\$75,478.80	\$70,194	\$0	2 - 6x8 box culverts - 62 feet long (Bartlett Rd)
Concrete: Cast in place	yd3	40	\$250.00	\$10,000.00	\$0	\$0	2 - 6x8 box culverts - 62 feet long(Bartlett Rd)
Buyout: Property *	dollar	188195	\$1.00	\$188,195.29	\$0	\$0	

\* Indicates item excluded from subtotal (e.g. land acquisition, buyouts)

<b>Subtotal (direct costs)</b>		<b>\$3,128,416</b>	<b>\$620,104</b>	<b>\$115,616</b>
Utility Relocation	4 %	\$125,137		
Mobilization \ General Conditions	5%	\$156,421		
<b>Subtotal with Percent Allowances</b>		<b>\$3,409,973</b>		
Contingency	30%	\$1,022,992		
Profit	5%	\$221,648		
<b>Probable Construction Cost Estimate</b>		<b>\$4,654,614</b>		
Design Engineering, Geotechnical, and Construction Management	10%	\$465,461		
Property Acquisition Cost:		\$188,195		
<b>Total Conceptual Cost Estimate</b>		<b>\$6,043,990</b>		

**Additional Comments**

Note: Small differences between the base cost and the reported product of quantity and unit cost due to rounding

**Metropolitan Water Reclamation District of Greater Chicago  
Poplar Creek Watershed Detailed Watershed Plan**

<b>Alternative Name</b>	WBMS-3
<b>Problem Description</b>	Structure flooding on Cornell Lane.
<b>Strategy</b>	Improve 6,300' of channel and replace two crossings.
<b>District Minimum</b>	Met
<b>Criteria for Funding:</b>	
<b>Recommended</b>	Yes

	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Base Cost</b>	<b>Maint. Cost</b>	<b>Replacement Cost</b>	<b>Notes/Issues</b>
Channel treatment: Excavation	yd3	19800	\$10.68	\$211,464.00	\$0	\$0	Channel excavation
Channel treatment: Material to be hauled offsite	yd3	19800	\$11.75	\$232,650.00	\$0	\$0	Channel excavation
Channel treatment: Soil stabilization and vegetative cover	yd2	41740	\$13.88	\$579,351.20	\$538,788	\$138,727	Channel excavation
Channel treatment: Excavation	yd3	24000	\$10.68	\$256,320.00	\$0	\$0	Comp-storage area
Channel treatment: Material to be hauled offsite	yd3	24000	\$11.75	\$282,000.00	\$0	\$0	Comp-storage area
Channel treatment: Soil stabilization and vegetative cover	yd2	11111	\$13.88	\$154,220.68	\$143,423	\$36,929	Comp-storage area
Bridge: Bridge Demolition-Concrete Removal	cf	950	\$25.00	\$23,750.00	\$0	\$0	Remove pedestrian bridge
Concrete: Cast in place	yd3	43	\$250.00	\$10,750.00	\$0	\$0	Syracuse Ln headwall/wingwall
Pipe under Pavement (City): Box Culvert (72 sf to 144 sf)	lf	45	\$2,500.00	\$112,500.00	\$104,623	\$0	Syracuse Ln 10x7 Box culvert
Channel treatment: Soil stabilization and vegetative cover	yd2	85	\$13.88	\$1,179.80	\$1,097	\$283	Syracuse Ln
Channel treatment: Material to be hauled offsite	yd3	85	\$11.75	\$998.75	\$0	\$0	Syracuse Ln
Paving: Asphalt Pavement Installation (24 ft wide, 2 ft C&G, 1 ft Excavation	lf	50	\$148.47	\$7,423.50	\$6,904	\$0	Syracuse Ln
Concrete: Cast in place	yd3	43	\$250.00	\$10,750.00	\$0	\$0	Braintree headwall/wingwall
Pipe under Pavement (City): Box Culvert (72 sf to 144 sf)	lf	60	\$2,500.00	\$150,000.00	\$139,498	\$0	Braintree 10x7 Box culvert
Channel treatment: Soil stabilization and vegetative cover	yd2	85	\$13.88	\$1,179.80	\$1,097	\$283	Braintree
Channel treatment: Material to be hauled offsite	yd3	115	\$11.75	\$1,351.25	\$0	\$0	Braintree
Paving: Asphalt Pavement Installation (24 ft wide, 2 ft C&G, 1 ft Excavation	lf	50	\$148.47	\$7,423.50	\$6,904	\$0	Braintree

**Note:** Small differences between the base cost and the reported product of quantity and unit cost due to rounding

**Alternative Name** WBMS-3  
**Problem Description** Structure flooding on Cornell Lane.  
**Strategy** Improve 6,300' of channel and replace two crossings.  
**District Minimum** Met  
**Criteria for Funding:**  
**Recommended** Yes

	Unit	Quantity	Unit Cost	Base Cost	Maint. Cost	Replacement Cost	Notes/Issues
* Indicates item excluded from subtotal (e.g. land acquisition, buyouts)							
<b>Subtotal (direct costs)</b>				<b>\$2,043,312</b>	<b>\$942,333</b>	<b>\$176,222</b>	
Utility Relocation			4 %	\$81,733			
Mobilization \ General Conditions			5%	\$102,166			
<b>Subtotal with Percent Allowances</b>				<b>\$2,227,211</b>			
Contingency			30%	\$668,163			
Profit			5%	\$144,769			
<b>Probable Construction Cost Estimate</b>				<b>\$3,040,142</b>			
Design Engineering, Geotechnical, and Construction Management			10%	\$304,014			
Property Acquisition Cost:					\$0		
<b>Total Conceptual Cost Estimate</b>				<b>\$4,462,712</b>			
<b>Additional Comments</b>							

Note: Small differences between the base cost and the reported product of quantity and unit cost due to rounding