

City of Racine, WI
UV Disinfection Replacement Project - Final Design/Bidding

Hours/Fee Estimate

	Team Member	Role	Carollo Engineers, Inc.				
			Carollo Hours	Carollo Labor Cost	PECE	Carollo Expenses	Total Carollo Cost
		Billable Rate			\$ 13.00		
Task	Description						
	PHASE I - CONCEPTUAL AND PRELIMINARY DESIGN/EQUIPMENT PRESELECTION						
	PHASE II - FINAL DESIGN AND BIDDING SERVICES						
	Task 1 - Project Coordination						
1.1	Project Management, Coordination, Reporting (14 months)		166	\$ 28,930	\$ 2,158	\$ -	\$ 31,088
1.2	Site Visits (assume 2)		92	\$ 17,400	\$ 1,196	\$ 5,800	\$ 24,396
1.3	Bi-weekly Progress Calls (28 calls)		50	\$ 9,850	\$ 650	\$ -	\$ 10,500
1.4	Geotechnical/Survey		36	\$ 6,960	\$ 468	\$ 50,000	\$ 57,428
	Task 2 - Final Design Phase Services						
2.1	Wet Weather Analysis		124	\$ 24,240	\$ 1,612	\$ 1,500	\$ 27,352
	60% General Sheets (assumed 7)		30	\$ 4,530	\$ 390		\$ 4,920
	60% Civil Sheets (assumed 5)		30	\$ 4,410	\$ 390		\$ 4,800
	60% Demolition Sheets (assumed 8)		74	\$ 10,430	\$ 962		\$ 11,392
	60% Structural Sheets (assumed 25)		412	\$ 76,160	\$ 5,356		\$ 81,516
	60% Process/Mechanical Sheets (assumed 7)		126	\$ 23,570	\$ 1,638		\$ 25,208
	60% HVAC Sheets (assumed 6)		44	\$ 6,360	\$ 572		\$ 6,932
	60% Electrical Sheets (assumed 17)		172	\$ 34,670	\$ 2,236		\$ 36,906
	60% Instrumentation Sheets (assumed 8)		47	\$ 8,660	\$ 611		\$ 9,271
	60% Technical Specifications (Divisions 1 through 17)		180	\$ 34,120	\$ 2,340		\$ 36,460
	EOPCC at 60% Design Level		57	\$ 7,950	\$ 741		\$ 8,691
	60% Design Meeting		32	\$ 5,840	\$ 416	\$ 500	\$ 6,756
	90% General Sheets (assumed 7)		30	\$ 4,530	\$ 390		\$ 4,920
	90% Civil Sheets (assumed 4)		15	\$ 2,315	\$ 195		\$ 2,510
	90% Demolition Sheets (assumed 8)		62	\$ 8,690	\$ 806		\$ 9,496
	90% Structural Sheets (assumed 20)		432	\$ 77,160	\$ 5,616		\$ 82,776
	90% Process/Mechanical Sheets (assumed 7)		84	\$ 13,040	\$ 1,092		\$ 14,132
	90% HVAC Sheets (assumed 6)		36	\$ 5,200	\$ 468		\$ 5,668
	90% Electrical Sheets (assumed 17)		162	\$ 33,220	\$ 2,106		\$ 35,326
	90% Instrumentation Sheets (assumed 8)		47	\$ 8,660	\$ 611		\$ 9,271
	90% Technical Specifications (Divisions 1 through 17)		188	\$ 34,040	\$ 2,444		\$ 36,484
	EOPCC at 90% Design Level		39	\$ 5,550	\$ 507		\$ 6,057
	90% Design Meeting		34	\$ 6,040	\$ 442	\$ 500	\$ 6,982
	100% General Sheets (assumed 7)		10	\$ 1,630	\$ 130		\$ 1,760
	100% Civil Sheets (assumed 4)		7	\$ 1,195	\$ 91		\$ 1,286
	100% Demolition Sheets (assumed 8)		24	\$ 3,500	\$ 312		\$ 3,812
	100% Structural Sheets (assumed 20)		272	\$ 52,060	\$ 3,536		\$ 55,596
	100% Process/Mechanical Sheets (assumed 7)		90	\$ 13,750	\$ 1,170		\$ 14,920
	100% HVAC Sheets (assumed 6)		36	\$ 5,200	\$ 468		\$ 5,668
	100% Electrical Sheets (assumed 17)		162	\$ 33,220	\$ 2,106		\$ 35,326
	100% Instrumentation Sheets (assumed 8)		42	\$ 7,880	\$ 546		\$ 8,426
	100% Technical Specifications (Divisions 1 through 17)		172	\$ 32,040	\$ 2,236		\$ 34,276
	EOPCC at 100% Design Level		27	\$ 3,970	\$ 351	\$ 1,000	\$ 5,321
	Task 3 - Permitting Phase Services						
	CWFP Application Support		40	\$ 5,920	\$ 520	\$ 500	\$ 6,940
	COJ Building Permit		40	\$ 5,920	\$ 520	\$ -	\$ 6,440
	Stormwater Permit		40	\$ 5,920	\$ 520	\$ -	\$ 6,440
	Focus on Energy Grant Application		40	\$ 5,920	\$ 520	\$ 500	\$ 6,940
	WPDES General Permit		48	\$ 8,000	\$ 624	\$ 500	\$ 9,124
	Task 4 - Bid Phase Services						
	Attend Pre-Bid Conference		30	\$ 4,540	\$ 390	\$ 500	\$ 5,430
	Respond to Bidder Questions (2 addendums)		120	\$ 20,900	\$ 1,560	\$ -	\$ 22,460
	Prepare Conformed Documents		80	\$ 12,740	\$ 1,040	\$ 1,000	\$ 14,780
	PHASE III - CONSTRUCTION AND POST-CONSTRUCTION SERVICES (Submitted Separately)						
	Total Project Hours		4,081				
	Total Direct Labor Dollars			\$ 726,830	\$ 53,053	\$ 62,300	\$ 842,183