

ALTERNATIVE 2 - NEW WATER PLANT - COST ESTIMATE

Alternative 2B - New Water Plant at Sarawak Family Park. Smaller Size Watermains Only. Fire Flows not Provided. Booster Station only at Mount Pleasant Drive.

WATERMAINS						
Item	Description	Length (m)	Size	Cost (\$/m)	Unit	Total Cost
1 a)	300 mm dia. watermain on Grey Road 1 from Indian River to Grey Road 17A and on Grey Road 17 A to Mount Pleasant Road	1,800	200 mm	\$600	m	\$1,080,000
1 b)	200 mm dia. watermain on Grey Road 1 south of Grey Rd 17 A	1,300	200 mm	\$500	m	\$650,000
1 c)	300 mm dia. watermain from Booster Station to Range Road and then south on Range Road to 30th Street West	1,300	200 mm	\$500	m	\$650,000
1 d)	200 mm dia. watermain on 30th Street West and Edmonstone Street	1,600	200 mm	\$400	m	\$640,000
1 e)	200 mm dia. watermain on Gale Street south of 30th Street West to Grey Road 17B	2,900	200 mm	\$400	m	\$1,160,000
1 f)	200 mm dia. watermain on Nicols Gully Road and Youngs Drive to Atkins Street (Pottawatomni Village)	850	200 mm	\$400	m	\$340,000
1 g)	150 mm dia. watermain on Mount Pleasant Drive	270	150 mm	\$300	m	\$81,000
SUBTOTAL - WATERMAINS						\$4,601,000
Note - watermain cost per m above includes restoration and allowance for fittings, hydrants and service stubs. Does not include watermain replacement costs in Pottawatomni Village.						
NEW WATER PLANT, BOOSTER STATION AND RESERVOIR						
Item	Description	Length (m)	Size	Cost (\$/m)	Unit	Total Cost
2 a)	New water treatment plant and water intake from Georgian Bay at Sarawak Family Park. Minimal clearwell volume. Boosteer station at Mount Pleasant Drive.				Lump Sum	\$2,910,000
	200 m of 400 mm dia marine intake at \$1,700/m - \$340,000					
	15 m by 15 m water plant building. Includes footing, walls, roofs etc and insulation, building services etc. - \$1,000,000					
	Pall membrane treatment units for minimum 9 l/s (754 cmd) capacity plus 25% reserve treatment capacity - \$650,000					
	Backup Generator (external) - \$80,000					
	Electrical supply, panels, controls and SCADA etc - \$220,000					
	Low lift pumping equipment and piping, valves etc. - \$110,000					
	High lift pumping equipment and piping, valves etc. - \$110,000					
	UV Disinfection equipment - \$100,000					
	Chlorination equipment, chlorine and turbidity analyzers - \$80,000					
	General site work and yard piping for chlorine contact time - \$220,000					
2 b)	Booster Station at Mount Pleasant Road. Features three, 5 l/s peak flow pumps. All VFD controlled. Features electrical, flow measurement and SCADA control.				Lump Sum	\$280,000
	Pumps, flow meters, pressure gauges and other instrumentation - \$60,000					
	Pumping station building including walls, roof, floor etc and building services - \$80,000					
	Piping, valves and other mechanical - \$30,000					
	Backup generator (external) - \$60,000					
	Electrical supply, panels, controls etc - \$50,000					
2 c)	Glass fused to steel water storage standpipe - Not Provided.					\$0
2 d)	Pressure Reducing Valve Chamber - Not Required					\$0
SUBTOTAL OF WATER PLANT AND BOOSTER STATION						\$3,190,000
TOTAL OF WATERMAINS, WATER PLANT AND BOOSTER STATION						\$7,791,000
Allowance for Contingencies and Engineering (20% of above)						\$1,558,200
TOTAL COST ESTIMATE						\$9,349,200