

ALTERNATIVE 1 - CONNECT TO EAST LINTON SYSTEM - COST ESTIMATE

Alternative 1A - Connect to East Linton Water System. Large Size Watermains to Provide Fire Flows. Booster Station and Treated Water Reservoir 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 Balmy Beach Road to Grey Road 17A and on Grey Road 17 A to Booster Station near Mount Pleasant Road	2,200	300 mm	\$600	m	\$1,320,000
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)	200 mm dia. watermain on Grey Road 1 north of Balmy Beach Road to Indian Acres Road	700	200 mm	\$400	m	\$280,000
1 d)	Replace 200 mm dia. watermain on Balmy Beach Road south of Old Beach Road	350	200 mm	\$400	m	\$140,000
1 e)	200 mm dia. watermain on 30th Street West and Edmonstone Street	1,600	200 mm	\$400	m	\$640,000
1 f)	300 mm dia. watermain from Booster Station to Range Road and then south on Range Road and Gale Street to 16th Street West and then south to Grey Road 17B	4,200	300 mm	\$500	m	\$2,100,000
1 g)	200 mm dia. Watermain on Nicols Gully Road and Youngs Drive to Atkins Street (Pottawatomie Village)	850	200 mm	\$400	m	\$340,000
1 h)	150 mm dia. Watermain on Mount Pleasant Drive	270	150 mm	\$300	m	\$81,000
SUBTOTAL - WATERMAINS						\$5,551,000
<p>Note - watermain cost per m above includes restoration and allowance for fittings, hydrants and service stubs. Does not include watermain replacement costs in Pottawatomie Village.</p>						
BOOSTER STATION, RESERVOIR AND VALVE CHAMBERS						
Item	Description	Length (m)	Size	Cost (\$/m)	Unit	Total Cost
2 a)	Booster Station at Mount Pleasant Road. Features three, 35 l/s fire and peak flow pumps from reservoir, two 6 l/s maximum day flow pumps and two reservoir circulation pumps at 1 l/s. All VFD controlled. Features electrical, flow measurement and SCADA control.				Lump Sum	\$760,000
	Pumps, flow meters, pressure gauges and other instrumentation - \$140,000					
	Concrete substructure, wall, roof system, doors etc - \$360,000					
	Piping, valves and other mechanical - \$80,000					
	Backup Generator (external) - \$80,000					
	Electrical supply, panels, controls etc - \$100,000					
2 b)	Two compartment water storage reservoir to provide peak flow capacity and fire flows. Usable storage of 800 cubic meters.				Lump Sum	\$600,000
	Excavation, site grading, road access, site fencing etc - \$70,000					
	Reinforced concrete tank including vents, access hatches etc - approx. 400 cubic meter of reinforced concrete at \$1,200/cubic meter - \$480,000					
	Land acquisition - \$50,000					
2 c)	Pressure Reducing Valve Chamber on Grey Road 1 north of Balmy Beach Road				Lump Sum	\$60,000
SUBTOTAL OF BOOSTER STATION, RESERVOIR AND VALVE CHAMBER						\$1,420,000
TOTAL OF WATERMAINS, BOOSTER STATION, RESERVOIR AND VALVE CHAMBER						\$6,971,000
Allowance for Contingencies and Engineering (20% of above)						\$1,394,200
TOTAL COST ESTIMATE (excluding net HST)						\$8,365,200