

Phased Capital Improvements Program

Revised projections predict the Town to grow to a maximum day demand of approximately 24.6 MGD (reduced from 27 MGD) by 2025. Extensive treatment, storage and transmission/distribution requirements will be still be necessary. Note that the sizing of transmission mains through the Aaron Harbor property were decreased due to the reduction in proposed development.

Recommended capital improvements were updated and identified for 5-year, 10-year, and ultimate water system design. Immediate improvements should be constructed within the next 5 years, whereas longer-term improvements should be completed by 2030. The recommendations are listed by priority with a corresponding map key number to locate on the Town's Master Plan map. (Note that the sizing of the transmission mains through the Aaron Harbor property were decreased due to the reduction in proposed development.) The 5- and 10-year CIP recommendations are summarized in the following tables.

Table VI-A: 5-year CIP Recommendations

Item	Description	Size	Length (ft)
1. CW Bixler Connection	Connect 12-inch distribution main at both ends of CW Bixler Blvd.	12"	1,250
2. Orchard Glen Connection	Connect 12" in Austin Ave. to 12" in Meadow Sweet Farm Parkway.	12"	1,000
3. 20" Connection	Complete connection of new 20" to existing 18" in Erie Parkway.	20"	100
4. Austin Ave. Connection	Connect Zone 2 lines in County Line Road from Erie Parkway to Austin Ave./Mason St.	12"	2,000
5. Zone 4B Storage Tank Land and Easements	Complete negotiations for, and a tank siting study to evaluate possible locations for a Zone 4B elevated storage tank.	0.5 MG	N/A
6. Zone 2 Storage Tank Land and Easements	Acquire land at the appropriate elevation for an additional Zone 2 storage tank. Include any easements for transmission main.	N/A	N/A
7. County Line AC Pipe	Replace aging AC pipe in County Line Rd.	16"	5,200
8. Zone 3 Storage Tank Land and Easements	Acquire land and easements for ±4.3 MG Zone 3 Tank and Transmission Main	N/A	N/A
9. Zone 2 Storage Tank and Transmission	3.2 MG storage tank for Zone 2. 9,800 lf of 30" and 34,000 lf of 24" Zone 2 transmission main from the plant to tank.	3.2 MG 30"/24"	9,800/ 34,000

Note: Item number corresponds to numbering on updated Water System Master Plan Drawing dated December 2015.

Table VI-B: 10-year CIP Recommendations

Item	Description	Size	Length
			(ft)
10. Zone 4B Storage Tank and Transmission	Elevated 0.5 MG storage tank with transmission main to provide Zone 4B reliability.	0.5 MG 16"	7,000
11. New Water Treatment	Expand WTP at current site or construct new WTP. Either option requires land acquisition.	N/A	N/A
12. Holbrook Waterline	Connect waterline in Holbrook St. from Evans St. to WCR 10/County Line.	16"	3,400
13. Zone 3 Storage and Transmission	Additional ±4.3 MG water storage tank and 20" transmission line from WTP to tank.	4.3 MG 20"	11,000
14. Kenosha Connection	Zone 2 distribution line in County Line from WCR 10½ to Kenosha Rd.	12"	1,400

Note: Item number corresponds to numbering on Master Plan Drawing.

Preliminary Cost Estimates

An opinion of probable cost for the recommended non-potable water system improvements, at a master planning level, is presented following. Land acquisition costs have not been included for improvements (except for tank sites) since most improvements are within Right-of-Ways or are shown in approximate locations for Master Planning purposes.

Table VI-C: 5-year CIP Preliminary Cost Estimates

Priority	Item	Size/Quantity	Estimated Cost
	1. CW Bixler Connection	1,250 lf	\$180,000
	15. Orchard Glen Connection	1,000 lf	\$144,000
	4. 20" Connection	100 lf	\$35,000
	11. Austin Avenue Connection	2,000 lf	\$288,000
	2. Zone 4B Storage Tank Land and Easements	3± acres	\$200,000
	3. Zone 2 Tank Land Acquisition	3± acres	\$200,000
	8. Zone 3 Tank Land Acquisition	3± acres	\$200,000
	5. County Line AC Pipe	5,200 lf	\$955,000
	13. Zone 2 Storage Tank and Transmission Main	3.2 MG 9,800 / 34,000	\$3,500,000 \$3.1M / \$8.8M
	Construction Costs		\$25,162,000
	Add 25% for contingencies, engineering, inspection, legal and administrative costs.		\$6,291,000
	Subtotal - Project Budget		\$331,453,000

Estimated costs for 10-year CIP Recommendations presented correspond with the item numbers for the associated improvement above.

Table VI-D: 10-year CIP Preliminary Cost Estimates

Item	Size/Quantity	Estimated Costs	Project Trigger Points
14. Zone 4B Storage Tank and Transmission	0.5 MG/ 10,000	\$1,380,000 \$1,645,000	Acquisition of Site
16. New Water Treatment	2.25 MGD	\$1,500,000	DU = 16,000 Max Day = 16 MGD
17. Holbrook Waterline	3,400	\$587,000	Zone 2/4A Max Day = 5 MGD
18. Zone 3 Storage and Transmission	±3.3 MG/ 11,000	\$3,570,000 \$2,530,000	Zone 3/4B Max Day = 17.5 MGD
20. Kenosha Connection	1,400	\$196,000	Completion of Zone 2 Transmission
Construction Costs.		\$11,408,000	
Add 25% for contingencies, engineering, inspection, legal and administrative costs.		\$2,852,000	
Subtotal - Project Budget		\$14,260,000	