

8.1 SELECTED ALTERNATIVE(S)

8.1.1 Selected Sanitary Sewer Collection and Conveyance Alternative

As discussed throughout this Plan, there is adequate documentation available and reasoning to justify the provision of public to sewer in Matamoras Borough, Route 6/209 in Westfall Township, and Broad and Harford Street in Milford Borough. As detailed in Chapter No. 5, the most advantageous alternative for Matamoras Borough is Alternative No. 2B, Alternative No. 3B for Westfall Township, and Alternative No. 6F for Milford Borough. These alternatives are both dependent upon an updated inter-municipal agreement between each of the four municipalities and MATW, availability of favorable funding with maximum grants, and the potential contributions made by land developers or private entities at the time of implementation. Alternative No. 2B provides public sewer to the Matamoras Borough Planning Area along Pennsylvania Avenue as well as municipal roads that had been identified as needs areas in the Tier 2 Surveys. These areas are proposed to be collected through low-pressure sewer which is directly conveyed to the existing MATW force main, where the flows would be fed to the MATW Pump Station #1. The pump station would then convey the wastewater flow into MATW WWTP. Both the WWTP and MATW Pump Station #1 have the hydraulic capacity to handle projected flows from both this alternative and Alternatives No. 3B and No. 6F. Alternative No. 3B provides sewer to Westfall Township Southwest along Route 6/209 using a low pressure system. Alternative 6F provides sewer to Milford Borough along Route 6/209, Broad Street, and East and West Harford Street. These areas are proposed to be served through low-pressure sewers which are directly conveyed to the existing MATW force main, where the flows would be fed into MATW Pump Station #1. The pump station would then convey the wastewater flow into MATW WWTP. The estimated cost per EDU for each proposed structural alternative are presented in Tables 8-3 at the end of this Chapter.

The implementation of Alternatives No. 2B, No. 3B, and No. 6F are anticipated to be completed in accordance with the projected implementation schedule assuming that an updated inter-municipal agreement with MATW is negotiated and funding is secured. Without the updated inter-municipal agreement, development agreement(s), and favorable funding (public and private) this alternative is not considered to be feasible and will not be implemented.

8.1.2 OLDS Sewage Management Program

As previously stated, Milford Borough, Westfall Township, Milford Township, and Matamoras will each begin a five year monitoring period of the existing OLDS, and if the study indicates a need, they will implement an official On-Lot Sewage Management Ordinance.

8.2 CAPITAL FINANCING PLAN FOR SELECTED STRUCTURAL ALTERNATIVE(S)

The estimated project cost for the selected alternative for the Matamoras Borough Study Area (Alternative 2B) is approximately \$5,800,000.00. The estimated project cost for the selected alternative for the Westfall Township Southwest Study Area (Alternative 3B) is approximately \$2,600,000. The estimated project cost for the selected alternative for Milford Borough (Alternative 6F) is \$6,100,000.

With a wholesale rate of \$25.00/EDU, the estimated monthly cost per EDU for Alternative No. 2B would be approximately \$72/month utilizing USDA financing with a 45% grant. The estimated

monthly cost per EDU for Alternative No. 6F would be approximately \$76/month utilizing USDA financing with a 45% grant. The estimated monthly cost per EDU for Alternative No. 3B utilizing a bank loan would be approximately \$60/month. The existing user rate for MATW customers is \$60/month, and without favorable funding, the rates for service outside of Westfall Township would need to increase in order to fund the proposed projects.

To implement these structural alternatives while maintaining a reasonable user rate, a more detailed financing plan consisting of the payment of tapping fees from new connections, grant money, capital contributions from developers, and a low interest (PENNVEST, R.U.S., County Grants, RCAP, etc.) loan or any combination is required. The funding and project schedule would also need to be coordinated with MATW and their funding effort and schedule. Prior to preliminary design, a more detailed financial and funding analysis should be undertaken to examine all funding and financing options available. Funding scenarios studied should include (1) the use of grant monies to offset the capital costs of the project; (2) the use of potential developer capital contributions to offset the capital costs of the project; (3) the ability to combine debt service and operation and maintenance costs into a reasonable rate structure (both tapping fees and user rates), and (4) combinations of funding options.

8.3 PROJECT IMPLEMENTATION SCHEDULE

This project schedule for the proposed wastewater collection system extensions is contingent upon the receipt of affordable funding and an updated inter-municipal agreement with MATW. However, in the immediate future, Milford Borough, Westfall Township, Milford Township, and Matamoras Borough should each begin their 5 year enhanced monitoring program. The Municipalities should proceed with implementing their monitoring period as shown below:

Table 8-1 Implementation Schedule (OLDS Sewage Management Ordinance Phase I)

Years	OLDS Sewage Management Ordinance Phase I
2020 – 2025	Monitor and Report on On-Lot Disposal Systems
2025-2027	If the five year monitoring period Develop Draft On-lot Disposal System Management Ordinance
2022 – 2023	Provide Public Education for On-lot Disposal System Management Ordinance
2027 – 2028	Finalize and Adopt On-lot Disposal System Management Ordinance

Table 8-2 Implementation Schedule (Sewer System Extensions)

Years	Activity
0 to 2	Negotiate Updated Inter-municipal Agreement with MATW
	Pursue Funding Opportunities for Construction of Alternative 2B, 3B and 6F Facilities
2 to 5 ⁽¹⁾	Design and Permit Alternative 2B, 3B and 6F Facilities
5 to 9 ⁽¹⁾	Construct Alternative 2B, 3B and 6F Facilities (Assumed to Be Completed in Phases)
6 to 10 ⁽¹⁾	Complete Connections to Alternative 2B, 3B and 6F Facilities

Note (1): Without an updated inter-municipal agreement (including updates to the MATW rules and regulations), development agreement(s), and favorable funding (public and private) these alternatives are not feasible and will not be implemented.



Table 8-3 Summary of Financing Options for Selected Alternatives (Applying Separately)

Milford - Selected Alternative 6F							Project Cost: \$ 6,100,000	Annual O&M Cost: \$ 101,200	No. of EDUs 284		
Option	Description	Tapping Fee Towards Pjt	Grant	Loan	Interest Rate	Term (Yrs)	Annual DS Cost	Resulting Annual User Rate/EDU*	Resulting Monthly User Rate/EDU*	Total Interest over Term of Loan	
6F - 1a	PENNVEST - w/ Anticipated Grant	\$ -	\$ 1,785,000	\$ 4,315,000	1.000%	20	\$239,117	\$ 1,410	\$ 117	\$467,342	
6F - 1b	PENNVEST - w/ Max Grant	\$ -	\$ 4,250,000	\$ 1,850,000	1.000%	20	\$102,518	\$ 844	\$ 70	\$200,367	
6F - 2	USDA - w/ 45% Grant	\$ -	\$ 2,745,000	\$ 3,355,000	1.875%	40	\$119,972	\$ 916	\$ 76	\$1,443,875	
6F - 3	Bank Loan	\$ -	\$ -	\$ 6,100,000	4.250%	20	\$458,841	\$ 2,320	\$ 193	\$3,076,820	
6F - 4	Bond Issue	\$ -	\$ -	\$ 6,100,000	4.500%	30	\$374,488	\$ 1,971	\$ 164	\$5,134,652	

Matamoras - Selected Alternative 2B							Project Cost: \$ 5,800,000	Annual O&M Cost: \$ 89,800	No. of EDUs 276		
Option	Description	Tapping Fee Towards Pjt	Grant	Loan	Interest Rate	Term (Yrs)	Annual DS Cost	Resulting Annual User Rate/EDU*	Resulting Monthly User Rate/EDU*	Total Interest over Term of Loan	
2B - 1a	PENNVEST - w/ Anticipated Grant	\$ -	\$ 819,000	\$ 4,981,000	1.000%	20	\$276,024	\$ 1,559	\$ 130	\$539,474	
2B - 1b	PENNVEST - w/ Max Grant	\$ -	\$ 1,950,000	\$ 3,850,000	1.000%	20	\$213,349	\$ 1,292	\$ 108	\$416,979	
2B - 2	USDA - w/ 45% Grant	\$ -	\$ 2,610,000	\$ 3,190,000	1.875%	40	\$114,072	\$ 869	\$ 72	\$1,372,865	
2B - 3	Bank Loan	\$ -	\$ -	\$ 5,800,000	4.250%	20	\$436,275	\$ 2,242	\$ 187	\$2,925,501	
2B - 4	Bond Issue	\$ -	\$ -	\$ 5,800,000	4.500%	30	\$356,071	\$ 1,901	\$ 158	\$4,882,128	

Westfall - Selected Alternative 3B							Project Cost: \$ 2,600,000	Annual O&M Cost: \$ 808,200	No. of Total EDUs 1347		No. of New EDUs 354
Option	Description	Reserve Funds & Tapping Fee Towards Pjt	Grant	Loan	Interest Rate	Term (Yrs)	Annual DS Cost	Resulting Annual User Rate/EDU*	Resulting Monthly User Rate/EDU*	Total Interest over Term of Loan	
3B - 1a	PENNVEST - w/ Anticipated Grant	\$ 1,500,000	\$ -	\$ 1,100,000	1.000%	20	\$60,957	\$ 698	\$ 58	\$119,137	
3B - 1b	PENNVEST - w/ Max Grant	\$ 1,500,000	\$ -	\$ 1,100,000	1.000%	20	\$60,957	\$ 698	\$ 58	\$119,137	
3B - 2	USDA - w/ 45% Grant	\$ 1,500,000	\$ 1,170,000	\$ (70,000)	1.875%	40	\$0	\$ 649	\$ 54	\$0	
3B - 3	Bank Loan	\$ 1,500,000	\$ -	\$ 1,100,000	4.250%	20	\$82,742	\$ 715	\$ 60	\$554,836	
3B - 4	Bond Issue	\$ 1,500,000	\$ -	\$ 1,100,000	4.500%	30	\$67,531	\$ 703	\$ 59	\$925,921	

Notes:

1. Rate projections assumes 7.25% delinquency rate for retail customers and 15% for wholesale.
2. Private funding intended for the Westfall Extension (Alt 3B) because there is no Mandatory Connection Ordinance anticipated.
3. Assumes existing Westfall Authority reserve funds put towards capital project costs and used to lower amount financed by debt.
4. Assumes tapping fee revenue received by Westfall from new connections will be set aside in a reserve account for future capital improvement needs
5. Assumes annual retail and wholesale user charges from Westfall Authority are reduced by \$20/month and \$10/month respectively to eliminate budgeted depreciation expense for the initial years of service.
6. Assumes initial wholesale rate of \$25/EDU/month.

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