

CITY OF WOOSTER

CHAPTER 5—PUBLIC UTILITIES ASSESSMENT

The provision of utilities to businesses and residents in the city is one of the most critical services that a city can provide. Many judgements are made about a city based on how utility service provision is handled over both the long term and on a daily basis. The City of Wooster has been successfully providing water, sewer and storm water utility services to its residents in the past, but faces challenges in the future as growth continues within certain areas of the city.

There is a strong correlation between future growth and the ability of utility systems to accommodate increased demands over time. As residential, commercial and industrial growth continue in Wooster and or as the city boundaries expand due to annexations, additional pressures will be placed on the existing utility infrastructure systems, including the lines themselves and the treatment plants. A useful tool that many cities use to proactively prepare for future conditions is a utilities master plan. This type of plan assesses existing conditions, identifies inefficiencies and deficiencies, and develops improvement and implementation plans for both the water and sewer systems.

The following is a summary of the city's existing utility systems' issues, limitations and planned improvements. Figure 5-1 outlines the location of the water and sewage treatment facilities.

Sanitary Sewer and Storm Water

Existing Conditions

- ▶ The wastewater treatment plant is responsible for treating sewage from city residents, businesses and industries.
- ▶ The wastewater treatment plant has a capacity of treating 7.5 million gallons per day (mgd) under normal flow conditions.
- ▶ A maximum flow of 15 mgd can be treated at the treatment plant for short intervals.
- ▶ A combination of gravity flow lines and pump stations are used to transport wastewater to the treatment plant.
- ▶ A facilities 201 Plan was completed in 1980.

Limitations

- ▶ The city has numerous areas where combined sanitary and storm sewers are used. These contribute to peak flows during rain events.
- ▶ If flows exceed 15 mgd, then a by-pass situation occurs at the treatment plant where flows bypass the plant and flow directly downstream.
- ▶ The industrial area east of Highway 3 needs investment in a trunk line and lift station in order to provide adequate sewer service to this area for the future.
- ▶ As growth occurs in new areas, especially the northern end of the city, increased demands on water and sewer services occur as additional flows to the existing system may make it more difficult to handle additional volume with existing lines.

Opportunity

- ▶ Develop a coordinated water and sewer utilities master plan to strategically use utility investment resources efficiently over the long-term.

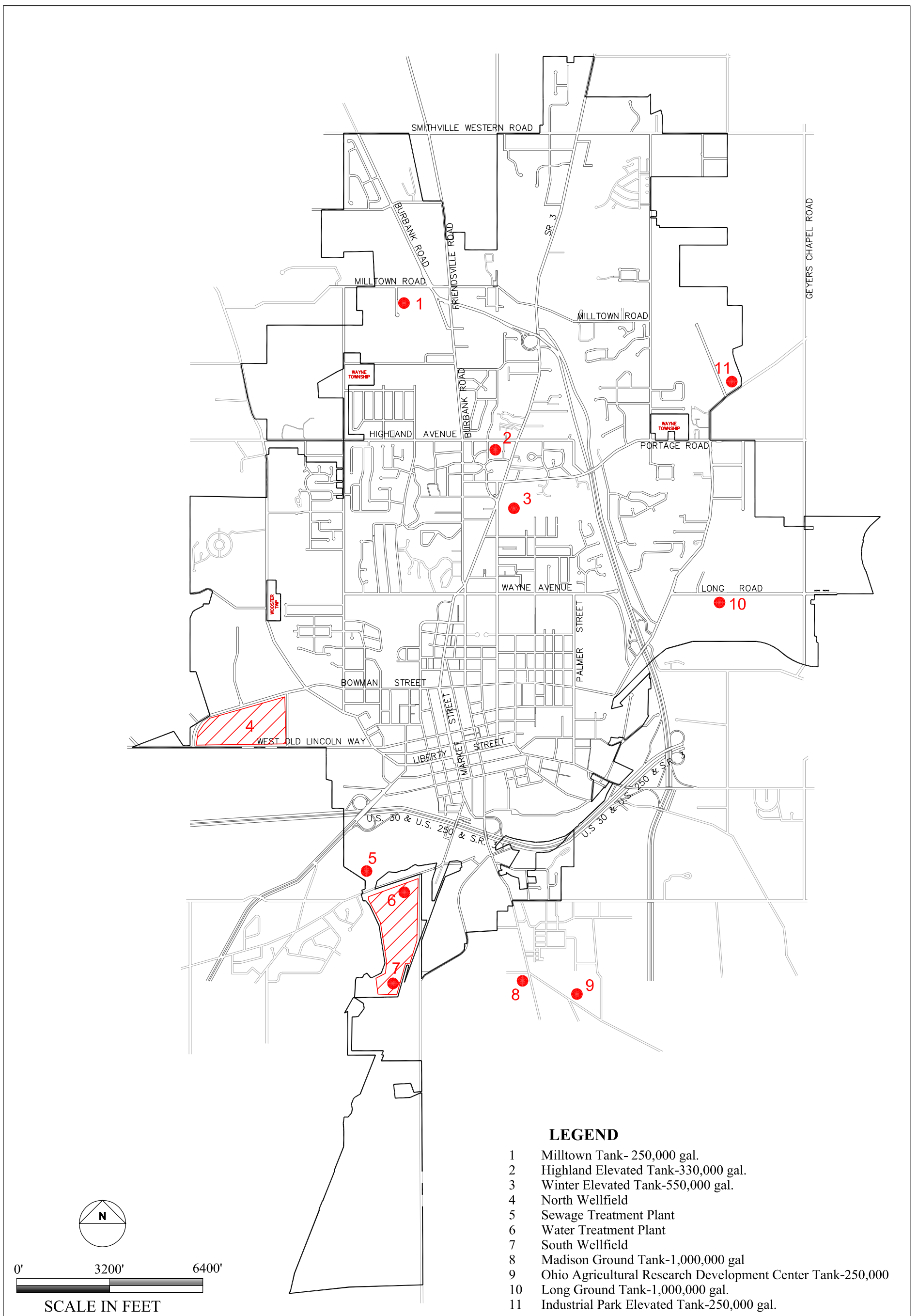


Figure 5-1

EXISTING WATER AND SEWER FACILITIES
CITY OF WOOSTER, OHIO
COMPREHENSIVE PLAN

CITY OF WOOSTER

Planned Improvements

- ▶ Nineteen sewer and storm line separation projects have been identified as part of the sewer/storm sewer separation master plan. Two projects have been completed to date. The realistic timeframe to complete the other 17 separation projects is between five to ten years. The budget for these projects is approximately 6.0 million total with \$ 500,000 annually set aside.
- ▶ The S. Walnut Street storm sewer (from Ohio Street to Mulberry Street) separation project began in January 2002.
- ▶ Improvements to the wastewater treatment plant are planned to raise capacity during storm events from 15 mgd to 24 mgd.

Water Supply

Existing Conditions

- ▶ The City of Wooster's drinking water comes from an underground aquifer.
- ▶ The city has two well fields where water is pumped to the surface. One field is on the north end of town and the other is on the south end of town.
- ▶ There is contamination in the vicinity of the north field, but this does not impact the wells.
- ▶ The south field has two wells, one of which has VOC (volatile organic compound) contamination. The VOC contamination is removed by stripping towers.
- ▶ The water treatment plant is located on the south end of the city. The treatment plant has the capacity to supply 6.1 million gallons per day and was upgraded to this capacity in 1999.
- ▶ There are four elevated and one ground water storage tanks in the city.
- ▶ A 1990 study outlined recommended improvements to the water distribution system.

Limitations

- ▶ There are several areas, such as the area south of Bowman Street where low water pressure exists.
- ▶ There are several areas where the loop configuration of the water distribution system needs to be completed. Some locations, such as the Old Airport Road area are presently in the process with possible route concepts being investigated.
- ▶ Many of the water lines are aging and need to be replaced on a systematic basis.
- ▶ As growth occurs in new areas, especially the north end, increased demands on water and sewer services occur. Adding flows to the existing system may make it more difficult to handle flows with existing lines.

Opportunity

- ▶ Develop a coordinated water and sewer utilities master plan to strategically use utility investment resources.

Planned Improvements

There are no planned improvements at this time.