

CHAPTER 7 — PUBLIC SERVICES AND FACILITIES

This chapter reviews public services and utilities in Cowley in terms of their status to support growth and development of the town. Utilities, including potable water, wastewater treatment, drainage, electrical power, telecommunications, and natural gas, are important considerations for the future development of the town. Public services including police, fire protection and ambulance services and the school system are reviewed here as well. This chapter includes a number of recommendations concerning public services and utilities.

POTABLE WATER SYSTEM

Cowley's potable water source is a deep, artesian well located six miles north of town. The well can supply 850 gallons per minute. The water arrives at the well head under sufficient pressure such that no pump is necessary. The water is conveyed to the town through a 12-inch main line that runs along the airport road. Largely because of the elevation drop to town, pressure reduction devices are required. The layout of the system is shown on Map 3.

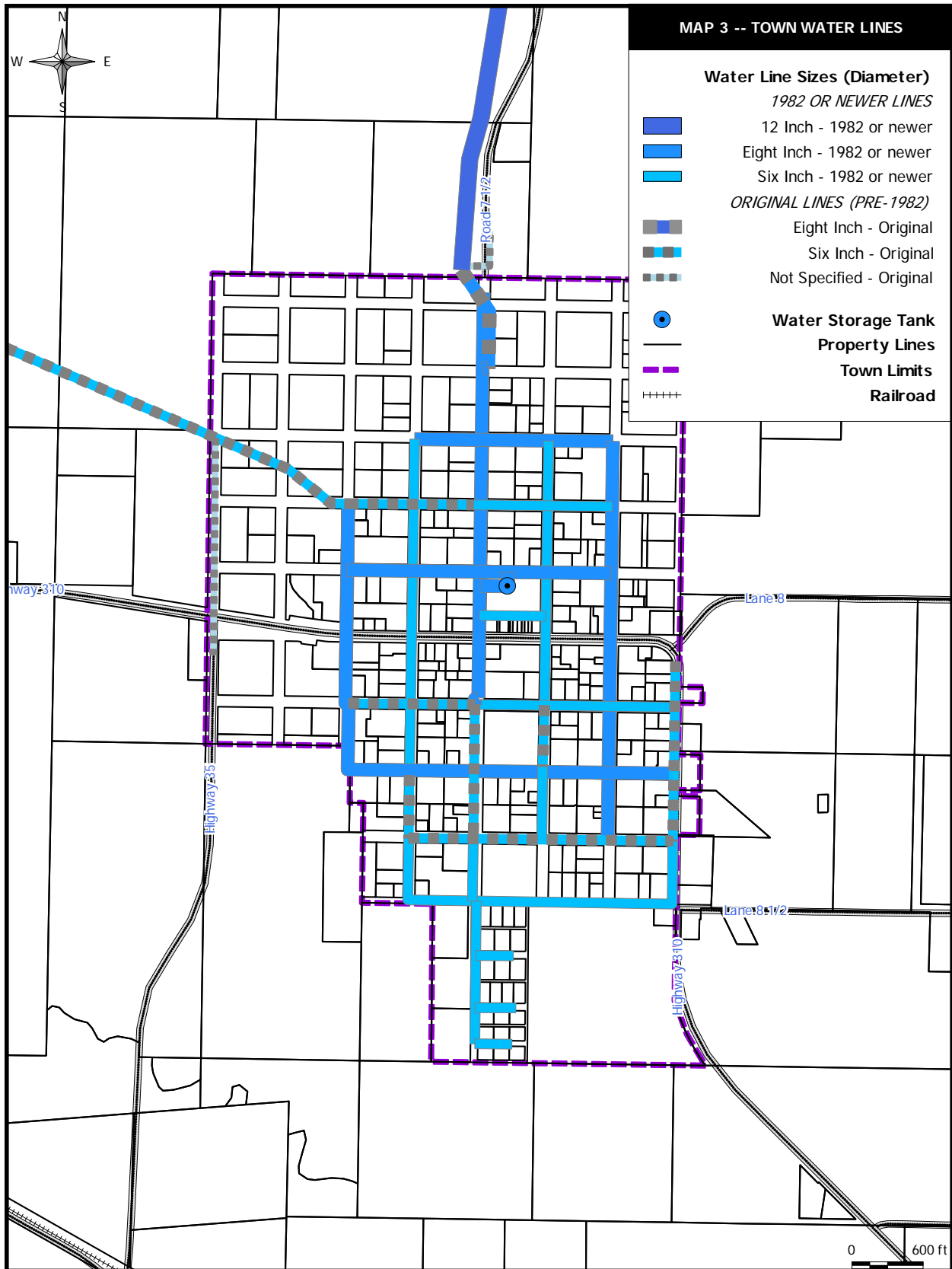
Water is stored in the town's 200,000 gallon water tower located in the town park. Water mains within town are generally in very good condition and are mostly six- and eight-inch diameter lines. Water pressure in town is adequate without any areas of low pressure. Water consumption for the system averages about 4.2 million gallons per month.

The quality and integrity of the water system have helped Cowley earn an "excellence award" from the U.S. Environmental Protection Agency. Cowley's water is untreated although the town has the capability to chlorinate the water if the need should arise.

Cowley's potable water system has great capacity to serve additional growth of the town. The well's production rating is greatly in excess of present usage. System pressures are not a problem and actually are mechanically reduced to avoid overly high pressures. The grid system of water mains is well below capacity. The water system can be readily expanded in any direction. To facilitate expansion to the east, the Town is planning to extend water mains under the north-south running segment of U.S. Highway 310 during the future reconstruction of the highway.

The Cowley water system serves 228 in-town customers as well as out-of-town customers on the West End and the South End Water Users District. The South End district purchases water from the town and distributes it through its own lines to 47 customers in the county to the east and south of Cowley. West of town, 64 customers are serviced by the town-owned main that runs to Deaver. Unlike the South End customers, the West End customers do not have their own district and rely on the town for system maintenance and administration. The town provides water to eight out-of-town customers on a two-inch line

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along Lane 8-½ east of town.

Before Cowley developed its present supply well, the town's water source was the Deaver Reservoir, located seven miles west near the town of Deaver. The original 1960s-era, six-inch water main from Deaver is still in service providing Cowley water to the West End customers. The line also serves as an emergency link for Cowley and Deaver. If Cowley's water source is ever interrupted, the Deaver-Cowley main can supply water from the Shoshone Municipal Pipeline to Cowley. Similarly, if Deaver's source was interrupted, Cowley water could supply Deaver through the main. The main, at only six-inches in diameter, is too small to act as any more an emergency link between the two water systems. There are no plans to upgrade the main, although doing so would give the town a stronger alternative water supply.

The Deaver line presents a number of questions for the Town:

- ▶ Should the Town be providing administrative and maintenance services to West End water customers?
- ▶ Should the Town require West End water users to organize and provide their own administration and maintenance service?
- ▶ Should the Town upgrade the line to have a better backup system?
- ▶ What would be an equitable means to finance such improvements?
- ▶ Should a sinking fund be established to provide for long-term maintenance and upgrading?

As a first step to answering these questions, the Town should use the Planning Commission or set up a study committee to investigate and report findings to the Town Council. The committee would need participation from the Town Engineer, Town Manager, representatives of the West End users, and the Town Council. After receiving a report, the Council would be in a better position to decide what to do.

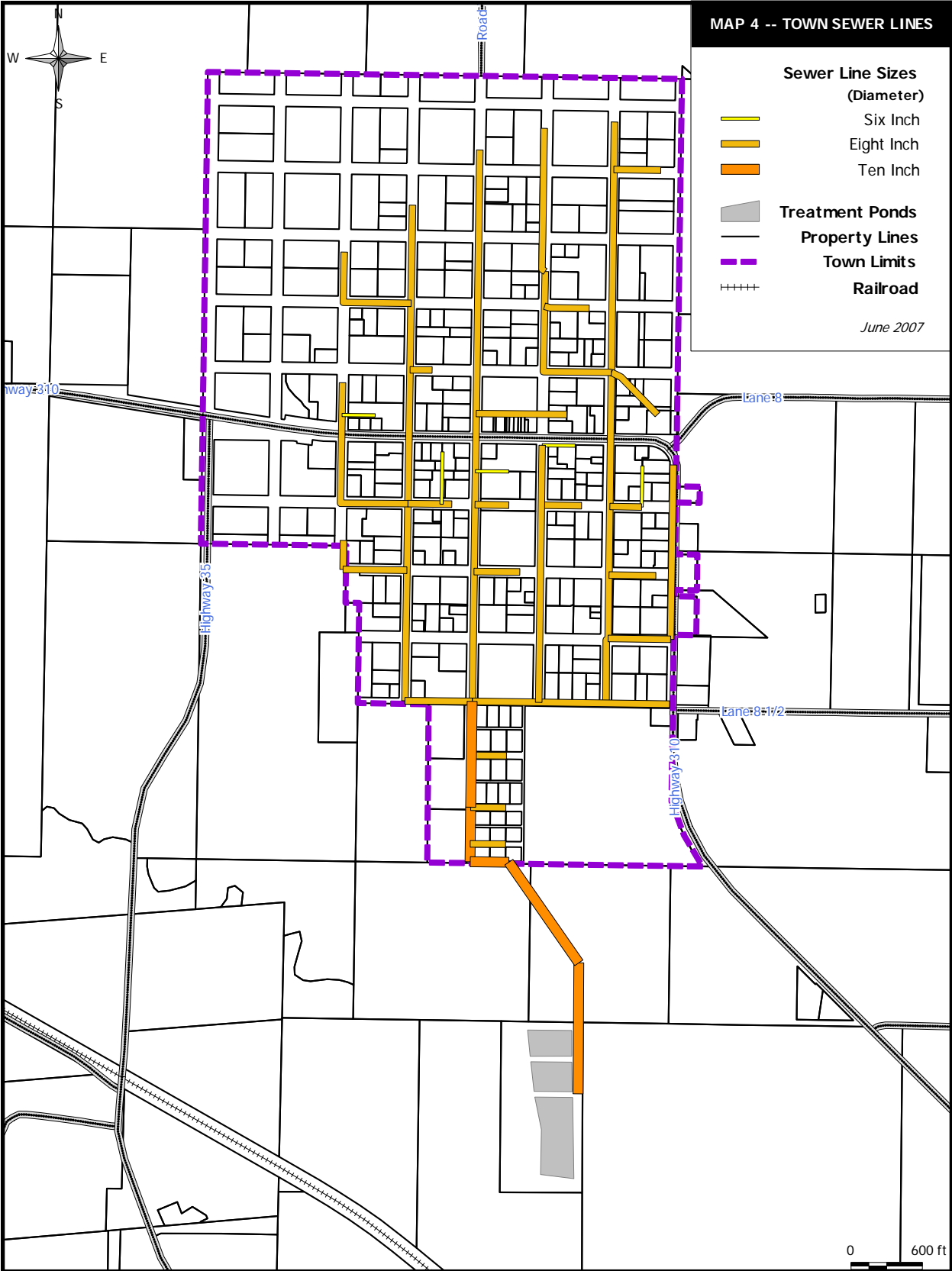
WASTEWATER TREATMENT SYSTEM

Wastewater in Cowley is collected by an all-gravity flow system of sewer mains; the system does not have any sewage pumping or lift facilities. The sewer mains are in good condition, all being 1970's-era, PVC piping. Most mains are eight inches in diameter while the main trunk line from 4th Street South to the wastewater treatment lagoons is a 12-inch line. The system layout is shown on Map 4.

All the developed areas of Cowley are provided with connections to the system, except for the area west of the Wash where the few buildings there are served by septic systems. Except for a few buildings on U.S. Highway 310, wastewater treatment service is not provided beyond the town limits.

Wastewater is treated at the Town's three-cell lagoon system which is located about one-half mile south of 4th Street South. Treated wastewater evaporates and is occasionally applied to land near the lagoon.

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No upgrades or improvements are necessary or anticipated at present.

The treatment system has a great capacity to accommodate future growth in Cowley. Flows at the wastewater treatment lagoons run at approximately 75 percent of potable water consumption. The overall capacity of the treatment system is more than double the current usage. Furthermore, the system capacity could be readily increased by adding aeration devices to the treatment lagoons.

In terms of the best location for future growth, the first priority is land that can be sewered with gravity flow sewer mains. A low ridge to the east of town and the Wash in western Cowley are barriers to gravity-flow sewers. To the south, potential service areas are limited as the land elevation gradually drops below the elevation of the treatment lagoons. Expansion to the north, both in and out of town, is less limited for service by extending gravity-flow sewers. Crossing under the Sidon Canal would be necessary, but not problematic as the existing sewer mains are quite deep near the canal. The Town's existing mains are well below capacity and capable of handling additional flows without the need of enlargement. Beyond these areas that can be serviced by gravity flow sewers, additional land could be sewered with the use of sewage pumping or lift stations.

DRAINAGE

Stormwater drainage in Cowley is handled without extensive use of storm sewers. There are storm sewers on U.S. Highway 310 (Main Street) from Division Street to the west. These storm sewers discharge to the Wash. The planned reconstruction of U.S. Highway 310 will likely involve extending the storm sewers to all segments of the highway within the town. The Town of Cowley is planning to improve stormwater drainage along its streets as part of a multi-year street upgrade plan.

Cowley has a number of subsurface, open-joint, six-inch diameter, clay-tile drainage lines that were installed long ago to help lower the water table in town. The location of these lines is not well known although they are typically buried six- to seven-feet down. The exact drainage benefit of these lines is not well understood. It is generally recommended that these lines be undisturbed to avoid causing new drainage problems.

ELECTRICAL POWER

Rocky Mountain Power provides electrical power service to Cowley. Service is provided over two systems—a 4,160 volt system serving most of Cowley and a 34,500 volt system serving the south side of Cowley. The lower voltage system is at capacity while the higher voltage system can easily accommodate all foreseeable growth. Because of this situation, it will be more difficult to provide electrical power to areas in the northern parts of town. To grow in that direction, power load would need to be removed from the lower voltage system and shifted to the higher voltage system.

TELECOMMUNICATIONS

TCT West provides various broadband telecommunication services to Cowley and other communities in the Big Horn Basin. These services include telephone, television, and Internet connection services. Available telecommunication services from TCT West can support small businesses that need to transfer larger data sets via the Internet. These capabilities are an important community asset that may facilitate the future recruitment of small businesses to Cowley.

NATURAL GAS

Montana-Dakota Utilities supplies natural gas to Cowley. Natural gas is readily available to service additional growth in Cowley.

SOLID WASTE

The Town of Cowley provides solid waste collection service to town residents through a contract with a private hauler. At present there is no recycling program. Solid waste is disposed of at the nearby Big Horn County Landfill.

PUBLIC SAFETY

Public safety services are provided to Cowley by several different entities. North Big Horn Hospital provides ambulance service. Fire protection is provided by Big Horn Fire District #1 with its fire station six miles away in Lovell. The Town of Cowley employs one part-time police officer for the town and the county sheriff's office will respond to incidents in town. The Town also employs a building inspector.

Future issues in public safety include investigating the feasibility of establishing a Cowley fire substation in cooperation with Fire District #1. Cowley has no interest in establishing a separate fire district. A fire substation would improve response times to Cowley emergencies but could only be established as a satellite of the Lovell station.

Another future public safety issue is expansion of the police department. With the new high school and middle school coming to Cowley, an expanded police force may be warranted. Byron, where the high school is presently located, has one full-time officer and five part-time officers. Cowley should begin formally evaluating its future police department needs in consultation with the school district and the county sheriff. Some expansion of the police department will need to be accomplished by the time the school opens. Once the new school is opened and as Cowley continues to grow, the Town should annually evaluate the need for additional officers.

PUBLIC SCHOOLS

Cowley presently has one school, Rocky Mountain Elementary School. The elementary school was constructed in 2004 to consolidate the former elementary schools in Byron, Frannie, and Cowley. The school is 37,000 square feet in size and has about 180 students and 38 staff.

The school district, Big Horn County School District #1, intends to construct a new combined junior-senior high school in Cowley beginning this year or early next year. The 66-70,000 square-foot building will be located on town-owned land on west side of U.S. Highway 310 at the south end of town. The new facility will consolidate the high school presently in Byron and the middle school presently in Deaver. The new combined school will have an estimated 210 students and 48 staff. Ancillary facilities will include a football/track field, outdoor courts, and a bus barn. Total cost is not yet determined but will probably be in the \$15-20 million range.

The school district maintains its administrative offices with five employees in Cowley and will continue to do so when the new school is completed. The administration building may be relocated to the high school site although some consideration is being given to relocating to the historic Big Horn Academy building.