

CHAPTER SIX: QUALITY PUBLIC SERVICES

Kalona's public facilities and infrastructure should be managed and directed to encourage new development, solve existing problems and support the needs of its current residents. This section examines Kalona's vital infrastructure and public facilities and suggests modifications to assure continued service to the city as it grows.

Public Facility Inventory and Analysis

The City of Kalona provides services to the public through a variety of city-owned buildings and facilities. The following section presents an inventory and evaluation of these varied facilities. The assessment of each facility is based on existing conditions and potential community needs. Proposed or desirable changes in facilities and services are noted.

Kalona City Hall & Community Center

Kalona City Hall and Community Center was erected in its current location at 511 C Avenue in 1939. The two story structure was remodeled in 1983 and currently houses all of the city's administrative services. The Community Center occupies a good portion of the building and offers a gym, recreation room, a kitchen, storage, and meeting space.

Evaluation

The building is well maintained but does not currently meet the modern needs of the city's administrative staff and elected officials. City officials are currently seeking to renovate and expand the current facility to include a larger and more modern council chamber as well as more office space.

Recommendations

- Continue routine maintenance.
- Modernize facility by renovating & remodeling.
- Install new roofing and siding on Community Center portion with renovations.

Fire Station

The Kalona Volunteer Fire Department is located in a 5,200 square foot building located at 310 5th Street that was opened in 1974. The building is a single-story structure that is handicapped accessible and has five vehicle bays. The parking deck currently holds seven emergency vehicles consisting of: 3 pump engines, 1 rescue Unit, and 3 tanker trucks. The department averages a new emergency response vehicle every five years and covers a 100 square mile territory around Kalona. The building is centrally located in the community, on the same property as Kalona's City Hall & Community Center. There has been one addition to the original structure and there is room for additional expansion if required. The department has 25 volunteers with an average response count of 16-18 volunteers, or a 64-72% response rate for structure fires.

Evaluation

The building is in good condition with only routine maintenance needed. Current operation levels are beginning to strain the space limitations of the firehouse. The department is expecting future expansion in the current location to accommodate their increasing need for more space. In the short term future the department will be looking to purchase new bunker gear.

Recommendations

- Continue routine maintenance on the fire hall.
- Continue vehicle replacement program on current five year schedule.
- Assess future space needs and begin a program for expansion of structure to meet those needs.
- Replace/upgrade department gear as needed.

Kalona Public Library

The Kalona Public Library is located in 10,000 square foot building built in 2005 at 510 C Avenue. The library was previously located in the Community Center across C Avenue. The new facility is attractive, well used by the community and is handicapped accessible. In addition to collection space the library contains office space, storage areas, a meeting room, a children's section, and a large community room. The library staff consists of two full-time staff members, including a director, and five part-time employees. The staff manages a growing collection that consisted of over 20,000 pieces in 2006. Circulation increased by 8% between 2005 and 2006. The library recently earned accreditation of the highest level from the Iowa Library Association and the staff is working hard to balance the variable needs of the community with the resources available. Technology is a major component and growth sector for the library's services that will continue to play an important role in the library's future operations. Additionally, the library is working at the local, county and regional level to expand its service to the community through material loaning partnerships and college-sponsored computer learning courses.

Evaluation

The new library building is an attractive public facility in excellent condition. The initial construction was widely supported by the community. Community interest has continued to grow through program expansion, increased circulation, and increased patronage by a range of community users. The building is well maintained, well designed, and meets the current needs of patrons, staff, and the community. Parking availability has been an expressed issue at times but there is usually ample parking in public areas and lots surrounding the building.

Recommendations

- Continue routine maintenance on the building.
- Continue identifying the primary needs of the community in regards to the library and work with available resources to address those needs.
- Continue working with Washington County libraries and regional education institutions to efficiently expand the library's scope of services to the community.

Public Works/Parks Shop & Yard

The Public Works/Parks Shop & Yard is located just west of the Kalona Sales Barn on A Avenue. The roughly 7,200 square pre-engineered metal building is primarily used for indoor storage of both public works and parks & recreation equipment and vehicles. Various equipment and materials are also stored in limited quantities outside the building. The building has a concrete floor covering half of the building, a small office, and 3 bays/doors.

Evaluation

The shop and yard are all in good condition and well kept. Only half of the building's floor area is paved and paving the other half would increase the storage capabilities. The property provides room for additional storage or an addition to the current building should it be needed. The city has a mixture of newer and older equipment but upgrades and replaces pieces as required and/or necessary.

Recommendations

- Continue routine maintenance of existing facilities.
- Continue replacement program for equipment.
- Pave the un-paved half of the facility to increase storage capability and facility efficiency.

Public Facility Priorities

From the above analysis specific priorities were identified. These priorities include:

- Modernize City Hall by renovating and remodeling current facility. Complete a facility study of Community Center/City Hall space need to assist in public space decisions.
- Assess future space needs and begin a program for expansion of structure to meet those needs for the Fire Department.
- Continue identifying the primary needs of the community in regards to the library and work with available resources to address those needs.
- Pave the un-paved half of the facility to increase storage capability and facility efficiency.

Infrastructure Inventory and Analysis

This section presents an inventory and evaluation of the city's existing infrastructure systems. It includes water distribution and storage, wastewater collection and treatment, storm sewer system, and electrical system.

Sanitary Sewer Collection System

The city's sanitary sewer collection system is composed of 6" - 15" mains. Most of the system consists of bell tile lines or PVC that has been installed as the community has grown and is separated from the storm sewer system. Map 6.1 shows the location of Kalona's sanitary sewer lines and facilities.

Evaluation

Based on the City's 2007 analysis, the system was in good working condition. Cleaning and jetting of the system happens on as-needed basis about every two-years. The system has very few if any flow problems and will be able to accommodate the community's projected population growth.

Recommendations

- Continue routine maintenance on the system.
- Replace faulty and older sections in conjunction with street repairs.

Sanitary Sewer Lift Stations

The City of Kalona owns and operates four lift stations. These stations include:

- Lift station # 1 located South of City Park
- Lift station # 2 located at the intersection of Highway 1 & 22.
- Lift station # 3 located south of 6th Street across A Avenue.
- Lift station # 4 located just north of the treatment lagoons.

There are also a few private homes with individual lift stations in areas where elevation can be a problem with sewage flow.

Evaluation

The lift stations are in good working condition and the system will be able to accommodate the projected population growth for next 20 years. Station #3, located south of 6th Street may need to be replaced in the next few years.

Recommendations

- Continue routine maintenance program.
- Replace lift station #3 as required.

Wastewater Treatment Lagoons

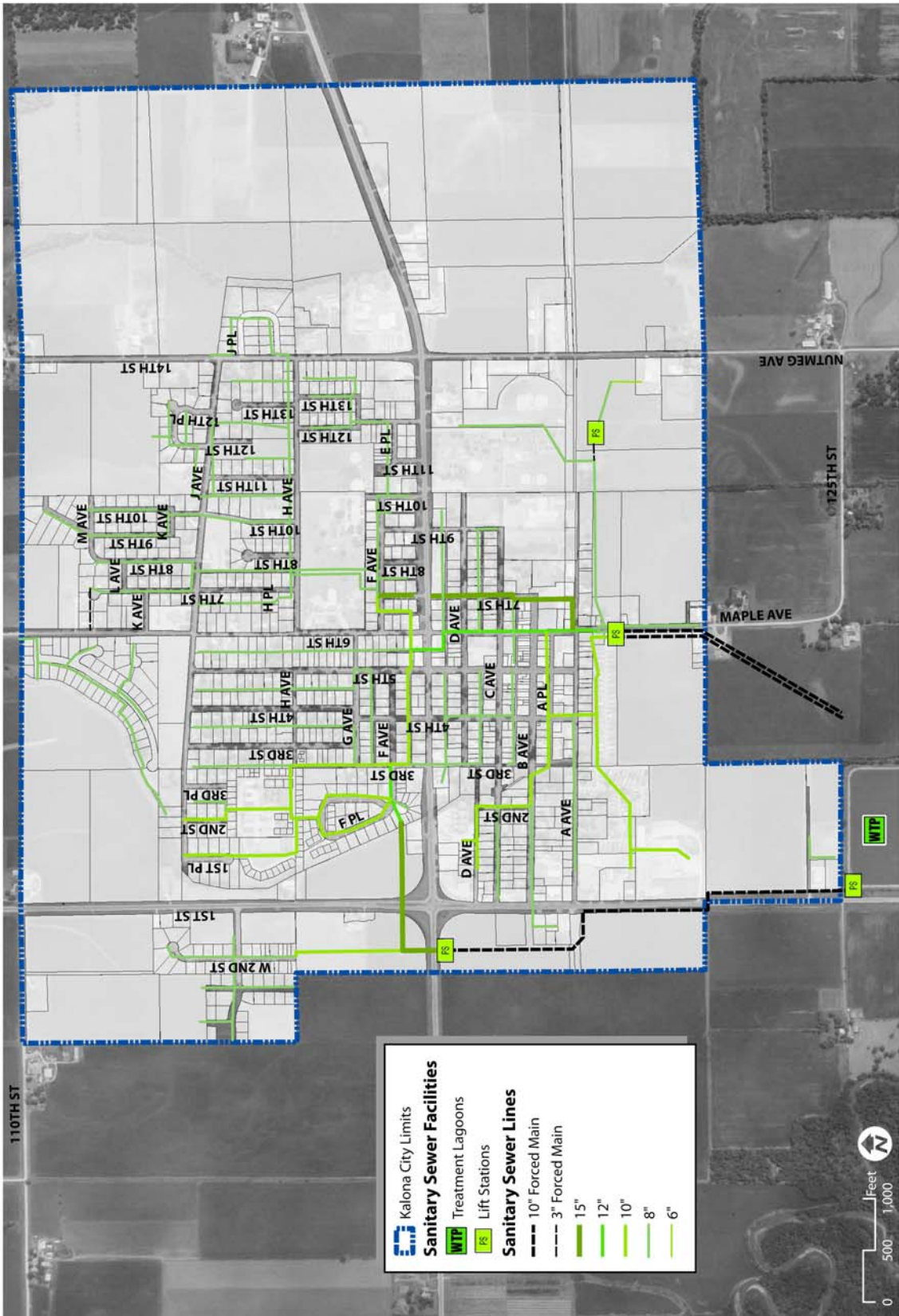
Kalona's wastewater treatment facilities consist of three non-arrogated sewage lagoons located south of South G Avenue east of Highway 1. The collective capacity of the lagoons is 51.3 million gallons at 6' deep. The average daily flow of the system is .156 - .169 million gallons and the treated outflow into the English River is regularly monitored and meets the state's regulations. The three lagoons cover approximately 40 acres.

Evaluation

The sewage lagoons have met the city's needs over the years but the capacity of the entire facility will be a major issue in the coming years as the population grows and sewage flows increase. The lagoons, as currently operated, have the ability to support a population of 2,800. This means that the current capacity will not adequately serve the growing community much past 2010, at which time the predicted population is 2,707. There are several viable options available for the City to consider as increased capacity is required. One option is to aerate the existing lagoons. Aerating the lagoons would speed the breakdown of organic material and allow the facility to discharge more often or perhaps continuously, thereby increasing the treatment capacity. Another option is to expand the size of the current facility. Both of these options are not necessarily preferred by state regulations, but are possibilities. The third option would be for Kalona to abandon the lagoon system and construct a sewage treatment plant. This is the most expensive option but may be the best option and/or the only option allowed if new state regulations restricting lagoon type sewage treatment facilities appear. City officials will continue to work with the Iowa Department of Natural Resources to assure that the treatment lagoons are operating within acceptable limits and that the needs of the community are met as the population grows.

KALONA COMPREHENSIVE PLAN

MAP 6.1: SANITARY SEWER SYSTEM



Recommendations

- Continue outflow quality testing and routine maintenance of the facility.
- In the next ten years the city will need to either upgrade or expand the existing lagoon system or construct a new wastewater treatment plant. The city must closely weigh the advantages and disadvantages of each option and appropriate funding through a Capital Improvement Program to meet the needs of the community.

Water Supply & Storage

Water is supplied to the city of Kalona by three wells that pump water into the fresh water treatment facility. The three wells and the treatment facility are located in City Park. The wells are 60' deep and have a maximum capacity of 250 gallons per minute. The current average daily water use is approximately 240,000 gallons a day, or about 85 gallons per person. The water treatment system has a maximum daily demand capacity of 400,000 gallons. In 2006 all of the well's components were pulled and replaced. Pumping rates at the wells are electronically controlled by storage tank water levels in the community's two storage tanks. One of these tanks is a brand new 600,000 gallon water tower located in the at the north edge of the city on 14th Street. The other tank is a 100,000 gallon wet-well tank located under City Park. Water pressure supplied by the system is excellent citywide, there is more than enough capacity to serve the community, and the water quality is monitored frequently by city staff. Map 6.1 shows the location of Kalona's water system lines and facilities.

Evaluation

The wells are all in good condition and the water distribution system is well maintained. Taking into account the average daily water use of 85 gallons per person and the system's maximum daily demand capacity of 400,000 gallons, the current system will serve approximately 4,700 people. The current infrastructure should be able to meet the expanded need for fresh water that will result with the projected 2025 population of roughly 3,500.

Recommendations

- Continue routine maintenance on all wells, treatment facility, storage tanks and distribution lines.
- Install replacement well(s) and/or well equipment as needed.
- Continue monitoring water quality and federal regulations for water treatment.

Water Distribution

Kalona's water main system is constructed of primarily cast iron or ductile iron materials, with some newer PVC extensions. The mains range from 4-inches to 8-inches and the system is metered. The system has been installed as growth occurred which has resulted in several dead-end lines in the system but the overall performance is very good. The city's fire hydrants are flushed every other year.

Evaluation

Overall the system is in good condition. The dead-end lines can cause a reduction in water quality and fire flow protection; new development should require looping of distribution mains to avoid loss of flow in the future.

Recommendations

- Continue routine maintenance on the system.
- Loop dead-ends where feasible and with new development.

Electrical System

The City of Kalona is currently working to create an electric cooperative that would be the owner/operator of the city's power distribution system. Alliant Energy is the community's current electric service provider. The current distribution system works well.

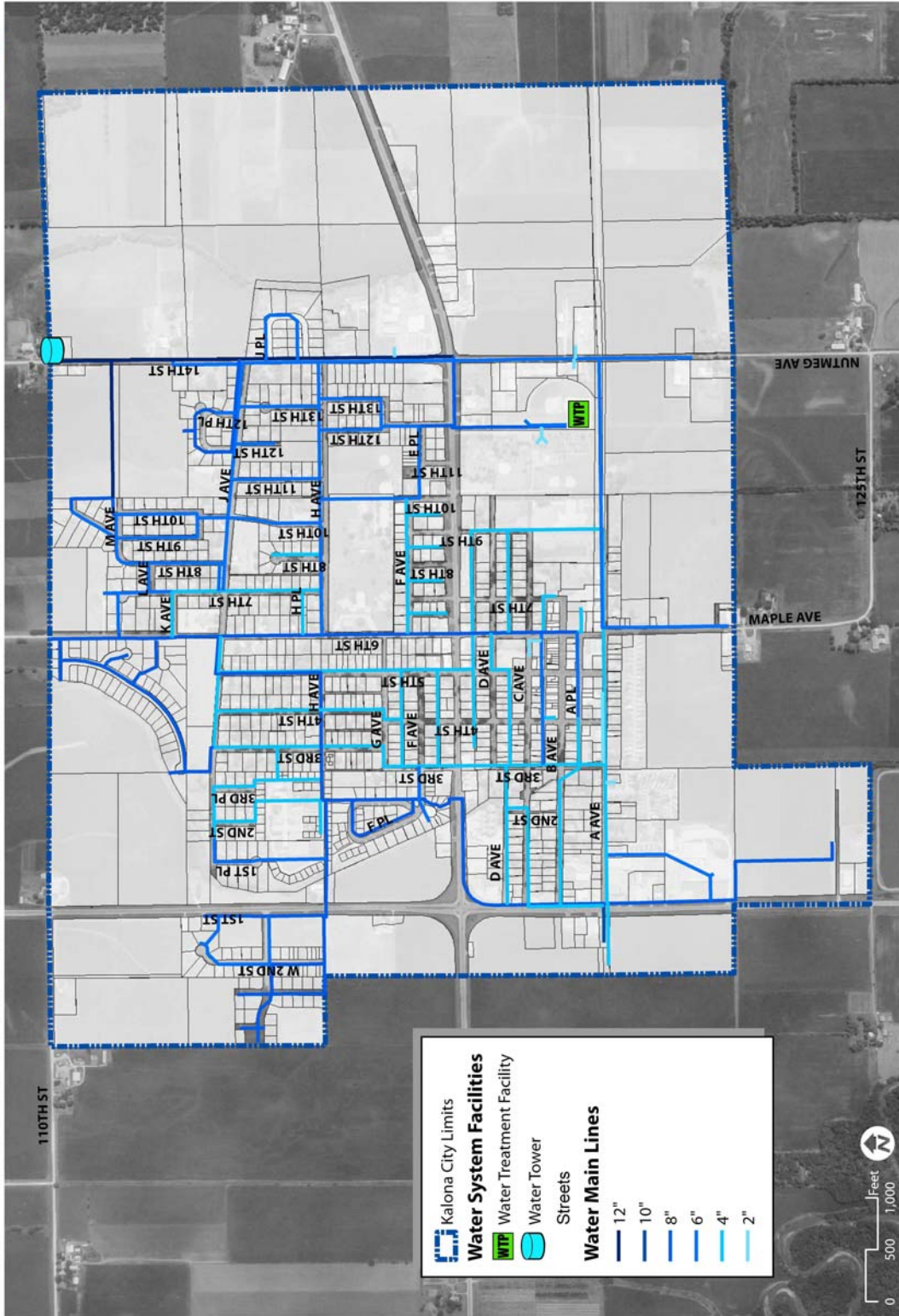
Evaluation

Kalona should continue to work with the state, Alliant Energy, and the community to create an electric cooperative that will benefit the community. The community should continue to consider the effects that projected population growth will have on the existing system and plan to increase capacity as required.

Recommendations

- Continue efforts to create an electric cooperative.
- Consider the impacts of future growth and expand system capacity as needed.

KALONA COMPREHENSIVE PLAN
MAP 6.2: WATER DISTRIBUTION SYSTEM



Stormwater System

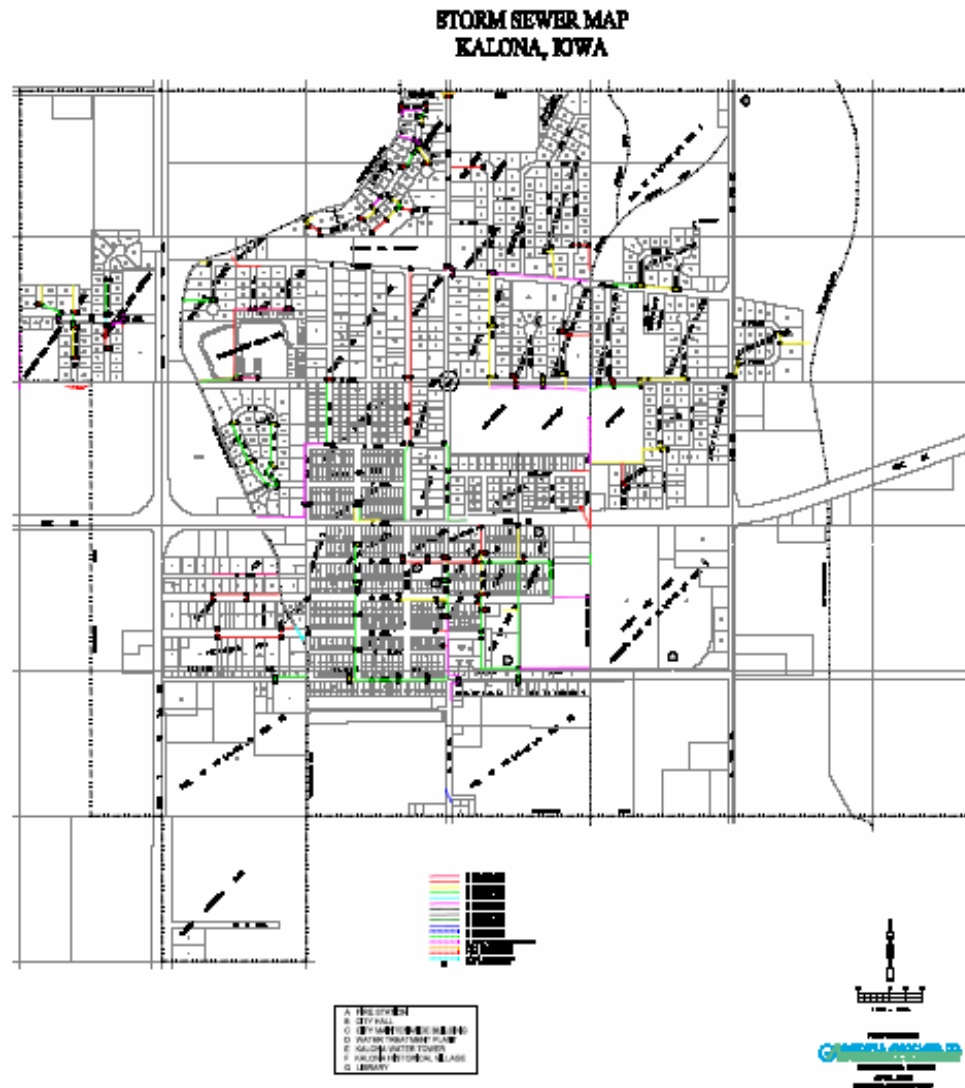
Kalona is located in a low and flat area just north of the English River. The city's stormwater is collected through a system of surface drainage and storm sewers. The size of the systems collection pipes range from 6" – 24" and newer installations are double-walled PVC pipe. From the collection pipes stormwater makes its way into the drainage-ways/creeks running north-south through the city and down into the English River. Due to the flat nature of the land across the community surface pooling of stormwater can be a problem; especially in periods where there are quick, heavy rains that sometimes overload the current systems capacity. The City's engineer is currently working on mapping the stormwater system for the community. The graphic below is an incomplete version of the current storm water system mapping project.

Evaluation

Storm drainage systems in the western portions of Kalona, specifically along Highway 1, sometimes cause on-street pooling problems in areas around the intersection of Highways 1 & 22. Projected development north of Highway 22 in the northwestern portion of the city could also create increased flows into the existing portion of the city. Future development of this area of the community needs to mitigate the downstream impact of stormwater run-off through improved stormwater management practices.

Recommendations

- Encourage use of on-site detention/retention to limit peak outflows to a level at or below pre-developed levels and enhance the overall quality of the stormwater system.
- Encourage the implementation of new stormwater management strategies to limit the amount of run-off into the existing system. These include: reduction in impervious coverage, protection of open space and natural greenways, vegetated swales, and naturalized detention systems.
- Repair and replace storm sewer infrastructure as required and in conjunction with street repairs when possible.
- Work with the Iowa Department of Transportation to address the flooding/pooling issues at the intersection of Highways 1 & 22.



Infrastructure Priorities

- Consider options available for expanding sewage treatment capacity and choose best the option for expansion to accommodate projected growth.
- Continue to implement improved stormwater management practices to mitigate downstream impacts of storm water flows.
- Take advantage of street improvement projects to upgrade utility infrastructure as feasible.