



January 16, 2015

Mayor and Ames City Council:

A quick look around the community will reinforce the fact that the City of Ames is experiencing an economic boom unlike any we have seen for many years. Construction work is progressing throughout our city on new residential subdivisions, apartment complexes, senior living centers, commercial developments, and industrial projects. With this economic resurgence comes physical expansion and a corresponding responsibility on our part as a City to build the necessary infrastructure to accommodate this growth. This infrastructure must meet not only the basic needs of our citizens in the form of safety, transportation, and utilities, but should also satisfy the quality of life desired by our current and prospective residents who are making the choice of whether or not to stay in or relocate to the city of Ames.

To meet these obligations, the Capital Improvements Plan (CIP) for FY 2015-16 through FY 2019-20 reflects a commitment of \$251,885,728. This plan is attached for your review. Please note that this CIP reflects some of the most significant projects ever undertaken by the City within a five year span.

To assist with your understanding of what has been included in this document, I have provided a few highlights of the CIP.

PUBLIC SAFETY - \$5,030,510

The **Accessibility Enhancement Program** (page 18) is being introduced into the CIP. This program replaces the Sidewalk Safety Program by combining the elements of the previous program along with additional accessibility upgrades to intersection crosswalk panels, audible and vibrotactile traffic control devices, and on-street or parking lot stalls. This program increases the City's commitment to accessibility by \$50,000 per year.

The **Multi-Modal Roadway Improvements Program** (page 23) continues the City's desire to create a safer interaction between bicyclists and motorists using techniques such as bike detection, on-street bike lanes, and sharrows.

Traffic adaptive systems have been added to the fifth year of the CIP in the **Traffic Signal Program** (page 20). These systems will allow for real time optimization of traffic and pedestrian flow at signalized intersections that will promote increased travel efficiency throughout the city.

As the second phase of the upgrade to the Police Department space in City Hall is about to be completed, during the next five years we will shift attention to making various improvements to our three fire stations for such projects as restroom additions, driveway repairs, and roof replacement (pages 10, 11, and 12).

UTILITIES - \$161,436,200

Resource Recovery - \$2,105,800

During the five years of the CIP, approximately \$1,600,000 has been identified for various projects to improve the Resource Recovery system (page 28). This work includes replacement of rollers, conveyors, gears, drains, flooring, and pumps in the facility. The largest project in this category is the construction of a cold storage building scheduled for the last year of the CIP (page 29). This new facility will house the glass crushing operation as well as serve a consolidated location for equipment storage currently housed in the plant.

Water - \$60,079,000

The CIP reflects the largest single project ever considered by the City of Ames, the **New Water Treatment Plant** (page 31). This new \$74,000,000 facility, with its 15 million gallon per day capacity, is designed to meet all current federal and state water quality standards as well as accommodate our projected drinking water needs for the next 20 years. A related project calls for the **Demolition of the Old Water Treatment Plant** (page 37). This project is scheduled to take place once the new plant is fully commissioned. It should be noted that the two-story Technical Services Complex that houses the Water Meter and Laboratory Services Divisions will remain at the site.

As our demand for potable water increases and our existing wells begin to fail, the need for a **Water Supply Expansion** project (page 32) becomes more important. Three new wells with a capacity to pump 1.5 million gallons per day are planned to be constructed north of the North River Valley Park, east of the Skunk River.

Over the next five years, \$5,375,000 will be invested in the **Water System Improvements** program (page 39) to install larger water mains, remove/abandon 4-inch supply lines, and eliminate duplicate water mains with the goal of reducing rusty water problems and improving water flow in the older sections of our city.

One project that needs special attention is the **Campustown Public Improvements** program (page 40). Much of the public infrastructure in this business district was installed in the early 1900s. As Campustown becomes a focal point for commercial and multi-family developments, it is important that we take action to construct new water lines, sanitary sewer lines, storm sewer lines, and to reconstruct streets in this area. The magnitude of this project will cause major disruption to the businesses in the district. Therefore, a great deal of communication will be required as we pursue this \$1,550,000 project.

Storm Sewer - \$12,144,400

Unfortunately, many of us have experienced numerous 100-year floods during the past 20 years in Ames. In an effort to reduce damage related to river flooding in those developed sections of our community that historically have been impacted, the five year plan includes a **Flood Mitigation - River Flooding** project (page 42). This \$5,854,000 project to "restore" the Squaw Creek channel 2,000 feet on both sides of the South Duff bridge was identified in a recently completed Flood Mitigation Study as the most cost-effective strategy to accomplish our goal.

As our community continues to grow, we must be prepared for the impact of the runoff from the resulting development on surrounding properties to increase. The CIP acknowledges this increase and earmarks \$5,570,400 over the next five years in various projects to improve our storm water system (pages 43 through 47).

Sanitary Sewer - \$32,072,000

In order to meet existing clean water standards and secure our next operating permit from the Iowa Department of Natural Resources, we had to decide whether to engage in a very costly expansion of our Water Pollution Control plant or concentrate our efforts on replacing deteriorated sanitary collection lines. Faulty lines allow infiltration of storm water into our treatment process, thereby increasing the demand for expanded capacity at our WPC plant to treat this clean water.

Having concluded that the latter approach is the most cost-effective strategy, two projects are included in the CIP to accomplish our goal. The **Sanitary Sewer Rehabilitation Program** (page 50) earmarks \$18,338,000 over the next five years to rehabilitate/reconstruct deficient sanitary sewer sections to remove major sources of infiltration of clean water from our treatment process. In addition, the **Flow Equalization Expansion** project (page 56) calls for \$1,075,000 to increase the capacity of our equalization basins by six million gallons, thereby reducing the possibility for a future need to bypass the treatment process during excessive flow events.

It is hard to believe our Water Pollution Control Plant is 25 years old and, therefore, in need of major repairs. Because of the needs identified in a recently completed Long-Range Facility Plan, the CIP includes \$9,992,000 over the next five years for various maintenance projects at the Plant (pages 54, 55, 57, 58, 59, 60, 61, and 63).

In an effort to accomplish the City Council's goal to promote economic development, the **East Industrial Area Sewer Extension** project (page 51) has been identified in the CIP. The project involves the installation of this sewer line just east of the Interstate 35. Once completed, we will be able to act more quickly to open up this industrial area for development. Of course this will not happen until a contract is finalized with the Central Iowa Water Association that allows for the transfer of their service territory rights to the City.

Electric - \$55,035,000

The second largest project included in this CIP involves the conversion of our Power Plant's fuel source from coal to natural gas. This project, which began in FY 2014/15, is estimated to cost \$26,000,000. Approximately \$15,000,000 of this **Unit 7 and 8 Fuel Conversion** project is reflected in this CIP (page 76). This project is estimated to reduce the carbon emissions from the Power Plant by approximately 312,000 tons per year. This project, coupled with our current contract for wind energy and use of Refuse-Derived Fuel from our Resource Recovery Plant, is a major step in meeting the Council's commitment to sustainability.

In order to assure that the Power Plant is in good working order so that our customers can continue to receive reliable service, the CIP includes \$15,380,000 towards various improvements to this critical facility (pages 77, 78, 80, 81, 82, 83, 84, and 85).

Service reliability also is reliant upon strong transmission and distribution systems. These systems allow the City to acquire lower cost energy from the open market when available and to obtain energy when our Power Plant is taken off line due to a mechanical failure or for preventive maintenance. Therefore, over the life of this CIP, \$8,355,000 is anticipated to be spent on various projects to these systems (pages 68, 70, 71, 72, 73, 74, and 75).

Recent successes in attracting new and assisting with the expansion of existing industries in the City have led to an ever increasing demand for electricity. Realizing that the more cost-effective strategy for meeting this challenge is to financially encourage demand reduction, the CIP earmarks \$5,000,000 to the **Demand Side Management** program (page 67). This program provides incentives to our electric customers to encourage a reduction in their consumption by installing higher efficient equipment. To date, it is estimated that this program has reduced demand on our electric system by 15 megawatts, thereby delaying the need to invest in the very costly expansion of our electric capacity.

TRANSPORTATION - \$79,784,018

Streets - \$67,015,018

In keeping with the feedback received from our annual Citizen Satisfaction Survey, a substantial amount of City funds in the CIP are devoted to improvements to our transportation infrastructure. One project of particular note is the **Grand Avenue**

Extension project (page 93). This improvement will help alleviate traffic congestion along our busiest street corridor, Highway 69 from Grand Avenue to Highway 30. With the elimination of federal earmarks, this \$18,000,000 project has been delayed over the years as the staff seeks non-City revenue to partially fund the project. As the search for alternative funding continues, the CIP calls for us to initiate the required environmental study of the proposed route in FY 2015/16.

The CIP proposes spending approximately \$32,000,000 predominantly from Road Use Tax, G.O. Bond, Federal Grant, and State Grant revenues to reconstruct and repair our street system. The determination of need is based on a sophisticated structural evaluation tool we utilize to help prioritize our deteriorated street sections.

New to the CIP is the **Iowa State University Research Park Phase III** project (page 91). Already one of the most successful economic generators in this community, few lots remain available to accommodate companies wishing to locate their business at this park. Therefore, the CIP calls for \$6,949,718 to be spent to widen University Boulevard as well as extend water and sewer lines to Phase III. Fortunately, approximately 58% of this total cost will be paid from an Iowa Department of Transportation RISE grant.

Shared Use Paths - \$3,183,300

In order to provide a safe and convenient alternative to the automobile, the **Shared Use Path System Expansion** (page 94) and the **Shared Use Path Maintenance** (page 109) projects have been included in the CIP. Over the next five years, \$3,183,300 has been earmarked to repair and expand our shared use path system.

Bridges - \$3,320,000

A 2012 bridge report indicated the 6th Street bridge needed to be replaced (\$3,020,000) and the decking on the East Lincoln Way bridge required repairs (\$300,000). This work has been included in the **Bridge Rehabilitation Program** (page 105).

Airport - \$5,312,000

To enhance the capacity of the Ames Municipal Airport to accommodate larger aircraft, we are making plans to extend our main runway to 8,000 feet as reflected in the **Airport Improvements** project (page 118). A companion project will involve the **Terminal Building Replacement**. It is anticipated that this new 6,500 square foot facility will cost \$2,410,000. Commencement of this project will occur once the additional revenue needed to partially finance this initiative is identified in a Fixed Base Operator contract, or from some other source.

Transit - \$7,457,000

Unfortunately, even as CyRide continues to experience unprecedented growth in ridership, the availability of federal funds for cities to purchase buses has been eliminated. Therefore, over the next five years we will rely on the purchase of 20 40-foot

used buses to meet our vehicle needs as reflected in the **CyRide Vehicle Replacement** program (page 111). In addition, we will continue our commitment to improving and updating our **CyRide Shop and Office Equipment** (page 113) and **CyRide Building Expansion & Modernization** (page 112) where \$2,111,000 has been earmarked for these improvements. Plans also are in place to install one new bus stop shelter per year over the life of this CIP (page 114).

COMMUNITY ENRICHMENT - \$5,635,000

Strengthening Our Neighborhoods - \$750,000

The popular **Neighborhood Improvement Program** continues to receive funding in this CIP (page 133) with the goal of improving the appearance of our neighborhoods and promoting a greater sense of community through resident participation in neighborhood projects. In addition to residential neighborhoods, the City Council continues to support our commercial neighborhoods as well. Towards this end the **Downtown and Campustown Facade** programs (pages 135 and 136) include \$500,000 to motivate property owners to make exterior improvements to their buildings in accordance with an approved set of design standards unique to each business district.

Parks & Recreational Facilities - \$4,254,000

Over the five year life of this CIP, \$4,254,000 has been identified to improve our park system and related recreation facilities. Of this total, \$2,439,000 is planned for park improvements (pages 122, 124, 126, and 130), \$255,000 is earmarked for recreation building improvements (page 123), \$700,000 is reflected for aquatic facility improvements (pages 125 and 127), \$300,000 is identified for Ice Arena improvements (page 128), and \$360,000 is highlighted for Golf Course improvements (page 129). In anticipation of the new housing development that is expected in the north growth area and the corresponding need for a new park, the **Rose Prairie Park Development** project (page 131) is being reflected into the CIP for the first time.

As always we need to thank our department heads for their ability to gaze into the future and identify which capital improvement projects are warranted to meet the needs and desires of our citizens. In addition, the preparation of the CIP document is the result of the hard work of Duane Pitcher, Finance Director; Nancy Masteller, Budget Officer; Emily Burton, Finance Department Secretary; Bob Kindred, Assistant City Manager; Melissa Mundt, Assistant City Manager; and Brian Phillips, Management Analyst. These professionals are deserving of special recognition for their efforts!

Respectfully submitted,



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City Manager