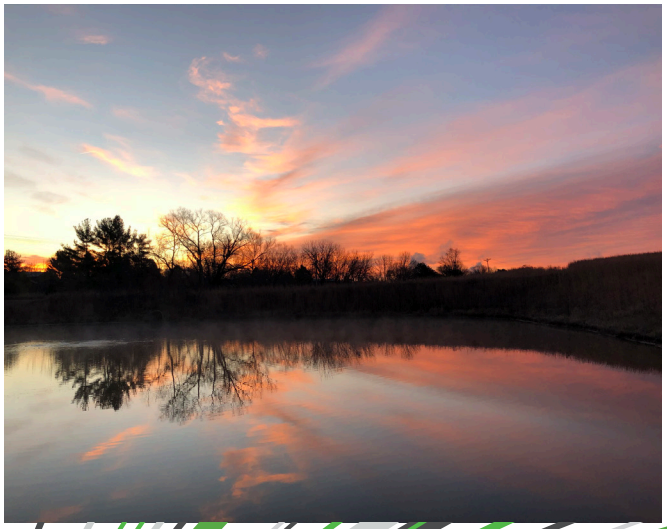


Capital Improvements Plan

City of Ames, Iowa
2022-2027

CITY OF Ames™

DRAFT

The Importance of Parks!

Gardens, play areas, green space, trees, trails, and abundant opportunities for outdoor recreation top the list of why residents say they love their cities. Natural beauty and a connection to nature is important, and each plays a major role in why people feel good about where they live. The value of Ames' well-maintained and growing park system is endless, and continually cultivating outdoor space improves the quality of life for all residents. The National Recreation and Park Association considers parks an essential public service on par with utilities and public safety. The group sites data showing that investing in outdoor space, natural areas, and playground equipment can increase property values, attract businesses, encourage economic development, improve the physical and mental health of residents, protect water and natural resources, and build community pride.

For more than 135 years, Ames residents have enjoyed an increasing number of public parks. Starting with Bandshell Park, gifted to the community in 1882, to Tahira and Labh Hira Park, formerly the site of Edwards Elementary School, the Ames park system now includes 38 parks and 1,215 acres of land. As Ames expands, so does its dedication to creating outdoor recreation opportunities. In the past year, Ames residents have enjoyed the addition of the Rotary Club of Ames Miracle Field and Barnes Family Inclusive Playground, Sunset Ridge Park, improvements to Franklin Park, a new fishing pier at Ada Hayden Heritage Park, and more. That's not all – additional parks, green space, and playground improvements are planned for the coming years.

People seek communities that preserve natural beauty and provide access for all ages and abilities to enjoy the outdoors. The Ames City Council and City of Ames staff have a long history of investing in Ames to develop a city where people can live, work, play, and have plenty of opportunities to be active in all seasons.

Capital Improvements Plan

City of Ames, Iowa
2022-2027

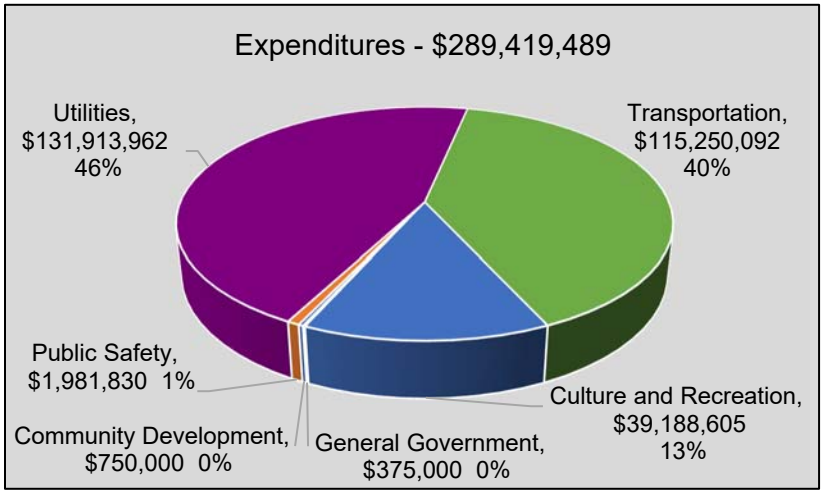
CITY OF ames™

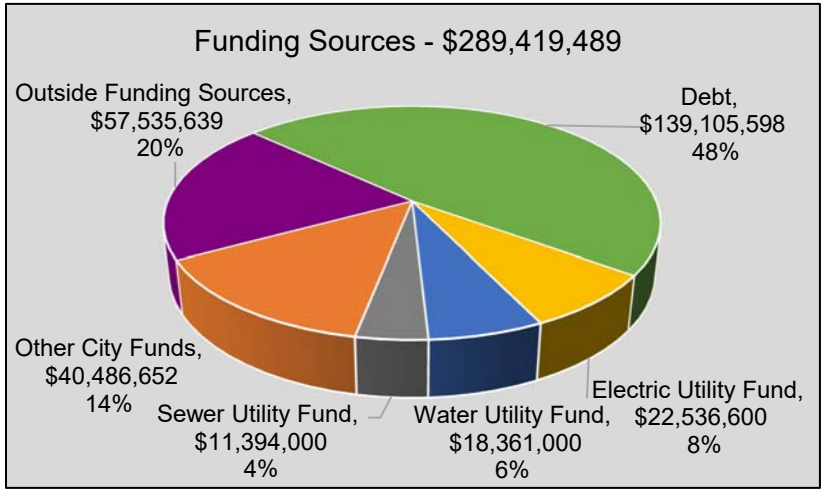
DRAFT

January 18, 2022

The Mayor and Ames City Council Members

I am attaching for your review and approval my recommended Capital Improvements Plan (CIP) for fiscal years 2022/23 through 2026/27. This Plan includes expenditures of $289,594,489 supported by various funding sources over the next five years as reflected below.





The Capital Improvements Plan serves as a valuable long-range planning and fiscal management plan for the City focusing on physical improvements related to land, buildings, public infrastructure, and major equipment/vehicle expenditures. In order to assist you in better understanding the attached CIP, I am providing below major highlights reflected in this document.

AMERICAN RESCUE PLAN ACT FUNDING TO IMPLEMENT THE 2040 COMPREHENSIVE PLAN - $11,238,962

The CIP earmarks $11,238,962 out of the $14,257,623 of federal American Rescue Plan Act (ARPA) funding allocated to the City to install seven major water and sanitary sewer lines that will serve to open development in all four of the first-tier growth areas reflected in the recently approved Comprehensive Plan.

This Comprehensive Plan gives direction where the city will expand over the next twenty years. Too often in the past when a land-use plan was adopted by the City Council, the viability of implementing the plan in a timely fashion was inhibited because expensive utility infrastructure improvements were needed.

The availability of the ARPA funding will allow us to complete the needed infrastructure expansions reflected in the **Ames Plan 2040 Water Utility Infrastructure** (page 68**)** and **Ames Plan 2040 Sewer Utility Infrastructure** (page 71) projects without needing to raise water and sanitary sewer rates.

PUBLIC SAFETY - $1,981,830

Fire - $1,981,830

We currently have a fleet of two pumper trucks and one ladder truck along with one reserve pumper truck. Our goal is to maintain these front-line fire apparatuses for at least fifteen years before replacing them. These vehicles are purchased with General Obligation bond proceeds. The five-year plan calls for the replacement of Engine #1 and Engine #2 along with refurbishing the existing Engine #2 to serve as the reserve unit in the **Fire Apparatus Replacement** program (page 9).

In addition, the deterioration of the driveway has persuaded us to include a new project, **Fire Station #3 Concrete Replacement** (page 10), in the CIP for the first time.

UTILITIES - $131,913,962

Electric Utility – $23,575,000

You will note that most of the projects planned for the Electric Utility have been continued in this CIP. However, there are a number of new projects introduced in this document that are worthy of note.

The upgrade to an **Advanced Metering Infrastructure** (page 15) will increase the functional capabilities of our current electric metering system in the following areas: 1) demand side management, 2) outage identification, 3) real-time feeder and transformer analysis, 4) remote disconnect, and 5) time-of-day usage tracking.

The Electric Utility previously installed five charging stations, one that can charge a car in 30 minutes (fast charger) and four that can charge a vehicle in three to four hours (L2 charger). These five stations can serve ten vehicles at a time. The CIP continues this commitment to support electric vehicle ownership with the additional installation of three fast chargers and six L2 chargers which will serve eighteen vehicles at a time with the inclusion of the **Electric Vehicle Infrastructure** project (page 16).

The Iowa Department of Transportation (IDOT) has an important highway project that will require us to relocate a portion of our Ames to Ankeny transmission line which was installed in their right-of-way. While this $2,404,000 **161 kV Line Relocation** project (page 18) will be designed and constructed by a contractor hired by the City, IDOT will reimburse the City for the costs associated with this project.

In response to lessons learned from the Derecho, the **Critical Electric System Generators** project (page 32) will install a new diesel generator at the Power Plant to assure on-going operations of our SCADA system, DCS system, and oil pumps on the steam turbine generators during blackout conditions. In addition, our system restoration plan requires that a Combustion Turbine is capable of starting without any power from the grid. Therefore, this project also includes the installation of a diesel generator on Combustion Turbine #2. These improvements will allow a cold restart of our electric generation systems even when isolated from the transmission grid.

The **Electric Distribution Universal Locker Room** project (page 22) will result in the renovation of the locker rooms at the Electric Line Distribution work center that were built in 1979. The renovation will provide universal locker room space that will accommodate all genders.

Water Utility – $35,222,000

The **North River Valley Well Field** project (page 45) involves the construction of three new wells, with the capability to construct three additional wells. This new field will increase of water capacity by 40% to accommodate the growth in customer demand and the loss of older wells.

New to the CIP is the **Physical and Cyber Security Improvements** project (page 50) that will help protect our water system. Of particular note is the work to segregate the Water Plant's SCADA network with a firewall from the access control and security camera system. The commitment to cyber security also is evidenced in the **Remote Sites Fiber Installation** project (page 49), where water utility data will be transmitted over City fiber optic cables rather than over a third party's lines to our Southwest Well Field, Youth Sports Complex Well Field, Bloomington Road water tower, Mortensen & County Line water tower, and State & Mortensen booster pump station.

The conversion to **Advanced Metering Infrastructure** (page 52) will be accomplished by the second year of the CIP. These new meters will allow for quicker reads, easier reads, and more efficient workflow. The new system is capable to be upgraded to a more sophisticated system that could provide more detailed data collection and remote readings.

The Derecho taught us a lesson in the water system as well. The **SAM Pump Station Improvements** project (page 51) will install a new standby generator at this critical point in our water distribution system to help assure that water pressure to the west and southwest portions of the city are maintained during an electric outage. Standby generators will also be included in the North River Valley Well Field and Youth Sports Complex Well Field projects.

Sanitary Sewer Utility - $59,669,962

A significant project in the Sanitary Sewer Utility CIP is the **Nutrient Reduction Modifications** project (page 59). This five-year plan includes $11,395,000 of the $41,110,000 estimated total cost of this project, which will occur over the next twenty years. The work designated at the Water Pollution Control Plant in the first three years of this plan will involve the design and construction of back-up capacity for the existing trickling filters that are scheduled to be removed in FY 2027/28.

In addition to reconfiguring our Water Pollution Control Plant to improve the nutrient removal treatment technology, we remain committed to working with landowners who surround Ames in implementing best practices to accomplish **Watershed-Based Nutrient Reduction** (page 62). This effort will yield benefits in reducing flood risks, increasing recreational opportunities, and protecting our drinking water. Currently, we are working with the Iowa Soybean Association in planting cover crops, the Parks and Recreation Department to convert the western portion of Moore Memorial Park to prairie, Story and Polk County Conservation to promote edge-of-field practices, and Ducks Unlimited to create the Dotson Wetland to treat subsurface drainage from adjacent farmlands.

The **Cogeneration System Maintenance** project (page 60) includes the construction of a new fats, oils, and grease receiving station that will provide more unloading area, more appropriate pumping capabilities, and better ability to accept hauled food waste. It is hoped that this new system will result in more food waste being diverted from our Resource Recovery system.

Clarifier Maintenance (page 66) is the only new project added to the CIP. It is critical that we repaint the steel structures periodically since this coating protects these structures from the harsh conditions to which they are exposed.

The Sanitary Sewer System Improvements program (page 72) earmarks $22,333,000 over the next five years to remove infiltration into our sanitary sewer system by repairing and replacing manholes and collection lines. This work will reduce clean water from entering our system and causing backups as well as improving our capacity to handle increased customer demand.

Stormwater Utility - $12,050,000

Feedback from our annual citizen satisfaction survey indicates that the storm sewer projects reflected in the CIP are a high priority of our residents since they will reduce overland flooding and erosion that damage private property. Work planned for the various projects include construction of detention areas, replacement or repair of storm sewer pipes and intakes, and installation of permanent erosion control structures**.** These projects are reflected in the **Stormwater Erosion Control** program (page 75), **Low Point Drainage Improvements** program (page 76), and the **Stormwater Improvement Program** (page 77).

Protecting the water quality of our streams and rivers receives attention in this CIP with the **Stormwater Quality Improvements** program (page 78) and **Stormwater Detention/Retention Maintenance** program (page 80)**.** These programs address the removal of sediment and nutrients before they enter our waterways by establishing bioretention cells, vegetated swales, native landscape, rain gardens as well as cleaning out regional detention facilities.

Resource Recovery Utility - $1,397,000

As you know, we are engaged in a study to consider various options for continuing our waste-to-energy system into the future. Until a final decision is made regarding our path forward, the CIP includes the **Resource Recovery System Improvements** program (page 82) to perform preventive maintenance on our current facility by replacing various components and equipment at the plant.

TRANSPORTATION - $115,210,092

Streets/Traffic/Shared Use Paths - $89,959,980

Feedback from our annual Citizen Satisfaction Survey indicates that our residents place a high priority on investing in repairing the existing street system as well as constructing additional street segments that will facilitate more efficient traffic movements throughout the community. With this feedback in mind, the CIP reflects significant expenditures to satisfy these two objectives.

You will note that while many of the projects in this section were included in past documents, the projected costs to accomplish the same amount of work have grown to reflect inflationary increases related to current bidding conditions. This is particularly true with the **Alley Pavement Improvements** program (page 91), which is being increased in this CIP from $150,000 per year to $400,000 per year.

To emphasize its commitment to multi-modal transportation the City Council has established a goal of spending an average of $1,200,000 per year to improving our shared use path system. The CIP being presented to you reflects expenditures of $7,390,700 over the next five years, or an annual average of $1,478,140. Of note is the **Shared Use Path Maintenance** program (page 102), which establishes for the first time a commitment to joint seal and seal coat these surfaces every five years before they are reconstructed.

The **Intelligent Transportation System** program (page 105) remains a priority in this CIP. This four-year project will result in the installation of adaptive systems that are able to perform real time optimization of traffic and pedestrian flow at signalized intersections thus improving efficient traffic flow and reduction in delays.

One of the City Council's goals is to assure a welcoming environment to those who live or visit our community. The **Accessibility Enhancement** program (page 108) is one way we help facilitate this goal by installing handicapped ramps at crosswalks, audible and vibrotactile push buttons on signalized traffic control devices, and public parking spaces to current accessible standards.

Funding has been included in the first year of the CIP for the **Main Street Sidewalk Pavement Replacement** project (page 115) to complete this $995,000 Downtown beautification project with the final section of the paver installation from Kellogg Avenue to Duff Avenue.

A new project, **US Highway 69 Improvements** (page 117) has been included in this CIP. The Iowa Department of Transportation is planning to resurface Grand Avenue between Murray Drive and Lincoln Way and South Duff Avenue between Lincoln Way and Jewel Drive. The City will be responsible paying for curb, cutter, and stormwater intake repairs associated with this work.

Transit - $19,397,112

With support from 80% federal grants, the CIP anticipates the purchase of fourteen 40' buses, five battery electric buses, five administrative vehicles, two 60' articulated buses, one Dial-A-Ride bus, and one Dial-A-Ride van in the **CyRide Vehicle Replacement & Rehabilitation** program (page 119)**.**

The CyRide Facility Improvements (page 120) and **CyRide Shop and Office Equipment** (page 122) programs will assure the appropriate investment is made to maintain these critical facilities.

Upgrades will be made to interior signage, maintenance software, and demand response management software to improve efficiency and the riding experience for our passengers with the **CyRide Technology Improvements** program (page 121).

Airport - $5,853,000

The **Airport Improvements program** (page 125) reflects the elements that were included in our recently approved Airport Master Plan. These elements call for the rehabilitation of the South apron, reconstruction of Runway 13/31, upgrades to the runway lighting, improvements to wildlife fencing, and crack sealing Runway 1/19.

Even though the City anticipates receiving 75% federal funding for these airport projects, the traditional source of our local match, the Airport Construction Fund, is not projected to have sufficient funds over the next five years to finance the projects. Therefore, at this time it appears G.O. Bond funding will be needed if we hope to move ahead with all of these projects.

CULTURE AND RECREATION - $39,188,605

Parks & Recreation - $ 38,891,173

The City has been long known for its expansive and high quality park system. More recently, we have focused on improving our facilities to complement our open public spaces. Towards this end, the previous budget included funding to construct a Ninja obstacle course, a soccer pitch, and a community splash pad. This CIP continues this focus with the addition of the new **Indoor Aquatics Center** (page 131), with its zero depth entry pool, lap pool, therapeutic pool, current channel, and slide, along with the **Downtown Plaza** (page 130), with its ice skating and water features. Other new facilities envisioned in this CIP include a renovated fishing pond and wetland overlook

in **Ada Hayden Heritage Park** (page 133), a new women's locker room at the **Ames/ISU Ice Arena** (page 138), and a new pedestrian bridge over Ioway Creek that will connect our shared path system through **Moore Memorial Park** with the Ontario Road segment (page 139).

The availability of Local Option Sales Tax revenues allows us to assure that our existing infrastructure and equipment in our park system are well maintained. For example, the **Playground Equipment Improvements** program (page 134) will allow us to replace the playground equipment throughout our park system in accordance with a newly established twenty-year schedule and the bridge on hole #9 will be reconstructed at **Homewood Golf Course** (page 137).

The development of one new park in our system is highlighted in the fifth year of the CIP. The **Hayden's Preserve Park Development** project (page 140) anticipates the Hayden's Preserve subdivision progressing as planned.

Other Culture and Recreation – $297,432

Funding is also included in the Culture and Recreation program for the **Library Carpet Replacement** project (page 142), which will replace the carpet at the Ames Public Library over a two-year period. The **Cemetery Improvements** program (page 144) allocates funding for improvements at both the Ames Municipal Cemetery and the Ontario Cemetery.

COMMUNITY DEVELOPMENT - $750,000

Neighborhood Improvements - $750,000

The City Council's commitment to strengthening our neighborhoods will be realized through grants provided to owners making improvements to their properties through the **Downtown Façade** program (page 147), **Campustown Façade** program (page 148), and the **Neighborhood Improvement** program (page 149) along with the **Neighborhood Curb Replacement** program (page 114), highlighted in the Transportation Program of the CIP.

GENERAL GOVERNMENT - $375,000

Facilities - $375,000

The **City Hall Improvements** program (page 153) allocates funding for repairs and major maintenance projects for the City Hall building that are beyond the scope of the operating budget. Due to the age of the building and increased project costs, funding in this program has been increased from $50,000 per year to $75,000 per year.

PROJECTS NOT YET INCLUDED IN THE CIP

As in the past, I am highlighting a few projects that will be needed in the near future. However, because of the necessity for additional information and the fact that other projects have received a higher priority at this time, they have not yet been included in the CIP.

Now that the City Council has committed to moving ahead with a new indoor aquatics center, only three major projects remain on the list.

- With increased densities in Campustown, it has become more dangerous for pedestrians when fire trucks enter and leave Fire Station #2 on Welch Avenue. Because of this situation, the relocation of Fire Station #2 will need to be considered by the City Council. The City staff currently is working with Iowa State University administrators to identify alternative sites on University property along State Avenue to maintain adequate response times to the ISU campus as well as improve response times to other parts of the City.
- Because of inadequate space to 1) provide a healthy environment for the animals, 2) allow the staff to accomplish their work, and 3) accommodate the customers who wish to adopt animals, the construction of a new Animal Control Shelter is needed. City staff is currently working on finalizing construction estimates and learning how similar facilities have been financed.
- Now that the Comprehensive Plan has been adopted, it is time to finalize a Fire Station Location Plan to determine where a fourth fire station should be located to adequately address the response time needs to all four growth directions envisioned in the Plan. City staff is currently modeling response times to identify the optimal site for the fourth station as well as the availability of land for this purpose.

++

While the new Comprehensive Plans tells us where we should grow during the next twenty years, we are very fortunate that our department heads and their leadership teams have identified projects in this CIP that will be required to get us there.

The formulation of the document itself is a difficult task. Therefore, special thanks need to go to Duane Pitcher, Finance Director; Nancy Masteller, Budget Manager; Amy Crabbs, Budget Analyst; Amanda Calbert, Finance Secretary; Deb Schildroth, Assistant City Manager; and Brian Phillips, Assistant City Manager, for their hard work in coordinating the development of the CIP document.

Sincerely,

Steven L. Schainker
City Manager

CITY OF AMES, IOWA

FIVE-YEAR CAPITAL IMPROVEMENTS PLAN

2022-2027

TABLE OF CONTENTS

HOW TO USE THE CIP DOCUMENT

The 2022-2027 Capital Improvements Plan for the City of Ames is organized according to the City's program structure of services. This format allows decision makers to consider proposed improvements in much the same manner as the annual operating budget. First-year portions of these projects can also be identified in the annual operating program budget.

1. The **Description/Justification** section outlines the basic work to be done and the intended outcome or result of the project, outlines the reasons behind the proposal of the project, and also the advantages to the City of undertaking the project. The section may also describe the disadvantages to the City of either waiting to do the project, or of disapproving it altogether.

2. The **Comments** section outlines any additional information related to the project, including status changes from a previous year, its relationship to other projects or future developments, impacts on operating budgets and others.

3. The **Location** section lists a street location or various locations for each project. Specific locations for Public Works projects can also be found on the City of Ames website at: https://gis.cityofames.org/images/apps/cipmaps.html

In addition to the above information, the bottom of each page lists the types of costs (planning, construction, etc.) which will be associated with the project for each year of the present CIP. Below that is shown the source of financing for the project in each year.

INDEX TO 2022-2027 CAPITAL IMPROVEMENTS PLAN
CITY OF AMES, IOWA

INDEX TO 2022-2027 CAPITAL IMPROVEMENTS PLAN
CITY OF AMES, IOWA

UTILITIES - continued

INDEX TO 2022-2027 CAPITAL IMPROVEMENTS PLAN
CITY OF AMES, IOWA

INDEX TO 2022-2027 CAPITAL IMPROVEMENTS PLAN
CITY OF AMES, IOWA

TRANSPORTATION - continued

INDEX TO 2022-2027 CAPITAL IMPROVEMENTS PLAN
CITY OF AMES, IOWA

PROJECTION OF DEBT CAPACITY

	2020/21 ACTUAL	2021/22 BUDGETED	2022/23 PROJECTED	2023/24 PROJECTED	2024/25 PROJECTED	2025/26 PROJECTED	2026/27 PROJECTED
1. Total Actual Valuation	5,022,730,334	5,187,510,467	5,512,039,835	5,677,401,030	5,847,723,061	6,023,154,753	6,203,849,396
2. State Mandated Debt Limit	251,136,517	259,375,523	275,601,992	283,870,052	292,386,153	301,157,738	310,192,470
3. City Reserve (25% of Limit)	62,784,129	64,843,881	68,900,498	70,967,513	73,096,538	75,289,435	77,548,118
Un-Reserved Debt Capacity	188,352,388	194,531,642	206,701,494	212,902,539	219,289,615	225,868,303	232,644,352
4. Outstanding Debt	62,235,000	68,450,400	53,935,000	45,605,000	37,875,000	30,515,000	23,650,000
5. Proposed Issues	-	-	18,359,410	25,924,882	13,432,510	14,115,796	12,100,000
6. Balance of Proposed Issues	-	-	-	17,065,767	39,831,475	49,063,553	57,858,277
Total Debt Subject to Limit	62,235,000	68,450,400	72,294,410	88,595,649	91,138,985	93,694,349	93,608,277
7. Available Un-Reserved Debt Capacity ($)	126,117,388	126,081,242	134,407,084	124,306,890	128,150,630	132,173,954	139,036,075
8. Available Un-Reserved Debt Capacity (%)	66.96%	64.81%	65.02%	58.39%	58.44%	58.52%	59.76%
9. Total Debt Capacity ($)	188,901,517	190,925,123	203,307,582	195,274,403	201,247,168	207,463,389	216,584,193
10. Total Debt Capacity (%)	75.22%	73.61%	73.77%	68.79%	68.83%	68.89%	69.82%

Notes:

1. *Total assessed valuation plus utility valuation growth assumption is 3.0% per year.*
2. *State of Iowa statutory debt limit is 5% of total actual valuation.*
3. *City Policy reserves 25% percent of available debt capacity.*
4. *Current outstanding debt subject to limit at Fiscal Year End includes all debt in which property taxes are pledged.*
5. *Debt issues subject to limit proposed are part of Capital Improvement Plan.*
6. *Debt Balance on Issues in Capital Improvement Plan.*
7. *Debt capacity available after deducting the reserved capacity.*
8. *Percentage of debt capacity available after deducting the reserved capacity.*
9. *Debt capacity available prior to deducting the reserved capacity.*
10. *Percentage of Debt capacity available prior to deducting the reserved capacity.*

SUMMARY OF MAJOR BOND ISSUES

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2022/23:				
FIRE		1,089,338		
Fire Apparatus Replacement	747,000		100%	
Fire Station 3 Concrete Rehabilitation	342,338		100%	
STREET IMPROVEMENTS		9,225,000		
CyRide Route Pavement Improvements (Lincoln Way)	1,225,000		42%	Grants
Concrete Pavement Improvements	3,600,000		100%	
Asphalt Street Pavement Improvements	3,000,000		100%	
Seal Coat Pavement Improvements	750,000		100%	
Alley Pavement Improvements	400,000		100%	
Downtown Pavement Improvements	250,000		100%	
TRAFFIC IMPROVEMENTS		452,560		
Intelligent Transportation System	452,560		19%	Road Use Tax/Grants
STREET REHABILITATION		700,000		
Brudge Rehabilitation (South Fourth St/Ioway Creek)	700,000		92%	Iowa State University
PARKS AND RECREATION		6,892,512		
Downtown Plaza	700,000		19%	LOT/Council Priorities/ARP
Indoor Aquatic Center	6,192,512		41%	Winakor Donation/Donations
2022/23 TOTAL		**18,359,410**		

SUMMARY OF MAJOR BOND ISSUES, continued

2023/24:				
STREET IMPROVEMENTS		10,325,000		
Concrete Pavement Improvements	950,000		100%	
Asphalt Street Pavement Improvements	3,000,000		100%	
Seal Coat Pavement Improvements	1,750,000		100%	
Alley Pavement Improvements	400,000		100%	
Arterial Street Pavement Improvements (Airport Road)	1,500,000		100%	
Collector Street Pavement Improvements (6th Street)	1,200,000		94%	Road Use Tax
Campustown Public Improvements	1,200,000		70%	Water Utility/Sewer Utility
South 16th Street Roadway Widening	325,000		100%	
TRAFFIC IMPROVEMENTS		629,440		
Intelligent Transportation System	259,440		11%	Road Use Tax/Grants
Traffic System Capacity (Airport Road)	370,000		51%	Road Use Tax
STREET REHABILITATION		300,000		
Bridge Rehabilitation Program (East 13th St/Skunk River)	300,000		100%	Iowa State University
AIRPORT		198,778		
Airport Improvements	198,778		8%	FAA/Grants/Airport Construction
PARKS AND RECREATION		14,471,664		
Indoor Aquatic Center	13,971,664		98%	Donations
Park Maintenance Facilities Consolidation	500,000		45%	Local Option Sales Tax
2023/24 TOTAL		**25,924,882**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2024/25:				
STREET IMPROVEMENTS		12,391,000		
Concrete Pavement Improvements	3,600,000		100%	
Asphalt Street Pavement Improvements	2,900,000		100%	
Seal Coat Pavement Improvements	1,750,000		100%	
Alley Pavement Improvements	400,000		100%	
Downtown Street Imrpvements	250,000		100%	
Arterial Street Pavement Improvements (24th St/Hyland)	2,000,000		100%	
Collector Street Pavement Improvements (Oakland St)	750,000			
South 16th Street Roadway Widening	741,000		21%	MPO/STP Funds
TRAFFIC IMPROVEMENTS		316,940		
Intelligent Transportation System	316,940		13%	Road Use Tax/Grants
AIRPORT		24,570		
Airport Improvements	24,570		2%	FAA/Grants/Airport Construction
PARKS AND RECREATION		700,000		
Ada Hayden South Lake Path Replacement	700,000		100%	
2024/25 TOTAL		**13,432,510**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT	CATEGORY	% PROJECT	OTHER SOURCES
2025/26:				
FIRE		892,492		
Fire Apparatus Replacement	892,492		100%	
STREET IMPROVEMENTS		10,500,000		
Concrete Pavement Improvements	3,600,000		100%	
Asphalt Street Pavement Improvements	4,000,000		100%	
Seal Coat Pavement Improvements	1,000,000		100%	
Alley Pavement Improvements	400,000		100%	
Collector Street Pavement Improvements (West St)	1,500,000		100%	
TRAFFIC IMPROVEMENTS		1,667,660		
Intelligent Transportation System	147,660		13%	Road Use Tax/Grants
Traffic System Capacity (13th St/Grand Ave)	1,520,000		50%	Road Use Tax/Grants
AIRPORT		355,644		
Airport Improvements	355,644		44%	FAA/Grants/Airport Construction
PARKS AND RECREATION		700,000		
Ada Hayden North Lake Path Replacement	700,000		100%	
2025/26 TOTAL		**14,115,796**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2026/27:				
STREET IMPROVEMENTS		12,100,000		
CyRide Route Pavement Improvements (Lincoln Way)	2,000,000			
Concrete Pavement Improvements	3,350,000		100%	
Asphalt Street Pavement Improvements	1,100,000		100%	
Seal Coat Pavement Improvements	900,000		100%	
Alley Pavement Improvements	400,000		100%	
Arterial Street Pavement Improvements (East Lincoln Way)	600,000		20%	MPO/STP Funds
Collector Street Pavement Improvements (Bloomington Rd))	2,000,000		100%	
Campustown Public Improvements	1,750,000		100%	
2025/26 TOTAL		**12,100,000**		
TOTAL GENERAL OBLIGATION BONDS		**83,932,598**		

This page intentionally left blank.

City-Wide Program Summary

CITY OF Ames™

TOTAL CAPITAL IMPROVEMENTS PLAN EXPENDITURES AND FUNDING SOURCES

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
EXPENDITURES BY PROGRAM:							
Public Safety	1,981,830	1,089,338	-	-	892,492	-	8
Utilities	131,913,962	32,107,481	35,711,481	27,675,000	24,021,500	12,398,500	11
Transportation	115,210,092	23,165,211	22,754,107	26,197,896	22,140,886	20,951,992	83
Culture and Recreation	39,188,605	18,474,676	15,737,625	1,722,304	1,880,500	1,373,500	127
Community Development	750,000	150,000	150,000	150,000	150,000	150,000	145
General Government	375,000	75,000	75,000	75,000	75,000	75,000	151
TOTAL EXPENDITURES	**289,419,489**	**75,061,706**	**74,428,213**	**55,820,200**	**49,160,378**	**34,948,992**	
FUNDING SOURCES:							
Debt	139,105,598	30,686,410	41,610,882	29,998,510	24,709,796	12,100,000	
City	92,778,252	22,963,267	16,861,054	16,223,823	19,046,072	17,684,036	
Other	57,535,639	21,412,029	15,956,277	9,597,867	5,404,510	5,164,956	
TOTAL FUNDING SOURCES	**289,419,489**	**75,061,706**	**74,428,213**	**55,820,200**	**49,160,378**	**34,948,992**	

CAPITAL IMPROVEMENTS PLAN EXPENDITURE SUMMARY BY PROGRAM

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
EXPENDITURES BY PROGRAM:							
Public Safety:							
Fire Safety	1,981,830	1,089,338	-	-	892,492	-	8
Total Public Safety	**1,981,830**	**1,089,338**	**-**	**-**	**892,492**	**-**	
Utilities:							
Electric Services	23,575,000	6,270,000	5,470,000	5,295,000	3,870,000	2,670,000	13
Water Production/Treatment	23,127,000	9,424,000	3,150,000	1,175,000	9,228,000	150,000	43
Water Pollution Control	27,693,000	4,092,000	9,109,000	12,180,000	1,061,000	1,251,000	58
Water Distribution	12,095,000	2,070,000	3,425,000	2,050,000	2,050,000	2,500,000	67
Sanitary Sewer System	31,976,962	8,496,981	10,044,981	4,791,000	4,994,000	3,650,000	70
Stormwater Management	12,050,000	1,450,000	4,150,000	1,850,000	2,600,000	2,000,000	74
Resource Recovery	1,397,000	304,500	362,500	334,000	218,500	177,500	81
Total Utilities	**131,913,962**	**32,107,481**	**35,711,481**	**27,675,000**	**24,021,500**	**12,398,500**	

CAPITAL IMPROVEMENTS PLAN EXPENDITURE SUMMARY BY PROGRAM, continued

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
EXPENDITURES, continued:							
Transportation:							
Streets Improvements	63,666,000	11,236,000	11,250,000	15,530,000	10,825,000	14,825,000	85
Shared Use Path System	5,425,000	905,000	900,000	800,000	1,520,000	1,300,000	98
Traffic Improvements	16,833,980	3,155,580	4,027,600	3,808,600	4,947,200	895,000	103
Street Rehabilitation	4,035,000	1,690,000	1,055,000	580,000	430,000	280,000	111
Transit System	19,397,112	5,058,631	2,971,507	4,096,296	3,618,686	3,651,992	118
Airport	5,853,000	1,120,000	2,550,000	1,383,000	800,000	-	124
Total Transportation	**115,210,092**	**23,165,211**	**22,754,107**	**26,197,896**	**22,140,886**	**20,951,992**	
Culture and Recreation:							
Parks and Recreation	38,891,173	18,399,676	15,637,497	1,675,000	1,805,500	1,373,500	128
Library	147,432	-	100,128	47,304	-	-	141
Cemetery	150,000	75,000	-	-	75,000	-	143
Total Culture and Recreation	**39,188,605**	**18,474,676**	**15,737,625**	**1,722,304**	**1,880,500**	**1,373,500**	

CAPITAL IMPROVEMENTS PLAN EXPENDITURE SUMMARY BY PROGRAM, continued

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
EXPENDITURES, continued:							
Community Development:							
Neighborhood Improvements	750,000	150,000	150,000	150,000	150,000	150,000	146
Total Community Development	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	
General Government:							
Facilities	375,000	75,000	75,000	75,000	75,000	75,000	152
Total General Government	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**	
TOTAL EXPENDITURES	**289,419,489**	**75,061,706**	**74,428,213**	**55,820,200**	**49,160,378**	**34,948,992**	

CAPITAL IMPROVEMENTS PLAN FUNDING SOURCE SUMMARY

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
Debt:						
G.O. Bonds	83,932,598	18,359,410	25,924,882	13,432,510	14,115,796	12,100,000
State Revolving Fund Loans	55,173,000	12,327,000	15,686,000	16,566,000	10,594,000	-
Total Debt Funding	**139,105,598**	**30,686,410**	**41,610,882**	**29,998,510**	**24,709,796**	**12,100,000**
City:						
Local Option Sales Tax	10,994,432	2,105,500	1,892,628	2,007,304	2,315,500	2,673,500
Road Use Tax	11,341,700	2,292,740	2,795,560	2,500,060	2,553,340	1,200,000
Electric Utility Fund	22,536,600	5,903,000	5,349,400	4,931,400	3,776,400	2,576,400
Water Utility Fund	18,361,000	4,232,000	2,946,000	3,105,000	5,353,000	2,725,000
Sewer Utility Fund	11,394,000	3,407,000	800,000	675,000	1,536,000	4,976,000
Stormwater Utility Fund	8,600,000	1,100,000	1,700,000	1,500,000	2,250,000	2,050,000
Resource Recovery Fund	1,397,000	304,500	362,500	334,000	218,500	177,500
Transit Capital Reserve Fund	4,942,712	1,137,027	808,744	1,042,329	973,976	980,636
Airport Construction Fund	501,308	112,000	206,222	113,730	69,356	-
Park Development Fund	200,000	-	-	-	-	200,000
Geitel Winakor Donation Fund	1,294,500	1,294,500	-	-	-	-
Council Priorities Fund	1,000,000	1,000,000	-	-	-	-
Ice Arena Capital Reserve Fund	215,000	75,000	-	15,000	-	125,000
Total City Funding	**92,778,252**	**22,963,267**	**16,861,054**	**16,223,823**	**19,046,072**	**17,684,036**

CAPITAL IMPROVEMENTS PLAN FUNDING SOURCE SUMMARY, continued

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
Other:						
Federal/State Grants	26,416,080	7,502,884	6,145,363	5,175,567	4,920,910	2,671,356
American Resucue Plan Funds	11,689,459	4,717,478	6,971,981	-	-	-
MPO/STP Funds	6,004,000	-	400,000	2,814,000	390,000	2,400,000
Federal Aviation Administration	4,322,700	1,008,000	2,070,000	1,244,700	-	-
Iowa State University	848,400	177,000	120,600	363,600	93,600	93,600
Iowa Department of Transportation	250,000	250,000	-	-	-	-
Private Donations	8,005,000	7,756,667	248,333	-	-	-
Total Other Funding	**57,535,639**	**21,412,029**	**15,956,277**	**9,597,867**	**5,404,510**	**5,164,956**
TOTAL FUNDING SOURCES	**289,419,489**	**75,061,706**	**74,428,213**	**55,820,200**	**49,160,378**	**34,948,992**

Public Safety

CITY OF Ames™

PUBLIC SAFETY

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
EXPENDITURES:							
Fire Safety	1,981,830	1,089,338	-	-	892,492	-	8
TOTAL EXPENDITURES	**1,981,830**	**1,089,338**	**-**	**-**	**892,492**	**-**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	1,981,830	1,089,338	-	-	892,492	-	
TOTAL FUNDING SOURCES	**1,981,830**	**1,089,338**	**-**	**-**	**892,492**	**-**	

PUBLIC SAFETY - FIRE

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Fire Apparatus Replacement	1,639,492	747,000	-	-	892,492	-	9
Fire Station 3 Concrete Rehabilitation	342,338	342,338	-	-	-	-	10
TOTAL PROJECT EXPENDITURES	**1,981,830**	**1,089,338**	**-**	**-**	**892,492**	**-**	
FUNDING SOURCES							
Debt:							
G.O. Bonds	1,981,830	1,089,338	-	-	892,492	-	
TOTAL FUNDING SOURCES	**1,981,830**	**1,089,338**	**-**	**-**	**892,492**	**-**	

FIRE APPARATUS REPLACEMENT **PROJECT STATUS:** Cost Change Scope Change

DESCRIPTION/JUSTIFICATION

Fire apparatus are essential for structural firefighting. The Fire Apparatus Replacement Program ensures replacement of fire apparatus at the end of their operational lives. The City maintains two frontline engines (Engine 1 and Engine 2) and one ladder truck (Truck 3). The City maintains its current fleet very well, which facilitates keeping front line fire apparatus for a maximum of 15 years. Our goal is to then retain one engine and one truck as reserve apparatus for an additional 10-15 years each. However, sometimes parts availability, metal fatigue, and corrosion will take an apparatus out of service sooner than expected, making continued use impractical. Before being placed in reserve status, fire apparatus are typically refurbished.

Engine 1 (purchased new in 2005) is not aging well and needs to be replaced. Replacement cost (including new equipment) is $747,000.
Engine 2 (purchased new in 2010) is currently in good condition but will require more maintenance and repairs as it ages. Replacement cost (including new equipment) is $792,492. Refurbishment cost for Engine 2 is $100,000.

COMMENTS

Engine 1 is experiencing heavy corrosion and metal fatigue. The manufacturer of Engine 1 went out of business in 2014, making parts nearly impossible to find. Engine 1 will not be eligible for reserve status since refurbishment costs and limited parts availability are not economically feasible. With Engine 1 not being eligible for refurbishment, the department will be left with one reserve Engine that is 26 years old.
Engine 2 will be an excellent apparatus for refurbishment, with extended service life beyond the frontlines as a reserve apparatus after it is replaced in 2025/26.

LOCATION

Fire Station #1, 1300 Burnett Ave. (Engine 1)
Fire Station #2, 132 Welch Ave. (Engine 2)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Replace Engine 1	747,000	747,000				
Replace Engine 2	792,492				792,492	
Refurbish Engine 2 for Reserve Status	100,000				100,000	
TOTAL	**1,639,492**	**747,000**			892,492	
FINANCING:						
G.O. Bonds	1,639,492	747,000			892,492	
TOTAL	**1,639,492**	**747,000**			892,492	

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Public Safety - Fire	Fire	383-2258-429

FIRE STATION #3 CONCRETE REPLACEMENT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Fire Station #3 was constructed in 2002. Since its construction, the concrete driveway has continued to deteriorate around the structure. Public Works engineers have evaluated the driveway and recommended repair options, which range from patching to complete reconstruction. Multiple patches have been applied to the concrete over the last five years but were only temporary until the entire driveway could be replaced.

COMMENTS
In spring of 2021, a portion of the concrete driveway was replaced at a cost of $41,693. Public Works engineers have suggested a complete replacement of the remaining concrete driveway at a cost of $342,338.

LOCATION
Fire Station #3, 2400 South Duff Avenue

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
		342,338	342,338				
	TOTAL	**342,338**	**342,338**				
FINANCING:							
G.O. Bonds		342,338	342,338				
	TOTAL	**342,338**	**342,338**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety - Fire	Fire	383-2260-429

Utilities

CITY OF Ames™

UTILITIES

EXPENDITURES:	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
Electric Services	23,575,000	6,270,000	5,470,000	5,295,000	3,870,000	2,670,000	13
Water Production/Treatment	23,127,000	9,424,000	3,150,000	1,175,000	9,228,000	150,000	43
Water Pollution Control	27,693,000	4,092,000	9,109,000	12,180,000	1,061,000	1,251,000	58
Water Distribution	12,095,000	2,070,000	3,425,000	2,050,000	2,050,000	2,500,000	67
Sanitary Sewer System	31,976,962	8,496,981	10,044,981	4,791,000	4,994,000	3,650,000	70
Stormwater Management	12,050,000	1,450,000	4,150,000	1,850,000	2,600,000	2,000,000	74
Resource Recovery	1,397,000	304,500	362,500	334,000	218,500	177,500	81
TOTAL EXPENDITURES	**131,913,962**	**32,107,481**	**35,711,481**	**27,675,000**	**24,021,500**	**12,398,500**	

FUNDING SOURCES:

Debt:							
State Revolving Fund Loans	55,173,000	12,327,000	15,686,000	16,566,000	10,594,000	-	

UTILITIES, continued

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
FUNDING SOURCES, continued:						
City:						
Electric Utility Fund	22,536,600	5,903,000	5,349,400	4,931,400	3,776,400	2,576,400
Water Utility Fund	17,586,000	4,157,000	2,471,000	3,030,000	5,278,000	2,650,000
Sewer Utility Fund	10,894,000	3,332,000	600,000	600,000	1,461,000	4,901,000
Stormwater Utility Fund	8,350,000	1,050,000	1,650,000	1,450,000	2,200,000	2,000,000
Resource Recovery Fund	1,397,000	304,500	362,500	334,000	218,500	177,500
Total City Funding	60,763,600	14,746,500	10,432,900	10,345,400	12,933,900	12,304,900
Other:						
Federal/State Grants	3,700,000	400,000	2,500,000	400,000	400,000	-
American Rescue Plan	11,238,962	4,266,981	6,971,981	-	-	-
Iowa State University	788,400	117,000	120,600	363,600	93,600	93,600
Iowa Department of Transportation	250,000	250,000	-	-	-	-
Total Other Funding	15,977,362	5,033,981	9,592,581	763,600	493,600	93,600
Total Funding Sources	**131,913,962**	**32,107,481**	**35,711,481**	**27,675,000**	**24,021,500**	**12,398,500**

UTILITIES - ELECTRIC SERVICES

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Administration:							
Advanced Metering Infrastructure	2,200,000	100,000	700,000	700,000	700,000	-	15
Electric Vehicle Infrastructure	600,000	200,000	200,000	200,000	-	-	16
Transmission:							
Ontario Substation 69 kV Breaker Addition	1,300,000	1,300,000	-	-	-	-	17
161 kV Line Relocation	250,000	250,000	-	-	-	-	18
69 kV Transmission Reconstruction	2,080,000	-	520,000	520,000	520,000	520,000	19
Distribution:							
Street Light and Line Relocations	750,000	150,000	150,000	150,000	150,000	150,000	20
Dayton Avenue Substation Upgrade	1,350,000	250,000	1,100,000	-	-	-	21
Electric Distribution Universal Locker Room	110,000	10,000	100,000	-	-	-	22
Mortensen Road Transformer Protection	1,650,000	-	150,000	1,500,000	-	-	23
Vet Med Substation Switchgear Upgrade	1,100,000	-	-	200,000	900,000	-	24
Haber Road Substation Expansion	1,800,000	-	-	-	300,000	1,500,000	25
Production:							
Unit 8 Precipitator Insulation and Siding	1,000,000	1,000,000	-	-	-	-	26
Power Plant Load Centers/Breakers	1,850,000	500,000	500,000	850,000	-	-	27
Power Plant Building Modifications	1,750,000	300,000	650,000	150,000	650,000	-	28
Units 5 and 6 Boiler Removal	750,000	750,000	-	-	-	-	29
Unit 7 Exciter/Cooling Water System	450,000	450,000	-	-	-	-	30
Unit 7 Air Heater Basket Replacement	350,000	350,000	-	-	-	-	31
Critical Electric System Generators	700,000	200,000	500,000	-	-	-	32
Power Plant Fire Protection System	250,000	250,000	-	-	-	-	33

UTILITIES - ELECTRIC SERVICES, continued

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
Production (continued):							
Unit 7 Main Steam Line Insulation	210,000	210,000	-	-	-	-	34
Unit 8 Tube Corrosion Injection	250,000	-	250,000	-	-	-	35
Underground Storage Tank Removal	235,000	-	235,000	-	-	-	36
Combustion Turbine Generation Improvements	890,000	-	140,000	750,000	-	-	37
Power Plant Relay/Control Replacement	425,000	-	125,000	125,000	175,000	-	38
Combustion Turbine Minor Overhauls	300,000	-	150,000	150,000	-	-	39
RDF Bin Renovation	300,000	-	-	-	300,000	-	40
Plant Controls WIFI Network	175,000	-	-	-	175,000	-	41
Coal Yard Reclamation	500,000	-	-	-	-	500,000	42
TOTAL PROJECT EXPENDITURES	**23,575,000**	**6,270,000**	**5,470,000**	**5,295,000**	**3,870,000**	**2,670,000**	
FUNDING SOURCES:							
City:							
Electric Utility Fund	22,536,600	5,903,000	5,349,400	4,931,400	3,776,400	2,576,400	
Other:							
Iowa State University	788,400	117,000	120,600	363,600	93,600	93,600	
Iowa Department of Transportation	250,000	250,000	-	-	-	-	
Total Other Funding	1,038,400	367,000	120,600	363,600	93,600	93,600	
TOTAL FUNDING SOURCES	**23,575,000**	**6,270,000**	**5,470,000**	**5,295,000**	**3,870,000**	**2,670,000**	

ADVANCED METERING INFRASTRUCTURE **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The current electric metering system does not have the functional capability to allow for modern utility activities. These include activities like load management for energy peak reductions, outage identifications, real-time feeder and transformer studies, remote disconnect, and time-of-use rate design. This project will allow for the selection of an advanced metering system and provide a multi-year activity to systematically change out meters as these new services are implemented.

In 2022, a consultant would be hired to assess the system needs of the utility, develop a request for proposal, and assist in selecting an Advanced Metering Infrastructure vendor. In 2023, the communication web would be installed at an estimated cost of $350,000. The remaining budgeted funds would be spent on new advanced meters allowing the city to replace more than 50% of the existing meters. Future meters would be changed out “as needed” through the Operations & Maintenance budget.

LOCATION

Various

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering/Meters		2,200,000	100,000	700,000	700,000	700,000	
	TOTAL	**2,200,000**	**100,000**	**700,000**	**700,000**	**700,000**	
FINANCING:							
Electric Utility Fund		2,200,000	100,000	700,000	700,000	700,000	
	TOTAL	**2,200,000**	**100,000**	**700,000**	**700,000**	**700,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Administration	Electric Services	530-4803-489

ELECTRIC VEHICLE INFRASTRUCTURE **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

As the adoption of electric vehicles (EV) continues to grow in the coming years, Electric Services need to continue to add charging infrastructure. This project is for the addition of Level 2 and DC Fast chargers within the Ames community. The budget is intended to provide for (1) DC Fast Charger and at least (2) Level 2 chargers to be installed each year. There are 3 levels of EV charging:

- Level 1 charging operates at 120V AC, supplying between 1.2 – 1.8 kW. This is the level provided by a standard household outlet and **can provide approximately 40–50 miles of range overnight.**
- Level 2 charging operates at 240V AC, supplying between 3.6 – 22 kW. This level includes charging stations that are commonly installed in homes, workplaces, and public locations and **can provide approximately 25 miles of range per hour of charging**.
- Level 3 (or DC Fast Charger for our purposes) operates between 400 – 1000V AC, supplying 50 kW and above. DCFC, generally only available in public locations, **can typically charge a vehicle to 80% in approximately 20-30 minutes**.

LOCATION

Various locations being considered such as at 13th Street and I-35 or Highway 30/South Dakota for DC Fast Chargers; and near the mall, Main Street, City Library, and movie theater for a Level 2 charger.

2022/23	Materials & Construction	$200,000
2023/24	Materials & Construction	$200,000
2024/25	Materials & Construction	$200,000
		$600,000

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	600,000	200,000	200,000	200,000		
TOTAL	**600,000**	**200,000**	**200,000**	**200,000**		
FINANCING:						
Electric Utility Fund	600,000	200,000	200,000	200,000		
TOTAL	**600,000**	**200,000**	**200,000**	**200,000**		

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Administration	Electric Services	530-4806-489

ONTARIO SUBSTATION 69KV BREAKER ADDITION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project will add a 69kV line, replace the existing 13.8kV switchgear, add transformer breakers, replace all 13.8kV and 69kV relays and controls, upgrade the station service and feeders, replace fuses, upgrade the obsolete 69kV bus potential transformers, replace the lightning arresters, and upgrade the grounding and shielding to the Ontario Road Substation.

This project will improve the reliability of transmission service to the Ontario distribution substation. This will also improve service for customers served by this substation by shortening the duration of unexpected outages.

Electric utility engineering practices recommend the use of 69kV transmission breakers and the use of switchgear main breakers at distribution substations.

COMMENTS
Iowa State University's (ISU) share of the project is based on a load-ratio-share at the time of implementation. For budgetary purposes, staff is assuming the ISU load-ratio-share to be 9%. This estimate is based on an 18% load-ratio-share (estimated 50% of the project cost) of the 69kV facilities.

2020/21	Engineering	200,000
2021/22	Engineering	75,000
2022/23	Construction	1,300,000
Total		**$1,575,000**

LOCATION
Ontario Substation, Delaware Avenue, and Utah Drive

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering							
Construction		1,300,000	1,300,000				
	TOTAL	**1,300,000**	**1,300,000**				
FINANCING:							
Electric Utility Fund		1,183,000	1,183,000				
Iowa State University		117,000	117,000				
	TOTAL	**1,300,000**	**1,300,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Transmission	Electric Services	530-4821-489

161kV LINE RELOCATION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The Iowa Department of Transportation (IDOT) has an improvement project along I-35 north of Ankeny that will result in road and bridge widening. Accomplishing this will require the relocation of a portion of the Ames to Ankeny 161 kV transmission line at three locations by the end of 2022. For two sites the relocation will only be temporary while IDOT performs their work. The utility is to redesign the line, negotiate easements, purchase materials and hire a contractor. 100% of the costs are to be reimbursed by the IDOT under a negotiated reimbursement agreement. However, to create the reimbursement agreement, the City will need to "up front" the engineering costs. The engineering cost will be reimbursed under the agreement, but the City bears some risk of reimbursement for the engineering costs if the engineering is accomplished and the IDOT project is cancelled. It is also worth noting that the FY2021/22 expenditures were not in last year's CIP but have now been included in the Electric Fund calculation.

LOCATION

I-35 north of Ankeny

2021/22	Engineering	$241,000
	Easements	$111,000
	Materials & Construction	$1,802,000
2022/23	Engineering	$50,000
	Materials & Construction	$200,000
	Total	$2,404,000

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	50,000	50,000				
Materials & Construction	200,000	200,000				
TOTAL	**250,000**	**250,000**				
FINANCING:						
Iowa DOT Reimbursement	250,000	250,000				
TOTAL	**250,000**	**250,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Transmission	Electric Services	530-4820-489

69KV TRANSMISSION RECONSTRUCTION **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
This is a multi-year project that will reconstruct the deteriorated portions of 69kV transmission pole lines. This project will replace between one and two line-miles of 69kV transmission line per year. The actual length and cost per mile will vary by terrain, accessibility, and attachments. Line replacement candidates include the original MidAmerican 69kV tie line that connects the Ames Plant switchyard to the MidAmerican 69kV source point located south of Ames on Highway 69, the Ames Plant to the Top-O-Hollow line, the Top-O-Hollow line to the Stange Road Substation line, and the Vet Med line to the Mortensen Road Substation line. The total project will require at least five years and will reconstruct approximately 11 miles of deteriorated 69kV line. Capacity and reliability improvements will include the reconstruction of distribution lines which are underbuilt on existing transmission lines and/or adding new distribution underbuild along the same construction route line. No funding is budgeted for FY 2022/23. If work needs to be done that year, carryover funding from FY 2021/22 will be available.

COMMENTS
Iowa State University's (ISU) share of the project is based on a load-ratio-share at the time of implementation. For budgetary purposes, staff is assuming the ISU load-ratio-share to be 18%.

LOCATION
Various locations

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		280,000		70,000	70,000	70,000	70,000
Construction		1,800,000		450,000	450,000	450,000	450,000
	TOTAL	**2,080,000**		**520,000**	**520,000**	**520,000**	**520,000**
FINANCING:							
Electric Utility Fund		1,705,600		426,400	426,400	426,400	426,400
Iowa State University		374,400		93,600	93,600	93,600	93,600
	TOTAL	**2,080,000**		**520,000**	**520,000**	**520,000**	**520,000**

PROGRAM - ACTIVITY: Utilities - Electric Transmission
DEPARTMENT: Electric Services
ACCOUNT NO.

STREET LIGHT AND LINE RELOCATIONS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This work is being coordinated with Public Works' road improvement projects and will require the relocation of various electric facilities, including street lights, services, and distribution lines.

COMMENTS
Locations for street line and line relocations will be coordinated each year with Public Works street improvement projects.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Construction	750,000	150,000	150,000	150,000	150,000	150,000
TOTAL	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**
FINANCING:						
Electric Utility Fund	750,000	150,000	150,000	150,000	150,000	150,000
TOTAL	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Distribution	Electric Services	530-4823-489

DAYTON AVE SUBSTATION SWITCHGEAR UPGRADES **PROJECT STATUS:** No change

DESCRIPTION/JUSTIFICATION

This project will upgrade two existing 13.8kV distribution metal clad switchgear lineups at the Dayton Avenue Substation. The oldest switchgear has obsolete air blast breakers, no main breaker, and electro-mechanical relays. This switchgear needs to be replaced with all new switchgear with vacuum interrupter breakers, a main breaker, and microprocessor relays. The second switchgear has vacuum interrupter feeder breakers, which do not need to be replaced, but it has no main breaker and uses older style relays. This project will provide for the addition of a main breaker and replacement of existing distribution relays with modern microprocessor-based relays.

The addition of a main breaker will improve safety for workers and improve system reliability through the use of low maintenance breakers and relays.

These upgrades are consistent with recommended electric utility industry engineering practices.

LOCATION

Dayton Avenue Substation, Pullman Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		250,000	250,000				
Construction		1,100,000		1,100,000			
	TOTAL	**1,350,000**	**250,000**	**1,100,000**			
FINANCING:							
Electric Utility Fund		1,350,000	250,000	1,100,000			
	TOTAL	**1,350,000**	**250,000**	**1,100,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Distribution	Electric Services	530-4830-489

ELECTRIC DISTRIBUTION UNIVERSAL LOCKER ROOM **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Renovate existing building to include a universal locker and shower facility.

COMMENTS
The current Electric Distribution building was constructed in 1979 and contains only one locker room. Since then, the electric utility industry has seen an increase in the number of females entering the workplace. According to the US Department of Labor Statistics, in the electric industry specifically, approximately 24% of electric staff are female. It is essential that this building accommodates all genders equally. Adding a universal locker room would accomplish this goal.

LOCATION
2208 Edison Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering/Plans		10,000	10,000				
Construction		100,000		100,000			
	TOTAL	**110,000**	**10,000**	**100,000**			
FINANCING:							
Electric Utility Fund		110,000	10,000	100,000			
	TOTAL	**110,000**	**10,000**	**100,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Distribution	Electric Services	530-4846-489

MORTENSEN ROAD SUBSTATION 69KV TRANSFORMER PROTECTION

PROJECT STATUS: Scope Change Cost Change

DESCRIPTION/JUSTIFICATION
This project is for the addition of a 69kV breaker, relays, and controls to replace the fuse protection on the distribution transformer. This project also includes replacement of two obsolete oil circuit breakers with low-maintenance SF6 gas breakers and replacement of the existing 20 MVA transformer with a 25 MVA transformer. This is needed for additional capacity to serve load growth in the vicinity of Mortensen and South Dakota.

COMMENTS
The use of breakers for transformer protection is consistent with recommended engineering practice in the electric utility industry and will minimize damage to the transformer and surrounding facilities while providing better worker safety in the event of a fault. Oil circuit breakers are obsolete and require increased maintenance. The use of SF6 gas breakers represents current best practices for utility substations for reduced maintenance and fast, reliable operation.

Iowa State University's (ISU) share of the project is based on a load-ratio-share at the time of implementation. For budgetary purposes, staff is assuming the ISU load-ratio-share to be 18% of the 69 kV-related costs (excluding the distribution transformer).

LOCATION
Mortensen Road Substation, 3040 Mortensen Road

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		150,000		150,000			
Construction		1,500,000			1,500,000		
	TOTAL	**1,650,000**		**150,000**	**1,500,000**		
FINANCING:							
Electric Utility Fund		1,353,000		123,000	1,230,000		
Iowa State University		297,000		27,000	270,000		
	TOTAL	**1,650,000**		**150,000**	**1,500,000**		

PROGRAM - ACTIVITY: Utilities - Electric Distribution

DEPARTMENT: Electric Services

ACCOUNT NO.

VET MED SUBSTATION SWITCHGEAR REPLACEMENT **PROJECT STATUS:** No change

DESCRIPTION/JUSTIFICATION

This project will replace the original 13.8kV metal clad distribution switchgear at the Vet Med Substation. This is a change from a previous CIP project where staff were considering the upgrade of existing equipment. The Vet Med expansion in 2011 installed two new transformers and switchgear but the metal clad switchgear was not upgraded at that time. This project will replace the metal clad switchgear to add a main breaker and update older existing relays to current standards. The original "stacked" formation switchgear will be replaced with a much safer "single-row" formation. The addition of a main breaker will improve safety for workers and improve system reliability. The use of low maintenance breakers and relays will provide protection that operates quickly and selectively.

These upgrades are consistent with electric utility industry engineering practices.

LOCATION

Vet Med Substation, South Riverside Drive

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		200,000			200,000		
Construction		900,000				900,000	
	TOTAL	**1,100,000**			**200,000**	**900,000**	
FINANCING:							
Electric Utility Fund		1,100,000			200,000	900,000	
	TOTAL	**1,100,000**			**200,000**	**900,000**	

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Utilities - Electric Distribution Electric Services

HABER ROAD SUBSTATION EXPANSION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

Currently, Haber Road Substation serves as a source for Iowa State University's (ISU) power plant and campus loads and provides no distribution feeder sources to Ames' electric distribution system. This project will expand the existing substation yard at Haber Road Substation to add a distribution transformer and associated 69kV transformer protection/switching along with 13.8kV switchgear and associated 69kV/13.8kV relays and controls. This project also includes the extension of one or more 13.8kV feeder extensions to provide a 13.8kV distribution feeder source for Ames' electric system out of Haber Road Substation. Because this only serves Ames customers, ISU does not cost share in this improvement.

This project will improve the reliability of Ames' distribution system by providing a new 13.8kV feeder source which will normally serve a portion of Ames electric load in the vicinity of Haber Rd Substation and will also provide a central alternate/emergency source to other existing Ames customers currently served by Stange Road, Ontario Road, and Mortensen Road Substations. This will improve service for Ames customers served by this substation by shortening the duration of unexpected outages and increasing normal and alternate/emergency distribution capacity to Ames's electric service territory.

2025/26	Engineering & Materials	300,000
2026/27	Construction	1,500,000
Total		**$1,800,000**

LOCATION

601 Haber Road

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		1,800,000				300,000	1,500,000
	TOTAL	**1,800,000**				**300,000**	**1,500,000**
FINANCING:							
Electric Utility Fund		1,800,000				300,000	1,500,000
	TOTAL	**1,800,000**				**300,000**	**1,500,000**

PROGRAM - ACTIVITY: Utilities - Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

UNIT 8 PRECIPITATOR INSULATION AND SIDING **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project will provide for the replacement of the lagging, insulation and support steel of a 33-year-old precipitator. There have been numerous repairs done over the years, but the outer lagging and insulation are now in need of a complete replacement. Over time, the support steel has failed due to rusting and fatigue with the breaking of attachment tabs. Due to the precipitator's height of approximately 155 to 210 feet in the air and approximately 20,000 square feet, it will require scaffolding and be difficult to repair. Failure to repair all four sides from top to bottom could result in a catastrophic failure. If the lagging were to let go, the "skin" and insulation could fall on people, equipment, or the railroad track. The entire lagging, insulation, and some support steel need to be replaced for the safe, continued operation of the precipitator.

COMMENTS

2020/21	Engineering	45,000
2020/21	Materials and Labor	955,000
2022/23	Materials and Labor	1,000,000
Total		**$2,000,000**

LOCATION

Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Materials & Labor		1,000,000	1,000,000				
	TOTAL	**1,000,000**	**1,000,000**				
FINANCING:							
Electric Utility Fund		1,000,000	1,000,000				
	TOTAL	**1,000,000**	**1,000,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	530-485-1489

POWER PLANT LOAD CENTERS AND BREAKER REPLACEMENT

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION

The six load centers in the Power Plant are used to take power off the generator bus bar and distribute it out to the different equipment in the plant. The active load centers are original and were built for old, outdated breakers. The load centers do not currently have up-to-date equipment built in that would allow them to be operated safely and more efficiently. This project involves replacing the six load centers over a three-year period.

In FY 2024/25, staff will also be replacing breakers in the Power Plant. The existing 4160-volt breakers are old and outdated, making it very difficult to find replacement parts and maintain a reliable electric source.

LOCATION

Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Materials/Parts		1,850,000	500,000	500,000	850,000		
	TOTAL	**1,850,000**	**500,000**	**500,000**	**850,000**		
FINANCING:							
Electric Utility Fund		1,850,000	500,000	500,000	850,000		
	TOTAL	**1,850,000**	**500,000**	**500,000**	**850,000**		

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Production	Electric Services	530-4855-489

POWER PLANT BUILDING MODIFICATIONS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project will bring much needed improvements to the Power Plant. The Power Plant is a City building that has gone through several changes over the last 50 years. In addition, several of the power plant roofs are in bad repair and need to be replaced. This project is a multi-year effort to make the building more energy efficient, meet current building requirements, and install security features.

2022/23	Relay room HVAC replacement	300,000
2023/24	New ADA compliant entrance ($500,000); roof replacement phase I ($150,000)	650,000
2024/25	Roof replacement phase II	150,000
2025/26	Replace siding on exterior portion of north and west sides and replace windows on the first floor of the west side ($500,000); roof replacement phase III ($150,000)	650,000
Total		**$1,750,000**

LOCATION

Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		150,000		75,000	25,000	50,000	
Construction		1,600,000	300,000	575,000	125,000	600,000	
	TOTAL	**1,750,000**	**300,000**	**650,000**	**150,000**	**650,000**	
FINANCING:							
Electric Utility Fund		1,750,000	300,000	650,000	150,000	650,000	
	TOTAL	**1,750,000**	**300,000**	**650,000**	**150,000**	**650,000**	

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Production	Electric Services	530-4869-489

UNITS 5 AND 6 BOILER REMOVAL **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The Power Plant houses two operational generating units (7 and 8). Units 5 and 6 were decommissioned in 1986. This project is to remove the Unit 5 and Unit 6 boiler. This equipment is outdated and unusable in its current condition. The area that will be cleared through this project can be used to provide expanded maintenance shop space.

The turbine/generators will not be removed as part of this project. The City is currently studying Waste-to-Energy alternatives, one of which may be to develop a dedicated unit to dispose of refuse-derived fuel. As part of that study, the turbine-generators could be evaluated for rehabilitation. Until the possibility of repurposing one or both of the turbine/generators is ruled out, they will remain in place.

LOCATION
Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		50,000	50,000				
Demolition and Removal		700,000	700,000				
	TOTAL	**750,000**	**750,000**				
FINANCING:							
Electric Utility Fund		750,000	750,000				
	TOTAL	**750,000**	**750,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Production	Electric Services	530-4854-489

UNIT 7 EXCITER AND COOLING WATER SYSTEM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

FY 2021/22 - This project is to install a new closed loop glycol cooling system on Unit 7. Currently all of the equipment on Unit 7 that needs to be cooled (boiler feed pumps, hydrogen coolers, air heater, force draft fan bearings, and the exciter) are cooled with open loop systems from well water, cooling tower water, or City water. These waters are difficult to treat and cause equipment to get dirty quickly. This prevents a good heat exchange and higher running temperatures. A closed loop glycol system will be more economical and allow for better cooling efficiency.

FY 2022/23 - This project is to replace the Unit 7 exciter. The main purpose of an exciter in a steam turbine is to provide a magnetic field. The current exciter is water-cooled by copper tubes that run through the electronics. These tubes are fouled and plugged; efforts to clear the tubes have not been successful. To reduce the temperature, the exciter must constantly have the cabinet doors open with a large fan blowing air across the hardware. The replacement will install new updated controls and a new cooling system. This will allow for better cooling, more control, and better exciter monitoring.

2021/22	Engineering and Construction	500,000
2022/23	Engineering and Construction	450,000
Total		**950,000**

LOCATION
Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2025/26
COST:							
Engineering		50,000	50,000				
Construction		400,000	400,000				
	TOTAL	**450,000**	**450,000**				
FINANCING:							
Electric Utility Fund		450,000	450,000				
	TOTAL	**450,000**	**450,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Production	Electric Services	530-4866-489

UNIT 7 AIR HEATER BASKET REPLACEMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The Unit 7 air heater baskets are showing a large amount of corrosion. These baskets transfer heat from the boiler exhaust gas to heat the incoming combustion air. Poor or corroded baskets cause operating efficiency to drop, and negatively impact heat transfer. This in turn restricts the air path through the air heater causing the induced draft fan to work harder and limit our unit capacity. This project involves all three layers of the baskets to be replaced with new baskets.

LOCATION

Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Construction		350,000	350,000				
	TOTAL	**350,000**	**350,000**				
FINANCING:							
Electric Utility Fund		350,000	350,000				
	TOTAL	**350,000**	**350,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Electric Production	Electric Services	530-4857-489

CRITICAL ELECTRIC SYSTEM GENERATORS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
After the derecho event that occurred in August 2020, two limitations were uncovered concerning the operation of the City's electrical generating units during prolonged outages.

Although battery systems are in place at the Power Plant, a more robust backup system supporting critical systems in the power plant is required. This project will involve installing a diesel generator that, under blackout conditions, will continually support the DCS control system, SCADA system, and the emergency oil pumps on both steam turbine generators at the power plant.

At the combustion turbine site, the "black start" system restoration plan requires that at least one combustion turbine be capable of starting without any power from the surrounding grid. This portion of the project will involve installing a diesel generator large enough to start Combustion Turbine #2 in a blackout condition. This will reduce the length of long-duration, city-wide electrical outages.

LOCATION
Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Materials/Parts		200,000	200,000				
Construction		300,000		300,000			
Engineering		200,000		200,000			
	TOTAL	**700,000**	**200,000**	**500,000**			
FINANCING:							
Electric Utility Fund		700,000	200,000	500,000			
	TOTAL	**700,000**	**200,000**	**500,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	530-4859-489

POWER PLANT FIRE PROTECTION SYSTEM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The City's insurance carrier has made several loss prevention recommendations for the Power Plant. The following project is in response to these recommendations:

2022/23 Install containment and protection under both turbine generators at the power plant. In the event of a bearing or turbine oil leak, the oil will be restricted to an area just below the turbine and generator and any fire extinguished by an automatic foam discharge system.

COMMENTS
A serious fire in any one of the systems can force the outage of Unit 7, Unit 8, or the entire Power Plant. Replacement power during an extended period of time can be very expensive.

LOCATION
Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Construction		250,000	250,000				
	TOTAL	**250,000**	**250,000**				
FINANCING:							
Electric Utility Fund		250,000	250,000				
	TOTAL	**250,000**	**250,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	530-4876-489

UNIT 7 MAIN STEAM LINE INSULATION REPLACEMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The main steam line on Unit 7, from the boiler to the turbine, is insulated with asbestos insulation. The asbestos has caused issues with performing repairs around the line as well as performing high energy pipe testing. The asbestos will be entirely removed prior to the installation of new insulation and lagging.

LOCATION
Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/24	2026/27
COST:							
Engineering		10,000	10,000				
Construction		200,000	200,000				
	TOTAL	**210,000**	**210,000**				
FINANCING:							
Electric Utility Fund		210,000	210,000				
	TOTAL	**210,000**	**210,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric Services	530-4863-489

UNIT 8 TUBE CORROSION INJECTION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

Plant staff is currently in the process of performing a project to replace the superheater tubes that have suffered from severe corrosion caused by the combustion environment created when burning RDF and natural gas. The new tubes will have an Inconel coating on them to protect them from this corrosive environment. Staff expects this coating to greatly increase the life span of these tubes. However, this harsh environment will still exist and continuing to reduce this corrosive environment will only increase the tube life span further.

This project involves the engineering, materials, and labor to install a chemical injection into the gas stream of the boiler. This will modify the chemical reaction occurring in the boiler, further preventing the corrosion of the boiler tubes.

LOCATION

Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Materials/Parts		250,000		250,000			
	TOTAL	**250,000**		**250,000**			
FINANCING:							
Electric Utility Fund		250,000		250,000			
	TOTAL	**250,000**		**250,000**			

PROGRAM - ACTIVITY: Utilities - Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

UNDERGROUND STORAGE TANK REMOVAL **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
There are two 42,000-gallon underground tanks that previously stored #2 fuel oil for Unit 7 and Unit 8. These original tanks were installed during the construction of Unit #8. They have been in the ground for 30 years. Testing completed in 2011 indicated that there are no problems. However, due to the age of these tanks (30 years is the expected safe life) it is possible that an oil leak could occur, causing an expensive cleanup. Now that the plant has been converted to natural gas, these tanks are no longer needed and should be removed from the ground.

COMMENTS
It is prudent to plan to remove these tanks rather than leave them in the ground.

LOCATION
Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Equipment and Labor		235,000		235,000			
	TOTAL	**235,000**		**235,000**			
FINANCING:							
Electric Utility Fund		235,000		235,000			
	TOTAL	**235,000**		**235,000**			

PROGRAM - ACTIVITY: Utilities - Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

COMBUSTION TURBINE GENERATION IMPROVEMENTS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

FY 2023/24 New Remote Terminal Unit, Meters and Relays - The current remote terminal unit, meters, and protective relays are original to the 1972 unit and need to be updated to more modern equipment ($140,000).

FY 2024/25 Combustion Turbine #1 Controls Upgrade - This project is to replace the current outdated controls on Combustion Turbine 1 (CT1) with updated controls ($600,000). The original controls were upgraded in 2007 and now have a number of components that are obsolete and no longer supported by the control's OEM, suffering from the same limitations as CT2 above.

FY 2024/25 Combustion Turbine Weather Protection - There are multiple small enclosures housing different auxiliary equipment. The enclosures are outfitted with individual unit heaters to keep equipment from reaching freezing temperatures. There is also piping between the enclosures that are heat traced to keep from freezing. If one of the enclosure heaters malfunctions and the temperature drops below freezing, equipment will be damaged and require costly repairs or replacement. Keeping all of the individual heating systems maintained and constantly monitoring the climate status has proved to be a difficult task, especially since the unit is located at a remote site from the main power plant. In order to remove most of this risk, an insulated building will be erected that will enclose this equipment and be heated to maintain a proper climate ($150,000).

LOCATION
Combustion Turbine Site, 2300 Pullman Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering/Design/Construction		890,000		140,000	750,000		
	TOTAL	**890,000**		**140,000**	**750,000**		
FINANCING:							
Electric Utility Fund		890,000		140,000	750,000		
	TOTAL	**890,000**		**140,000**	**750,000**		

PROGRAM - ACTIVITY: Utilities - Electric Production
DEPARTMENT: Electric Services
ACCOUNT NO.

POWER PLANT RELAY/CONTROL REPLACEMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project will replace existing electro-mechanical 13.8kV feeders and 4.160kV bus differential relays in the Power Plant. The existing relays are obsolete electro-mechanical devices which are becoming difficult to maintain and repair since the replacement parts are no longer manufactured. By installing modern programmable relays and updated controls in this location, long-term reliability can be improved by eliminating the obsolete, maintenance-intensive, electro-mechanical relays. This project will likely take three years to complete.

These upgrades are consistent with recommended electric utility industry engineering practices.

LOCATION

Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		50,000		50,000			
Construction		375,000		75,000	125,000	175,000	
	TOTAL	**425,000**		**125,000**	**125,000**	**175,000**	
FINANCING:							
Electric Utility Fund		425,000		125,000	125,000	175,000	
	TOTAL	**425,000**		**125,000**	**125,000**	**175,000**	

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Utilities - Electric Production Electric Services

TURBINE/GENERATOR MINOR OVERHAULS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
It is standard in the industry to perform a major overhaul every 7-8 years on the turbine and generator. In order to perform well within these 7-8 years, a minor overhaul is performed every 3-4 years. The minor overhaul consists of inspecting and cleaning the main stop valve, control valves, and bearings. This inspection insures proper operation of these critical components.

COMMENTS
Traditionally, the City of Ames Power Plant has not performed a minor inspection on either Unit 7 or Unit 8, but that is because the time between major inspections has been about 5 years. We would like to increase this time between major inspections to 7-8 years.

2023/24	Unit 7 minor overhaul	150,000
2024/25	Unit 8 minor overhaul	150,000
Total		**$300,000**

LOCATION
Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2025/26
COST:							
Turbine Overhaul		200,000		100,000	100,000		
GE Tech Support		100,000		50,000	50,000		
	TOTAL	**300,000**		**150,000**	**150,000**		
FINANCING:							
Electric Utility Fund		300,000		150,000	150,000		
	TOTAL	**300,000**		**150,000**	**150,000**		

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**
Utilities - Electric Production Electric Services

RDF BIN RENOVATION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
There are several drives at the RDF bin that are DC (direct current). The DC drives have limitations for control and are expensive to maintain. This is a scope change to the project as staff replaces the DC drives used within the RDF process to an AC (alternating current) drive.

COMMENTS

The City is currently studying Waste-to-Energy alternatives, which could impact how the RDF bin will be utilized over the next ten to twenty years. As additional information is learned through the Waste-to-Energy study, adjustments may be made to the RDF Bin Renovation project which could impact the cost if the bin is not needed long-term.

LOCATION
Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Construction		300,000				300,000	
	TOTAL	**300,000**				**300,000**	
FINANCING:							
Electric Utility Fund		300,000				300,000	
	TOTAL	**300,000**				**300,000**	

PROGRAM - ACTIVITY: Utilities - Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

PLANT CONTROLS WI-FI NETWORK **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

Each time a component is installed in the field and it needs to be connected to the DCS, conduit and wiring must be installed and connected. This takes a tremendous amount of time and space when considering adding additional components in the field. This project will install a secured wireless network that will only be used to retrieve operational data from the field and brought into the DCS without having to run conduit or wiring. The network will also be capable of quickly adding additional components in the future. This wireless network will only be used for retrieving data and will not be used to output any control commands.

LOCATION

Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Materials/Parts		175,000				175,000	
	TOTAL	**175,000**				**175,000**	
FINANCING:							
Electric Utility Fund		175,000				175,000	
	TOTAL	**175,000**				**175,000**	

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Utilities - Electric Production Electric Services

COAL YARD RECLAMATION **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
In spring 2016, the Power Plant was converted from coal-fired to natural gas-fired. This project is to reclaim the area used for coal storage by transforming it into a green space.

LOCATION
Power Plant, 200 East Fifth Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		50,000					50,000
Construction		450,000					450,000
	TOTAL	**500,000**					**500,000**
FINANCING:							
Electric Utility Fund		500,000					500,000
	TOTAL	**500,000**					**500,000**

PROGRAM - ACTIVITY: Utilities - Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

UTILITIES - WATER PRODUCTION/TREATMENT

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
North River Valley Well Field	6,200,000	6,200,000	-	-	-	-	45
Old Water Treatment Plant Demolition	1,233,000	1,233,000	-	-	-	-	46
Technical Services Complex Addition	2,785,000	206,000	2,579,000	-	-	-	47
Water Plant Facility Improvements	2,101,000	593,000	207,000	44,000	1,107,000	150,000	48
Remote Sites Fiber Installation	994,000	659,000	-	335,000	-	-	49
Physical/Cyber Security Improvements	795,000	285,000	80,000	170,000	260,000	-	50
SAM Pump Station Improvements	300,000	145,000	155,000	-	-	-	51
Advanced Metering Infrastructure	209,000	103,000	106,000	-	-	-	52
Ada Hayden Water Quality Study	46,000	-	23,000	23,000	-	-	53
Lime Lagoon Improvements	1,539,000	-	-	408,000	1,131,000	-	54
East Industrial Elevated Tank	6,195,000	-	-	195,000	6,000,000	-	55
Well Controls Rehabilitation	605,000	-	-	-	605,000	-	56
Ioway Creek Pump Station Demolition	125,000	-	-	-	125,000	-	57
TOTAL PROJECT EXPENDITURES	**23,127,000**	**9,424,000**	**3,150,000**	**1,175,000**	**9,228,000**	**150,000**	
FUNDING SOURCES:							
Debt:							
State Revolving Fund Loans	15,791,000	7,017,000	2,579,000	195,000	6,000,000	-	

UTILITIES - WATER PRODUCTION/TREATMENT, continued

	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
FUNDING SOURCES, continued						
City:						
Water Utility Fund	7,336,000	2,407,000	571,000	980,000	3,228,000	150,000
TOTAL FUNDING SOURCES	**23,127,000**	**9,424,000**	**3,150,000**	**1,175,000**	**9,228,000**	**150,000**

NORTH RIVER VALLEY WELL FIELD **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
As old wells fail and need to be replaced and as demand for treated water increases, additional wells must be drilled. This project will provide new and replacement source water capacity. In addition, under drought conditions, the yield of the aquifer is reduced, requiring additional wells to achieve the same source water capacity. Development of the new well field will include an interconnecting pipeline and three new wells, each with a capacity of approximately 1,000 gallons per minute (~1.5 million gallons per day).

COMMENTS
In the summer of 2019, bids were accepted on this project that exceeded the adopted budget, and the bids were rejected. The project is being redesigned and will be rebid in the spring of 2022. This CIP page now reflects a revised timeline for development of the well field. If additional land is acquired in the future, two or three additional wells could be constructed in this same well field. The City already owns approximately 70 acres of land south of Ames that is being held for a future well field. Additional funds are included in the current year (FY 2021/22) for the purchase of land in order to secure additional water rights to the south.

2016/17 – 2020/21	Design/engineering/easements	581,838
2021/22	Redesign/start of construction	600,162
2022/23	Complete construction	6,200,000
	Total	**7,382,000**

As currently designed, the project includes a fixed standby electrical generator for the new wells. Once the warranty period expires, the new generator will be included in an annual service agreement. The wells will be placed on a rotating five-year schedule for routine cleaning and rehabilitation. Both expenses are a part of the operating budget for the Water Plant. However, an option is being evaluated that would power the new wells using the standby engine at the Water Plant instead of installing a new engine in the well field.

LOCATION
North River Valley Park – North of East 13th Street and east of the Skunk River in the floodplain.

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		622,000	622,000				
Construction		5,578,000	5,578,000				
	TOTAL	**6,200,000**	**6,200,000**				
FINANCING:							
Drinking Water State Revolving Fund		5,578,000	5,578,000				
Water Utility Fund		622,000	622,000				
	TOTAL	**6,200,000**	**6,200,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Production	Water and Pollution Control	510-3943-489
		512-3943-489

DEMOLITION OF OLD WATER TREATMENT PLANT **PROJECT STATUS:** Scope Change Delayed

DESCRIPTION/JUSTIFICATION
This project will demolish the treatment structures at the old Water Treatment Plant site.

COMMENTS
The new Water Treatment Plant began operation during the summer of 2017. Now that the new facility has been fully commissioned and is performing reliably, the treatment structures at the old plant can be torn down. This project will demolish the filter building, chemical feed building, external treatment basins, administrative offices, and ¾ million-gallon ground reservoir.

The project scope originally included some additions to the adjacent Technical Services Complex (TSC) building. That project has now been separated out into a new CIP project, and $1,695,000 from the original demolition budget has been transferred to that new stand-alone project CIP page.

The schedule for the demolition has been slowed by a lengthy evaluation process by the State and by the need to address any remaining asbestos in the facility. The entire demolition should be completed during the summer of 2022.

FY 2018/19 – FY 2020/21	Engineering, permitting, environmental	141,916
FY 2021/22	Complete design, asbestos assessment, start demolition, project administration (engineering, legal, etc.)	1,288,560
FY 2022/23	Complete demolition, project administration	1,233,000
	Total	**2,663,476**

LOCATION
300 East 5th Street

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	92,000	92,000				
Construction	1,141,000	1,141,000				
TOTAL	**1,233,000**	**1,233,000**				
FINANCING:						
Drinking Water State Revolving Fund	1,233,000	1,233,000				
TOTAL	**1,233,000**	**1,233,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Water Treatment	Water and Pollution Control	512-3960-489

TECHNICAL SERVICES COMPLEX ADDITION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project will add additional square footage to the Technical Services Complex (TSC). The addition will include: a new conference room space; new restrooms and kitchenette, garage/storage space for the Laboratory Services and Water Meter Divisions; and an elevator. It will also include a renovation of the TSC building to include: converting the old small conference room into an office and storage closet; converting the old kitchenette into a first aid/lactation room; replacing damaged and stained ceiling tiles in the laboratory; replacing the existing HVAC systems, and a general refresh of flooring and wall coverings throughout the building.

COMMENTS

Portions of this project were originally included as a part of the demolition of the old Water Plant CIP project, and approximately $1,695,000 of the expenses previously budgeted have been transferred from the demolition project into this new project. The scope has changed to now include a renovation of the existing TSC building. The cost has also been updated from the 2009 estimate prepared at the start of design for the new Water Plant.

The project will be funded using a Drinking Water State Revolving Fund (DW SRF) loan. The loan terms include a 2% interest rate and a 20-year repayment schedule. The debt service on the DW SRF loan would be repaid equally from the Water Fund and the Sewer Fund; approximately $85,500 per year from each fund for the next 20 years.

LOCATION

300 East 5th Street

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	206,000	206,000				
Construction	2,579,000		2,579,000			
TOTAL	**2,785,000**	**206,000**	**2,579,000**			
FINANCING:						
Drinking Water State Revolving Fund	2,785,000	206,000	2,579,000			
TOTAL	**2,785,000**	**206,000**	**2,579,000**			

PROGRAM - ACTIVITY: Utilities - Water Administration

DEPARTMENT: Water and Pollution Control

ACCOUNT NO. 512-3940-489

WATER PLANT FACILITY IMPROVEMENTS **PROJECT STATUS:** Cost Change Scope Change

DESCRIPTION/JUSTIFICATION
This project involves annual equipment repairs, major maintenance activities, replacement, and upgrades at the Water Treatment Plant, Technical Services Complex, and associated remote facilities such as wells, elevated tanks, and booster pump stations. Each of the identified items are stand-alone projects.

COMMENTS
The schedule for these improvements is as follows:

2022/23	Lime slaking building dehumidification ($212,000); add variable frequency drive (VFD) at new high service pump station ($75,000); major routine maintenance on switchgear ($81,000); SCADA server replacement ($200,000); remote site solar conversion feasibility study ($25,000)
2023/24	Replace valve actuators on solids contact units/re-carbonation tanks ($207,000)
2024/25	Install chlorine analyzers in distribution system ($44,000)
2025/26	Add (2) high service pumps ($170,000); upsize high service pump station connection to distribution system ($241,000); minor routine maintenance on switchgear ($50,000); add third slaker ($646,000)
2026/27	Clean both ground storage reservoirs at old plant site ($150,000)

LOCATION
Technical Services Complex, 300 East Fifth Street and Water Treatment Plant, 1800 East 13th Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		122,000	25,000			97,000	
Construction		1,979,000	568,000	207,000	44,000	1,010,000	150,000
	TOTAL	**2,101,000**	**593,000**	**207,000**	**44,000**	**1,107,000**	**150,000**
FINANCING:							
Water Utility Fund		2,101,000	593,000	207,000	44,000	1,107,000	150,000
	TOTAL	**2,101,000**	**593,000**	**207,000**	**44,000**	**1,107,000**	**150,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Water Treatment	Water and Pollution Control	Various

REMOTE SITES FIBER INSTALLATION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project will connect multiple remote sites back to the Water Plant using fiber optic cables. This will provide greater security of the communications, increased communications reliability, and the ability to bring back security video of these unstaffed remote facilities.

COMMENTS
The installation of the fiber network planned as a part of the deployment of the smart transportation grid can be leveraged to allow fiber connections to a significant number of remote Water Plant facilities such as wells, water towers, and booster pump stations. The timing of the projects shown below coincides with the planned schedule for installing the transportation network. The installation of fiber to serve the planned North River Valley Well Field is included separately in the construction budget for that project.

2022/23 Connections to the Southeast Well Field (5 wells) and the Youth Sports Complex Well Field (5 wells)
2024/25 Connections to the Bloomington Road Elevated Tank (BRET), Mortensen and County Line Tank (MAC), and the Elevated Tank and Booster Pump Station at State and Mortensen (SAM)

LOCATION
Various remote sites

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		130,000	86,000		44,000		
Construction		864,000	573,000		291,000		
	TOTAL	**994,000**	**659,000**		**335,000**		
FINANCING:							
Water Fund		994,000	659,000		335,000		
	TOTAL	**994,000**	**659,000**		**335,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Production	Water and Pollution Control	510-3961-489

PHYSICAL AND CYBER SECURITY IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Maintaining the security of the water system is an extremely high priority. As evidenced by numerous breaches at utilities around the country in the past year, as well as repeated assertions by foreign bad actors that utilities are a preferred target, continuous upgrades and improvements are essential to stay ahead of threats.

COMMENTS
Some security-related projects were previously included in the Water Plant Facility Improvements Project but are now broken out in this new project. Others are new additions resulting from the completion of an update to the Vulnerability Assessment completed in 2020.

2021/22	Modify and reterminate wiring on access control key pads ($50,000); install fencing around the new High Service Pump Station and Clearwell ($60,000)
2022/23	Segregate access control and security cameras off the SCADA network and onto their own dedicated network ($130,000); install security fencing around wells in the SE Wellfield ($155,000)
2023/24	Add / replace security cameras at Water Plant ($80,000)
2024/25	Convert access control to a system compatible with the City Hall system ($170,000)
2025/26	Remote site security upgrades (access control, cameras, lighting) ($260,000)

LOCATION
Various locations

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering							
Construction		795,000	285,000	80,000	170,000	260,000	
	TOTAL	**795,000**	**285,000**	**80,000**	**170,000**	**260,000**	
FINANCING:							
Water Utility Fund		795,000	285,000	80,000	170,000	260,000	
	TOTAL	**795,000**	**285,000**	**80,000**	**170,000**	**260,000**	

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Water Treatment	Water and Pollution Control	510-3972-489 510-3973-489

SAM PUMP STATION IMPROVEMENTS **PROJECT STATUS:** Advanced

DESCRIPTION/JUSTIFICATION
This project will add a fourth pump ($155,000) to the pump station located at State Avenue and Mortensen Road (SAM). It will also add standby power ($145,000) to the SAM pump station.

COMMENTS
In 2003, the water distribution system was split into two separate pressure zones to accommodate growth in the west and southwest portions of the city. To provide the increased pressure to the new western pressure zone, a booster pump station was built at the intersection of State Avenue and Mortensen Road. Initially only three pumps were installed in the station, with accommodations for a fourth future pump. As growth in that area continues to increase, it now seems prudent to add the fourth pump. Iowa's Water Supply Design Standards require that a water system have redundant electrical power available. This project will add a standby generator to the facility.

As a result of the 2020 derecho, the timing for the standby generator has been advanced by one year. This will provide increased reliability for this important booster pump station. The schedule for the fourth pump is unchanged.

The standby generator will require nominal fuel for monthly testing. It will also be placed on a maintenance agreement to insure it is operational in an emergency. Both of these expenses will be included in the operating budget.

LOCATION
Intersection of State Avenue and Mortensen Road

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		25,000	18,000	7,000			
Construction		275,000	127,000	148,000			
	TOTAL	**300,000**	**145,000**	**155,000**			
FINANCING:							
Water Utility Fund		300,000	145,000	155,000			
	TOTAL	**300,000**	**145,000**	**155,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Production	Water and Pollution Control	510-3962-489

ADVANCED METERING INFRASTRUCTURE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This is a multi-year project to convert the water meter reading system from the existing generator/remote technology to the current industry standard of Automated Meter Reading/Advanced Metering Infrastructure (AMR/AMI). While the project includes water meter reading only, the system being implemented can be expanded to accommodate electric meters as well.

COMMENTS

The water meter reading system installed prior to 2014 was a mechanical system that transmits the meter reading from the water meter (located inside the property) to a remote register on the outside of the property using a low-voltage cable. This technology is obsolete and is no longer available. A cross-departmental team evaluated multiple technology platforms utilizing various combinations of "walk-by" or "drive-by" reads, radio reads, cellular reads, and other methods of obtaining meter readings. The team concluded that an AMR walk-by or drive-by system would be the most cost-effective short-term solution to replace the old technology. The City has entered into a contract with Itron, Inc. to provide the radio read system, reading equipment, and software; and Badger Meter, Inc. to provide water meters for this project. This system is capable of being upgraded to a more sophisticated AMI system in the future that could provide more detailed data collection and could allow meter reading from the office without the need to send a meter reader out into the field.

The replacement program began in FY 2014/15, focusing initially on meter locations that were problematic for the Meter Readers to access. Much of the next two years focused on replacing meters in areas that are not served by the Ames Municipal Electric System, which, as a result, are locations that are more expensive to read on a per-meter basis. The final years will pick up the balance of the meter inventory. The cost to replace 1,900 meters per year is budgeted in the Water Meter Division's operating budget (300 meters for new construction and 1,600 for routine meter replacement). The cost for an additional 500 replacements is included annually as a part of this CIP project.

The operating budget is held at a "typical" number of meter replacements. This CIP page includes only the additional meter replacements necessary to complete the change-out in a timely manner. FY 24/25 will include the roughly 500 final meters for the change-over, included in the operating budget's normal allotment.

LOCATION

City-wide

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Equipment		209,000	103,000	106,000			
	TOTAL	**209,000**	**103,000**	**106,000**			
FINANCING:							
Water Utility Fund		209,000	103,000	106,000			
	TOTAL	**209,000**	**103,000**	**106,000**			

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Water Meter	Water and Pollution Control	510-3947-489

ADA HAYDEN WATER QUALITY STUDY **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
Since the mid-1970s, the lakes at Ada Hayden Park have been used by the Ames Water Plant as a source for augmenting alluvial groundwater recharge during periods of low flows in the South Skunk River. In addition to the drinking water use, the lakes are a defining feature of Ada Hayden Heritage Park, providing a wide array of water-based recreational opportunities for the community. This project is part of an on-going effort to monitor the health of the lakes as development occurs in and around the lake's watershed. In addition to being a valuable tool for City staff, the continued monitoring of the lakes is of interest to many members of the community.

COMMENTS
A preliminary water quality evaluation was made in 2000 as part of the City's "due diligence" effort prior to purchasing the former Hallett's Quarry property. This evaluation focused primarily on potential contamination of the lakes that could have resulted from the former industrial use of the property. Follow-up investigations were performed in FY 2004/05, FY 2009/10, and again in FY 2017/18. These latter investigations were focused on the overall "health" and water quality in the lakes, looking at parameters such as dissolved oxygen, nitrogen and phosphorus, algae and microcystins, suspended solids and turbidity, and bacteria.

As the watershed has developed, the City has made efforts to encourage land use practices that will not have a negative impact on the water quality in the lakes. The long-term intent behind the monitoring effort has been to periodically recheck the lakes (on a five- to seven-year interval) to determine if the existing land practices have been effective in preserving the in-lake water quality.

The intent of this project is to conduct a new monitoring event every five years. The next round would take place during the summers of 2023 and 2024 at an estimated cost of $23,000 per summer.

LOCATION
Ada Hayden Heritage Park

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Contracted Monitoring		46,000		23,000	23,000		
	TOTAL	**46,000**		**23,000**	**23,000**		
FINANCING:							
Water Utility Fund		46,000		23,000	23,000		
	TOTAL	**46,000**		**23,000**	**23,000**		

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**
Utilities - Water Production Water and Pollution Control

LIME LAGOON IMPROVEMENTS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION
This project includes the ongoing major maintenance to the lime lagoons, as well as periodic improvements to increase available working capacity. The timing for constructing additional cells is staggered over time to match growth in demand.

COMMENTS
Lime residuals from the water softening process are stored and dewatered in large storage lagoons. The material is removed annually in the fall and recycled by applying it to farm fields as an agricultural liming agent. The cost of the annual removal and application is budgeted in the operating budget.

A project is underway in FY 2021/22 to rebuild the trench drain in the bottom of one of the oldest cells. These drains aid in the dewatering process. Over time, they have plugged with fine lime particles and have been damaged due to the excavation of lime from the cells using a back hoe. The same modifications are planned for the two oldest cells for FY 2024/25 ($222,000). The purchase of a replacement decant pump ($55,000) is also planned for FY 2024/25. A project that will partially subdivide the large north cell is planned for design in FY 2024/25 with construction the following year.

FY 2024/25 Underdrain replacements ($222,000); replacement decant pump ($55,000); design of new cell ($131,000)

FY 2025/26 Construction of new cell ($1,131,000)

LOCATION
Water Plant lime lagoons, south of East 13th Street, west of the Skunk River

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		131,000			131,000		
Construction		1,353,000			222,000	1,131,000	
Equipment		55,000			55,000		
	TOTAL	**1,539,000**			**408,000**	**1,131,000**	
FINANCING:							
Water Utility Fund		1,539,000			408,000	1,131,000	
	TOTAL	**1,539,000**			**408,000**	**1,131,000**	

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Utilities - Water Production Water and Pollution Control

EAST INDUSTRIAL ELEVATED TANK **PROJECT STATUS:** Cost Increase Delayed

DESCRIPTION/JUSTIFICATION
This project involves the construction of a new one-million-gallon elevated tank ("water tower") to serve the Prairie View Industrial Center along Lincoln Way east of Interstate 35.

COMMENTS
In order to meet the anticipated water demands in this new area in east Ames, a new elevated tank is required. The tank will help stabilize pressures at the far eastern edge of the city limits, as well as provide the necessary volume for firefighting purposes in what is envisioned as a moderate to heavy industrial neighborhood.

The project is shown as being delayed by one year from what was shown in last year's CIP. The schedule will be adjusted as needed to meet the pace of development in the industrial park. Cost estimates were updated in October 2021 to reflect the current bidding climate. The hydraulic model of the distribution system will be updated as development in the industrial park unfolds to determine when the tank will be required.

LOCATION
Intersection of East Lincoln Way and 580th Avenue

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	295,000			195,000	100,000	
Construction	5,900,000				5,900,000	
TOTAL	**6,195,000**			**195,000**	**6,000,000**	
FINANCING:						
Drinking Water State Revolving Fund	6,195,000			195,000	6,000,000	
TOTAL	**6,195,000**			**195,000**	**6,000,000**	

PROGRAM - ACTIVITY: Utilities - Water Pumping
DEPARTMENT: Water and Pollution Control
ACCOUNT NO.

WELL CONTROLS REHABILITATION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project involves routine upgrades to the programmable logic controllers (PLCs) that operate each well and provide a connection back to the Water Plant's Supervisory Control And Data Acquisition (SCADA) system.

COMMENTS
A project was completed in FY 2019/20 that, among other things, replaced the PLCs in 10 wells. This project will replace the PLCs in the remaining 15 wells. Ongoing replacements are scheduled every ten years; the schedule may be adjusted depending on replacement parts availability and technology advancements.

LOCATION
Wells located in multiple well fields

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		90,000				90,000	
Construction		515,000				515,000	
	TOTAL	**605,000**				**605,000**	
FINANCING:							
Water Utility Fund		605,000				605,000	
	TOTAL	**605,000**				**605,000**	

PROGRAM - ACTIVITY: Utilities - Water Production

DEPARTMENT: Water and Pollution Control

ACCOUNT NO.

IOWAY CREEK BOOSTER PUMP STATION DEMOLITION

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION
This project will demolish the abandoned booster pump station located at 1420 Lincoln Way (immediately east of Ioway Creek).

COMMENTS
The property located at 1420 Lincoln Way was acquired by the City in 1924. Prior to that date, residents in the Fourth Ward were supplied water purchased from Iowa State College. In that year, the City erected a 200,000-gallon elevated tank on Hunt Street and a booster pump station at 1420 Lincoln Way, allowing the Fourth Ward to be served by the City's water utility. The booster pump station remained in use until 1990, when the distribution system was altered to function as a single pressure zone. With that change, the pump station was no longer needed. The building served for several years as a storage building for the Water & Pollution Control Department. Currently, it sits vacant and unused, and there are no identified future uses for the structure. This project will demolish the existing structure and leave the property as open green space.

LOCATION
1420 Lincoln Way

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		15,000				15,000	
Demolition		110,000				110,000	
	TOTAL	**125,000**				**125,000**	
FINANCING:							
Water Utility Fund		125,000				125,000	
	TOTAL	**125,000**				**125,000**	

PROGRAM - ACTIVITY: Utilities - Water Pumping

DEPARTMENT: Water and Pollution Control

ACCOUNT NO.

UTILITIES - WATER POLLUTION CONTROL

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Nutrient Reduction Modifications	11,395,000	1,260,000	4,640,000	5,495,000	-	-	59
Cogeneration System Maintenance	1,525,000	1,525,000	-	-	-	-	60
WPC Plant Facility Improvements	1,592,000	1,010,000	-	-	482,000	100,000	61
Watershed-Based Nutrient Reduction	1,000,000	200,000	200,000	200,000	200,000	200,000	62
WPC Electrical System Maintenance	147,000	97,000	-	-	50,000	-	63
WPC Headworks Modifications	10,754,000	-	4,269,000	6,485,000	-	-	64
Lift Station Improvements	530,000	-	-	-	329,000	201,000	65
Clarifier Maintenance	750,000	-	-	-	-	750,000	66
TOTAL PROJECT EXPENDITURES	**27,693,000**	**4,092,000**	**9,109,000**	**12,180,000**	**1,061,000**	**1,251,000**	
FUNDING SOURCES:							
Debt:							
State Revolving Fund Loans	22,149,000	1,260,000	8,909,000	11,980,000	-	-	
City:							
Sewer Utility Fund	5,544,000	2,832,000	200,000	200,000	1,061,000	1,251,000	
TOTAL FUNDING SOURCES	**27,693,000**	**4,092,000**	**9,109,000**	**12,180,000**	**1,061,000**	**1,251,000**	

NUTRIENT REDUCTION MODIFICATIONS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION
In early 2013, the Iowa Department of Natural Resources (IDNR) released the Iowa Nutrient Reduction Strategy. This strategy will require the State's 102 largest municipal wastewater facilities to install "technically and economically feasible process changes for nutrient removal." A feasibility study was completed in early 2019 that identified the City's desired approach to meet the nutrient standards. The cost estimates shown below are built around a "Conventional Activated Sludge – Biological Nutrient Removal" treatment scheme, implemented over a 20-year period.

COMMENTS
The Iowa Nutrient Reduction Strategy lays out a schedule for point source discharges (including the Ames WPCF) based on the National Pollutant Discharge Elimination System (NPDES) permit renewal cycle for each facility. The City submitted a plan to the Iowa Department of Natural Resources in early 2019 that described the City's plan for installing nutrient reduction at the facility. The next discharge permit is expected to include a timeline to complete the modifications.

The schedule would construct back-up capacity for the trickling filters in Phase 1, with engineering beginning in FY 2022/23 and construction occurring over the following two years. The second phase would begin in approximately FY 2027/28 and would remove the trickling filters and construct additional nutrient removal capacity. The third and final phase would begin in approximately FY 2037/38, bringing on-line the full nutrient reduction capacity.

2017/18	Preliminary Engineering Report	285,000
2022/23-2024/25	Phase 1 Engineering and Construction	11,395,000
2027/28-2028/29	Phase 2 Engineering and Construction	14,260,000
2037/38-2038/39	Phase 3 Engineering and Construction	15,170,000
Total		**$41,110,000**

The "scope change" comes from incorporating the SCADA servers ($60,000) and Programmable Logic Controllers (PLC's) into this large upgrade project. Those items were previously included as stand-along items on the WPC Facility Improvements CIP page. The combined net cost is unchanged.

LOCATION
Water Pollution Control Facility; four miles south of Highway 30, east of I-35

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	1,760,000	1,260,000	250,000	250,000		
Construction	9,635,000		4,390,000	5,245,000		
TOTAL	**11,395,000**	**1,260,000**	**4,640,000**	**5,495,000**		
FINANCING:						
Clean Water State Revolving Fund	11,395,000	1,260,000	4,640,000	5,495,000		
TOTAL	**11,395,000**	**1,260,000**	**4,640,000**	**5,495,000**		

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - WPC Plant	Water and Pollution Control	522-3420-489

COGENERATION SYSTEM MAINTENANCE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project includes the ongoing major maintenance needs of the Water Pollution Control Facility's (WPCF) cogeneration system and hauled waste receiving infrastructure. Specific projects planned in the next five years include maintenance of Methane Engines #2 (MG2) and #3 (MG3), and the construction of a fats, oils, and grease (FOG) receiving station.

COMMENTS
The WPC Facility uses anaerobic digestion as a core treatment process for wastewater solids. The digestion process stabilizes waste, reduces the volume of solids, and provides a measure of pathogen destruction. The process also generates methane "bio-gas" as a by-product. This gas is captured and used as a fuel source for the on-site electrical generation of approximately 20% of the facility's total electricity needs. The facility has two gas-fired engines capable of operating on either the bio-gas or natural gas. Each engine drives a dedicated electric generator. A heat recovery system on the engines uses the waste heat to warm the digesters, further reducing the energy demand of the facility. The facility also has a direct-fired boiler that operates as a back-up to the engine-generator units.

The FOG Receiving Station will improve the receiving capabilities of the facility by paving the unloading areas, changing to more appropriate pumping capabilities, and better incorporating the ability to accept hauled food waste that has been diverted away from the Resource Recovery Plant.

FY 2022/23 includes the following projects:

Maintenance on MG2 / MG3	250,000
New FOG receiving station	1,275,000
Total	**$1,525,000**

LOCATION
Water Pollution Control Facility; four miles south of Highway 30, east of I-35

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		190,000	190,000				
Construction		1,335,000	1,335,000				
	TOTAL	**1,525,000**	**1,525,000**				
FINANCING:							
Sewer Utility Fund		1,525,000	1,525,000				
	TOTAL	**1,525,000**	**1,525,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - WPC Plant	Water and Pollution Control	520-3447-489 520-3470-489

WPC PLANT FACILITY IMPROVEMENTS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

It is necessary to plan for the orderly repair, replacement, and upgrade of the Water Pollution Control Facility equipment in order to continue high-quality treatment and comply with environmental regulations. This project involves annual equipment repairs, maintenance, replacement, and upgrades at the plant. This facility became fully operational in November 1989. Life expectancies for plant equipment vary from five to six years to more than thirty years.

COMMENTS

The Administration Building was constructed in 1988, and much of the interior finishes are original and showing significant wear and deterioration. Also, the building originally housed the Laboratory Services Division which is now located in the Technical Services Complex on E. 5_{th} Street. The renovations will convert the old lab space into a training and meeting room. Other updates to restrooms, lockers, and other spaces are included as well. This was originally included as a scope element of the Nutrient Reduction Modifications Project but has been pulled out as a stand-alone element to hopefully have the work completed ahead of the rest of the plant work. The remote storage building and grain bin controls were originally included in the current year (FY 2021/22), but have been delayed with the intention of being able to obtain better pricing in the future. The atomic absorption spectrophotometer is used to detect heavy metals in the wastewater and biosolids. Funds are allocated in FY 2026/27 to work on some of the many buried valves and valve operators throughout the plant. Some items shown last year have been dropped (SCADA server replacement, PLC replacements, fire alarm replacement), as these items will be addressed by the Nutrient Reduction Modifications Project.

The schedule for these improvements is as follows:

2022/23 Administration Building Renovation ($1,010,000)
2025/26 Remote Storage Building and Grain Bin Controls ($400,000); Replace Atomic Absorption Spectrophotometer ($82,000)
2026/27 Buried Valve Maintenance ($100,000)

LOCATION

WPC Plant; four miles south of Highway 30, east of I-35

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering & Administration	164,000	164,000				
Construction & Equipment	1,428,000	846,000			482,000	100,000
TOTAL	**1,592,000**	**1,010,000**			**482,000**	**100,000**
FINANCING:						
Sewer Utility Fund	1,592,000	1,010,000			482,000	100,000
TOTAL	**1,592,000**	**1,010,000**			**482,000**	**100,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - WPC Plant	Water and Pollution Control	520-3418-489

WATERSHED-BASED NUTRIENT REDUCTION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The Water Pollution Control Facility is being converted to a nutrient removal treatment technology over a period of 20 years. Separate from the work that will occur inside the treatment plant, watershed-based improvements performed by the City can be included in the Iowa Nutrient Reduction Exchange. Staff is currently working with the Iowa League of Cities and other large utilities to encourage the Iowa Department of Natural Resources to allow these off-site nutrient reductions to be "banked" as credit toward any future, more stringent nutrient reduction requirements imposed on the WPC Facility. This project sets aside $200,000 per year that can be put toward urban watershed improvements that have a nutrient reduction component.

COMMENTS
Projects undertaken will not only have a nutrient reduction element, but will also provide additional, ancillary benefits such as flood risk reduction, increased recreational opportunities, improved wildlife habitat, urban storm water management, and drinking water source protection. Examples of projects currently underway include:

- *Soil and Water Outcomes Fund*: The second year of a partnership with the Soil and Water Outcomes Fund (a subsidiary of the Iowa Soybean Association) to fund in-field conservation practices such as cover crops. Over 2,000 acres of cover crops will be planted as a result of this project.
- *Moore Memorial West*: The City is converting 35 acres of farm ground west of Ioway Creek and Moore Memorial Park to prairie. This project is in collaboration with Ames Parks & Recreation Department and will expand the park with soft walking trails, provide a perennial groundcover to slow runoff, and create wildlife and pollinator habitat.
- *Story County Saturated Buffer & Bioreactor Project*: Currently in development is a partnership with Story County and Polk County Conservation to bundle together multiple edge-of-field conservation practices that can be bid as a single package.
- *Dotson Wetland*: A large, constructed wetland to the northwest of Ames is being designed in partnership with Ducks Unlimited and Story County. The wetland will treat subsurface drainage from over 2,200 acres of farm fields.
- Other projects are in the works with Ames Public Works, Ames Parks & Recreation, Prairie Rivers of Iowa, and others.

LOCATION
Throughout the community; specific locations will vary by year

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		150,000	30,000	30,000	30,000	30,000	30,000
Construction		850,000	170,000	170,000	170,000	170,000	170,000
	TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**
FINANCING:							
Sewer Utility Fund		1,000,000	200,000	200,000	200,000	200,000	200,000
	TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - WPC Plant	Water and Pollution Control	520-3422-489

WPC ELECTRICAL SYSTEM MAINTENANCE **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION
This project covers the periodic maintenance of the overall electrical system for the facility. It includes routine preventative maintenance projects intended to sustain the safety and functionality of the electrical components at a high level. It also may include periodic major repair or replacement projects not directly associated with other CIP projects.

COMMENTS
A main component of the facility's electrical system is the switchgear, which is a series of electrical cabinets that contain the disconnect switches and circuit breakers used to protect and isolate electrical equipment. Over time, the equipment can build up dust, insects, and other debris. The connections can become loose over time, and the insulation can degrade. These issues can create a reliability problem and can also pose a serious fire hazard. To help ensure that the equipment performs as needed, a routine schedule of preventative maintenance has been used, with the main switchgear and the Total Energy Building switchgear undergoing an intensive cleaning every six years, with a less-invasive inspection every three years. Both sets of switchgear are planned for the intensive cleaning in FY 2022/23, and the less intensive inspection in FY 25/26.

The scope and cost change come from extending the period of intensive cleanings from a five-year schedule to six years, and the addition of the inspection at an interval halfway between the cleanings.

LOCATION
Water Pollution Control Plant; four miles south of Highway 30, east of I-35

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Construction		147,000	97,000			50,000	
	TOTAL	**147,000**	**97,000**			**50,000**	
FINANCING:							
Sewer Utility Fund		147,000	97,000			50,000	
	TOTAL	**147,000**	**97,000**			**50,000**	

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - WPC Plant	Water and Pollution Control	520-3438-489

WPC HEADWORKS MODIFICATIONS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION
This project includes a complete replacement of the entire headworks system beginning in FY 2023/24. This work will likely be combined with the Nutrient Reduction Modifications project into a single bid package to try to capture some design and construction coordination and economies of scale.

COMMENTS
The headworks of the Water Pollution Control (WPC) Facility is where the very first treatment steps take place, including the capture and removal of rags and large debris, as well as the removal of heavy sand and grit. These materials can plug downstream valves and equipment and are extremely abrasive to pumps and piping. A long-range facility needs assessment completed in 2012 provided a prioritized schedule of structural and equipment replacement needs. This work was identified in that assessment. The scope change comes from moving the fire alarm replacement from the Facility Improvements Project into this project (the combined net cost did not change).

The cost breakdown for individual elements of the project is as follows:

		Engineering	Construction	Total
2023/24 – 2024/25	Replace Grit Conveyor	346,000	1,689,000	2,035,000
	Bar Screen Improvements	599,000	2,926,000	3,525,000
	Grit Wash Clarifier	74,000	359,000	433,000
	Replace GRUs with New Head Cells	545,000	2,660,000	3,205,000
	RWPS Piping and Supports	241,000	1,179,000	1,420,000
	Replace Fire Alarm System	13,000	123,000	136,000
	Total	**$1,818,000**	**$8,936,000**	**$10,754,000**

LOCATION
WPC Facility; four miles south of Highway 30, east of I-35

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	1,818,000		1,117,000	701,000		
Construction	8,936,000		3,152,000	5,784,000		
TOTAL	**10,754,000**		**4,269,000**	**6,485,000**		
FINANCING:						
Clean Water State Revolving Fund	10,754,000		4,269,000	6,485,000		
TOTAL	**10,754,000**		**4,269,000**	**6,485,000**		

PROGRAM - ACTIVITY: Utilities - WPC Plant

DEPARTMENT: Water and Pollution Control

ACCOUNT NO.

LIFT STATION IMPROVEMENTS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION
This project includes periodic maintenance and repair of the wastewater lift stations.

COMMENTS
The project in FY 2025/26 will connect three wastewater lift stations (Orchard Drive, Dayton Avenue, and Freel Drive) to the Water Pollution Control Facility using fiber optic cables. This will provide greater security of the communications, increased communications reliability, and the ability to bring back security video of these unstaffed, remote facilities. It also includes the addition of wireless flow monitoring at the lift stations and key locations in the collection system. The timing of the work coincides with the planned schedule for installing the transportation network. It does not include a connection to the Northwood Lift Station on Duff Avenue, as that lift station is planned to be eliminated in FY 2028/29. The cost estimates for the fiber have been updated since last year.

The FY 2026/27 work is to replace the aging pumps and controls at the Freel Drive lift station.

LOCATION
Orchard Drive, Dayton Avenue, and Freel Drive Lift Stations

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		56,000				30,000	26,000
Construction		474,000				299,000	175,000
	TOTAL	**530,000**				**329,000**	**201,000**
FINANCING:							
Sewer Fund		530,000				329,000	201,000
	TOTAL	**530,000**				**329,000**	**201,000**

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**
Utilities - WPC Plant Water and Pollution Control

CLARIFIER MAINTENANCE **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project includes a repainting of the steel structures of the Primary (3 of 4), Intermediate (2 of 2), and Final (2 of 2) Clarifiers. The coatings protect the steel elements from the harsh conditions present both in the submerged portions of the clarifiers as well as at the air/water interface.

COMMENTS
The structures were last repainted over a period of several years between 2005 and 2012. The typical life of a recoating project is 15-20 years in this application. The actual cost will depend on the condition of the coating system at the time of the project, and the scope could range from spot touch-ups to full blasting and recoating. The scope could be reduced depending on the nutrient reduction technology that is ultimately implemented at the facility and how many clarifiers are retained.

LOCATION
WPC Plant; four miles south of Highway 30, east of I-35

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Construction		750,000					750,000
	TOTAL	**750,000**					**750,000**
FINANCING:							
Sewer Utility Fund		750,000					750,000
	TOTAL	**750,000**					**750,000**

PROGRAM - ACTIVITY: Utilities - WPC Plant

DEPARTMENT: Water and Pollution Control

ACCOUNT NO.

UTILITIES - WATER DISTRIBUTION

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Ames Plan 2040 Utility Infrastructure	1,845,000	320,000	1,525,000	-	-	-	68
Water System Improvements	10,250,000	1,750,000	1,900,000	2,050,000	2,050,000	2,500,000	69
TOTAL PROJECT EXPENDITURES	**12,095,000**	**2,070,000**	**3,425,000**	**2,050,000**	**2,050,000**	**2,500,000**	
FUNDING SOURCES:							
City:							
Water Utility Fund	10,250,000	1,750,000	1,900,000	2,050,000	2,050,000	2,500,000	
Other:							
American Rescue Plan	1,845,000	320,000	1,525,000	-	-	-	
TOTAL FUNDING SOURCES	**12,095,000**	**2,070,000**	**3,425,000**	**2,050,000**	**2,050,000**	**2,500,000**	

AMES PLAN 2040 WATER UTILITY INFRASTRUCTURE **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This new program involves installation of public water infrastructure into priority tiers shown in the Growth Plan 2040. By installing the water systems proactively, this opens the development ability for lands in the adopted growth tiers. Design ahead of construction installation takes several months followed by a couple months for Iowa DNR permitting and two months for bidding and approval of contract and bond.

COMMENTS

The American Rescue Plan Act (ARPA) of 2021, which was signed into law on March 11, 2021, provides $350 billion in additional funding for state and local governments. The local funding portion is approximately $130 billion, equally divided between cities and counties. The City of Ames is slated to receive approximately $14.3 million. Eligible uses include revenue replacement for the provision of government services to the extent of the reduction in revenue due to the COVID-19 public health emergency and investments in water, sewer, and broadband infrastructure. After revenue replacement, there will be approximately $12.26 million available for infrastructure investment.

LOCATION

2022/23 Extend 12” water main along Lincoln Way to County Line Road ($320,000)
2023/24 Prairie View Industrial Center (East Lincoln Way: Teller Avenue to Potter Avenue ($1,000,000) extend 14” water main along US Highway 69 (Ken Maril south past waterway) ($525,000)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	358,500	64,000	294,500			
Construction	1,486,500	256,000	1,230,500			
TOTAL	**1,845,000**	**320,000**	**1,525,000**			
FINANCING:						
American Rescue Plan Act	1,845,000	320,000	1,525,000			
TOTAL	**1,845,000**	**320,000**	**1,525,000**			

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Water Distribution	Public Works	122-8470-489

WATER SYSTEM IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This program provides for replacing water mains in areas that experience rusty water problems, generally caused by aged cast iron pipe (most often 4-inch and 6-inch but also some larger mains such as 12-inch). It also provides for installing larger distribution mains in areas that have 4-inch supply lines, transferring water services from 4-inch water mains in streets where larger water mains exist, and abandoning 4-inch water mains. Eliminating duplicate water mains, where possible, improves water flow and helps reduce rusty water. Installing larger distribution lines in areas that have a high concentration of 4-inch supply lines and less than desirable firefighting capacity (predominantly in the older areas of the community) provides larger supply quantities in relation to the current and proposed land uses, in accordance with the Land Use Policy Plan. This program also includes projects to loop the water system to provide improved pressures, circulation, and redundancy to the community. This program may also include maintenance issue areas, such as those that experience a large number of water main breaks, or the replacement of leaking valves on larger water mains along major roadways where the complexity of the project encourages replacement by a contractor.

COMMENTS

Rusty water complaints highlight the continuing need to replace the aged 4-inch and 6-inch cast iron water mains in order to provide firefighting capacity and improved water quality in the system. The system currently has 7.5 miles of active 4-inch water main (estimated $12 million) and 28.5 miles of active, aged 6-inch cast iron water main (estimated $45 million). There are estimated 130 lead services ($1 million) still active, connected to these older mains. Improvements to these water mains will result in reduced maintenance costs. Replacing these mains will also result in improved fire safety and water quality. Annual funding continues to be increased in this program to accelerate replacement of utilities.

The cost of these public infrastructure projects is a high priority need to continue to improve the public water system to provide water quality and firefighting capacity to the community.

LOCATION

Water system improvements and water service transfers will be completed at various locations in the community. Project locations will be coordinated with upcoming roadway improvement projects to minimize construction impacts to neighborhoods.

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		1,450,000	250,000	265,000	280,000	280,000	375,000
Construction		8,800,000	1,500,000	1,635,000	1,770,000	1,770,000	2,125,000
	TOTAL	**10,250,000**	**1,750,000**	**1,900,000**	**2,050,000**	**2,050,000**	**2,500,000**
FINANCING:							
Water Utility Fund		10,250,000	1,750,000	1,900,000	2,050,000	2,050,000	2,500,000
	TOTAL	**10,250,000**	1,750,000	**1,900,000**	**2,050,000**	**2,050,000**	**2,500,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Distribution	Public Works	510-8461-489

UTILITIES - SANITARY SEWER SYSTEM

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Ames Plan 2040 Sewer Utility Infrastructure	9,393,962	3,946,981	5,446,981	-	-	-	71
Sanitary Sewer System Improvements	22,333,000	4,500,000	4,548,000	4,741,000	4,944,000	3,600,000	72
Clear Water Diversion	250,000	50,000	50,000	50,000	50,000	50,000	73
TOTAL PROJECT EXPENDITURES	**31,976,962**	**8,496,981**	**10,044,981**	**4,791,000**	**4,994,000**	**3,650,000**	
FUNDING SOURCES:							
Debt:							
State Revolving Fund Loans	17,233,000	4,050,000	4,198,000	4,391,000	4,594,000	-	
City:							
Sewer Utility Fund	5,350,000	500,000	400,000	400,000	400,000	3,650,000	
Other:							
American Rescue Plan	9,393,962	3,946,981	5,446,981	-	-	-	
TOTAL FUNDING SOURCES	**31,976,962**	**8,496,981**	**10,044,981**	**4,791,000**	**4,994,000**	**3,650,000**	

AMES PLAN 2040 SANITARY SEWER UTILITY INFRASTRUCTURE **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This new program involves installation of public sanitary sewer infrastructure into priority tiers shown in the Growth Plan 2040. By installing the sanitary sewer systems proactively, this opens the development ability for lands in the adopted growth tiers. Design ahead of construction installation takes several months followed by a couple months for Iowa DNR permitting and two months for bidding and approval of contract and bond.

COMMENTS

The American Rescue Plan Act(ARPA) of 2021, which was signed into law on March 11, 2021, provides $350 billion in additional funding for state and local governments. The local funding portion is approximately $130 billion, equally divided between cities and counties. The City of Ames is slated to receive approximately $14.3 million. Eligible uses include revenue replacement for the provision of government services to the extent of the reduction in revenue due to the COVID-19 public health emergency and investments in water, sewer, and broadband infrastructure. After revenue replacement, there will be approximately $12.26 million available for infrastructure investment.

LOCATION

2022/23 Oversize sanitary sewer through Huang/Hunziker parcel north of Sunset Ridge Subdivision ($1,065,000) East 13th Sanitary Sewer (S. Dayton Ave to east of I-35) ($2,881,981)

2023/24 Prairie View Industrial Center (E. Lincoln Way: Teller Avenue to Potter Avenue) ($1,000,000); extend sanitary sewer from trunk main at 265th Street west then north along US Hwy 69 to waterway south of Ken Maril ($3,381,981), extend 12" sanitary sewer from Mortensen Road along County Line Road to Lincoln Way ($1,065,000)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	1,800,914	710,457	1,090,457			
Construction	7,593,048	3,236,524	4,356,524			
TOTAL	**9,393,962**	**3,946,981**	**5,446,981**			
FINANCING:						
American Rescue Plan Act	9,393,962	3,946,981	5,446,981			
TOTAL	**9,393,962**	**3,946,981**	**5,446,981**			

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Sanitary Sewer	Public Works	122-8520-489 122-8571-489

SANITARY SEWER SYSTEM IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This is the annual program for rehabilitation/reconstruction of deficient sanitary sewers and deteriorated manholes at various locations throughout the city. Most of the problem areas are in sewers that can be bundled into a construction package for cost efficiency, or in problem areas deeper than City crews are equipped to handle. This program, therefore, provides for those repairs by outside firms. The goal of this program is to identify and remove major sources of inflow/infiltration as a means of lowering the peak wet weather flow at the treatment plant.

COMMENTS

System improvement locations have been identified through the Sanitary Sewer System Evaluation (SSSE) field investigation completed over the last several years. Through manhole inspections, smoke testing, and televising, severe structural defects (ratings of "4" or "5") have been identified as priorities within this program. It is highly recommended by national standards to fix structural defects with ratings of "5" within 12 months. According to national standards, structural defects with ratings of "4" are necessary to be fixed within five years. *It was originally estimated that the system would need $25.7 million in improvements over 10 years to improve the infrastructure with ratings of "4" or "5". The program commenced in FY 2015/16,* **however construction costs have inflated at a higher rate than anticipated causing extensions to the timeframe. To date, $16,548,330 of improvements have taken place and it is estimated there to be $23.5 million remaining to fix the "4" and "5" rated sewers (estimated to be completed with FY 2027/28 funding).** This program does not reflect any capacity issues that may be identified. Suggested work activities include rehabilitating or replacing manholes, repairing or lining pipe, and similar work. City maintenance crews are continuing to also complete projects identified by the SSSE, as equipment and staffing allows.

This program continues to make improvements to the sanitary sewer system to remove inflow/infiltration, thereby reducing the peak wet weather flows to enter the system and cause back-ups, similar to what is reported in the survey. These rehabilitation improvements will improve the capacity of the sanitary sewer system.

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		3,456,000	684,000	684,000	684,000	684,000	720,000
Construction		18,877,000	3,816,000	3,864,000	4,057,000	4,260,000	2,880,000
	TOTAL	**22,333,000**	**4,500,000**	**4,548,000**	**4,741,000**	**4,944,000**	**3,600,000**
FINANCING:							
State Revolving Fund (SRF)		17,233,000	4,050,000	4,198,000	4,391,000	4,594,000	
Sewer Utility Fund		5,100,000	450,000	350,000	350,000	350,000	3,600,000
	TOTAL	**22,333,000**	**4,500,000**	**4,548,000**	**4,741,000**	**4,944,000**	**3,600,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Sanitary Sewer	Public Works	520-8542-489 522-8542-489

CLEAR WATER DIVERSION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This is the annual program providing for diversion of footing drain discharge from sanitary sewers to storm sewers.

Clear water from footing drains causes overloading and backups in the sanitary sewer as well as increases in the volume of clean water that is treated at the sewage treatment facility. The Clear Water Diversion program historically involved diverting footing drain discharge from sanitary sewers to storm sewers. This diversion results in lower volumes of clean water needing treatment at the sewage treatment facility, thereby decreasing operating and maintenance costs of that facility. In addition, customers should experience fewer, less severe sewer backups.

COMMENTS
The Inflow and Infiltration Study, undertaken in 1995, showed that in order for clear water diversion to be cost effective, an individual sump pump must discharge in excess of 1,000 gallons per day. To encourage participation in the footing drain grant program, City Council authorized grants to participating property owners. In all, 2,334 footing drain grants were paid to property owners under this program through July 1, 2011, when the grant program was suspended.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Construction	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Sewer Utility Fund	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Sanitary Sewer	Public Works	520-8585-489

UTILITIES - STORMWATER

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Stormwater Erosion Control Program	4,750,000	750,000	1,250,000	750,000	1,250,000	750,000	75
Low Point Drainage Improvements	1,500,000	200,000	200,000	350,000	500,000	250,000	76
Stormwater Improvement Program	2,850,000	400,000	500,000	650,000	650,000	650,000	77
Stormwater Quality Improvements	700,000	100,000	100,000	100,000	200,000	200,000	78
South Skunk River Improvements	2,100,000	-	2,100,000	-	-	-	79
Stormwater Detention/Retention Maint	150,000	-	-	-	-	150,000	80
TOTAL PROJECT EXPENDITURES	**12,050,000**	**1,450,000**	**4,150,000**	**1,850,000**	**2,600,000**	**2,000,000**	
FUNDING SOURCES:							
City:							
Stormwater Utility Fund	8,350,000	1,050,000	1,650,000	1,450,000	2,200,000	2,000,000	
Other:							
Grant Funds	3,700,000	400,000	2,500,000	400,000	400,000	-	
TOTAL FUNDING SOURCES	**12,050,000**	**1,450,000**	**4,150,000**	**1,850,000**	**2,600,000**	**2,000,000**	

STORMWATER EROSION CONTROL PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program provides for stabilization of areas that have become eroded in streams, channels, swales, gullies, or drainage ways that are part of the stormwater system. This program provides a more permanent control of the erosion and will reduce recurring maintenance costs in these areas.

COMMENTS

Following the floods of 2010, an Urban Stream Assessment was updated, which rated the stream banks of each tributary of Ada Hayden, College Creek, Clear Creek, Onion Creek, Worle Creek, Ioway Creek, and the South Skunk River. This assessment identified areas where stabilization is a priority. As monitoring activities associated with the National Pollutant Discharge Elimination System (NPDES) permit requirements continue, further locations for future improvements will be identified.

The State Revolving Fund (SRF) Sponsored Project funding for this program is a grant connected with SRF funding for the Sanitary Sewer Rehabilitation Program and not guaranteed to be awarded. Year five of this CIP proposes shifting away from SRF funding to Storm Water Utility funding for this program.

Staff receives numerous communications from residents requesting these projects and asking for updates on the status. This is a high priority program.

LOCATION

2022/23	Clear Creek bank stabilization (near 4921 Utah Drive) and Clear Creek bank stabilization (west of British Columbia Avenue)
2023/24	Inis Grove Park (Duff Avenue restroom facilities), unnamed tributary east of 4415 Lincoln Way, and College Creek (Hemingway Drive area)
2024/25	Clear Creek bank stabilization (west of North Dakota Avenue)
2025/26	Canterbury Court waterway and Mortensen Parkway/University Blvd (Gateway Hill Park)
2026/27	Ioway Creek (Stange Road/Veenker Golf Course)

Stuart Smith Park is a location for future Capital Improvement Plans.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	950,000	150,000	250,000	150,000	250,000	150,000
Construction	3,800,000	600,000	1,000,000	600,000	1,000,000	600,000
TOTAL	**4,750,000**	**750,000**	**1,250,000**	**750,000**	**1,250,000**	**750,000**
FINANCING:						
Storm Water Utility Fund	3,150,000	350,000	850,000	350,000	850,000	750,000
State Revolving Fund (SRF) Grant Program	1,600,000	400,000	400,000	400,000	400,000	
TOTAL	**4,750,000**	**750,000**	**1,250,000**	**750,000**	**1,250,000**	**750,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Storm Water	Public Works	560-8638-489 561-8638-489

LOW POINT DRAINAGE IMPROVEMENTS **PROJECT STATUS:** Cost Change Site Change

DESCRIPTION/JUSTIFICATION

This is the annual program for drainage improvements to decrease flooding at low points. Low point drainage improvements are not only focused on residential street locations, but specifically on those locations most in need of the improvements as affected by standing water, flooding, and insufficient pipe capacity. During heavy rain, some areas become flooded, and damage to private property occasionally occurs. This program provides for installation of drainage improvements to decrease this flooding at low points. These improvements may include construction of detention areas, new pipe systems, and replacement systems to increase the ability to control the runoff so it can be carried by downstream systems.

COMMENTS

Addressing these drainage issues will reduce flooding problems on both public and private property. The amount of time spent setting out barricades in areas that flood during heavy rains will also be reduced. Locations already identified for improvements as part of this program, in addition to new complaints received over the past year, have been prioritized as shown below. Staff receives numerous communications from residents requesting these projects and asking for updates on the status. Stormwater and flooding continue to receive significant feedback as part of the Residential Satisfaction Survey.

The cost/site change is due to eliminating South Dayton/Isaac Newton from 2024/25. A storm sewer intake is being added to this location with another project.

LOCATION

2022/23 Ferndale Avenue/Hunziker Drive area and Northridge Lane
2023/24 Garnet Drive/Meadow Place and Idaho Avenue/Idaho Court
2024/25 South of Ken Maril Road (extend earthen berm behind 300/400 blocks) and Crystal drainage ditch (east of Crystal Street cul-de-sac)
2025/26 6th Street/Duff Avenue, 20th Street/Northwestern Avenue, South Bell Avenue/South East 16th Street, and Grove Avenue/River Oak Drive
2026/27 Duff Avenue/6th Street and Crystal Street (200 Block)

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		270,000	40,000	40,000	52,500	100,000	37,500
Construction		1,230,000	160,000	160,000	297,500	400,000	212,500
	TOTAL	**1,500,000**	**200,000**	**200,000**	**350,000**	**500,000**	**250,000**
FINANCING:							
Storm Water Utility Fund		1,500,000	200,000	200,000	350,000	500,000	250,000
	TOTAL	**1,500,000**	**200,000**	**200,000**	**350,000**	**500,000**	**250,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Storm Water	Public Works	560-8651-489

STORMWATER IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program is to repair or replace deteriorated storm sewer pipes and intakes. Areas of concentration for storm sewer repairs will be those locations programmed for street improvements and those areas where structural deficiencies are identified.

Many intakes are brick or concrete and have experienced repeated “freeze/thaw” conditions during winters and springs. This repeated freeze/thaw action causes bricks and mortar to deteriorate, resulting in collapsed intakes. This program provides for a proactive response by contractually repairing/replacing intakes on a scheduled basis. In addition to the contractual work provided in this program, City crews provide immediate repair of those intakes that pose an immediate concern for life, health, or safety.

COMMENTS

Maintenance crews, through citizen inquiries and/or storm sewer inspections, have identified storm sewer structural deficiencies within the system. These include areas where the pipe has cracked or is missing sections or pieces of pipe. This program will provide funding to correct these deficiencies.

Completion of the Stormwater System Analysis will likely identify the need for additional improvements as part of the program.

The results of the 2019 Residential Satisfaction Survey showed stormwater drainage improvements being at a level of 80% important (the highest level over the past five years of survey results and within the top three priorities) of capital improvement priorities. The 2021 Residential Satisfaction Survey states stormwater drainage projects to be the third highest project priorities (behind reconstructing existing streets and traffic flow improvements).

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		425,000	50,000	75,000	100,000	100,000	100,000
Construction		2,425,000	350,000	425,000	550,000	550,000	550,000
	TOTAL	**2,850,000**	**400,000**	**500,000**	**650,000**	**650,000**	**650,000**
FINANCING:							
Storm Water Utility Fund		2,850,000	400,000	500,000	650,000	650,000	650,000
	TOTAL	**2,850,000**	**400,000**	**500,000**	**650,000**	**650,000**	**650,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Storm Water	Public Works	560-8642-489

STORMWATER QUALITY IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

Improvement/treatment of water quality for new development and re-development in the Ames community has been incorporated into the newly adopted Post Construction Stormwater Management Ordinance. This addresses removal of sediment and nutrients before they enter waterways such as Ioway Creek and South Skunk River. This program includes treatment of the water quality volume from public impervious areas (e.g. streets and parking lots).

COMMENTS

This program includes installation of bioretention cells, vegetated swales, native landscape, and rain gardens, soil quality restoration, and other approved best management practices at various locations in the community. These best management practices may be combined with a street improvement project, where the neighborhood/adjacent land owners agree to help with day-to-day maintenance.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	105,000	15,000	15,000	15,000	30,000	30,000
Construction	595,000	85,000	85,000	85,000	170,000	170,000
TOTAL	**700,000**	**100,000**	**100,000**	**100,000**	**200,000**	**200,000**
FINANCING:						
Storm Water Utility Fund	700,000	100,000	100,000	100,000	200,000	200,000
TOTAL	**700,000**	**100,000**	**100,000**	**100,000**	**200,000**	**200,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Storm Water	Public Works	560-8601-489

SOUTH SKUNK RIVER IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
Following the floods of 2010, a comprehensive Flood Mitigation Study was completed. On December 10, 2013, the City Council approved a series of flood mitigation measures. These included discrete elements targeted at undertaking a "stream restoration" of Ioway Creek, working with Iowas Department of Transportation (IDOT) to improve the conveyance capacity of the U.S. Highway 30 bridge, working through the Ioway Creek Watershed Management Authority to pursue flood mitigation alternatives in the upper reaches of the watershed, and conducting a workshop to review and discuss the range of possible floodplain regulatory approaches.

COMMENTS
The Iowa DOT has programmed improvements to the U.S. Highway 30 bridge in the coming years, with a fall 2024 bid letting and construction in 2025 and 2026.

Due to river capacity constraints with the U.S. Highway 30 bridges, the design of the SE 16th Street bridge was established to overtop with a 100-year flood event. Considering IDOT's plans to move forward with capacity changes, a study to increase capacity at the SE 16th Street bridge was included in 2021/22. The results of this study will be reflected as the next (2023-2028) CIP is established.

For the increased bridge capacity to not negatively impact landowners downstream, flood reduction improvements with improved water quality benefits have been identified along the South Skunk River between East 13th Street and SE 16th Street as shown in FY 2025/26 in this CIP. An analysis indicates that a stormwater management facility (e.g. wetland, basin) south of East 13th Street could take the storm water from the existing pipes and disconnect 266 acres of drainage area that currently discharges directly into South Skunk River. Any specific improvements will be determined and programmed after engaging a consultant. Planned improvements at the Water Pollution Control facility utilizing State Revolving Fund (SRF) financing would facilitate leveraging the $2.1 million in SRF grant funding show in FY 2023/24.

LOCATION
2023/24 South Skunk River (SE 16th Street to East 13th Street) Flood Reduction and Water Quality Improvements
2027/28 South East 16th Bridge (increasing drainage capacity) (cost to be determined as part of study to be completed in 2022)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Land Acquisition	2,100,000		2,100,000			
Engineering						
Construction						
TOTAL	**2,100,000**		**2,100,000**			
FINANCING:						
State Revolving Fund (SRF) Grant Program	2,100,000		2,100,000			
TOTAL	**2,100,000**		**2,100,000**			

PROGRAM - ACTIVITY: Utilities - Storm Water
DEPARTMENT: Public Works
ACCOUNT NO.

STORMWATER DETENTION/RETENTION MAINTENANCE PROGRAM

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION

In accordance with the *Municipal Code*, new developments within the community are required to provide stormwater management quantity control. This means maintaining stormwater runoff discharge at pre-developed conditions through the use of extended detention and/or retention. Through establishment of developers' agreements, the City of Ames has accepted responsibility for the long-term maintenance of many of these facilities in residential areas. As these facilities age, sediment accumulates, volunteer vegetation becomes more prevalent, erosion occurs, and structures need to be improved. This annual program addresses those concerns.

COMMENTS

As part of the new post-construction stormwater management ordinance adopted in April 2014, commercial and industrial land owners are responsible to maintain their own stormwater facilities. This ordinance also outlines that the homeowner's association/owner for residential development will maintain all water quality features. However, the City is responsible for long-term maintenance of the regional detention facilities providing water quantity control.

LOCATION

2026/27 Ada Hayden wetlands

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		30,000				30,000	
Construction		120,000				120,000	
	TOTAL	**150,000**				**150,000**	
FINANCING:							
Storm Water Utility Fund		150,000				150,000	
	TOTAL	**150,000**				**150,000**	

PROGRAM - ACTIVITY: Utilities - Storm Water

DEPARTMENT: Public Works

ACCOUNT NO.

UTILITIES - RESOURCE RECOVERY

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Resource Recovery System Improvements	1,397,000	304,500	362,500	334,000	218,500	177,500	82
TOTAL PROJECT EXPENDITURES	**1,397,000**	**304,500**	**362,500**	**334,000**	**218,500**	**177,500**	
FUNDING SOURCES:							
City:							
Resource Recovery Fund	1,397,000	304,500	362,500	334,000	218,500	177,500	
TOTAL FUNDING SOURCES	**1,397,000**	**304,500**	**362,500**	**334,000**	**218,500**	**177,500**	

RESOURCE RECOVERY SYSTEM IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This program is to purchase new and replacement components and equipment at the Resource Recovery Plant. Also included is funding for materials for two annual preventive maintenance projects (replacement of the rotary disc screen rollers (RDS) and chains and rebuilding the C-1 conveyor). Resource Recovery personnel perform the work to complete the preventive maintenance projects.

COMMENTS

2022/23 Preventive maintenance materials for the replacement of the RDS rollers and chains ($60,000); conveyor upgrades ($25,500); #1 mill armored teeth and combs ($42,000); remodel locker room ($20,000); remodel restroom to a gender-neutral locker room ($12,000); switchgear cleaning and maintenance ($85,000); customer convenience center/HHM ($60,000)

2023/24 Preventive maintenance materials for the replacement of the RDS rollers and chains ($60,000); conveyor upgrades ($25,500); #1 mill armored teeth and combs ($42,000); dust pipe replacement/engineering ($115,000); baler siding and roof replacement $35,000); remodel office area for Assistant Superintendent ($20,000); #2 mill hopper ($65,000)

2024/25 Preventive maintenance materials for the replacement of the RDS rollers and chains ($115,000); conveyor upgrades ($25,500); #1 mill armored teeth and combs ($42,000); #1 mill planetary ($50,000); replace east truck bay approach concrete ($65,000); replace C-7 belt ($15,000); #1 mill synchronous motor/engine assembly group ($21,500)

2025/26 Preventive maintenance materials for the replacement of the RDS rollers and chains ($60,000); conveyor upgrades ($25,500); #1 mill armored teeth and combs ($42,000); fire system air compressor ($15,000); maintenance/inventory control software ($23,000); #1 mill replacement rotor ($53,000)

2026/27 Preventive maintenance materials for the replacement of the RDS rollers and chains ($60,000); conveyor upgrades ($25,500); #1 mill armored teeth and combs ($42,000); #1 mill counter comb door ($50,000)

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
System Improvements		1,397,000	304,500	362,500	334,000	218,500	177,500
	TOTAL	**1,397,000**	**304,500**	**362,500**	**334,000**	**218,500**	**177,500**
FINANCING:							
Resource Recovery Fund		1,397,000	304,500	362,500	334,000	218,500	177,500
	TOTAL	**1,397,000**	**304,500**	**362,500**	**334,000**	**218,500**	**177,500**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Resource Recovery	Public Works	590-9003-489

Transportation

CITY OF Ames™

TRANSPORTATION

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
EXPENDITURES:							
Street Improvements	63,666,000	11,236,000	11,250,000	15,530,000	10,825,000	14,825,000	85
Shared Use Path System	5,425,000	905,000	900,000	800,000	1,520,000	1,300,000	98
Traffic Improvements	16,833,980	3,155,580	4,027,600	3,808,600	4,947,200	895,000	103
Street Rehabilitation	4,035,000	1,690,000	1,055,000	580,000	430,000	280,000	111
Transit System	19,397,112	5,058,631	2,971,507	4,096,296	3,618,686	3,651,992	118
Airport	5,853,000	1,120,000	2,550,000	1,383,000	800,000	-	124
TOTAL EXPENDITURES	**115,210,092**	**23,165,211**	**22,754,107**	**26,197,896**	**22,140,886**	**20,951,992**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	59,186,592	10,377,560	11,453,218	12,732,510	12,523,304	12,100,000	

TRANSPORTATION, continued

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
FUNDING SOURCES, continued						
City:						
Road Use Tax	11,341,700	2,292,740	2,795,560	2,500,060	2,553,340	1,200,000
Local Option Sales Tax	4,610,000	875,000	650,000	775,000	910,000	1,400,000
Water Utility Fund	775,000	75,000	475,000	75,000	75,000	75,000
Sewer Utility Fund	500,000	75,000	200,000	75,000	75,000	75,000
Stormwater Utility Fund	250,000	50,000	50,000	50,000	50,000	50,000
Transit Fund	4,942,712	1,137,027	808,744	1,042,329	973,976	980,636
Airport Construction Fund	501,308	112,000	206,222	113,730	69,356	-
Total City Funding	22,920,720	4,616,767	5,185,526	4,631,119	4,706,672	3,780,636
Other:						
MPO/STP Funds	6,004,000	-	400,000	2,814,000	390,000	2,400,000
Federal/State Grants	22,716,080	7,102,884	3,645,363	4,775,567	4,520,910	2,671,356
Iowa State University	60,000	60,000	-	-	-	-
Federal Aviation Administration	4,322,700	1,008,000	2,070,000	1,244,700	-	-
Total Other Funding	33,102,780	8,170,884	6,115,363	8,834,267	4,910,910	5,071,356
TOTAL FUNDING SOURCES	**115,210,092**	**23,165,211**	**22,754,107**	**26,197,896**	**22,140,886**	**20,951,992**

TRANSPORTATION - STREET IMPROVEMENTS

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
CyRide Route Pavement Improvements	4,911,000	2,911,000	-	-	-	2,000,000	87
Concrete Pavement Improvements	15,100,000	3,600,000	950,000	3,600,000	3,600,000	3,350,000	88
Asphalt Street Pavement Improvements	14,000,000	3,000,000	3,000,000	2,900,000	4,000,000	1,100,000	89
Seal Coat Pavement Improvements	6,150,000	750,000	1,750,000	1,750,000	1,000,000	900,000	90
Alley Pavement Improvements Program	2,000,000	400,000	400,000	400,000	400,000	400,000	91
Downtown Street Pavement Improvements	500,000	250,000	-	250,000	-	-	92
Right-of-Way Restoration	1,625,000	325,000	325,000	325,000	325,000	325,000	93
Arterial Street Pavement Improvements	6,500,000	-	1,500,000	2,000,000	-	3,000,000	94
Collector Street Pavement Improvements	5,525,000	-	1,275,000	750,000	1,500,000	2,000,000	95
Campustown Public Improvements	3,475,000	-	1,725,000	-	-	1,750,000	96
South 16th Street Roadway Widening	3,880,000	-	325,000	3,555,000	-	-	97
TOTAL PROJECT EXPENDITURES	**63,666,000**	**11,236,000**	**11,250,000**	**15,530,000**	**10,825,000**	**14,825,000**	

TRANSPORTATION - STREET IMPROVEMENTS, continued

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
FUNDING SOURCES:						
Debt:						
G.O. Bonds	54,541,000	9,225,000	10,325,000	12,391,000	10,500,000	12,100,000
City:						
Road Use Tax	700,000	125,000	200,000	125,000	125,000	125,000
Water Utility Fund	775,000	75,000	475,000	75,000	75,000	75,000
Sewer Utility Fund	500,000	75,000	200,000	75,000	75,000	75,000
Stormwater Utility Fund	250,000	50,000	50,000	50,000	50,000	50,000
Total City Funding	2,225,000	325,000	925,000	325,000	325,000	325,000
Other:						
MPO/STP Funds	5,214,000	-	-	2,814,000	-	2,400,000
Federal/State Grants	1,686,000	1,686,000	-	-	-	-
Total Other Funding	6,900,000	1,686,000	-	2,814,000	-	2,400,000
TOTAL FUNDING SOURCES	**63,666,000**	**11,236,000**	**11,250,000**	**15,530,000**	**10,825,000**	**14,825,000**

CYRIDE ROUTE PAVEMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This is the annual program for pavement improvements to streets that are or were bus routes.

These streets were not designed or built for continuous bus loading. With these streets now designated as bus routes, accelerated deterioration of the street surface has occurred. Pavement improvements will restore street sections that will carry higher traffic volumes.

COMMENTS
Improving these streets will reduce maintenance needs for them. This reduction will allow for additional and earlier maintenance of other streets, which will prolong their useful life.

Bike facilities will be included in the FY 2022/23 project on Lincoln Way from Marshall Avenue to Franklin Avenue. The bike facilities will consist of off-street improvements with an estimated cost of $172,500.

LOCATION

2022/23 Lincoln Way (Beedle Drive/Hickory Drive to Franklin Avenue)
2026/27 Lincoln Way (Beach Avenue to Hayward Avenue)

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		880,000	580,000				300,000
Construction		4,031,000	2,331,000				1,700,000
	TOTAL	**4,911,000**	**2,911,000**				**2,000,000**
FINANCING:							
G.O. Bonds		3,225,000	1,225,000				2,000,000
STBG Funds		1,686,000	1,686,000				
	TOTAL	**4,911,000**	**2,911,000**				**2,000,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Improvements	Public Works	320-8122-439 383-8122-439

CONCRETE PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change Delayed

DESCRIPTION/JUSTIFICATION
This annual program is to rehabilitate or reconstruct concrete street sections that have deteriorated in order to prevent premature breakdown of the pavement. This work will provide enhanced rideability to residents and visitors.

COMMENTS
Repair of these streets will reduce maintenance and repairs needed for them. The Clark Avenue project in FY 2024/25 will include a portion of the Long Range Transportation Plan project "SH 10" which will be accomplished using post-mounted signs. ($10,000)

The cost changes are due to updated cost estimates considering further deterioration of roadway pavements as well as rising material and labor costs. The delay is due to North Loop Drive being moved to 2026/27 to avoid significant cost increase in FY 2022/23 GO Bond funding.

LOCATION

2022/23	Ridgewood Avenue/Brookridge Avenue/Lee Street/Ninth Street/Park Way area
2023/24	Prairie View West
2024/25	Campus Avenue (Lincoln Way to Oakland Street), Sunset Drive (Ash Avenue to Beach Avenue), and Clark Avenue (Ninth Street to 13th Street)
2025/26	7th Street (Grand Avenue to Burnett Avenue) and 10th Street (Grand Avenue to Duff Avenue)
2026/27	North Loop Drive, 6th Street (Clark Avenue to Duff Avenue), 9th Street (Roosevelt Avenue to Grand Avenue), Gaskill Drive (250 ft south of Friley Rd to Country Club Blvd), and Crawford Avenue (end to E 9th Street)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	2,800,000	720,000	140,000	720,000	720,000	500,000
Construction	12,300,000	2,880,000	810,000	2,880,000	2,880,000	2,850,000
TOTAL	**15,100,000**	**3,600,000**	**950,000**	**3,600,000**	**3,600,000**	**3,350,000**
FINANCING:						
G.O. Bonds	15,100,000	3,600,000	950,000	3,600,000	3,600,000	3,350,000
TOTAL	**15,100,000**	**3,600,000**	**950,000**	**3,600,000**	**3,600,000**	**3,350,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Improvements	Public Works	383-8168-439

ASPHALT STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This is the annual program for reconstruction and resurfacing (rehabilitation) of asphalt streets, typically located within residential neighborhoods. Streets within residential subdivisions have been installed using full-depth asphalt pavement since mid-1970. Full-depth replacement of these streets has become necessary due to structural pavement failure. Rehabilitation of existing asphalt streets is possible where the base asphalt layer is solid, but the surface course has failed. This program was created in accordance with City Council's goal of strengthening our neighborhoods.

COMMENTS

Reconstructing these streets will reduce maintenance costs.

Cost change is due to updated cost estimates reflecting rise in material and labor costs.

LOCATION

2022/23	Oakwood Road (State Avenue to University Boulevard), and 28th Street (Hoover Avenue to Ferndale Avenue)
2023/24	Phoenix Circle, Curtiss Avenue (13th Street to 16th Street), Marston Avenue (13th Street to 16th Street), Roosevelt Avenue (13th Street to 16th Street), Prairie View East, North Riverside Drive, and East Seventh Street (Crawford Avenue east to end)
2024/25	Toronto Street (North Dakota Avenue to Garfield Avenue), Garfield Avenue (north and south of Ontario Street), Woodstock Avenue, and Windsor Court
2025/26	Hillcrest Avenue, Ellis Street, Kentucky Avenue, Illinois Avenue, Indiana Avenue, Oklahoma Drive and Delaware Avenue (North Dakota Avenue to Ontario Street)
2026/27	Wilder Avenue (Clemens Blvd to Lincoln Way) and Dickinson Avenue (Mortensen Avenue south through circle)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	2,385,000	600,000	600,000	435,000	600,000	150,000
Construction	11,615,000	2,400,000	2,400,000	2,465,000	3,400,000	950,000
TOTAL	**14,000,000**	**3,000,000**	**3,000,000**	**2,900,000**	**4,000,000**	**1,100,000**
FINANCING:						
G.O. Bonds	14,000,000	3,000,000	3,000,000	2,900,000	4,000,000	1,100,000
TOTAL	**14,000,000**	**3,000,000**	**3,000,000**	**2,900,000**	**4,000,000**	**1,100,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Improvements	Public Works	383-8116-439

SEAL COAT STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This is the annual program for removal of built-up seal coat from streets with asphalt surface. This program restores surface texture, corrects structural deficiencies, removes built-up seal coat, and prevents deterioration of various streets. This resurfacing process results in better riding surfaces, increased safety with improved surface texture, and increased life expectancy of streets. Built-up seal coat on streets causes excess crown which results in vehicles dragging at driveway entrances. Complete removal of this built-up seal coat allows for repair to curb and gutter and placement of four inches of asphalt surface.

COMMENTS

The areas to be resurfaced are chosen each spring based on the current street condition inventory and funding availability. Funding for this program may vary from year to year in order to maintain a consistent overall bond issue each year over five years. Cost estimates include funding for concrete curb and gutter repairs that need to be made prior to street asphalt being placed, and also include pedestrian improvements to meet the most recent state and federal accessibility requirements.

Street maintenance operation costs for patching will be reduced for the streets involved in this program.

The 2020 Residential Satisfaction Survey respondents indicated that reconstructing existing streets is the top capital improvement priority with 83% responding as somewhat or very important. A majority of local streets with poorer than average pavement conditions were constructed in seal coat and are now in need of reconstruction.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	1,107,500	112,500	260,000	400,000	200,000	135,000
Construction	5,042,500	637,500	1,490,000	1,350,000	800,000	765,000
TOTAL	**6,150,000**	**750,000**	**1,750,000**	**1,750,000**	**1,000,000**	**900,000**
FINANCING:						
G.O. Bonds	6,150,000	750,000	1,750,000	1,750,000	1,000,000	900,000
TOTAL	**6,150,000**	**750,000**	**1,750,000**	**1,750,000**	**1,000,000**	**900,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Improvements	Public Works	381-8101-439

ALLEY PAVEMENT IMPROVEMENTS PROGRAM **PROJECT STATUS:** Cost Change Site Change

DESCRIPTION/JUSTIFICATION
This program is to reconstruct existing paved alleys were the structural integrity of the existing pavement has diminished beyond repair. These alleys are primarily in the area north of Downtown, however projects as part of this CIP program can be community-wide if the adjacent properties (or the City) have paid for the prior pavement placement.

COMMENTS
This program was introduced in FY 2021/22 with FY 2022/23 being the first construction year.

Site change is due to including project locations that have been prioritized throughout the community.
Cost change is due to updated, site specific, cost estimates reflecting current bidding conditions.

LOCATION

2022/23	Alley between Brookridge Avenue and Ridgewood Avenue (6th Street to Lee Street)
2023/24	Alley between Brookridge Avenue and Ridgewood Avenue (Lee Street to 9th Street)
2024/25	Alley south of Lincoln Way (S Sherman Avenue to S Kellogg Avenue)
2025/26	Alley south of Lincoln Way (Washington Avenue to S Walnut Avenue)
2026/27	Alley south of Lincoln Way (S Duff Avenue to S Sherman Avenue

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		400,000	80,000	80,000	80,000	80,000	80,000
Construction		1,600,000	320,000	320,000	320,000	320,000	320,000
	TOTAL	**2,000,000**	**400,000**	**400,000**	**400,000**	**400,000**	**400,000**
FINANCING:							
G.O. Bonds		2,000,000	400,000	400,000	400,000	400,000	400,000
	TOTAL	**2,000,000**	**400,000**	**400,000**	**400,000**	**400,000**	**400,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Improvements	Public Works	383-8170-439

DOWNTOWN STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This annual program is for the rehabilitation/reconstruction of streets and alleys within the downtown area (Lincoln Way to Seventh Street and Grand Avenue to Duff Avenue). These projects involve pavement reconstruction, rehabilitation of storm and sanitary sewers, and streetscapes. This program will meet the recommendations of the Downtown Improvements Study for the side streets in the downtown area.

COMMENTS
Improvements to the streets in the downtown area will enhance the downtown business district.

LOCATION

2022/23 North/south alley (between Duff Avenue and Douglas Avenue, by Adams Funeral Home)
2024/25 East/west alley north of Lincoln Way (Sherman Avenue to Kellogg Avenue)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2025/26
COST:						
Engineering	70,000	35,000		35,000		
Construction	430,000	215,000		215,000		
TOTAL	**500,000**	**250,000**		**250,000**		
FINANCING:						
G.O. Bonds	500,000	250,000		250,000		
TOTAL	**500,000**	**250,000**		**250,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Improvements	Public Works	383-8154-439

RIGHT-OF-WAY RESTORATION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
In recent years, staff has continued to observe and analyze restoration of the right-of-way areas associated with CIP projects. Some areas have been restored with sod, while other areas have been restored using seed or dormant seed. Restoration appears to depend on the weather at the time of installation. In areas where vegetation is not anticipated to be successful, other forms of restoration have been used, such as pervious pavement or standard concrete. This program will enable better restoration through a separate contract with a contractor specializing in vegetation establishment (instead of having this as a subcontract in each CIP contract as has been past practice).

COMMENTS
Conditions for each restoration area will be considered independently to select the appropriate and sustainable alternative. Restoration examples include sod, native turf, and pervious and standard colored/stained concrete.

LOCATION
Various locations (coordinated with Public Works streets and utility projects)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	200,000	40,000	40,000	40,000	40,000	40,000
Construction	1,425,000	285,000	285,000	285,000	285,000	285,000
TOTAL	**1,625,000**	**325,000**	**325,000**	**325,000**	**325,000**	**325,000**
FINANCING:						
Road Use Tax	625,000	125,000	125,000	125,000	125,000	125,000
Water Utility Fund	375,000	75,000	75,000	75,000	75,000	75,000
Sewer Utility Fund	375,000	75,000	75,000	75,000	75,000	75,000
Storm Water Utility Fund	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**1,625,000**	**325,000**	**325,000**	**325,000**	**325,000**	**325,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Improvements	Public Works	Various

ARTERIAL STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change/ Delay

DESCRIPTION/JUSTIFICATION
This annual program utilizes current repair and reconstruction techniques to improve arterial streets with asphalt or concrete. These pavement improvements are needed to restore structural integrity, serviceability, and rideability. Targeted streets are reaching a point of accelerated deterioration. By improving these streets prior to excessive problems, the service life will be extended.

COMMENTS
Improving these streets will reduce maintenance costs. This reduction will allow for additional and earlier maintenance of other streets.

The cost change is due to updated cost estimates considering materials and labor increases as well as further deterioration of the roadway pavements. The delay is to provide a better balance in General Obligation Bond annual funding.

LOCATION

2023/24 Airport Road (University Boulevard to South Riverside Drive)
2024/25 24th Street (Grand Avenue east and west, approximately 300 feet each) and Hyland Avenue (Lincoln Way to Ontario Street)
2026/27 E. Lincoln Way (Duff Avenue to S Skunk River) ($2,400,000 MPO/STP)

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		1,025,000		225,000	300,000		500,000
Construction		5,475,000		1,275,000	1,700,000		2,500,000
	TOTAL	**6,500,000**		**1,500,000**	**2,000,000**		**3,000,000**
FINANCING:							
G.O. Bonds		4,100,000		1,500,000	2,000,000		600,000
MPO/STP Funds		2,400,000					2,400,000
	TOTAL	**6,500,000**		**1,500,000**	**2,000,000**		**3,000,000**

PROGRAM - ACTIVITY: Transportation - Street Improvements
DEPARTMENT: Public Works
ACCOUNT NO.

COLLECTOR STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This is the annual program for reconstruction or rehabilitation of collector streets. Locations are chosen in accordance with the most current street condition inventory.

COMMENTS

The Sixth Street project in FY 2023/24 will include on-street bike facilities to continue existing bike lanes, with an estimated cost of $75,000.

Collector street pavement improvements should result in lower street maintenance costs.

LOCATION

2023/24	Sixth Street (Brookridge Avenue to Northwestern Avenue)
2024/25	Oakland Street (Hawthorne Avenue to Franklin Avenue)
2025/26	West Street (Crane Avenue to Hillcrest Avenue)
2026/27	Bloomington Road (GW Carver to Eisenhower Avenue)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	940,000		200,000	125,000	300,000	315,000
Construction	4,585,000		1,075,000	625,000	1,200,000	1,685,000
TOTAL	**5,525,000**		**1,275,000**	**750,000**	**1,500,000**	**2,000,000**
FINANCING:						
G.O. Bonds	5,450,000		1,200,000	750,000	1,500,000	2,000,000
Road Use Tax	75,000		75,000			
TOTAL	**5,525,000**		**1,275,000**	**750,000**	**1,500,000**	**2,000,000**

PROGRAM - ACTIVITY: Transportation - Street Improvements

DEPARTMENT: Public Works

ACCOUNT NO.

CAMPUSTOWN PUBLIC IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project includes public infrastructure improvements that complement the project being constructed in 2020 in Campustown. The 200-block of Welch Avenue project included in this program will involve sanitary sewer, storm sewer, and roadway pavement improvements. Multi-modal improvements in the form of bike lanes in each direction are included in the 2020 construction project and would be continued into the 200-block improvements.

COMMENTS

The sanitary sewers and water mains along a portion of Welch Avenue (Chamberlain Street to Hunt Street) date back to the early 1900s. Storm sewer capacity and water quality also will be analyzed as part of this project. Due to its age, multi-modal improvements, and well as the increased demand from redevelopment, the infrastructure will need to be reconstructed. These improvements will be coupled with new pavement improvements on Welch Avenue and inclusive crosswalk at Chamberlain and Welch.

Bicycle facilities as part of this project ("ON 16"—Welch Avenue on-street treatment from Mortensen Road to Union Drive) are estimated to cost $120,000, were part of the FY 2019/20 project, and will be incorporated into the FY 2023/24 projects.

The cost change is due to adding in the water system improvements that were not awarded during the previous phase of construction on Welch Avenue.

LOCATION

2023/24: Streets: Welch Avenue (Chamberlain Street to Hunt Street) and Chamberlain Place
Sanitary sewer: Welch Avenue (Chamberlain Street to Hunt Street)
Water main: Welch Avenue (Chamberlain Street to Knapp Street)
Bicycle facilities: Welch Avenue (Mortensen Road to Union Drive)
2026/27: Chamberlain Street (Lynn Avenue to Hayward Avenue)

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		610,000		260,000			350,000
Construction		2,865,000		1,465,000			1,400,000
	TOTAL	**3,475,000**		**1,725,000**			**1,750,000**
FINANCING:							
G.O. Bonds		2,950,000		1,200,000			1,750,000
Water Utility Fund		400,000		400,000			
Sewer Utility Fund		125,000		125,000			
	TOTAL	**3,475,000**		**1,725,000**			**1,750,000**

PROGRAM - ACTIVITY: Transportation - Street Improvements

DEPARTMENT: Public Works

ACCOUNT NO.

SOUTH 16TH STREET ROADWAY WIDENING **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project includes widening South 16th Street to four lanes from University Boulevard to Apple Place with auxiliary lanes and traffic control improvements at Christensen Drive & South Riverside Drive (both into Vet Med), culvert extension at Worrell Creek, and an improved multi-use path along the corridor.

COMMENTS

The proposed project would include:

- Reconstruction of the existing roadway and multi-use trail segment from University Boulevard to just east of Mulberry Boulevard
- Evaluate raising South 16th Street above the 100-year flood elevation
- Widen the segment of South 16th Street to four lanes consistent with South 16th Street east to South Duff Avenue
- Extend the multi-use trail along north side of South 16th Street to University Boulevard
- Add traffic control signals at South Riverside Drive

Identified benefits of the project include:

- Completes the minor arterial linkage from University Boulevard to South Duff Avenue with consistent lane configuration, adequate capacity, and improved safety
- Improves route resiliency during flood events
- Removes bottlenecks at Christensen Drive and South Riverside Drive, improving safety for turning traffic and corridor progression
- Improves efficiency of CyRide bus routes with improved corridor progression and possible bus turnouts at high ridership locations
- Improves pedestrian capacity & safety by separating the multi-use trail from the roadway edge.

The cost change is due to the updated award amount of MPO/STBG grant for this project.

The reconstruction segment lies within Iowa State University boundaries and active coordination with major stakeholders including the College of Veterinary Medicine and the Department of Athletics has been underway through internal university processes.

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		650,000		325,000	325,000		
Construction		3,230,000			3,230,000		
	TOTAL	**3,880,000**		**325,000**	**3,555,000**		
FINANCING:							
G.O. Bonds		1,066,000		325,000	741,000		
MPO/STP Funds		2,814,000			2,814,000		
	TOTAL	**3,880,000**		**325,000**	**3,555,000**		

PROGRAM - ACTIVITY: Transportation - Street Improvements

DEPARTMENT: Public Works

ACCOUNT NO.

TRANSPORTATION - SHARED USE PATH SYSTEM

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Shared Use Path System Expansion	3,000,000	650,000	300,000	375,000	825,000	850,000	100
Multi-Modal Roadway Improvements	925,000	130,000	350,000	125,000	320,000	-	101
Shared Use Path Maintenance	1,500,000	125,000	250,000	300,000	375,000	450,000	102
TOTAL PROJECT EXPENDITURES	**5,425,000**	**905,000**	**900,000**	**800,000**	**1,520,000**	**1,300,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	4,110,000	775,000	550,000	675,000	810,000	1,300,000	
Road Use Tax	925,000	130,000	350,000	125,000	320,000	-	
Total City Funding	5,035,000	905,000	900,000	800,000	1,130,000	1,300,000	
Other:							
MPO/STP Funds	390,000	-	-	-	390,000	-	
TOTAL FUNDING SOURCES	**5,425,000**	**905,000**	**900,000**	**800,000**	**1,520,000**	**1,300,000**	

TRANSPORTATION - SHARED USE PATH SUMMARY

PROJECT BY ACTIVITY	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
STREET IMPROVEMENTS:							
Collector Street Improvements	75,000	-	75,000	-	-	-	95
CyRide Route Pavement Improvements	172,500	172,500	-	-	-	-	87
Concrete Pavement Improvements	10,000	-	-	10,000	-	-	88
Campustown Public Improvements	120,000	-	120,000	-	-	-	96
South 16th Street Roadway Widening	378,200	-	-	378,200	-	-	97
Total Street Improvement Projects	755,700	172,500	195,000	388,200	-	-	
SHARED USE PATH SYSTEM:							
Shared Use Path System Expansion	3,000,000	650,000	300,000	375,000	825,000	850,000	100
Multi-Modal Roadway Improvements	925,000	130,000	350,000	125,000	320,000	-	101
Shared Use Path Maintenance	1,500,000	125,000	250,000	300,000	375,000	450,000	102
Total Shared Use Path Projects	5,425,000	905,000	900,000	800,000	1,520,000	1,300,000	
TRAFFIC IMPROVEMENTS:							
Traffic System Capacity Improvements	150,000	-	-	-	150,000	-	106
Traffic Signal Program	125,000	25,000	25,000	25,000	25,000	25,000	107
Total Traffic Improvement Projects	275,000	25,000	25,000	25,000	175,000	25,000	
STREET REHABILITATION:							
Bridge Rehabilitation Program	760,000	760,000	-	-	-	-	112
TOTAL SHARED USE PATH PROJECTS	**7,215,700**	**1,862,500**	**1,120,000**	**1,213,200**	**1,695,000**	**1,325,000**	
AVERAGE EXPENDITURE/FISCAL YEAR	**1,443,140**						

SHARED USE PATH SYSTEM EXPANSION **PROJECT STATUS:** Site Change Cost Change

DESCRIPTION/JUSTIFICATION
This program provides for construction of shared use paths on street rights-of-way, adjacent to streets, and through greenbelts. The Long-Range Transportation Plan (LRTP) identifies those paths that separate bicycle traffic from higher-speed automobile traffic.

COMMENTS
The projects included in this program are subject to acquiring voluntary easements from property owners. Construction of certain segments are contingent upon acquisition of land. Shared use path maintenance costs will increase due to new shared use path construction. The Bike and Pedestrian Master Plan will provide a systemwide conceptual design specific to local community needs in order to create a detailed and consistent non-motorized transportation network, which will ensure that Ames has a transparent and comprehensive plan for bikes and pedestrians, including implementation and installation of wayfinding signage in 2023 that is being funded from previous General Fund Savings. Whereas the MPO's Long Range Transportation Plan provides information on regional connectivity but is prohibited under federal requirements from doing design and working through those local community issues. Site Change is due to adding Moore Memorial Park in 2024/25 & 2025/26.

LOCATION

2021/22	Bicycle and Pedestrian Master Plan ($175,000 funded by previous Local Option Sales Tax savings)
2022/23	Grand Avenue path (Lincoln Way to Sixth Street)
2023/24	East Lincoln Way path (Carnegie Avenue to Dayton Avenue-$300,000);
2024/25	Skunk River (South Duff trail connection along Billy Sunday Road $350,000); Moore Memorial Park to Ioway Creek Trail Design ($25,000)
2025/26	South Dayton Avenue (East Lincoln Way to SE 16th Street $725,000); Moore Memorial Park to Ioway Creek Trail Construction ($100,000)
2026/27	Mortensen Road path (Dickinson Road to S. Dakota Ave $190,000); 24th Street path (Grand Avenue to Duff Avenue $400,000); S. Duff path (S. 5th Street to S. 3rd Street $260,000)

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		595,000	75,000	60,000	115,000	145,000	200,000
Land Acquisition		-					
Construction		2,405,000	575,000	240,000	260,000	680,000	650,000
	TOTAL	**3,000,000**	**650,000**	**300,000**	**375,000**	**825,000**	**850,000**
FINANCING:							
Local Option Sales Tax		2,610,000	650,000	300,000	375,000	435,000	850,000
MPO/STP Funds		390,000				390,000	
	TOTAL	**3,000,000**	**650,000**	**300,000**	**375,000**	**825,000**	**850,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Shared Use Paths	Public Works	030-88-32-439

MULTI-MODAL ROADWAY IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

Multi-modal transportation refers to the various modes used by Ames residents to travel the transport system. The modes specifically addressed in this program include bicycling and automobiles. This program is aimed at improving the roadway to create a safer interaction between these modes using alternatives such as improved crossing visibility at intersections, bike detection, and on-street facilities (e.g. bike lanes, sharrows). Bike lanes consist of a portion of the roadway designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. Sharrows, also known as shared lane markings, are markings used in lanes shared by bicycles and motor vehicles when a travel lane is too narrow to provide a standard width bike lane. Bike detection improvements include retrofitting signalized intersections to radar detection to facilitate the movement of bicycles. These improvements retrofit the existing street to provide a useful and appropriate route of travel for these popular modes used by Ames residents. The proposed locations and treatments that are identified in the 2040 Long Range Transportation Plan (LRTP) will be noted by project numbers (e.g. “ON 15”) from the LRTP. The cost change is due to updated cost estimates for 2025/26.

LOCATIONS

2022/23	Enhanced intersection crossing: intersection of Grand Avenue and Sixth Street (“CR 5”: improve crossing visibility)
2023/24	Enhanced intersection crossing: “CR 24”, 16th Street and Grand Avenue
2024/25	Enhanced intersection crossing: various locations requiring bicycle and pedestrian detection at arterial street crossings
2025/26	University Boulevard and Lincoln Way (protected intersection improvements)

The locations for this program have been coordinated with the Shared Use Path System Expansion program.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	125,000	30,000	50,000		45,000	
Construction	800,000	100,000	300,000	125,000	275,000	
TOTAL	**925,000**	**130,000**	**350,000**	**125,000**	**320,000**	
FINANCING:						
Road Use Tax	925,000	130,000	350,000	125,000	320,000	
TOTAL	**925,000**	**130,000**	**350,000**	**125,000**	**320,000**	

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Shared Use Paths	Public Works	060-8821-439

SHARED USE PATH MAINTENANCE **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION
The shared use path recreational and transportation system has continued to expand throughout the community. The shared use paths have typically been constructed with five inches of asphalt or concrete pavement. Structural failure, drainage problems, and vegetation infringement are several causes for the need to improve the pavement. This annual program provides for those improvements.

COMMENTS
The pavement management system for shared use paths is used to guide maintenance activities to segments of the shared use path system that are in need of repair. This inventory aids in prioritizing those segments throughout the community.

Spot repairs that are identified will be prioritized by severity of the repair that is needed and then addressed in the operations budget.

Improvement to the shared use path pavement will enhance the safety and usability of the transportation/recreational system and improve the aesthetics of the right-of-way.

Newer rehabilitation techniques such as mastic joint repair and micro-surface treatments are being utilized as a part of this program.

Beginning in FY 2023/24, funding incrementally increases to $450,000 annually. This will provide for a system-wide maintenance schedule of joint sealing and surface slurry seal every five years, along with scheduled overlay and reconstruction for every path.

LOCATIONS
Various locations throughout Ames will be identified using pavement management data and user feedback.

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		216,000	18,000	36,000	43,000	54,000	65,000
Construction		1,284,000	107,000	214,000	257,000	321,000	385,000
	TOTAL	**1,500,000**	**125,000**	**250,000**	**300,000**	**375,000**	**450,000**
FINANCING:							
Local Option Sales Tax		1,500,000	125,000	250,000	300,000	375,000	450,000
	TOTAL	**1,500,000**	**125,000**	**250,000**	**300,000**	**375,000**	**450,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Shared Use Paths	Public Works	030-8811-439

TRANSPORTATION - TRAFFIC IMPROVEMENTS

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Intelligent Transportation System Program	7,914,980	2,410,580	1,971,600	2,410,600	1,122,200	-	105
Traffic System Capacity Improvements	4,850,000	190,000	720,000	750,000	3,070,000	120,000	106
Traffic Signal Program	2,219,000	305,000	561,000	373,000	480,000	500,000	107
Accessibility Enhancements Program	1,000,000	200,000	200,000	200,000	200,000	200,000	108
Regional Transportation Count Program	350,000	50,000	75,000	75,000	75,000	75,000	109
Long Range Transportation Plan Update	500,000	-	500,000	-	-	-	110
TOTAL PROJECT EXPENDITURES	**16,833,980**	**3,155,580**	**4,027,600**	**3,808,600**	**4,947,200**	**895,000**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	3,066,600	452,560	629,440	316,940	1,667,660	-	
City:							
Road Use Tax	6,741,700	1,107,740	1,490,560	1,670,060	1,678,340	795,000	
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000	
Total City Funding	7,241,700	1,207,740	1,590,560	1,770,060	1,778,340	895,000	

TRANSPORTATION - TRAFFIC IMPROVEMENTS, continued

PROJECT/FUNDING SOURCE	TOTAL	2021/22	2022/23	2023/24	2024/25	2025/26
FUNDING SOURCES, continued:						
Other:						
MPO Planning Funds	400,000	-	400,000	-	-	-
Federal/State Grants	6,125,680	1,495,280	1,407,600	1,721,600	1,501,200	-
Total Other Funding	6,525,680	1,495,280	1,807,600	1,721,600	1,501,200	-
TOTAL FUNDING SOURCES	**16,833,980**	**3,155,580**	**4,027,600**	**3,808,600**	**4,947,200**	**895,000**

INTELLIGENT TRANSPORTATION SYSTEM PROGRAM **PROJECT STATUS:** Cost Change Location Change

DESCRIPTION/JUSTIFICATION
The 2040 Ames Area Long Range Transportation Plan (LRTP), which became effective on October 12, 2015, identified a wide range of transportation improvements including those projects that utilize technology referred to as Intelligent Transportation Systems (ITS). The 2045 LRTP shows the completion of the program with Phase 6 implementation. Traffic signal improvements rank as one of the highest priority areas from the Ames Resident Satisfaction Survey.

COMMENTS
In FY 2016/17, staff began the development of a Traffic Network Master Plan that created a detailed inventory and evaluation of the communication network used along the City's signalized corridors. The master plan identified the upgrades necessary to support the modern technologies used to manage transportation. Implementation of the respective phases has been proposed following recommended areas shown in the Traffic Network Master Plan.

Traffic adaptive systems are a form of Intelligent Transportation System infrastructure that conduct real-time optimization of traffic and pedestrian flow at signalized intersections. Traffic adaptive systems provide a significant improvement in efficiency and will provide reliable travel times during all times of the day. Projects in this program have been delayed a year to allow application for congestion mitigation funds. The cost change is due to an adjustment in phasing of this program.

LOCATION

2022/23	Phase 3: Grand Avenue(US69), extending north on Duff Avenue to 24th Street
2023/24	Phase 4: Lincoln Way (Campustown & West Ames), South Dakota Avenue, Mortensen Road
2024/25	Phase 5: Bloomington Road, 24th Street, Stange Road, 13th Street, and North Dakota Avenue (NW Ames)
2025/26	Phase 6: South 16th Street; South Grand Avenue; South Dayton Avenue (network extensions/looping)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	814,000	224,300	211,200	258,300	120,200	
Construction	7,100,980	2,186,280	1,760,400	2,152,300	1,002,000	
TOTAL	**7,914,980**	**2,410,580**	**1,971,600**	**2,410,600**	**1,122,200**	
FINANCING:						
G.O. Bonds	1,176,600	452,560	259,440	316,940	147,660	
Road Use Tax	1,312,700	462,740	304,560	372,060	173,340	
Iowa Clean Air Attainment Program Grant Funds (ICAAP)	5,425,680	1,495,280	1,407,600	1,721,600	801,200	
TOTAL	**7,914,980**	**2,410,580**	**1,971,600**	**2,410,600**	**1,122,200**	

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Traffic Improvements	Public Works	060-7513-439 320-7513-439 383-7513-439

TRAFFIC SYSTEM CAPACITY IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The System Capacity Improvements will address several issues identified in the 2045 Long Range Transportation Plan (LRTP). The 2045 LRTP had several critical intersections that were at or nearing capacity such that improvements we needed. This program will provide for the planning, design, and construction of those improvements.

LOCATION

2022/23	North growth intersection studies (conceptual design and cost estimation $65,000); U.S. Highway 30 and South Duff Ave interchange study (South 16th Street to Airport Road $125,000)
2023/24	Airport Road improvements (Sam's Club/Danfoss intersection to connection with South Duff Ave)
2024/25	13th Street and Grand Avenue intersection improvement (conceptual design and Right-of-Way)
2025/26	13th Street and Grand Avenue intersection improvement (construction) (shared use path portion $150,000)
2026/27	Lincoln Way corridor study (Grand Avenue to Duff Avenue)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	913,000	190,000	120,000	250,000	233,000	120,000
Land/ROW	500,000			500,000		
Construction	3,437,000		600,000		2,837,000	
TOTAL	**4,850,000**	**190,000**	**720,000**	**750,000**	**3,070,000**	**120,000**
FINANCING:						
G.O.Bonds	1,890,000		370,000		1,520,000	
Road Use Tax	2,260,000	190,000	350,000	750,000	850,000	120,000
State Grants	700,000				700,000	
TOTAL	**4,850,000**	**190,000**	**720,000**	**750,000**	**3,070,000**	**120,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Traffic Improvements	Public Works	060-7522-439 060-7523-439

TRAFFIC SIGNAL PROGRAM **PROJECT STATUS:** Cost Change Site Change

DESCRIPTION/JUSTIFICATION

The Traffic Signal Program is the annual program that provides for replacing older traffic signals and for constructing new traffic signals in the City. This program will result in improved visibility, reliability, and appearance of signals. Although recent advances in technology have elongated the normal, useful life for traffic signal installations well past the previously expected 25 years, some of the older-generation traffic signals still in use exceed their functional age. Components at those installations (including conduits, wiring, signal heads, and poles) need to be completely replaced. This program also provides funding for those maintenance needs as well as the necessary upgrading of the traffic signal system as technology continues to change. In recent years, traffic signal replacements have included radar detection systems instead of in-pavement loop detection systems that had previously been used and frequently failed. Another advantage of the radar detection system is that it detects bicycles in addition to vehicles.

COMMENTS

A continued trend in increasing material costs (specifically for copper wiring and steel for the poles and mast arms) and additional federal design requirements (such as additional ADA facilities) have resulted in an increased cost of a standard traffic signal. The cost for signalized intersection replacements has been increasing by approximately 3% per year based upon historical bid pricing. Staff tracks this trend and will adjust projected funding for this program each annual CIP cycle. When a full replacement is not necessary, staff will identify equipment within existing signal locations that can be replaced to achieve similar operational improvements to a major reconstruction. The site change is due to programming funds for the University Boulevard/South.16th St signal replacement to be done with the South 16th Street widening project.

LOCATIONS

2022/23 State Ave/ Mortensen Rd permanent signal ($180,000), various equipment upgrades ($125,000)

2023/24 South Duff Avenue/Chestnut Street signal replacement ($456,000), engineering & signal poles for University Boulevard and South 16th Street signal replacement ($105,000)

2024/25 University Boulevard and South 16th Street signal replacement

2025/26 South Duff Avenue/South Third Street

2026/27 University Boulevard and Lincoln Way signal replacement

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	231,000	35,000	71,000	23,000	50,000	52,000
Construction	1,988,000	270,000	490,000	350,000	430,000	448,000
TOTAL	**2,219,000**	**305,000**	**561,000**	**373,000**	**480,000**	**500,000**
FINANCING:						
Road Use Tax	2,219,000	305,000	561,000	373,000	480,000	500,000
TOTAL	**2,219,000**	**305,000**	**561,000**	**373,000**	**480,000**	**500,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Traffic Improvements	Public Works	060-7564-439 060-7569-439

ACCESSIBILITY ENHANCEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program combines sidewalk and ADA ramp improvements with additional accessibility upgrades at traffic signals and other publicly owned parking facilities. This program will provide for removing and replacing sidewalk intersection crosswalk panels and handicap ramps at locations that fail to meet the Americans with Disabilities Act (ADA) requirement to have truncated dome warning panels installed. It also includes retrofitting existing signalized traffic control devices with audible and vibrotactile push-buttons, and upgrading parking stalls to current accessible standards in any on-street location or parking lot owned by the City of Ames. This program may be combined with and used in conjunction with roadway, traffic signal replacement, or shared use path improvement projects for pedestrian ramp reconstruction.

This program provides safer pedestrian facilities and limits the City's liability for injury to residents using public sidewalks that are in a deteriorated condition. The program also improves ADA accessibility at municipal facilities.

COMMENTS

The City Manager's office facilitated a survey of stakeholders to help prioritize the retrofitting of existing traffic signals that currently do not have audible and vibrotactile operation. These locations will be prioritized along with other ADA improvement needs that are identified throughout the year.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	150,000	30,000	30,000	30,000	30,000	30,000
Construction	850,000	170,000	170,000	170,000	170,000	170,000
TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**
FINANCING:						
Road Use Tax	500,000	100,000	100,000	100,000	100,000	100,000
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000
TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Traffic Improvements	Public Works	030-7510-439 060-7510-439

REGIONAL TRANSPORTATION COUNT PROGRAM **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION
This program is the result of an ongoing need for transportation-related data in the Ames regional area. This program will be for the collection and management of travel demand data from all transportation modes including walking, biking, and various forms of motorized travel. Data from this program will be used to track critical transportation system performance measures which are used to analyze and forecast transportation system needs and priorities. Each year consists of an annual base for data collections services.

COMMENTS
The data collectors continuously record traffic volume, speed, and classification on arterial and collector streets throughout the network. This data supports long-range transportation planning and modeling efforts, as well as pavement management, safety analysis, and other system performance measures as needed.

Each year, traffic improvements rank as one of the highest priority areas from the Ames Resident Satisfaction Survey.

The cost change is due to increased data processing and analysis costs.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Construction/Engineering	350,000	50,000	75,000	75,000	75,000	75,000
TOTAL	**350,000**	**50,000**	**75,000**	**75,000**	**75,000**	**75,000**
FINANCING:						
Road Use Tax	350,000	50,000	75,000	75,000	75,000	75,000
TOTAL	**350,000**	**50,000**	**75,000**	**75,000**	**75,000**	**75,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Traffic Improvements	Public Works	060-7515-439

LONG RANGE TRANSPORTATION PLAN UPDATE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The project shown in FY 2023/24 will be an update to the Long Range Transportation Plan (LRTP) for the Ames region. Typically, an update to the LRTP takes approximately 24 months to complete. The LRTP is federally required to be updated every five years, and therefore the latest date for approving this update is October 27, 2025.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	500,000		500,000			
TOTAL	**500,000**		**500,000**			
FINANCING:						
Road Use Tax Fund	100,000		100,000			
MPO Planning Funds	400,000		400,000			
TOTAL	**500,000**		**500,000**			

PROGRAM - ACTIVITY: Transportation - Traffic Improvements

DEPARTMENT: Public Works

ACCOUNT NO.

TRANSPORTATION - STREET REHABILITATION

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Bridge Rehabilitation Program	1,060,000	760,000	300,000	-	-	-	112
Pavement Restoration	1,250,000	250,000	250,000	250,000	250,000	250,000	113
Neighborhood Curb Replacement Program	750,000	300,000	-	300,000	150,000	-	114
Main Street Sidewalk Paver Replacement	350,000	350,000	-	-	-	-	115
Right-of-Way Appearance Enhancements	150,000	30,000	30,000	30,000	30,000	30,000	116
US 69 Improvements	475,000	-	475,000	-	-	-	117
TOTAL PROJECT EXPENDITURES	**4,035,000**	**1,690,000**	**1,055,000**	**580,000**	**430,000**	**280,000**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	1,000,000	700,000	300,000	-	-	-	
City:							
Road Use Tax	2,975,000	930,000	755,000	580,000	430,000	280,000	
Other:							
Iowa State University	60,000	60,000	-	-	-	-	
TOTAL FUNDING SOURCES	**4,035,000**	**1,690,000**	**1,055,000**	**580,000**	**430,000**	**280,000**	

BRIDGE REHABILITATION PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This program provides funding for necessary repairs recommended by the Iowa Department of Transportation (IDOT) biennial bridge inspections. The IDOT requires inspections for bridges within the city of Ames.

COMMENTS
The South Fourth Street bridge over Ioway Creek includes upgrades to allow pedestrian crossing along the south side of the bridge. This is a heavily trafficked pedestrian and bicycle corridor. The project also includes additional trail paving to close the gap between existing infrastructure and the new bridge structure. The Iowa State funding is for the connection of the trail on the west side of the Ioway Creek across Iowa State's property along the south side of South Fourth Street.

The East 13th Street bridge over Skunk River includes concrete repairs to the bridge substructure to extend the life of the structure.

Bicycle facilities will be included in the FY 2022/23 project on the South Fourth Street Bridge Rehabilitation project. The project will widen the bridge to include an off-street, 10-foot wide shared use path.

LOCATION

2022/23 South Fourth Street bridge over Ioway Creek
2023/24 East 13th Street bridge over Skunk River

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	150,000	100,000	50,000			
Construction	910,000	660,000	250,000			
TOTAL	**1,060,000**	**760,000**	**300,000**			
FINANCING:						
G.O. Bonds	1,000,000	700,000	300,000			
Iowa State University Funding	60,000	60,000				
TOTAL	**1,060,000**	**760,000**	**300,000**			

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Rehabilitation	Public Works	383-7758-439 320-7758-439

PAVEMENT RESTORATION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This annual program is for preventive and proactive maintenance of the streets. This allows for a large variety of possible maintenance activities including, but not limited to, slurry seal, full-depth concrete paving, milling and patching of asphalt, joint sealing, diamond grinding, partial depth patching, and new maintenance techniques to preserve and enhance City streets.

COMMENTS
This program is funded at $250,000 annually to help extend the longevity of the pavement system and supplement the current pavement restoration activities. Priorities for this program are identified using information from the pavement management system and input from citizens and maintenance crews.

LOCATION
Locations will be coordinated with street construction to gain the best possible life cycle of streets.

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Construction		1,250,000	250,000	250,000	250,000	250,000	250,000
	TOTAL	**1,250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**
FINANCING:							
Road Use Tax		1,250,000	250,000	250,000	250,000	250,000	250,000
	TOTAL	**1,250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Rehabilitation	Public Works	060-7723-439

NEIGHBORHOOD CURB REPLACEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This is the annual program for replacement of deteriorated curb and gutter in selected neighborhood areas. Curb and gutter replacement enhances neighborhood and right-of-way aesthetics.

Areas to receive curb and gutter replacement are selected by staff using input of neighborhoods, the condition of the curb, and the extent of needed repairs.

COMMENTS
The Neighborhood Curb Replacement Program decision criteria approved by City Council includes the extent of curb deterioration, the number of residential structures on the block, and the longitudinal grade. Locations are coordinated with other pavement improvement locations in the CIP.

The cost change and delay are due to updated cost estimates for each project location.

LOCATION

2022/23 Murray Drive (Northwestern Avenue to Grand Avenue)
2024/25 East 16th Street (Duff Avenue to Maxwell Avenue)
2025/26 Ferndale Avenue (20th Street to 24th Street)

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Engineering		80,000	30,000		30,000	20,000	
Construction		670,000	270,000		270,000	130,000	
	TOTAL	**750,000**	**300,000**		**300,000**	**150,000**	
FINANCING:							
Road Use Tax		750,000	300,000		300,000	150,000	
	TOTAL	**750,000**	**300,000**		**300,000**	**150,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Rehabilitation	Public Works	060-7770-439

MAIN STREET SIDEWALK PAVER REPLACEMENT **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This project provides for the replacement of the pavers in the Main Street corridor. The original pavers were installed with the Main Street reconstruction project in 1999. At that time, the pavers were an aesthetic upgrade to traditional concrete sidewalks. Over time, the pavers have proven to be a difficult maintenance item. Uneven pavers appear every year, and Public Works Operations crews spend a considerable amount of time to level or replace pavers. Additional pavers are now in short supply as the pavers are not produced anymore. Winter ice control chemicals applied by adjacent business owners have led to accelerated deterioration of the pavers, especially on the southern side of Main Street where the building provides continuous shade in the winter and no sunlight reaches the sidewalk to aid in melting the snow and ice.

COMMENTS

The first phase of the project is complete (Clark to Burnett) and the second phase is under contract (Burnett to Kellogg), including the necessary paver materials for the final two phases (Kellogg to Douglas and Douglas to Duff). Construction in the first phase uncovered heavily deteriorated concrete under the pavers in need of replacement. The overall cost of the project has increased due to these unforeseen conditions. Funding for FY 2022/23 is for the installation of pavers from Kellogg Ave to Duff Ave which will complete paver replacement in the corridor, as shown to City Council on 6-22-2021.

Total Project Funding:

2017/18	171,000
2018/19	171,000
2019/20	190,000
2019/20	(166,000) COVID-19 Adjustment
2020/21	88,000
2021/22	191,000
2022/23	350,000
Total	**$995,000**

LOCATION

Main Street corridor from Douglas Avenue to Duff Avenue (north side and south side sidewalks)

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Construction		350,000	350,000				
	TOTAL	**350,000**	**350,000**				
FINANCING:							
Road Use Tax Fund		350,000	350,000				
	TOTAL	**350,000**	**350,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Rehabilitation	Public Works	060-7707-439

RIGHT-OF-WAY APPEARANCE ENHANCEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project provides for the enhancement of the rights-of-way in the City of Ames. The funding may be used for a number of elements including retaining walls, entryway enhancements, and median enhancements.

COMMENTS
In addition to retaining wall repairs, the entryway enhancement portion could be used to enhance or repair other right-of-way elements such as decorative signs or monuments.

LOCATION
Various locations

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Right-of-Way Enhancements		150,000	30,000	30,000	30,000	30,000	30,000
	TOTAL	**150,000**	**30,000**	**30,000**	**30,000**	**30,000**	**30,000**
FINANCING:							
Road Use Tax		150,000	30,000	30,000	30,000	30,000	30,000
	TOTAL	**150,000**	**30,000**	**30,000**	**30,000**	**30,000**	**30,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Street Rehabilitation	Public Works	060-7731-439

US HIGHWAY 69 IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Intersection and corridor improvement projects along US Highway 69 are included in this program to alleviate congestion and reduce accidents.

COMMENTS
In FY 2023/24, the Iowa Department of Transportation (IDOT) will be resurfacing Grand Avenue between Murray Drive and Lincoln Way and will also be resurfacing South Duff Avenue between Lincoln Way and Jewel Drive. The City of Ames is responsible for paying for curb and gutter repair and storm sewer intake repair in the corridor as part of the project.

LOCATION
2023/24 Grand Avenue (Murray Drive to Lincoln Way) and South Duff Avenue (Lincoln Way to Jewel Drive)

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Construction		475,000		475,000			
	TOTAL	**475,000**		**475,000**			
FINANCING:							
Road Use Tax		475,000		475,000			
	TOTAL	**475,000**		**475,000**			

PROGRAM - ACTIVITY: Transportation - Street Rehabilitation

DEPARTMENT: Public Works

ACCOUNT NO.

TRANSPORTATION - TRANSIT

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Vehicle Replacement	14,485,358	4,199,477	1,957,107	3,066,896	2,614,286	2,647,592	119
CyRide Facility Improvements	3,884,435	554,435	840,000	830,000	830,000	830,000	120
CyRide Technology Improvements	440,319	240,319	50,000	50,000	50,000	50,000	121
CyRide Shop/Office Equipment	322,000	64,400	64,400	64,400	64,400	64,400	122
Bus Stop Improvements	265,000	-	60,000	85,000	60,000	60,000	123
TOTAL PROJECT EXPENDITURES	**19,397,112**	**5,058,631**	**2,971,507**	**4,096,296**	**3,618,686**	**3,651,992**	
FUNDING SOURCES:							
City:							
Transit Capital Reserve	4,942,712	1,137,027	808,744	1,042,329	973,976	980,636	
Other:							
Federal/State Grants	14,454,400	3,921,604	2,162,763	3,053,967	2,644,710	2,671,356	
TOTAL FUNDING SOURCES	**19,397,112**	**5,058,631**	**2,971,507**	**4,096,296**	**3,618,686**	**3,651,992**	

CYRIDE VEHICLE REPLACEMENT & REHABILITATION **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

CyRide will replace buses in the fleet as grant funding opportunities arise to ensure vehicles are in a state of good repair, as required by the Federal Transit Administration. CyRide anticipates future state funding for new buses through the state's capital funding allocation process. CyRide has five vehicles used for administrative support in the operations division for drivers to utilize when switching shifts. These vehicles are on a four to six-year replacement schedule. Dial-A-Ride vehicles are programmed to be replaced every four to six years.

In total, these purchases are programmed as follows:

2022/23 Replace three 40' buses with battery electric buses ($2,964,986); replace two 40' buses ($1,035,230); replace one administrative vehicle ($40,000); replace the Dial-A-Ride bus and van ($159,261)
2023/24 Replace two 40' buses ($1,067,107); replace one 40' bus with a new articulated 60' bus ($850,000); replace one administrative vehicle ($40,000)
2024/25 Replace four 40' buses ($2,176896); replace one 40' bus with a new articulated 60' bus ($850,000); replace one administrative vehicle ($40,000)
2025/26 Replace one 40' buses with a battery electric bus ($908,960); replace three 40' buses ($1,665,326); replace one administrative vehicle ($40,000)
2026/27 Replace one 40' buses with a battery electric bus ($908,960); replace three 40' buses ($1,698,632); replace one administrative vehicle ($40,000)

COMMENTS

The new buses will be funded with 80-85% federal funding, including the State of Iowa's Iowa Clean Air Attainment Program (ICAAP) funds that are a distribution of federal dollars. In addition, for FY 2022/23, a one-time transfer of CyRide's annual 5307 funding will be used to support the purchase of three new battery electric buses. For FY 2023/24, the Ames Area MPO approved $225,000 to assist in funding the purchase of a new articulated bus.

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Large Buses - 40' New		12,426,097	4,000,216	1,067,107	2,176,896	2,574,286	2,607,592
Large Buses - 60' New		1,700,000		850,000	850,000		
Administrative Vehicles		200,000	40,000	40,000	40,000	40,000	40,000
Dial-A-Ride Bus/Van		159,261	159,261				
	TOTAL	**14,485,358**	**4,199,477**	**1,957,107**	**3,066,896**	**2,614,286**	**2,647,592**
FINANCING:							
Transit Fund		3,026,755	681,670	442,344	660,929	617,576	624,236
PTMS Funds		10,558,603	3,517,807	1,289,763	2,180,967	1,771,710	1,798,356
STP Funds		900,000		225,000	225,000	225,000	225,000
	TOTAL	**14,485,358**	**4,199,477**	**1,957,107**	**3,066,896**	**2,614,286**	**2,647,592**

PROGRAM - ACTIVITY: Transportation - Transit
DEPARTMENT: CyRide
ACCOUNT NO. 552-1159-439, 552-1169-439

CYRIDE FACILITY IMPROVEMENTS **PROJECT STATUS:** Cost Change Revenue Change

DESCRIPTION/JUSTIFICATION

CyRide's facility is 40 years old, and major components of the building are at the end of their useful life. Additionally, the facility is housing more vehicles than it was initially designed for, creating higher wear and tear on the facility and a need to explore expansion options in the future. As a result, this plan has been developed to keep the current facility in a state of good repair, as required by the Federal Transit Administration.

2022/23 Replace HVAC system phase III ($414,435); interior facility improvements ($50,000); concrete replacement ($40,000); A&E Services
2023/24 Shop Expansion ($750,000); replace concrete ($40,000); A & E services
2024/25 Replace fueling system with spill free fueling ($262,500); Construct a gasoline fueling station ($487,500); concrete replacement ($30,000); A & E services
2025/26 Construct an addition onto existing or new facility ($750,000); concrete replacement ($30,000); A & E services
2026/27 Construct an addition onto existing or new facility ($750,000); concrete replacement ($30,000); A & E services

COMMENTS

HVAC projects (phases III) will replace units 20 to 30 years old in fiscal year 2022/23. Interior facility improvements include painting, carpet, and upgrading lighting to LED fixtures. Concrete replacement is budgeted each fiscal year to replace concrete around the facility as it fails. Spill-free fueling replaces the existing system with one that is faster and has less waste. A gasoline fueling station will reduce operational costs associated with regular vehicle servicing. A&E services would provide technical expertise during the various construction projects and assist with the preparation of bid documents. The CIP assumes a CyRide facility expansion as funding sources are identified. To date, CyRide has reserved $1,715,166 in local match dollars for a grant to begin construction.

LOCATION

CyRide, 601 N. University Blvd.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Architectural/Engineering	250,000	50,000	50,000	50,000	50,000	50,000
Concrete	170,000	40,000	40,000	30,000	30,000	30,000
Construction	3,464,435	464,435	750,000	750,000	750,000	750,000
TOTAL	**3,884,435**	**554,435**	**840,000**	**830,000**	**830,000**	**830,000**
FINANCING:						
Transit Fund	1,152,887	222,887	240,000	230,000	230,000	230,000
State of Iowa - PTIG	2,731,548	331,548	600,000	600,000	600,000	600,000
TOTAL	**3,884,435**	**554,435**	**840,000**	**830,000**	**830,000**	**830,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Transit	CyRide	552-1159-439, 552-1169-439

CYRIDE TECHNOLOGY IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
Advancements in technology have grown significantly over the past several years. As a result, CyRide will incorporate the following:

- **Bus Technology / Signage:** CyRide will continue investing in bus technology to improve system efficiency and the riding experience for passengers with disabilities. Interior signs listing upcoming stops will be expanded to additional vehicles, and obsolete advertising screens will be retrofitted with new equipment.
- **Maintenance Software:** Maintenance personnel use specialized software to track work hours, inventory, and parts ordering. This software is planned to be replaced in the upcoming year to increase employee productivity.
- **Demand Response Management Software:** CyRide intends to purchase software to help manage existing and future demand response service offerings. This purchase is planned to include both internal management tools and a passenger-facing app for scheduling rides. Flexible transit services are a vital tool to expand transit access in community areas not well served by the existing fixed route bus lines.

LOCATION
CyRide, 601 North University Boulevard

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Bus Technology	250,000	50,000	50,000	50,000	50,000	50,000
LED Signage - Infotainment	90,319	90,319				
Maintenance Software	50,000	50,000				
Demand Response Mgmt. Software	50,000	50,000				
TOTAL	**440,319**	**240,319**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Transit Fund	368,070	168,070	50,000	50,000	50,000	50,000
5310 Funds	72,249	72,249				
TOTAL	**440,319**	**240,319**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Transit	CyRide	552-1159-439, 552-1169-439

CYRIDE SHOP AND OFFICE EQUIPMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The FY 2022/23 office equipment expenditures include the replacement of computers, laptops, and printers and the replacement of office chairs and stand-up style desks at an estimated cost of $14,400. Except for stand-up desks, these expenditures will be used for replacing old and obsolete equipment.

The CyRide Maintenance Division owns specialized equipment used to maintain buses to keep CyRide in compliance with Federal Transit Administration regulations regarding vehicle maintenance, including parts washers, refrigerant recovery machines, lifts, and electronic diagnostic equipment. Expenditures in this category are difficult to predict as some of the equipment is up to 38 years old and is still reliable. Historically, CyRide has spent between $45,000 and $50,000 during a fiscal year on shop equipment.

COMMENTS
In addition to computers and related equipment, CyRide will invest in more stand-up desks as an element of employee wellness. Employees that have received these desks enjoy the ability to stand and sit throughout the workday alternately.

In FY 2022/23, CyRide Maintenance plans to purchase sandblasting containment equipment and replace a fume extractor. Both pieces of equipment are safety systems to improve air quality within the facility for employees.

LOCATION
CyRide, 601 North University Boulevard

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Computers/Office Equipment	72,000	14,400	14,400	14,400	14,400	14,400
Shop Equipment	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**322,000**	**64,400**	**64,400**	**64,400**	**64,400**	**64,400**
FINANCING:						
Transit Fund	322,000	64,400	64,400	64,400	64,400	64,000
TOTAL	**322,000**	**64,400**	**64,400**	**64,400**	**64,400**	**64,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Transit	CyRide	552-1159-439

BUS STOP IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
CyRide 2.0 and COVID-19 have created a significant shift in riding patterns, which has led to a reduction in the amount budgeted for bus stop improvements. CyRide will be updating the bus stop improvement plan in a more stable ridership environment to ensure bus stop upgrades are implemented to enhance the passenger experience for the greatest number of riders. CyRide will budget dollars for smaller projects in the CIP while the plan is updated.

The automatic passenger counters (APCs) recently added will allow CyRide to measure the precise number of passengers boarding and alighting from buses at each stop and help determine the appropriate amenities at each location. Additionally, the Iowa DOT has recently issued a report with recommended bus stop improvements along their roadways. Recommendations from the report will be incorporated into the updated bus stop improvement plan. After the plan has been updated, an increase in funding will be requested for subsequent years.

COMMENTS
Shelter improvements will resume in FY 2023/24 through FY 2026/27, with three shelters being added or replaced each year.

LOCATION
Various locations throughout Ames.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Pads, Benches, Shelters	240,000		60,000	60,000	60,000	60,000
Concrete	25,000			25,000		
TOTAL	**265,000**		**60,000**	**85,000**	**60,000**	**60,000**
FINANCING:						
Transit Fund	73,000		12,000	37,000	12,000	12,000
Federal 5310 Grants	192,000		48,000	48,000	48,000	48,000
TOTAL	**265,000**		**60,000**	**85,000**	**60,000**	**60,000**

PROGRAM - ACTIVITY: Transportation - Transit
DEPARTMENT: CyRide
ACCOUNT NO.

TRANSPORTATION - AIRPORT

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Airport Improvements	5,853,000	1,120,000	2,550,000	1,383,000	800,000	-	125
TOTAL PROJECT EXPENDITURES	**5,853,000**	**1,120,000**	**2,550,000**	**1,383,000**	**800,000**	**-**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	578,992	-	198,778	24,570	355,644	-	
City:							
Airport Construction Fund	501,308	112,000	206,222	113,730	69,356	-	
Other:							
Federal Aviation Administration	4,322,700	1,008,000	2,070,000	1,244,700	-	-	
Federal/State Grants	450,000	-	75,000	-	375,000	-	
Total Other Funding Sources	4,772,700	1,008,000	2,145,000	1,244,700	375,000	-	
TOTAL FUNDING SOURCES	**5,853,000**	**1,120,000**	**2,550,000**	**1,383,000**	**800,000**	**-**	

AIRPORT IMPROVEMENTS **PROJECT STATUS:** Site Change Cost Change

DESCRIPTION/JUSTIFICATION
Airport improvement projects are accomplished through this program.

COMMENTS
The projects included in this program are determined by the Airport Master Plan, as well as staff evaluation of airport facilities. The Master Plan update that was completed in 2020 determines Federal Aviation Administration (FAA) funding eligibility.

2022/23 Rehabilitate South Apron ($920,000); Drainage Improvements ($200,000)
2023/24 Wildlife fence improvements ($2,000,000); reconstruct runway 13/31 runway lighting ($300,000); hangar doors repair (9 doors) ($250,000)
2024/25 Runway 1/19 crack seal ($333,000); reconstruct Taxiway B lighting ($300,000); South Apron expansion ($750,000)
2025/26 Fuel System relocation ($800,000)

Projects beginning in FY 2022/23 include various maintenance projects for failing pavement and drainage improvements to the west Airport basin. FY 2023/24 includes the construction of the wildlife safety fence, lighting replacement along Runway 13/31, and the repairs to the failing T Hangar doors that were identified after the 2020 Derecho . FY 2024/25 various maintenance projects for pavement improvements, lighting on Taxiway B, and the South Apron expansion.
FY 2025/26 includes the relocation of the fuel system.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	1,118,889	208,889	420,000	340,000	150,000	
Construction	4,734,111	911,111	2,130,000	1,043,000	650,000	
TOTAL	**5,853,000**	**1,120,000**	**2,550,000**	**1,383,000**	**800,000**	
FINANCING:						
G.O. Bonds	578,992		198,778	24,570	355,644	
Airport Construction Fund	501,308	112,000	206,222	113,730	69,356	
FAA	4,322,700	1,008,000	2,070,000	1,244,700		
State Grants	450,000		75,000		375,000	
TOTAL	**5,853,000**	**1,120,000**	**2,550,000**	**1,383,000**	**800,000**	

PROGRAM - ACTIVITY: Transportation - Airport
DEPARTMENT: Public Works
ACCOUNT NO. 330-7077-439, 330-7078-439

This page intentionally left blank.

Culture & Recreation

CITY OF ames™

CULTURE AND RECREATION

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
EXPENDITURES:							
Parks and Recreation	38,891,173	18,399,676	15,637,497	1,675,000	1,805,500	1,373,500	128
Library	147,432	-	100,128	47,304	-	-	141
Cemetery	150,000	75,000	-	-	75,000	-	143
TOTAL EXPENDITURES	**39,188,605**	**18,474,676**	**15,737,625**	**1,722,304**	**1,880,500**	**1,373,500**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	22,764,176	6,892,512	14,471,664	700,000	700,000	-	
City:							
Local Option Sales Tax	5,259,432	1,005,500	1,017,628	1,007,304	1,180,500	1,048,500	
Park Development Fund	200,000	-	-	-	-	200,000	
Geitel Winakor Donation Fund	1,294,500	1,294,500	-	-	-	-	
Council Priorities Fund	1,000,000	1,000,000	-	-	-	-	
Ice Arena Capital Reserve	215,000	75,000	-	15,000	-	125,000	
Total City Funding	7,968,932	3,375,000	1,017,628	1,022,304	1,180,500	1,373,500	
Other:							
American Rescue Plan	450,497	450,497	-	-	-	-	
Private Donations	8,005,000	7,756,667	248,333	-	-	-	
Total Other Funding	8,455,497	8,207,164	248,333	-	-	-	
TOTAL FUNDING SOURCES	**39,188,605**	**18,474,676**	**15,737,625**	**1,722,304**	**1,880,500**	**1,373,500**	

CULTURE AND RECREATION - PARKS AND RECREATION

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Downtown Plaza	2,350,497	2,350,497	-	-	-	-	130
Indoor Aquatic Center	29,458,676	15,238,679	14,219,997	-	-	-	131
Park System/Facility Improvements	2,633,000	313,000	1,110,000	435,000	525,000	250,000	132
Ada Hayden Heritage Park	1,725,000	15,000	60,000	700,000	700,000	250,000	133
Playground Equipment Improvements	1,066,500	100,000	162,500	175,000	205,500	423,500	134
Furman Aquatic Center	325,000	225,000	-	-	-	100,000	135
ADA Transition Plan Improvements	125,000	25,000	25,000	25,000	25,000	25,000	136
Homewood Golf Course	367,500	57,500	60,000	250,000	-	-	137
Ames/ISU Ice Arena	215,000	75,000	-	15,000	-	125,000	138
Moore Memorial Park	425,000	-	-	75,000	350,000	-	139
Hayden's Preserve Park Development	200,000	-	-	-	-	200,000	140
TOTAL PROJECT EXPENDITURES	**38,891,173**	**18,399,676**	**15,637,497**	**1,675,000**	**1,805,500**	**1,373,500**	

CULTURE AND RECREATION - PARKS AND RECREATION, continued

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
FUNDING SOURCES:						
Debt:						
G.O. Bonds	22,764,176	6,892,512	14,471,664	700,000	700,000	-
City:						
Local Option Sales Tax	4,962,000	930,500	917,500	960,000	1,105,500	1,048,500
Park Development Fund	200,000	-	-	-	-	200,000
Geitel Winakor Donation Fund	1,294,500	1,294,500	-	-	-	-
Council Priorities Fund	1,000,000	1,000,000	-	-	-	-
Ice Arena Capital Reserve	215,000	75,000	-	15,000	-	125,000
Total City Funding	7,671,500	3,300,000	917,500	975,000	1,105,500	1,373,500
Other:						
American Rescue Plan	450,497	450,497	-	-	-	-
Private Donations	8,005,000	7,756,667	248,333	-	-	-
Total Other Funding	8,455,497	8,207,164	248,333	-	-	-
TOTAL FUNDING SOURCES	**38,891,173**	**18,399,676**	**15,637,497**	**1,675,000**	**1,805,500**	**1,373,500**

DOWNTOWN PLAZA **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

In accordance with previous planning studies, City staff first introduced the idea of developing a gathering place in the Downtown Business District back in 2009. Most recently, the City Council has expressed interest in bringing this type of amenity to reality. The plaza will contain an area that includes a water feature in the summer and an ice-skating ribbon in the winter. The area will also include such amenities as a shelter, public restrooms, irrigated green space, food truck area, benches, an art piece, and landscaping. Additional diagonal parking will also be added along Clark Avenue in front of City Hall.

COMMENTS

Total project cost and funding are as follows:

2020/21	Conceptual design	20,000	Hotel Motel Tax ($20,000)
2021/22	Design/Construction	2,184,624	G.O. Bonds ($700,000; General Fund ($1,484,624)
2022/23	Construction	2,350,497	G.O. Bonds ($700,000); Local Option Sales Tax ($200,000); Council Priorities Fund ($1,000,000); American Rescue Plan ($450,497))
	Total	**$4,555,121**	

LOCATION

The parking lot east of City Hall.

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Construction		2,350,497	2,350,497				
	TOTAL	**2,350,497**	**2,350,497**				
FINANCING:							
G.O. Bonds		700,000	700,000				
Local Option Sales Tax		200,000	200,000				
Council Priorities Fund		1,000,000	1,000,000				
American Rescue Plan		450,497	450,497				
	TOTAL	**2,350,497**	**2,350,497**				

PROGRAM - ACTIVITY
Culture and Recreation - Parks and Recreation

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.
Various

INDOOR AQUATIC CENTER **PROJECT STATUS:** NEW

DESCRIPTION/JUSTIFICATION

The last day of operation for the Ames Municipal Pool is February 28, 2022 and will be demolished in March 2022. Although the Ames Community School District new high school includes a competition pool, there is still a need for a warm-water pool facility. The proposed Indoor Aquatic Center will be a one-story building and contain a 25-yard six-lane lap pool, a zero-depth entry pool with a play structure and a current channel, a therapy pool, slides, locker rooms (men's, women's, and gender neutral), party/meeting rooms, multi-purpose rooms, and a walking track.

The Indoor Aquatic Center is to be located at 122 Oak Street which is currently owned by the Iowa Department of Transportation (DOT). City staff is working with DOT staff to develop a purchase agreement which will include the purchase price (appraisal is $2.9 million), a date for the DOT to vacate the property, as well as any other stipulations, such as environmental studies, that pertain to the purchase of the property.

This project was included in the City's 2021 preliminary application for the Iowa Reinvestment District Program in which the City has been notified of a provisional award of $10 million to be used for the Indoor Aquatic Center. The Iowa Reinvestment District revenue will be used to reduce the property tax levy to repay the bonds issued to fund the aquatics center. The City will submit a final application in February 2022. Additionally, over $10 million in private donations has been secured/pledged for the project.

COMMENTS

Indoor Aquatic Center Estimated Project Schedule

Phase	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	Total
Conceptual Design	$ 22,000	$ -	$ -	$ -	**$ 22,000**
Land	-	-	2,900,000	-	**2,900,000**
Design	-	425,500	1,021,200	255,300	**1,702,000**
Construction Manager (CM)	-	280,000	560,000	560,000	**1,400,000**
Soils, Survey, Testing (SST)	-	-	195,000	195,000	**390,000**
Construction	-	-	8,791,973	10,745,745	**19,537,718**
FFE	-	-	-	300,000	**300,000**
Subtotal	**$ 22,000**	**$ 705,500**	**$ 13,468,173**	**$ 12,056,045**	**$ 26,251,718**
Contingency	-	-	1,770,506	2,163,952	**3,934,458**
Total	**$ 22,000**	**$ 705,500**	**$ 15,238,679**	**$ 14,219,997**	**$ 30,186,176**

LOCATION

122 Oak Street

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Design, Land, CM, & SST		5,986,500	4,676,200	1,310,300			
Construction		23,472,176	10,562,479	12,909,697			
	TOTAL	**29,458,676**	**15,238,679**	**14,219,997**			
FINANCING:							
G.O. Bonds		20,164,176	6,192,512	13,971,664			
Geitel Winakor Donation Fund		1,294,500	1,294,500				
Donations		8,000,000	7,751,667	248,333			
	TOTAL	**29,458,676**	**15,238,679**	**14,219,997**			

PROGRAM - ACTIVITY	DEPARTMENT:	ACCOUNT NO.
Culture and Recreation - Parks and Recreation	Parks and Recreation	Various

PARK SYSTEM/FACILITY IMPROVEMENTS **PROJECT STATUS:** Schedule Change Cost Change

DESCRIPTION/JUSTIFICATION

To maintain City parks in a safe and quality manner, the projects listed below address maintenance issues and improvements at various locations.

COMMENTS

2022/23 Renovate changing rooms at Bandshell Park($80,000); replace flooring in aerobics room at Community Center ($20,000); engineer/ design bath house removal and plan new shelter with restroom at Carr Park ($45,000); install irrigation system at sports fields at Emma McCarthy Lee Park ($55,000); replace roofing, replace flooring, renovate restrooms, and redesign open office space area in administration building at Gateway Hills Park ($113,000)

2023/24 Construct new shelter with restroom at Carr Park ($350,000); replace weight room weight equipment at Community Center ($75,000); add gutters to the hill drive at Emma McCarthy Lee Park ($40,000); engineer/design restroom addition at Gateway Hills Park ($25,000); install additional parking by Cottonwood Shelter at River Valley Park ($120,000); consolidate maintenance facilities for Park Maintenance ($500,000)

2024/25 Replace sound system at Auditorium (100,000); resurface tennis courts at Brookside Park ($40,000); construct restroom at Gateway Hills Park ($160,000); replace basketball court at Inis Grove Park ($60,000); replace Cottonwood Shelter at River Valley Park ($75,000)

2025/26 Add parking near soccer fields ($250,000), renovate restroom ($125,000), renovate canoe/kayak access ($50,000) at River Valley Park; add climbing boulder at location to be decided ($100,000)

2026/27 Refinish gymnasium wood floor at Community Center ($50,000); resurface tennis courts at Inis Grove Park ($50,000); renovate canoe/kayak access at South 16th Street (50,000); remove light poles on baseball field at Brookside Park ($100,000)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	70,000	45,000	25,000			
Construction	2,563,000	268,000	1,085,000	435,000	525,000	250,000
TOTAL	**2,633,000**	**313,000**	**1,110,000**	**435,000**	**525,000**	**250,000**
FINANCING:						
G.O. Bonds	500,000		500,000			
Local Option Sales Tax	2,133,000	313,000	610,000	435,000	525,000	250,000
TOTAL	**2,633,000**	**313,000**	**1,110,000**	**435,000**	**525,000**	**250,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Culture and Recreation - Parks and Recreation	Parks and Recreation	Various

ADA HAYDEN HERITAGE PARK **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

Ada Hayden Heritage Park is the crown jewel of the Ames Park system. To keep it maintained and install new features, three projects have been identified.

By adding a wetland overlook to view wildlife, these portions of the park will be enhanced and able to be enjoyed more fully by park visitors.

The asphalt trails around the lakes are deteriorating. This project will replace the asphalt with concrete and widen the path.

Jensen's Pond (northwest section of the park north of the upland trail) is an excellent location for creating a child friendly fishing location. Adding a fishing dock, a solar operated aerator, a path around the pond, and a new outlet structure are all components of this project.

COMMENTS

2022/23	Engineer/design a wetland overlook
2023/24	Construct a wetland overlook
2024/25	Replace path around south lake
2025/26	Replace path around north lake
2026/27	Renovate Jensen's Pond

LOCATION
Ada Hayden Heritage Park, 5205 Grand Avenue

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	15,000	15,000				
Construction	1,710,000		60,000	700,000	700,000	250,000
TOTAL	**1,725,000**	**15,000**	**60,000**	**700,000**	**700,000**	**250,000**
FINANCING:						
G.O. Bonds	1,400,000			700,000	700,000	
Local Option Sales Tax	320,000	10,000	60,000			250,000
Donations	5,000	5,000				
TOTAL	**1,725,000**	**15,000**	**60,000**	**700,000**	**700,000**	**250,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Culture and Recreation - Parks and Recreation	Parks and Recreation	030-5388-459 113-5388-459

PLAYGROUND EQUIPMENT IMPROVEMENTS **PROJECT STATUS:** Schedule Change Cost Change

DESCRIPTION/JUSTIFICATION

During the past 25 years, the City has replaced old play equipment throughout the park system. The life expectancy of play equipment is 20–25 years. Therefore, it is necessary to begin replacement of playground equipment that was installed at the beginning of this cycle.

COMMENTS

2022/23	Replace equipment in Christofferson Park ($50,000); install new equipment in Inis Grove Park ($50,000)
2023/24	Replace equipment adjacent to Hickory Shelter in Brookside Park ($50,000); replace equipment in Bandshell Park ($62,500); replace equipment in Stuart Smith Park ($50,000)
2024/25	Replace equipment in Parkview North Park ($56,250); replace equipment in Patio Homes West Park ($56,250); replace equipment in North River Valley Park ($62,500)
2025/26	Replace equipment in Old Town Park ($44,500); replace ages 2-5 equipment in O'Neil Park ($41,500), replace ages 5-12 equipment in O'Neil Park ($57,000); replace equipment adjacent to Cottonwood Shelter in River Valley Park ($62,500)
2026/27	Replace equipment in Gateway Hills Park ($50,000); replace equipment in Emma McCarthy Lee Park ($69,500); replace equipment in Franklin Park ($54,000); replace ages 2-5 equipment and ages 5-12 equipment in Moore Memorial Park ($250,000)

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Construction	1,066,500	100,000	162,500	175,000	205,500	423,500
TOTAL	**1,066,500**	**100,000**	**162,500**	**175,000**	**205,500**	**423,500**
FINANCING:						
Local Option Sales Tax	1,066,500	100,000	162,500	175,000	205,500	423,500
TOTAL	**1,066,500**	**100,000**	**162,500**	**175,000**	**205,500**	**423,500**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Culture and Recreation - Parks and Recreation	Parks and Recreation	030-5350-439 030-5352-439

FURMAN AQUATIC CENTER **PROJECT STATUS:** Schedule Change Cost Change

DESCRIPTION/JUSTIFICATION

This facility opened in May 2010. It has been operational for eleven seasons with an average of 90,573 visitors per summer. To ensure it remains a quality facility, structural and electrical issues have been identified and will be addressed in a systematic manner.

The pool basins need to be repainted every six to seven years and it is time to have this done again. The water heaters are over 12 years old and inefficient. By replacing the heaters with a more efficient model, the energy consumption will be reduced. The current light fixtures at times allow water to accumulate inside the fixture which must be drained. Replacing with an LED lamp and better fixture will reduce maintenance and energy consumption.

COMMENTS

2022/23 Repaint pool basins ($150,000); replace pool water heaters ($75,000)
2026/27 Replace the light fixtures on the pool deck ($100,000)

LOCATION

Furman Aquatic Center, 1365 13th Street

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Construction	325,000	225,000				100,000
TOTAL	**325,000**	**225,000**				**100,000**
FINANCING:						
Local Option Sales Tax	325,000	225,000				100,000
TOTAL	**325,000**	**225,000**				**100,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Culture and Recreation - Parks and Recreation	Parks and Recreation	030-5312-459 030-5313-459

ADA TRANSITION PLAN IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

To better understand where Parks and Recreation does not comply with the 2010 Americans with Disabilities Act Standards for Accessible Design, an inventory and assessment of the park system and facilities is being conducted in FY 2021/22. Upon conclusion of the inventory and assessment, a transition plan will be developed in order to become compliant. In anticipation of items needing to be corrected, money is being put into each year of the CIP. This is an estimate; cost will not be known until the transition plan is finalized.

COMMENTS

Actual transition plan items will be determined based upon the assessment to be completed in FY 2021/22.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Construction	125,000	25,000	25,000	25,000	25,000	25,000
TOTAL	**125,000**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**
FINANCING:						
Local Option Sales Tax	125,000	25,000	25,000	25,000	25,000	25,000
TOTAL	**125,000**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Culture and Recreation - Parks and Recreation	Parks and Recreation	030-5351-459

HOMEWOOD GOLF COURSE **PROJECT STATUS:** Cost Increase

DESCRIPTION/JUSTIFICATION
The projects listed below will address facility needs and enhance provided services. To help provide a secure environment, security cameras will be installed in the newly constructed clubhouse.

Staff has noticed erosion taking place in the ravine on hole #9 and behind the clubhouse. A consultant needs to be hired to assess the condition of the ravine and provide recommendations of future actions, if necessary.

The current bridge on Hole #9 was designed for walking golfers. Since the demand for motorized carts at Homewood has increased, replacing this bridge with one designed for motorized carts will speed up play and reduce safety concerns for golfers having to drive along Hole #8 to get to the 9th green.

COMMENTS

2022/23 Install security cameras in the clubhouse ($32,500); study of the hole #9 ravine ($25,000)
2023/24 Engineer/design bridge replacement on Hole #9 for cart accommodation
2024/25 Replace the bridge on Hole #9 so it can accommodate carts

LOCATION
Homewood Golf Course, 401 East 20th Street

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering	85,000	25,000	60,000			
Construction	282,500	32,500		250,000		
TOTAL	**367,500**	**57,500**	**60,000**	**250,000**		
FINANCING:						
Local Option Sales Tax	367,500	57,500	60,000	250,000		
TOTAL	**367,500**	**57,500**	**60,000**	**250,000**		

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Culture and Recreation - Parks and Recreation	Parks and Recreation	030-5343-459 030-5344-459

AMES/ISU ICE ARENA **PROJECT STATUS:** Scope Change Delayed

DESCRIPTION/JUSTIFICATION
The Ames/ISU Ice Arena is over 18 years old. The following item needs to be reconstructed, replaced, or repaired to maintain a quality facility:

2022/23 Construct a women's locker room
2024/25 Replace water heaters
2026/27 Replace lobby flooring

COMMENTS
Funding for capital improvement projects is provided through the Ice Arena Capital Reserve Fund. Every year, the City and Iowa State University each contribute $40,000 to this fund to ensure the facility is well-maintained. As of June 30, 2021, this fund totaled $137,208.

LOCATION
Ames/ISU Ice Arena, 1505 Gateway Hills Park Drive

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Construction	215,000	75,000		15,000		125,000
TOTAL	**215,000**	**75,000**		**15,000**		**125,000**
FINANCING:						
Ice Arena Capital Reserve Funds	215,000	75,000		15,000		125,000
TOTAL	**215,000**	**75,000**		**15,000**		**125,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Culture and Recreation - Parks and Recreation	Parks and Recreation	571-5334-459

MOORE MEMORIAL PARK **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

Moore Memorial Park is 90 acres; 50 acres are located east of Ioway Creek and 40 acres are west of the creek. The 50-acre parcel was developed into a community park in 1991. The 40-acre parcel has been leased to Iowa State University (ISU) as an agricultural research plot for $3,000 per year. ISU has farmed this land for the last time in 2021 as Parks and Recreation is working with Water and Pollution Control and Public Works to retire this land and install nutrient reduction and water quality practices.

In response to community input to connect parks via hard surface trails, a pedestrian bridge will link these two parcels of City property. The plan is to then have a trail from Moore Memorial Park along Scholl Road to Ontario Street. This improvement is viable because ISU owns the land adjacent the City's 40-acre parcel. In the event ISU allows public access through its parcel, several miles of recreational trails would be linked together. Staff will continue to meet with ISU officials to bring this project to fruition.

COMMENTS

2024/25 Engineer/design a pedestrian bridge to cross Ioway Creek at Moore Memorial Park
2025/26 Install a pedestrian bridge across Ioway Creek at Moore Memorial Park

LOCATION

Moore Memorial Park, 3050 Northridge Parkway

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Engineering/Design	75,000			75,000		
Construction	350,000				350,000	
TOTAL	**425,000**			**75,000**	**350,000**	
FINANCING:						
Local Option Sales Tax	425,000			75,000	350,000	
TOTAL	**425,000**			**75,000**	**350,000**	

PROGRAM - ACTIVITY: Culture and Recreation - Parks and Recreation

DEPARTMENT: Parks and Recreation

ACCOUNT NO.

HAYDEN'S PRESERVE PARK DEVELOPMENT **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
The Parks and Recreation Master Plan identifies neighborhood park service areas to cover a 1/4 to 1/2-mile radius. As the North Growth development occurs, this plan indicated a need for a neighborhood park to serve residents in this area. Standard amenities in neighborhood parks include a basketball pad with goals, a small shelter, a play structure and swings, and utilities. In addition, this park may require paths and sidewalks. The estimated costs to develop Hayden's Preserve Neighborhood Park will total $200,000.

COMMENTS
This project is delayed because the private development is not moving as quickly as originally planned.

LOCATION
Hayden's Preserve Development

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Park Development	200,000					200,000
TOTAL	**200,000**					**200,000**
FINANCING:						
Park Development Fund	200,000					200,000
TOTAL	**200,000**					**200,000**

PROGRAM - ACTIVITY	DEPARTMENT:	ACCOUNT NO.
Community Enrichment - Parks and Recreation	Parks and Recreation	

CULTURE AND RECREATION - LIBRARY

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Library Carpet Replacement	147,432	-	100,128	47,304	-	-	142
TOTAL PROJECT EXPENDITURES	**147,432**	**-**	**100,128**	**47,304**	**-**	**-**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	147,432	-	100,128	47,304	-	-	
Other:							
Private Contributions	-	-	-	-	-	-	
TOTAL FUNDING SOURCES	**147,432**	**-**	**100,128**	**47,304**	**-**	**-**	

LIBRARY CARPET REPLACEMENT **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
The Ames Public Library building was expanded and completely renovated between 2012 and 2014 and was re-opened to the public on September 14, 2014. The library sees an average of 1,300 people per day. By the time the renovated building has been in use for 10 years, the flooring will most likely have been traversed over 4 million times and show considerable wear.

The first-floor carpet replacement includes replacing approximately 9,450 square feet of flooring in the youth services area ($62,087), 2,640 square feet of flooring in the auditorium ($17,345), and approximately 610 square feet of flooring in the entryway ($4,008). Carpet tile will need to be torn out and flooring laid. Estimated pricing includes 2,540 square feet of extra material for fitting and making minor future repairs ($16,688).

The second-floor carpet replacement includes replacing approximately 6,000 square feet of flooring in the adult service area ($39,420). Carpet tile will need to be torn out and flooring laid; estimated pricing includes 2,418 square feet of extra material for fitting and making minor future repairs ($7,884).

COMMENTS
Pricing includes the estimated cost of materials, adhesive, and professional tear-out and installation.

LOCATION
515 Douglas Avenue

		TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:							
Materials/Labor		147,432		100,128	47,304		
	TOTAL	**147,432**		**100,128**	**47,304**		
FINANCING:							
Local Option Sales Tax		147,432		100,128	47,304		
	TOTAL	**147,432**		**100,128**	**47,304**		

PROGRAM - ACTIVITY: **DEPARTMENT:** **ACCOUNT NO.**

Culture and Recreation - Library Library/Youth Services

CULTURE AND RECREATION - CEMETERY

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Cemetery Improvements	150,000	75,000	-	-	75,000	-	144
TOTAL PROJECT EXPENDITURES	**150,000**	**75,000**	**-**	**-**	**75,000**	**-**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	150,000	75,000	-	-	75,000	-	
TOTAL FUNDING SOURCES	**150,000**	**75,000**	**-**	**-**	**75,000**	**-**	

CEMETERY IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This program provides funding to enhance the visitor experience at the three Ames cemeteries.

There are several areas in the eastern portion of the Ames Municipal Cemetery where hillsides are being eroded to the point where graves could be exposed in the near future. Retaining walls will be installed to these areas to prevent further erosion.

The fencing at the Ontario Cemetery is galvanized chain link and needs replacing. A more decorative style fence like that at the Ames Municipal Cemetery will be installed.

COMMENTS

2022/23 Install retaining walls on East side of Ames Municipal Cemetery ($50,000); establish landscaping above the retaining wall at Ontario Cemetery ($25,000)

2025/26 Replace fencing at Ontario Cemetery ($75,000)

LOCATION
Ames Municipal Cemetery and Ontario Cemetery

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Construction	150,000	75,000			75,000	
TOTAL	**150,000**	**75,000**			**75,000**	
FINANCING:						
Local Option Sales Tax	150,000	75,000			75,000	
TOTAL	**150,000**	**75,000**			**75,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Culture and Recreation - Cemetery	Parks and Recreation	030-5030-459 030-5031-459

Community Development

CITY OF Ames™

COMMUNITY DEVELOPMENT

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
EXPENDITURES:							
Neighborhood Improvements	750,000	150,000	150,000	150,000	150,000	150,000	146
TOTAL EXPENDITURES	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	750,000	150,000	150,000	150,000	150,000	150,000	
TOTAL FUNDING SOURCES	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	

COMMUNITY DEVELOPMENT - NEIGHBORHOOD IMPROVEMENTS

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
Downtown Facade Program	250,000	50,000	50,000	50,000	50,000	50,000	147
Campustown Façade Grant Program	250,000	50,000	50,000	50,000	50,000	50,000	148
Neighborhood Improvement Program	250,000	50,000	50,000	50,000	50,000	50,000	149
TOTAL PROJECT EXPENDITURES	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	750,000	150,000	150,000	150,000	150,000	150,000	
TOTAL FUNDING SOURCES	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	

DOWNTOWN FAÇADE IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project was introduced in FY 2001/02 to facilitate private improvements to the façades of the buildings in the Downtown area. For three years, the City did not receive any requests for these funds.

Downtown Design Guidelines were approved by the City Council in 2001 to ensure that financial assistance for façade improvements is consistent with the historical character of Downtown. The program initially started with loans but was altered by the City Council to be a grant program to qualify for these funds, improvements must be made to at least one of the following exterior elements: upper façades, storefronts, transoms, display windows, kick plates, entrances, signs, or awnings/canopies. Beginning in FY 2011/12, the City Council expanded the program guidelines, and implemented a review and award period in spring of each year. Additionally, to aid in comparing applications, the City Council also established a scoring process to prioritize awarding grants.

Under this program, the City provides up to $15,000 in grant funds to be matched dollar for dollar. In addition, a $1,000 grant is available to subsidize the cost of an architect. The program has awarded 49 grants to downtown businesses since 2001. Of the 53 award grants, 49 have been accepted for a total of approximately $658,208 of grant fund that have been expensed. FY 2022/23 will begin with a new $50,000 allocation.

COMMENTS
This program continues to support the City Council's previous goals for the commercial revitalization of Downtown. If interest in this program continues, funding can be expanded, or the City Council may consider appropriate funds to priority projects.

LOCATION
Downtown Ames

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Incentives (Loans or Grants)	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Community Development - Neighborhood Improvements	Planning & Housing	030-1030-469

CAMPUSTOWN FAÇADE IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The purpose of the Campustown Facade Improvement Program is to improve the Campustown commercial district by providing financial incentives to enhance the appearance and use of existing buildings with commercial use. The program design is to encourage and maintain the eclectic culture and 'uniqueness' of Campustown, to increase safety, security, and investments by property and business owners and to add to the vitality of Campustown.

The Campustown Facade Improvement Program seeks to encourage the creation of a place that is walkable, transparent, eclectic, sustainable, social, and historic. Beginning in FY 2014/15, the first step in the process was to hire a consultant to assist the city in the development of a "Vision Statement," prepare an "Idea Book," review design ideas and guidelines, provide assistance to applicants wanting to apply for the program, determine costs and feasibility, and conduct workshops and working meetings with applicants and City staff. The second step was to implement two pilot projects to include construction and evaluation.

Under this program, the City would provide up to $15,000 in grant funds to be matched dollar for dollar. In addition, a $2,000 grant is available to subsidize the cost of an architect. Through June 2021, the program has awarded seven grants to a Campustown business and has expensed a total of $122,580 on these seven projects. FY 2022/23 will begin with a new $50,000 allocation.

COMMENTS
This program will address the City Council's goal of revitalizing Campustown. Although there are annual inquiries about the program, interest has waned in recent years for new applications.

LOCATION
Campustown Ames

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Incentives (Loans or Grants)	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Development - Neighborhood Improvements	Planning & Housing	030-1031-469

NEIGHBORHOOD IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The Neighborhood Improvement Program was originally designed to enhance the appearance of City neighborhoods with the addition of permanent physical improvements and to promote a greater sense of community through resident participation in neighborhood projects. The program focused solely on providing City grants to help residents accomplish those projects that they have identified as top priorities for their neighborhoods. Competitive proposals are solicited from neighborhood groups and are rated by a review panel, which consists of City staff and citizens, according to the following criteria approved by the City Council: public impact, neighborhood participation, safety, environment, housing, and public space. Neighborhood residents are expected to provide a local match to these grants on a dollar-for-dollar basis in the form of labor, materials, and/or cash.

Since the program was initiated in FY 1996/97, 125 neighborhood projects have been funded by the City, totaling $378,920.61. Projects have included cul-de-sac, right-of-way and median landscaping; playground construction and/or restoration; alleyway beautification; street trees; pond renovation; installation of rain gardens, historic house plaques and medallions; prairie restoration; construction of a neighborhood message center; construction of a shelter house in a City park; park sidewalks; neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood barbecue grills; renovating “DZ Triangle;” Monarch butterfly habitat restoration; concrete ping pong tables in a City park, neighborhood clean-up days, and playground equipment in a new neighborhood park.

With the implementation of the Neighborhood Liaison Program, the City is committed to creating great neighborhoods with a sense of community. To complement this initiative, eligibility for these funds has been expanded beyond the original intent of the Neighborhood Improvement Grant Program to include such projects as sub-area planning elements and other support programs for neighborhood associations. In addition, the application period is now open-ended with the requirement that the funds be expended one year from date of Council approval.

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Construction	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY: **ACCOUNT NO.**

Community Development - Neighborhood Improvements 030-0420-469

This page intentionally left blank.

General Government

CITY OF Ames™

GENERAL GOVERNMENT

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
EXPENDITURES:							
Facilities	375,000	75,000	75,000	75,000	75,000	75,000	152
TOTAL EXPENDITURES	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	375,000	75,000	75,000	75,000	75,000	75,000	
TOTAL FUNDING SOURCES	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**	

GENERAL GOVERNMENT - FACILITIES

PROJECT/FUNDING SOURCE	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27	Page
PROJECT:							
City Hall Improvements	375,000	75,000	75,000	75,000	75,000	75,000	153
TOTAL PROJECT EXPENDITURES	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**	
FUNDING SOURCE:							
City:							
Local Option Sales Tax	375,000	75,000	75,000	75,000	75,000	75,000	
TOTAL FUNDING SOURCES	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**	

CITY HALL IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION
The City Hall Improvements program is focused on major maintenance or replacement of needed items for the City Hall building, the Veterans Memorial, and both east and west City Hall parking lots.

City Hall's mechanical, electrical, plumbing, sprinkler, and numerous other support systems were installed in 1990. Funds have been allocated yearly for equipment or system failures that may occur beyond the City Hall operating budget funding levels. Funding has been increased due to the increase in materials and repair costs and the age of some of our major systems (i.e. heat pumps).

LOCATION
City Hall, 515 Clark Avenue

	TOTAL	2022/23	2023/24	2024/25	2025/26	2026/27
COST:						
Maintenance	375,000	75,000	75,000	75,000	75,000	75,000
TOTAL	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**
FINANCING:						
Local Option Sales Tax	375,000	75,000	75,000	75,000	75,000	75,000
TOTAL	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
General Government - Facilities	Fleet Services/Facilities	030-2930-419

This page intentionally left blank.