# CITY OF AMES, IOWA

# Capital Improvements Plan 2010-2015



A YEAR OF PROGRESS!





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July 1, 2010

#### Mayor and Ames City Council Members:

Attached is the Capital Improvements Plan (CIP) for fiscal years 2010-11 through 2014-15. This Plan reflects total expenditures of \$223,346,246. The staff is well aware of the difficult economic environment in which we find ourselves and, therefore, this total expenditure level is the lowest of the previous five CIPs. However, even in the face of these challenging times, it is important that we continue to invest in our infrastructure. To defer these investments will result in even greater financial obligations in the future.

PUBLIC SAFETY		UTILITIES		TRANSPO	ORTATION	COMMUNITY ENRICHMENT	
Law	\$167,961	Resource	\$1,503,800	Streets	\$50,943,000	Parks &	\$3,935,100
Enforcement		Recovery		Engineering		Recreation	
Fire	\$691,888	Water	\$49,631,000	Streets	\$1,590,000	Library	\$408,800
Suppression		Treatment		Maintenance		Services	
Traffic	\$15,597,055	Water	\$4,500,000	Transit	\$22,924,341	City Hall	\$1,130,000
		Distribution				Improvements	
		Storm Sewers	\$2,476,905	Airport	\$2,960,000	Neighborhood	\$250,000
						Improvements	
		Sanitary	\$3,860,000			Downtown	\$250,000
		Sewers				Facade	
						Improvements	
		WPC	\$9,340,000			Cool Cities	\$200,000
		Treatment				Initiatives	
		Electric	\$50,431,396			City	\$555,000
						Maintenance	
						Facility	
TOTAL	\$16,456,904		\$121,743,101		\$78,417,341		\$6,728,900

This CIP anticipates the following City revenues to support the various projects reflected in the CIP: \$32,919,000 from G.O. Bond proceeds; \$17,179,396 from Electric Revenue Bond revenues; \$6,312,688 from Local Option Sales Tax receipts; \$4,168,384 from Road Use Tax receipts; \$6,497,750 from Water Utility user fees; \$10,988,750 from Sanitary Sewer Utility user fees; \$2,375,000 from Storm

Sewer Utility user fees; \$31,080,200 from Electric Utility user fees; \$1,503,800 from Resource Recovery Utility revenues; \$3,661,238 from CyRide revenues; and \$775,905 from various other City funding sources.

#### **PUBLIC SAFETY** - \$16,456,904

Story County E911 Board funding will be secured to upgrade the **Communication Center Radio Consoles** in the Police Dispatch area (page 10) to improve interoperability among the emergency response agencies in the County.

In addition to replacing Engine #2 in the **Fire Apparatus Replacement** program (page 12), we are exploring outfitting the remaining five front-line vehicles with **Mobile Data Terminals** (page 13) to provide improved information to responding apparatus.

The safe movement of pedestrians and automobiles is emphasized in this CIP with major intersection improvements at 20<sup>th</sup> and Grand in the **US 69 Intersection Improvements** (page 21), Franklin and Dotson Avenues in the **West Lincoln Way Intersection Improvements** (page 25), 215th and North Dakota in the **North Dakota Avenue Railroad Overpass** (page 24). To improve efficient movement of vehicles, the **Traffic Signal** program (page 20) calls for installing or replacing signals at South Dayton/S.E. 16<sup>th</sup> Street, 28<sup>th</sup> and Grand, Lincoln Way and Hayward, Lincoln Way and Hyland, and Lincoln Way and Union Drive.

The **Shared Use Path System Expansion** program (page 19) focuses on completing the Skunk River, South Dayton Avenue, and Squaw Creek Trail segments. Unfortunately, the traditional funding level of \$150,000 per year from Local Option Sales Tax revenues has been insufficient to make major progress in completing these important quality of life amenities. Therefore, this CIP reflects an additional commitment of \$100,000 per year to construct new shared use paths. This is one of a few areas for which I am recommending increased funding.

#### <u>UTILITIES</u> - \$121,743,101

#### Resource Recovery - \$1,503,800

In addition to the **Resource Recovery System Improvements** (page 30) to upgrade our mechanical systems in the plant, we are preparing to expand our site to the east to accommodate the construction of a **Resource Recovery Recyclables Building** (page 31) that will serve as a staging area for recyclable and ferrous materials, as well as to renovate the existing building to accommodate **Pre-Process Handling** (page 32) materials that do not need further processing to become Refuse Derived Fuel (RDF).

#### Water - \$54,131,000

The highlight of the Water Utility over the next five years will be the **Water Plant Expansion** project (page 34). A recent engineering analysis indicated that an investment of \$48,000,000 in constructing a new 15 MGD plant is the most cost effective approach to meeting our customer demands for the next twenty years as opposed to renovating our existing 1930 vintage facility. The Water Plant expansion is budgeted to be funded using the State Revolving Fund loan program. This low-interest loan program will reduce the interest cost over the life of the project. In addition to treating our water, the CIP helps ensure that we have an adequate supply to match our ever-growing demand through development of a new well field with the **Water Supply Expansion** (page 38). We hope to experiment with **Automatic Meter Reading** (page 39) with a pilot program in the later years of the CIP. The improvement of water flow and elimination of rusty water in our distribution lines are enhanced with the **Water System Improvements** (page 41).

#### Storm Sewer - \$2,476,905

This CIP continues the City's commitment to mitigate the negative impact of storm water runoff. The annual funding for **Storm Sewer Outlet Erosion Control** (page 43) is bolstered in the first year of the CIP with the inclusion of the final year of the three-year Watershed Improvement Review Board Grant. The cleaning of the retention/detention ponds to ensure their effectiveness will be accomplished by the **Storm Sewer Facility Rehabilitation Program** (page 44). Our five-year cycle for replacing deteriorated intakes will be maintained with our **Storm Sewer Intake Rehabilitation Program** (page 46). Problems associated with standing water, flooding, and insufficient pipe capacity are addressed by the **Low Point Drainage Improvements** (page 45).

#### Sanitary Sewer - \$13,200,000

In accordance with our commitment to protecting our water resources, the addition of the **WPC Plant Disinfection** system (page 52) will help maintain the South Skunk River for recreational use. The WPC Plant Disinfection project is expected to be funded primarily with I-JOBS or IDNR grant funding. If grant funding is not available for this project, the State Revolving Fund low-interest loan program will be used. It is hard to believe, but our "new" WPC Plant is over twenty years old. Therefore, improvements to the clarifiers, turbine pumps, bar screen, transformer, grease station, and lift station will all be accomplished in the **WPC Plant Facility Improvements** program (page 53). Other major work to be accomplished includes the modifications to facilitate a new sludge handling strategy in the **WPC Plant Residuals Handling Improvements** (page 54) and cleaning out and painting in the **Digester Improvements** (page 55).

Since the Water Pollution Control Plant was first opened, the City has sponsored the **Clear Water Diversion** program (page 50) that provides City grants to homeowners to redirect their sump pump connections into the storm sewer and away from the sanitary sewer system thus avoiding needless treatment of this "clean" water. To date, over 1,200 residences have benefitted from this program. We have reached a point where the staff believes it is important to shift emphasis from the service lines supported in the Clear Water Diversion program to a comprehensive analysis of our distribution system to determine if any major infiltration points are present in these lines. This **Sanitary Sewer System Evaluation** (page 48) is scheduled over the next five years.

#### Electric - \$50,431,396

Based on an in-depth study to determine the most cost effective strategy to meet our customer needs for the next twenty years, the City Council has directed staff to: 1) reduce consumption with an aggressive demand-side management program; 2) increase our commitment to renewable energy through the reliance on refuse derived fuel from the Resource Recovery Plant and the purchase of wind power; 3) complete our tie-line to the south to ensure access to cheaper energy and reliability during outages; and 4) maintain our existing generating units so that we can maintain our existing installed capacity. The extensive list of projects contained in this CIP is geared to accomplish these four objectives.

Our transmission and distribution systems will be enhanced with the **Mid-American Energy Interconnection** (page 59), **Top-O-Hollow Substation Expansion** (page 69), **Ontario Substation Breaker Addition** (page 83), and **Vet Med Substation Expansion** (page 60).

In addition to our significant commitment to reducing consumption reflected in our **Demand Side Management Programs** (page 64), twenty projects have been earmarked over the next five years to maintain our power generating units. The most significant of this group includes the **Unit #8 Boiler Tube Repair** (page 61), **Feedwater Heater Tube Replacement** (page 62), **Gas Turbine #1 Inspection and Overhaul** (page 68), **Unit #8 Nitrogen Oxide Control Capital** (page 71), **Unit #7 Nitrogen Oxide Control Capital** (page 72), **Unit #7 Tube Repairs** (page 75), **Cooling Tower Repairs** (page 77), **Unit #8 Turbine Generator Overhaul** (page 78), **Unit #8 Mercury Capital** (page 80).

The Electric Utility funding plan includes revenue bonds in the amount of \$11,589,396 in FY 11/12, and \$5,590,000 in FY 12/13. The revenue bonds will be used to fund major projects including the Mid-America Energy Interconnection, boiler tube repairs, and emissions control equipment.

#### **TRANSPORTATION** - \$78,417,341

#### Streets - \$52,533,000

Consistent with the high priority identified by our residents in the annual satisfaction survey, the CIP places an emphasis on maintaining and expanding our street system. Projects such as **Grand Avenue Extension** (page 96) and **South Dakota Widening** (page 97) will help alleviate traffic congestion, while the **Arterial Street** (page 90), **Collector Street** (page 91), **CyRide Route**, (page 89), and **Concrete Pavement Improvements** (page 92) will restore structural integrity, serviceability, and rideability.

The CIP reflects a commitment to the City Council's goal of strengthening our neighborhoods with the following programs that will enhance these residential areas: **Neighborhood Curb Replacement** (page 100), **Asphalt Pavement Improvement** (page 93), **Asphalt Resurfacing & Seal Coat Removal/Asphalt Reconstruction** (page 95), and **Sidewalk Safety** (page 103).

A recent engineering study indicated that of all the bridges that the City maintains, only the 6<sup>th</sup> Street bridge will need to be replaced in the foreseeable future. In order to delay the need for this costly expenditure for five to ten years, the **Bridge Rehabilitation** program (page 101) calls for the painting of the bridge to slow down the rusting of the support structure.

#### Airport - \$2,960,000

We hope to take advantage of 95% federal matching funds to accomplish numerous **Airport Improvements** (page 115) over the next three years. The CIP reflects apron reconstruction, redesign of the parking lot and vehicle circulation, and replacement of the main terminal building.

#### CyRide - \$22,924,341

A major emphasis over the next five years will be to upgrade our fleet with the addition of 18 new buses and 30 used buses in the **Vehicle Replacement** program (page 107). CyRide's current building, which was constructed in 1983, has been expanded four times. The CyRide Board in the **Building Expansion & Modernization** (page 108) program is planning the next expansion so that all of the fleet can be maintained in an indoor facility safe from the elements.

#### **COMMUNITY ENRICHMENT - \$6,728,900**

#### Parks and Recreation - \$3,935,100

Our continuing commitment to our park system and the excellent quality of life it affords our citizens is demonstrated by the investment in our **Parks and Recreation Facility Improvements** (page 123) and support for our **Playground/Park Equipment Improvements** (page 124). Through our partnership with the Ames School District, our indoor pool - **Municipal Pool Maintenance** (page 121) - will receive needed renovations to prolong the life of this facility until 2015. An existing park property will be transformed to a centralized trailhead with the **Greenbriar Park Development** (page 125).

In the latter years of the CIP, **Ada Hayden Heritage Park** (page 126) will be enhanced further with a new parking lot to the northwest and resurfaced paths. Through a partnership with the Ames Foundation, an **Interactive Fountain** (page 127) will be installed in a yet-to-be-determined site in the Downtown area.

#### **Library - \$408,800**

While the Library Board has engaged the public in a number of discussions regarding the possibility of a new facility, no final decision has been made by the City Council about this project. Hence, the CIP reflects a number of projects that assume the status quo is being maintained in the existing building. These projects include **Skylight Replacement** (page 129), **Air-Conditioning System Replacement** (page 130), and **Floor Covering Replacement** (page 131).

#### City Hall - \$1,130,000

As part of the federal stimulus package, the City was notified that it would receive \$544,000 of Energy Efficiency Community Block Grant (EECBG) Funds. Upon reviewing a list of possible "shovel ready" projects for this money, the City Council asked that the staff explore energy efficiency projects at the Animal Control Shelter, City Hall, and a pilot parking lot/street lighting project. After reviewing the needs at City Hall, it has been determined that there is an immediate need to replace 188 heat pumps that were originally installed in 1990 when we first occupied the renovated Central Junior High School. Therefore, the CIP in the **City Hall Mechanical/Structural Improvements** (page 137) recommends utilizing all of the EECBG funds for this purpose along with G.O. Bond funding. Not only will these units be more energy efficient, they will be designed to accommodate a possible future geo-thermal system.

The CIP also continues the **Cool Cities: Facility Energy Improvements** (page 138) that provides a funding mechanism to accomplish energy reduction projects for non-utility, City buildings in an effort to accomplish the City Council's goal of reducing our carbon emissions by 15% for non-utility operations by 2014. Funding for utility buildings will be included in their respective budgets for capital or capital improvements initiatives.

#### Neighborhood and Commercial Revitalization - \$4,610,000

Two important goals of the City Council over the years involve strong support for neighborhoods and commercial revitalization. To continue this support of these goals, the **Neighborhood Improvement Program** (page 133) and the **Downtown Façade Program** (page 135) are included in the CIP. In addition, the **Downtown Street Pavement Improvements** (page 94) will result in the north/south streets in the Downtown Business District being renovated as was accomplished along Main Street some time ago.

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We need to thank our department heads for their guidance in identifying the list of critical projects that are reflected in this CIP and Duane Pitcher, Carol Collings, Nancy Masteller, Sharon Hjortshoj, Sheila Lundt, and Bob Kindred for their leadership in developing this critical planning document.

Respectfully submitted,

#### Steve

Steven L. Schainker City Manager

# **CITY OF AMES, IOWA**

# FIVE-YEAR CAPITAL IMPROVEMENT PLAN 2010-2015

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#### HOW TO USE THE C.I.P. DOCUMENT

The 2010-2015 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.

- 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.
- 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 will list a street location or various locations and a map location is listed which refers to the sectioned City map on pages 141-150.

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 C.I.P. Below that is shown the source of financing for the project in each year.

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#### PROJECTION OF DEBT CAPACITY

	2008/09 ACTUAL	2009/10 BUDGETED	2010/11 PROJECTED	2011/12 PROJECTED	2012/13 PROJECTED	2013/14 PROJECTED	2014/15 PROJECTED
1. Total Actual Valuation	3,224,629,664	3,327,852,693	3,431,600,584	3,534,548,602	3,640,585,060	3,749,802,612	3,862,296,690
<ol><li>State Mandated Debt Limit</li></ol>	161,231,483	166,392,635	171,580,029	176,727,430	182,029,253	187,490,131	193,114,835
3. City Reserve (25% of Limit)	40,307,871	41,598,159	42,895,007	44,181,858	45,507,313	46,872,533	48,278,709
<b>Un-Reserved Debt Capacity</b>	120,923,612	124,794,476	128,685,022	132,545,572	136,521,940	140,617,598	144,836,126
<ol><li>Outstanding Debt</li></ol>	42,700,000	46,735,000	39,915,000	33,385,000	27,325,000	22,075,000	17,970,000
<ol><li>Proposed Issues</li></ol>	-	-	6,601,000	6,623,000	6,419,000	6,788,000	6,488,000
<ol><li>Balance of Proposed Issues</li></ol>		-		6,148,937	11,850,483	16,876,180	21,757,243
Total Debt Subject to Limit	42,700,000	46,735,000	46,516,000	46,156,937	45,594,483	45,739,180	46,215,243
7. Available Un-Reserved Debt Capacity (\$)	78,223,612	78,059,476	82,169,022	86,388,635	90,927,457	94,878,418	98,620,883
8. Available Un-Reserved Debt Capacity (%)	64.69%	62.55%	63.85%	65.18%	66.60%	67.47%	68.09%
9. Total Debt Capacity (\$)	118,531,483	119,657,635	125,064,029	130,570,493	136,434,770	141,750,951	146,899,592
10. Total Debt Capacity (%)	73.52%	71.91%	72.89%	73.88%	74.95%	75.60%	76.07%

#### Notes:

- 1. Total assessed valuation plus utility valuation growth assumption is 3.0% per year.
- 2. State of lowa 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
2010/11: FIRE		531,000		
Fire Apparatus Replacement	531,000		100%	
STREETS ENGINEERING		5,825,000		
CyRide Rte Pavement Improvements (Ontario Street)	900,000		95%	Electric Utility Fund
Arterial St Pavement Improvements (Duff Ave & 6th St)	775,000		50%	MPO/STP Funds/Electric Utility
Collector Street Pavement Improvements (Storm Street)	850,000		92%	Electric Utility Fund
Concrete Pavement Imp (Oakland Street & Lincoln Swing)	1,000,000		95%	Electric Utility Fund
Asphalt Pavement Improvements (various locations)	800,000		94%	Electric Utility Fund
Downtown Street Pavement Improvements (Kellogg Ave)	1,500,000		93%	Electric Utility Fund
STREETS MAINTENANCE		165,000		
Bridge Rehabilitation Program (6th Street/Squaw Creek)	165,000		100%	
INTERNAL SERVICES/FACILITIES		80,000		
City Hall Improvements	80,000		13%	Local Option Tax/Block Grant
2010/11 TOTAL		6,601,000		

**2011/12 YEAR TOTAL** 

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2011/12: TRAFFIC		235,000		
U.S. 69 Intersection Improvements	235,000	250,000	100%	
STREETS ENGINEERING		6,088,000		
CyRide Rte Pavement Imp (Lincoln Way & Emerald Drive)	1,500,000		100%	
Arterial Street Pavement Improvements (Lincoln Way)	600,000		89%	Electric Utility Fund
Collector Street Pavement Improvements (Ash Avenue)	438,000		28%	MPO/STP Funds/Electric Utility
Concrete Pavement Improvements (various locations)	1,550,000		100%	
Asphalt Pavement Imp (S. Oak Avenue & Ironwood Court)	950,000		95%	Electric Utility Fund
Downtown Street Pavement Improvements (Gilchrist St)	750,000		100%	
Grand Avenue Extension	300,000		20%	Congressionally Directed Funds
		300,000	86%	Local Option Tax
INTERNAL SERVICES/FACILITIES City Hall Improvements	300,000			

6,623,000

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2012/13:				
TRAFFIC		3,200,000		
U.S. 69 Intersection Improvements	1,600,000		97%	Electric Utility Fund
North Dakota Avenue Railroad Overpass	1,600,000		20%	Congressionally Directed Funds & Electric Utility Fund
STREETS ENGINEERING		3,219,000		
Arterial St Pavement Improvements (State Avenue)	219,000	-, -,	15%	MPO/STP Funds/Story County
Grand Avenue Extension	3,000,000		19%	Congressionally Directed Funds & Electric Utility Fund
2012/13 YEAR TOTAL		6,419,000		

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2013/14: TRAFFIC West Lincoln Way Intersection Improvements	350,000	350,000	32%	Road Use Tax/Grant/Developer
STREETS ENGINEERING  CyRide Route Pavement Imp (Todd Dr & Bloomington Rd)  Arterial St Pavement Improvements (East Lincoln Way)  Collector Street Pavement Imp (Ridgewood & Hayes Ave)  Concrete Pavement Improvements (Ridgewood Avenue)	750,000 438,000 1,700,000 1,000,000	6,438,000	100% 27% 96% 97%	MPO/STP Funds/Electric Utility Electric Utility Fund Electric Utility Fund
Asphalt Pavement Improvements (Various locations)  Downtown Street Pavement Improvements (Douglas Ave)  South Dakota Avenue Widening	1,600,000 1,600,000 750,000 200,000		97 % 95% 91% 100%	Electric Utility Fund Electric Utility Fund Electric Utility Fund

2013/14 YEAR TOTAL 6,788,000

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2014/15:	-	400.000		
TRAFFIC		400,000		
West Lincoln Way Intersection Improvements	400,000		57%	Developer
STREETS ENGINEERING		6,088,000		
CyRide Rte Pavement Improvements (24th Street)	438,000		29%	MPO/STP Funds
Arterial Street Pavement Improvements (Lincoln Way)	600,000		89%	Electric Utility Fund
Collector Street Pavement Improvements (Meadowlane)	700,000		93%	Electric Utility Fund
Concrete Pavement Improvements (various locations)	1,000,000		100%	•
Asphalt Pavement Improvement (Delaware Avenue)	400,000		94%	Electric Utility Fund
Downtown Street Pavement Improvements (Clark Avenue)	750,000		81%	Electric Utility Fund
South Dakota Avenue Widening	2,200,000		94%	Electric Utility Fund

GRAND TOTAL GENERAL OBLIGATION BONDS

**2014/15 YEAR TOTAL** 

32,919,000

6,488,000

REVENUE BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT BOND FUNDED	OTHER SOURCES OF FUNDING
2011/12:				
ELECTRIC		11,589,396		
Mid-American Energy Interconnection	3,239,396		79%	ISU
Unit #8 Boiler Tube Repair	2,500,000		100%	
Unit #8 Nitrogen Oxide Control Capital	1,000,000		100%	
Unit #7 Nitrogen Oxide Control Capital	500,000		100%	
Unit #7 Boiler Tube Repair	3,850,000		100%	
Unit #8 Mercury Capital	300,000		100%	
Unit #7 Mercury Capital	200,000		100%	
2011/12 YEAR TOTAL		11,589,396		

REVENUE BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT BOND FUNDED	OTHER SOURCES OF FUNDING
2012/13: ELECTRIC		5,590,000		
Unit #8 Nitrogen Oxide Control Capital	2,000,000	3,000,000	100%	
Unit #7 Nitrogen Oxide Control Capital	1,400,000		100%	
Unit #8 Mercury Capital	1,690,000		100%	
Unit #7 Mercury Capital	500,000		100%	
2012/13 YEAR TOTAL		5,590,000		
GRAND TOTAL REVENUE BONDS		17,179,396		



At the end of May, the Mayor and members of the City Council were on hand for a special "wire-cutting" celebration highlighting the wireless Internet connection available at Tom Evans Plaza. This location is one of several outdoor locations or "WiFi hotspots" providing free Internet service. Other WiFi hotspots include Hunziker Youth Sports Complex, Brookside Park, Campustown Court, and the new Furman Aquatic Center. Current and future inside hotspots include City Hall, Municipal Pool, and the ISU/City of Ames Ice Arena. The City Council pursued offering free Internet hotspots after being approached by citizens who asked for the service. Council Members agreed this service would forward their goal of "connecting the community" and funded the project.





#### WATER TOWER

In June 2009, the Water and Pollution Control Department celebrated the successful completion of a new elevated water tank on State Avenue and Mortensen Road. The tank, dubbed SAM (due to the location at State and Mortensen), holds one million gallons of water and cost \$1.7 million. The new elevated tank was the last major item necessary to complete the development of a new pressure zone in the Ames water distribution system. This new zone has expanded the water system's ability to provide service in the south and southwest portions of Ames, an area where the City's growth plan encourages future development.

# **CAPITAL IMPROVEMENT PLAN - GRAND TOTALS**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
Public Safety	16,456,904	1,921,016	881,618	10,254,000	2,040,270	1,360,000	7
Utilities	121,743,101	25,815,305	35,658,196	36,722,800	16,477,800	7,069,000	27
Transportation	78,417,341	13,348,000	13,794,000	26,578,316	12,004,338	12,692,687	85
Community Enrichment	6,728,900	1,429,100	1,187,800	1,309,000	1,873,000	930,000	117
Total Expenditures	223,346,246	42,513,421	51,521,614	74,864,116	32,395,408	22,051,687	
REVENUES:							
Bonds	50,098,396	6,601,000	18,212,396	12,009,000	6,788,000	6,488,000	
City	67,363,715	19,989,839	12,083,798	12,389,214	13,900,357	9,000,507	
Other	105,884,135	15,922,582	21,225,420	50,465,902	11,707,051	6,563,180	
Total Revenues	223,346,246	42,513,421	51,521,614	74,864,116	32,395,408	22,051,687	

# CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
Public Safety:							
Police	167,961	167,961					9
Fire	691,888	531,000	41,618	24,000	15,270	80,000	11
Traffic	15,597,055	1,222,055	840,000	10,230,000	2,025,000	1,280,000	17
Total Public Safety	16,456,904	1,921,016	881,618	10,254,000	2,040,270	1,360,000	
Utilities:							
Resource Recovery	1,503,800	498,400	254,800	582,800	59,800	108,000	29
Water Treatment	49,631,000	4,140,000	13,992,000	23,640,000	6,148,000	1,711,000	33
Water Distribution	4,500,000	900,000	900,000	900,000	900,000	900,000	40
Storm Sewer	2,476,905	576,905	475,000	475,000	475,000	475,000	42
Sanitary Sewer	3,860,000	1,000,000	385,000	825,000	825,000	825,000	47
WPC Treatment	9,340,000	3,170,000	1,200,000	1,635,000	1,485,000	1,850,000	51
Electric	50,431,396	15,530,000	18,451,396	8,665,000	6,585,000	1,200,000	57
Total Utilities	121,743,101	25,815,305	35,658,196	36,722,800	16,477,800	7,069,000	

# CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES, continued:							
Transportation:							
Streets/Engineering	50,943,000	7,763,000	9,020,000	17,610,000	8,365,000	8,185,000	87
Streets/Maintenance	1,590,000	340,000	605,000	215,000	215,000	215,000	98
Transit	22,924,341	3,900,000	3,269,000	8,038,316	3,424,338	4,292,687	106
Airport	2,960,000	1,345,000	900,000	715,000			114
Total Transportation	78,417,341	13,348,000	13,794,000	26,578,316	12,004,338	12,692,687	
Community Enrichment/Internal Serv	vices:						
Parks and Recreation	3,935,100	451,100	557,000	799,000	1,538,000	590,000	119
Library	408,800	48,000	180,800	180,000			128
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	132
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	134
Internal Services/Facilities	1,885,000	830,000	350,000	230,000	235,000	240,000	136
Total Community Enrichment	6,728,900	1,429,100	1,187,800	1,309,000	1,873,000	930,000	
GRAND TOTAL EXPENDITURES	223,346,246	42,513,421	51,521,614	74,864,116	32,395,408	22,051,687	

# **CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
REVENUES:						
Bonds:						
G.O. Bonds	32,919,000	6,601,000	6,623,000	6,419,000	6,788,000	6,488,000
Electric Revenue Bonds	17,179,396		11,589,396	5,590,000		
Total Bonds	50,098,396	6,601,000	18,212,396	12,009,000	6,788,000	6,488,000
City:						
Road Use Tax	4,168,384	829,634	800,000	845,000	846,250	847,500
Local Option Sales Tax	6,312,688	1,083,500	1,286,918	1,369,000	1,378,270	1,195,000
Electric Utility Fund	31,080,200	13,245,900	5,991,700	3,231,500	6,911,100	1,700,000
Bicycle Permit Fund	17,055	17,055				
Resource Recovery Fund	1,503,800	498,400	254,800	582,800	59,800	108,000
Water Utility Fund	6,497,750	1,400,000	990,000	1,685,000	1,146,250	1,276,500
Sewer Utility Fund	10,988,750	1,820,000	1,585,000	2,505,000	2,356,250	2,722,500
Storm Sewer Utility Fund	2,375,000	475,000	475,000	475,000	475,000	475,000
Fleet Services Fund	138,750			45,000	46,250	47,500
Transit Fund	3,661,238	365,000	605,380	1,481,164	631,187	578,507
Airport Construction Fund	148,000	67,250	45,000	35,750		
Park Development Fund	222,100	138,100		84,000		
Hotel/Motel Tax	250,000	50,000	50,000	50,000	50,000	50,000
Total City	67,363,715	19,989,839	12,083,798	12,389,214	13,900,357	9,000,507

# **CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE, continued**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
REVENUES, continued:						
Other:						
Story County E911 State Grant	134,369	134,369				
Story County E911 Board	33,592	33,592				
MPO/STP Funds	5,342,000	774,000	1,142,000	1,142,000	1,142,000	1,142,000
Recreation Trail Grant	414,000	414,000				
Traffic Safety Improvement Grant	155,000	155,000				
State Grants	200,000		200,000			
MPO/Planning Funds	320,000				320,000	
Congressionally Directed Funds	20,000,000		1,200,000	18,800,000		
Iowa D.O.T. Grant Funds	320,000				320,000	
Developer	700,000				400,000	300,000
Drinking Water State Revolving Fund	47,572,000	3,440,000	13,902,000	22,900,000	5,948,000	1,382,000
IDNR Low-Head Dam Grant	75,000	75,000				
Private Contributions	725,000	25,000			700,000	
Iowa State University	4,266,800	2,719,100	1,120,300	68,500	58,900	300,000
Watershed Improvement Review Board Grant	91,905	91,905				
Clean Water State Revolving Fund	2,450,000	2,450,000				
Story County	269,000		50,000	219,000		
I-JOBS Funds	270,366	270,366				
Federal Transit Administration	18,286,703	3,018,600	2,623,620	6,517,152	2,753,151	3,374,180
Federal Grants	676,400	516,400	40,000	40,000	40,000	40,000
FAA Grants	2,812,000	1,277,750	855,000	679,250		
Ames Community School District	270,000	27,500	92,500	100,000	25,000	25,000
Energy Efficiency & Conservation Block Grant	500,000	500,000				
Total Other	105,884,135	15,922,582	21,225,420	50,465,902	11,707,051	6,563,180
GRAND TOTAL REVENUES	223,346,246	42,513,421	51,521,614	74,864,116	32,395,408	22,051,687

#### **CITY HALL COURTYARD**





The City Hall courtyard renovation project was designed and completed as a partnership opportunity with the Story County Master Gardeners, the City of Ames, and many volunteers, including City employees, who spent countless hours shoveling, planting, and watering the new landscape.

The overgrown landscaping from years ago was removed and replaced with properly sized trees, grasses, and perennial plantings. Gravel paths, a water feature, and a pergola were also added.



#### **POLICE SEGWAYS**

The Ames Police Department is doing its part to reduce patrol car usage by accessing other resources when possible. In addition to seeing officers on bicycle patrol, Ames residents may be greeted by a police officer on a Segway. A Segway is a self-balancing, zero emissions, battery powered, personal transportation vehicle. They maneuver in small spaces and operate on pedestrian sidewalks and pathways. The Police Department has two Segways to use during large outdoor events such as road races and football games, enabling officers to move easily through crowds.

Officer Heath Ropp demonstrates how the operator is standing more than a foot off the ground, making it easier in large crowds to see greater distances and be seen by others who may need assistance.

# **PUBLIC SAFETY - SUMMARY**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
Police Fire	167,961 691,888	167,961 531,000	41,618	24,000	15,270	80,000	9 11
Traffic	15,597,055	1,222,055	840,000	10,230,000	2,025,000	1,280,000	17
Total Expenditures	16,456,904	1,921,016	881,618	10,254,000	2,040,270	1,360,000	
REVENUES:							
Bonds:							
G.O. Bonds	4,716,000	531,000	235,000	3,200,000	350,000	400,000	
City:							
Road Use Tax	1,205,000	300,000	225,000	175,000	280,000	225,000	
Local Option Sales Tax	1,410,888	250,000	291,618	274,000	265,270	330,000	
Electric Utility Fund	175,000			125,000	25,000	25,000	
Bicycle Permit Fund	17,055	17,055					
Sub-Total City Funds	2,807,943	567,055	516,618	574,000	570,270	580,000	

# **PUBLIC SAFETY - SUMMARY**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
REVENUES, continued:						
Other:						
Story County E911 State Grant	134,369	134,369				
Story County E911 Board	33,592	33,592				
MPO/STP Funds	406,000	86,000	80,000	80,000	80,000	80,000
Recreation Trail Grant	414,000	414,000				
Traffic Safety Improvement Grant	155,000	155,000				
State Grant	50,000		50,000			
MPO/Planning Funds	320,000				320,000	
Congressionally Directed Funds	6,400,000			6,400,000		
Iowa D.O.T. Grant Funds	320,000				320,000	
Developer	700,000				400,000	300,000
Sub-Total Other Funds	8,932,961	822,961	130,000	6,480,000	1,120,000	380,000
Total Revenues	16,456,904	1,921,016	881,618	10,254,000	2,040,270	1,360,000

# **PUBLIC SAFETY - POLICE**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
1 Communication Center Radio Consoles	167,961	167,961					10
Total Expenditures	167,961	167,961					
REVENUES:							
Other:							
Story County E911 State Grant	134,369	134,369					
Story County E911 Board	33,592	33,592					
Sub-Total Other Funds	167,961	167,961					
Total Revenues	167,961	167,961					

#### **DESCRIPTION/JUSTIFICATION**

During the last 15 years, the City of Ames and other Story County emergency response agencies have created an interoperable radio communications system based on analog 800 MHz technology. The functionality of this system has extended beyond emergency responders so that today a very wide range of public entities are able to use the same radio communications system. In the near future, that system will need to be upgraded to digital formats and advanced technologies. As a first step in that direction, the area E911 communications centers will upgrade their radio consoles to next generation capabilities.

In 2008, the Story County E911 Board applied for and received a grant through the Iowa Statewide Interoperable Communications System Board to accomplish the task of upgrading the radio consoles. The Story County E911 Board has budgeted to cover the matching funds required under the grant.

#### **COMMENTS**

The radio consoles serve as the radio interface and management tools for emergency communications dispatchers. The new consoles will allow the dispatchers to interact with radio users operating with both the existing and the newer technologies.

#### **LOCATION**

Ames City Hall - Police Communications Center - Map 5, location L-11

FISCAL YEAR PRIORITY			1				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Radio Console/Software/Installation		167,961	167,961				
	TOTAL	167,961	167,961				
FINANCING: Story County E911 State Grant		134,369	134,369				
Story County E911 Board		33,592	33,592				
	TOTAL	167,961	167,961				

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Public Safety - Law EnforcementPolice245-2541-429

# **PUBLIC SAFETY - FIRE**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
<ol> <li>Fire Apparatus Replacement</li> <li>Fire Apparatus Mobile Data Terminals</li> <li>Fire Station #1 Maintenance</li> <li>Fire Station #3 Maintenance</li> <li>Fire Station #1 Driveway Renovation</li> </ol>	531,000 41,618 24,000 15,270 80,000	531,000	41,618	24,000	15,270	80,000	12 13 14 15 16
Total Expenditures	691,888	531,000	41,618	24,000	15,270	80,000	
REVENUES:							
Bonds:							
G.O. Bonds	531,000	531,000					
City: Local Option Sales Tax	160,888		41,618	24,000	15,270	80,000	
Total Revenues	691,888	531,000	41,618	24,000	15,270	80,000	

# FIRE APPARATUS REPLACEMENT

**PROJECT STATUS:** Advanced

Cost Change

City of Ames, Iowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

The fire engines are essential structural firefighting apparatus. The Fire Apparatus Replacement Program ensures replacement of fire apparatus at the end of its operational life.

The City maintains one reserve and two frontline engines. In addition, the City has one frontline ladder truck. The City maintains its fire apparatus very well which facilitates keeping the frontline response vehicles for 15 years. Lack of parts availability, metal fatigue, and corrosion will take Engine 2 out of service, making continued use impractical.

Engine 1 is located at Station #1, engine 2 is located at Station #2, and one reserve engine is located at Station #3. Fire apparatus serve as frontline vehicles for 15 years, after which one is retained as a reserve unit for up to an additional 15 years. Before being placed in reserve status, fire apparatus are refurbished.

#### COMMENTS

FY 2010/11

Replace Engine 2 (806) at a cost of \$531,000.

# LOCATION

Fire Station #2, Corner of Welch and Chamberlain – Map 5, location H-11

FISCAL YEAR PRIORITY			1				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Replace Engine 2		531,000	531,000				
FINANOINO	TOTAL	531,000	531,000				
FINANCING: G. O. Bonds		531,000	531,000				
	TOTAL	531,000	531,000				

PROGRAM - ACTIVITY: **DEPARTMENT:** ACCOUNT NO. Public Safety - Fire Fire 371-2272-429

This project will provide field access to Fire Department records, state GIS databases, and direct connections to computer aided dispatch information for fire vehicles. The system is designed to decrease the time spent repeating information over the radio and provide more information to responders in the field. As emergency call volume grows, it is important to increase the efficiency of information flow to fire units. The system will provide timely and accurate information that can be used to more efficiently obtain records and exchange information among vehicles in the field. Firefighters can obtain more detailed information about emergencies to which they are responding or gain direct access to database information such as known hazards of a specific location.

In 2009, the Fire Department received a grant for installation of mobile data terminals in four of the response vehicles. This request is for phase two of the project. The 2008/09 CIP moved Ames Police into the system first, facilitating Ames Fire in the following year. To ensure that the project would function effectively on the county-wide shared public safety network, it was delayed in the 2006-2011 CIP. In 2008/09, the Police Department implemented the infrastructure and installed mobile data terminals in police vehicles.

Phase I in 2009 was paid by federal grant funds. The department may have an opportunity to apply for a Phase II grant for the mobile data terminals.

The annual ongoing operating cost will be \$6,500.60 (software support - \$400.00; Verizon air cards - \$205.00; depreciation - \$4,200.60; IT support - \$1,695.00).

# **COMMENTS**

Five Mobile Data Terminals for Rescue 1, Rescue 2,	
Rescue 3, Command 2, Hazardous Materials Truck 2	\$ 25,000
Verizon Air Cards	250
FH Mobile Pre-Plan Viewer	2,550
Mounting Hardware	8,390
Contingency (15%)	5,428
Total	\$ 41.618

#### LOCATION

Fire Station #1, 1300 Burnett – Map 5, location M-9

Fire Station #2. Corner of Welch and Chamberlain – Map 5. location H-11

Fire Station #3, 2400 South Duff Avenue – Map 8, location M-15

FISCAL YEAR PRIORITY				2			
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Mobile Data Terminals, Software, Hardware		41,618	_	41,618			
FINANCING: Local Option Sales Tax	TOTAL	41,618		41,618			
		41,618	_	41,618			
	TOTAL	41,618	_	41,618			

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

# FIRE STATION #1 MAINTENANCE

**PROJECT STATUS:** New

City of Ames, Iowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

Fire Station #1 was constructed in 1979 and is in need of repairs and renovations to the high traffic and high use areas. Basic cabinets and floor repairs are necessary after 33 years of use.

# **COMMENTS**

New cabinets, stove, refrigerators, flooring	\$15,000
New cabinets, countertop, storage for communications room and lieutenant's office	\$6,000
New storage and cabinets for compressor and self-contained breathing apparatus room	\$3,000

# **LOCATION**

Fire Station #1, 1300 Burnett - Map 5, location M-9

FISCAL YEAR PRIORITY					1		
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Fire Station #1 Repairs and Remode	el	24,000	_		24,000		
FINANCING:	TOTAL	24,000	_		24,000		
Local Option Sales Tax		24,000	_		24,000		
	TOTAL	24,000			24,000		

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Fire Station #3 was constructed in 2002. During construction, problems were encountered with the apparatus truck room floor. An agreement was made with the builder and a financial settlement was reached. For several years the budget for this repair was carried forward. In 2007, there was no anticipated repair date known and the balance set aside for the repair was utilized as part of the general fund. The concrete should now be stabilized and the necessary repair is to shot blast the floor and seal the surface.

# **COMMENTS**

Shot blast and repaint Fire Station #3 truck room floor - \$13,000 Seal sidewalk and driveway - \$2,270

# **LOCATION**

Fire Station #3, 2400 South Duff Avenue - Map 8, location M-15

FISCAL YEAR PRIORITY						1	
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Concrete Sealant and Repair		15,270				15,270	
	TOTAL	15,270	_			15,270	
FINANCING: Local Option Sales Tax		15,270	- -			15,270	
	TOTAL	15,270				15,270	

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

# **FIRE STATION #1 DRIVEWAY RENOVATION**

**PROJECT STATUS:** Delayed

City of Ames, Iowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

Fire Station #1 was constructed in 1979 and the rear driveway has deteriorated due to heavy vehicle traffic.

# **COMMENTS**

Some repair of the rear drive will be necessary before total replacement.

# **LOCATION**

Fire Station #1, 1300 Burnett – Map 5, location M-9

FISCAL YEAR PRIORITY							1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Rear Drive Replacement/Structural F	Repair	80,000					80,000
	TOTAL	80,000	<del></del>				80,000
FINANCING: Local Option Sales Tax		80,000					80,000
	TOTAL	80,000					80,000

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

# **PUBLIC SAFETY - TRAFFIC**

PROJECT/REVENUE DESCRIPTION	ON TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
<ol> <li>Shared Use Path System Expan</li> <li>Traffic Signal Program</li> <li>U.S. 69 Intersection Improvement</li> <li>Traffic Engineering Studies</li> <li>Shared Use Path Signage &amp; Light</li> <li>North Dakota Avenue Railroad Owest Lincoln Way Intersection</li> </ol>	1,105,000 nts 1,935,000 550,000 hting 17,055	750,000 355,000 50,000 50,000 17,055	330,000 225,000 235,000 50,000	330,000 175,000 1,650,000 8,075,000	330,000 175,000 400,000	330,000 175,000 50,000	19 20 21 22 23 24
7 Improvements	1,845,000				1,120,000	725,000	25
Total Expenditures	15,597,055	1,222,055	840,000	10,230,000	2,025,000	1,280,000	
REVENUES:							
Bonds: G.O. Bonds	4,185,000		235,000	3,200,000	350,000	400,000	

# **PUBLIC SAFETY - TRAFFIC, continued**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
REVENUES, continued:						
City:						
Road Use Tax	1,205,000	300,000	225,000	175,000	280,000	225,000
Local Option Sales Tax	1,250,000	250,000	250,000	250,000	250,000	250,000
Electric Utility Fund	175,000			125,000	25,000	25,000
Bicycle Permit Fund	17,055	17,055				
Sub-Total City Funds	2,647,055	567,055	475,000	550,000	555,000	500,000
Other:						
MPO/STP Funds	406,000	86,000	80,000	80,000	80,000	80,000
Recreation Trail Grant	414,000	414,000				
Traffic Safety Improvement Grant	155,000	155,000				
State Grant	50,000		50,000			
MPO/Planning Funds	320,000				320,000	
Congressionally Directed Funds	6,400,000			6,400,000		
Iowa D.O.T. Grant Funds	320,000				320,000	
Developer	700,000				400,000	300,000
Sub-Total Other Funds	8,765,000	655,000	130,000	6,480,000	1,120,000	380,000
Total Revenues	15,597,055	1,222,055	840,000	10,230,000	2,025,000	1,280,000

# SHARED USE PATH SYSTEM EXPANSION

**PROJECT STATUS:** Cost Change

**Location Change** 

City of Ames, Iowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

COMMENTS

This program provides for construction of shared use paths on street rights-of-way, adjacent to streets, and through greenbelts. The Transportation Plan identifies those paths that separate bicycle traffic from higher-speed automobile traffic. This program supports one of the City Council's priorities for the year, connecting our community.

2010/11	Skunk River Trail Extension (East Lincoln Way to South River Valley Park) (\$750,000: Local Option Sales Tax, \$250,000; MPO/STP funds, \$86,000; and Recreational Trail Grant, \$414,000) – Map 6, location N-8
2011/12	Skunk River Trail Extension (Inis Grove Park to Bloomington Road) (\$330,000: Local Option Sales Tax, \$250,000; MPO/STP funds, \$80,000; – Map 2, location M-7
2012/13	South Dayton Avenue (South Gateway Development to East Lincoln Way) and Southeast 16 <sup>th</sup> Street (at South Dayton Avenue) (\$330,000: Local Option Sales Tax, \$250,000; and MPO/STP funds, \$80,000) – Map 9, location Q-13
2013/14	Squaw Creek Trail (Skunk River to South Duff Avenue) (\$330,000: Local Option Sales Tax, \$250,000; and MPO/STP funds, \$80,000) – Map 6, location N-13
2014/15	Squaw Creek Trail (South Duff Avenue to South Grand Avenue) (\$330,000: Local Option Sales Tax, \$250,000; and MPO/STP, \$80,000) – Map 5, location M-12

Scheduling the Skunk River Trail Extension segments as proposed will allow the South Ames Business Group to assist in right-of-way connections to those segments and will build from the Southeast Entry Plan. The projects included in this program are subject to acquiring voluntary easements from property owners.

Cost and revenue changes are due to updated estimates. Location changes are due to the STIMULUS (ARRA) fund project completed in 2009.

Shared use path maintenance costs will increase due to new shared use path construction

FISCAL YEAR PRIORITY			11_	1	2	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Engineering		340,000	120,000	55,000	55,000	55,000	55,000
Construction		1,730,000	630,000	275,000	275,000	275,000	275,000
	TOTAL	2,070,000	750,000	330,000	330,000	330,000	330,000
FINANCING:			· —				
Local Option Sales Tax		1,250,000	250,000	250,000	250,000	250,000	250,000
MPO/STP Funds		406,000	86,000	80,000	80,000	80,000	80,000
Recreational Trail Grant		414,000	414,000	·			
	TOTAL	2,070,000	750,000	330,000	330,000	330,000	330,000
DDOODAM ACTIVITY	•	DED	DTMENT.		ACCUME NO	•	•

PROGRAM – ACTIVITY:

DEPARTMENT: **Public Works** 

ACCOUNT NO. 320-7505-429 030-7505-429

Public Safety - Traffic

# TRAFFIC SIGNAL PROGRAM

PROJECT STATUS:

Site Change Revenue Change Cost Change

City of Ames, Iowa Capital Improvements Plan

# **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 provides funding for those maintenance needs. In addition, this program provides for the necessary upgrading of the traffic signal system as technology continues to change.

#### COMMENTS

Proposed locations:

2010/11	28 <sup>th</sup> Street/Grand Avenue signal replacement (\$195,000: \$155,000 TSIP grant, \$40,000 Road Use Tax)- Map 2, location L-6; and South
	Dayton Avenue/S.E. 16 <sup>th</sup> Street (\$160,000) – Map 9, location Q-14
2011/12	Permanent Traffic Count Stations (various locations)
2012/13	Lincoln Way/Hayward Avenue signal replacement – Map 5, location H-11
2013/14	Lincoln Way/Hyland Avenue signal replacement – Map 5, location H-11
2014/15	Lincoln Way/Union Drive signal replacement - Map 5, location I-11; and Dayton Avenue/East Lincoln Way signal replacement - Map 6,
	Leasting O. 44, and C <sup>th</sup> Ctreat/Least Avenue signal replacement. Map E. Jacoting K. 40, 40 <sup>th</sup> Ctreat/Didrey, and Avenue signal replacement.

location Q-11; and 6" Street/Hazel Avenue signal replacement – Map 5, location K-10; 13" Street/Ridgewood Avenue signal replacement –

Map 5. location K-9

In 2009/10, the intersection of South Dayton Avenue/S.E. 16<sup>th</sup> met federal justifications to warrant installation of a traffic signal. Considering the current stop condition, this is a priority for 2010/11.

The 2011/12 project to implement permanent count stations around the City of Ames will provide vital and highly detailed transportation data 24 hours a day, all year round. This data will be used to significantly enhance the City's transportation model, as well as other planning efforts, such as the City's pavement management system and traffic safety planning tool. In addition, 24-hour count data will be used to improve traffic signal progression along all major corridors in Ames.

FISCAL YEAR PRIORITY		2	2	3	2	2
	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:						
Engineering	95,000	30,000	20,000	15,000	15,000	15,000
Construction	1,010,000	325,000	205,000	160,000	160,000	160,000
TOTAL	1,105,000	355,000	225,000	175,000	175,000	175,000
FINANCING:		· —				
Road Use Tax	900,000	200,000	175,000	175,000	175,000	175,000
Traffic Safety Improvement Grant (TSIP)	155,000	155,000				
State Grant	50,000	_	50,000			
TOTAL	1,105,000	355,000	225,000	175,000	175,000	175,000
PROGRAM – ACTIVITY:	DEP	ARTMENT:		ACCOUNT NO.		
Public Safety – Traffic	Publi	ic Works	:	320-7507-429 060	-7507-429	

060-7209-429

# **US69 INTERSECTION IMPROVEMENTS**

PROJECT STATUS:

Cost Change

Revenue Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

Intersection improvement projects along US69 within and just outside the City limits will alleviate congestion and reduce accidents.

# COMMENTS

Proposed schedule:

2010/11 20<sup>th</sup> Street/Grand Avenue intersection improvements (planning) – Map 5, location L-8

2011/12 20<sup>th</sup> Street/Grand Avenue intersection improvements (land acquisition and engineering) – Map 5, location L-8

2012/13 20<sup>th</sup> Street/Grand Avenue intersection improvements (construction) – Map 5, location L-8

The Long Range Transportation Plan identifies future projects and serves as a guide to scheduling those projects.

This project will commence during spring/summer 2010 with a public meeting to gather information about what citizens and business owners desire from a hired consultant. Through a proposal evaluation process, a design consultant will be selected to apply context-sensitive solutions as they develop intersection improvement plans. Public involvement will continue as design is finalized.

Cost and revenue changes are the result of adding Electric participation to this project sheet.

FISCAL YEAR PRIORITY			3	3	1		
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Planning		50,000	50,000				
Land Acquisition & Easements		100,000		100,000			
Engineering		135,000		135,000			
Construction		1,600,000			1,600,000		
Electric (Lighting Relocation)		50,000			50,000		
	TOTAL	1,935,000	50,000	235,000	1,650,000		
FINANCING:							
G. O. Bonds		1,835,000		235,000	1,600,000		
Road Use Tax		50,000	50,000				
Electric Utility Fund		50,000			50,000		
	TOTAL	1,935,000	50,000	235,000	1,650,000		

PROGRAM – ACTIVITY: Public Safety – Traffic **DEPARTMENT:** Public Works

**ACCOUNT NO.** 060-7511-429

The studies planned for this annual program will focus on examining the traffic signal system, the bicycle path (shared use path) system, and accident data to provide traffic information used for planning future capital improvement projects. These studies will identify those projects that will improve efficiency, effectiveness, and safety of those systems.

# **COMMENTS**

Proposed studies:

2010/11 Traffic Calming Study 2011/12 Accident Study

2012/13 No project

2013/14 Origin Destination Study and Long-Range Transportation Plan Update

2014/15 Hourly Model Development

The Traffic Calming Study (2010/11) will explore and analyze measures to establish a Traffic Calming Informational Guide and Policy to be implemented in residential neighborhoods. The Accident Study (2011/12) will examine high accident locations and propose potential solutions to these accident concerns with future capital improvement projects. (The Traffic Calming Study, originally scheduled for 2011/12, and the Accident Study, originally scheduled for 2010/11, have been re-prioritized based on feedback from the Ames community.) The Origin Destination Study and Long-Range Transportation Plan Update (2013/14) will collect data for enhancement of the Travel Demand Model and will update the Long-Range Transportation Plan which is to be adopted in 2015. Through Hourly Model Development in 2014/15, data will be collected and analyzed in order to transition the AAMPO model from a daily (24-hour) to a per-hour model.

The cost change is the result of eliminating a project in 2012/13.

FISCAL YEAR PRIORITY			4	4		3	3
0007		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		550,000	50,000	50,000		400,000	50,000
<b>-</b>	TOTAL	550,000	50,000	50,000		400,000	50,000
FINANCING: Road Use Tax		230,000	50,000	50,000		80,000	50,000
MPO/Planning Funds		320,000				320,000	
	TOTAL	550,000	50,000	50,000		400,000	50,000

PROGRAM – ACTIVITY:DEPARTMENT:ACCOUNT NO.Public Safety – TrafficPublic Works060-7512-429

**PROJECT STATUS:** New

City of Ames, Iowa Capital Improvements Plan

# DESCRIPTION/JUSTIFICATION

In 2010, the Federal Highway Administration is anticipated to release a new standard for destination guide signage that is scaled for pedestrian and bicycle users, similar to highway system guide signage. It will include guidance on size, type, content, and placement of these guide signs to enhance the use of the City's shared-use path network. Through use of destination guide signage that includes distances along the route to points of interest, users will be able to better plan their routes. This is anticipated to make the use of the shared use path network more attractive as a transportation system.

# **COMMENTS**

As part of a pilot project, Engineering staff will install solar LED (light emitting diode) lights that will be placed into a shared use path. Staff will identify a location that will benefit the most users from this safety enhancement while also optimizing direct sunlight to maximize the solar LED lights. This progressive lighting system will be flush-mounted into the pavement. (Since the lights run off solar power, no wiring will be needed.) While solar lighting has been used in other projects nationally, no known state projects are using solar lighting.

FISCAL YEAR PRIORITY			5				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Planning		2,000	2,000				
Materials and Installation		15,055	15,055				
	TOTAL	17,055	17,055				
FINANCING: Bicycle Permit Fund		17,055	17,055				
	TOTAL	17,055	17,055				

PROGRAM - ACTIVITY: Public Safety – Traffic

DEPARTMENT: Public Works

ACCOUNT NO. 065-7514-429

This project includes construction of an overpass to separate the existing at-grade railroad crossing on North Dakota Avenue. The east/west Union Pacific Railroad route includes over 68 trains per day. This project separates vehicle/train interaction, thus increasing the safety of traffic operations and aiding in meeting the emergency response standards for the northwest growth priority area north of the railroad tracks.

# **LOCATION**

North Dakota Avenue at Union Pacific Railroad crossing – Map 4, location E-9

FISCAL YEAR PRIORITY					4		
0007		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:		4 000 000			4 000 000		
Engineering		1,600,000			1,600,000		
Construction		6,400,000			6,400,000		
Electric		75,000			75,000		
	TOTAL	8,075,000			8,075,000		
FINANCING:							
G.O. Bonds		1,600,000			1,600,000		
Electric Utility Fund		75,000			75,000		
Congressionally Directed Funds		6,400,000			6,400,000		
Direction and Direction Funds		0,100,000			0, 100,000		
	TOTAL	8,075,000			8,075,000		
	IOIAL	5,575,000			0,010,000		

ACCOUNT NO.

PROGRAM - ACTIVITY:

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DEPARTMENT:

Public Safety - Traffic

Public Works

# WEST LINCOLN WAY INTERSECTION IMPROVEMENTS

PROJECT STATUS:

Revenue Change Delayed

Cost Change

ACCOUNT NO.

City of Ames, Iowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

This project is for constructing turn lanes and installing traffic signals at the Franklin Avenue/Lincoln Way and the Dotson Drive/Lincoln Way intersections. A traffic impact report for South Fork Subdivision justified these improvements.

Increased traffic flow from South Fork Subdivision necessitates left-turn lanes at the Lincoln Way approaches to both the Franklin Avenue and the Dotson Drive intersections to accommodate heavy turning movements. Additional turn lanes are also anticipated for right-turning movements northbound from Franklin Avenue onto Lincoln Way and for left-turning movements northbound from Dotson Avenue onto Lincoln Way. The increased traffic will also warrant replacement of signals at the Franklin Avenue/Lincoln Way intersection and the installation of new traffic signals at the Dotson Drive/Lincoln Way intersection. Turn lanes on Lincoln Way will mitigate left-turning, rear-end, and right-angle traffic accidents at both sites. Improvements will also support traffic coordination along Lincoln Way. An existing agreement requires the developer and the City to share equally in the construction cost of these improvements.

#### COMMENTS

2013/14 Franklin Avenue/Lincoln Way (construction) – Map 4, location G-11; Dotson Drive/Lincoln Way (planning) – Map 4, location F-11 Dotson Drive/Lincoln Way (construction) - Map 4, location F-11 2014/15

These projects continue to be delayed. The Franklin Avenue/Lincoln Way intersection improvement project had been anticipated to occur in 2006/07. However, the subdivision did not move forward as planned. This delayed the Franklin Avenue/Lincoln Way construction; it is now planned for 2013/14.

The Dotson Drive/Lincoln Way project, previously scheduled for 2007/08 and 2008/09, has been delayed until the warrants included in the developer's agreement for South Fork Subdivision have been met.

The cost and revenue changes are due to adding Electric participation to these projects.

The street widening for turn lanes will increase street maintenance and snow removal activities.

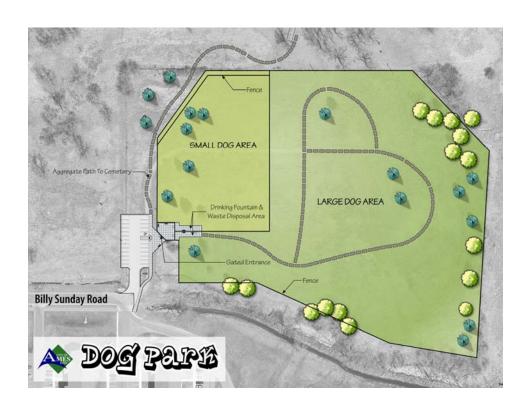
FISCAL YEAR PRIORITY						4	4
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Land Acquisition		120,000				120,000	
Planning		25,000				25,000	
Engineering		250,000				150,000	100,000
Construction		1,400,000				800,000	600,000
Electric (Street Lighting)		50,000				25,000	25,000
, , , , , , , , , , , , , , , , , , , ,	TOTAL	1,845,000				1,120,000	725,000
FINANCING:		, ,					
G. O. Bonds		750,000				350,000	400,000
Road Use Tax		25,000				25,000	
Electric Utility Fund		50,000				25,000	25,000
Iowa D.O.T Safety Grant		320,000				320,000	
Developer (50% of Construction)		700,000				400,000	300,000
,	TOTAL	1,845,000				1,120,000	725,000

PROGRAM - ACTIVITY: Public Safety – Traffic

**DEPARTMENT:** 

**Public Works** 

# **DOG PARK**



In June 2009, the City opened the Ames Dog Park, located directly east of the Ames Animal Shelter on Billy Sunday Road.

The Dog Park features ten acres of fenced-in freedom for dogs. The facility is divided into two sections: a two-acre area for dogs weighing less than 25 pounds, and an eight-acre area for larger dogs.

To use the Dog Park, owners must purchase a facility-use permit tag. Current rabies vaccination certification must be provided at the time of permit purchase.

The park is open daily from 6 a.m. to sunset.

# **NON-FERROUS METAL RECOVERY SYSTEM**

The Arnold O. Chantland Resource Recovery Plant takes in garbage from Ames and twelve surrounding communities and separates the combustible material into refuse derived fuel (RDF). The RDF is sold as a supplemental fuel to the Ames Electric Utility. Ferrous metals are separated and sold on the scrap market for recycling.

A non-ferrous metal recovery system was recently added to recover metals such as aluminum, copper, and stainless steel. These metals previously were hauled to the landfill.



This photo shows part of the system being hoisted through the side of the building.

# **UTILITIES - SUMMARY**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
Resource Recovery	1,503,800	498,400	254,800	582,800	59,800	108,000	29
Water Treatment	49,631,000	4,140,000	13,992,000	23,640,000	6,148,000	1,711,000	33
Water Distribution	4,500,000	900,000	900,000	900,000	900,000	900,000	40
Storm Sewer	2,476,905	576,905	475,000	475,000	475,000	475,000	42
Sanitary Sewer	3,860,000	1,000,000	385,000	825,000	825,000	825,000	47
WPC Treatment	9,340,000	3,170,000	1,200,000	1,635,000	1,485,000	1,850,000	51
Electric	50,431,396	15,530,000	18,451,396	8,665,000	6,585,000	1,200,000	57
Total Expenditures	121,743,101	25,815,305	35,658,196	36,722,800	16,477,800	7,069,000	

# **REVENUES:**

Bonds:

Electric Revenue Bonds 17,179,396 11,589,396 5,590,000

# **UTILITIES - SUMMARY**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
REVENUES, continued:						
City:						
Resource Recovery Fund	1,503,800	498,400	254,800	582,800	59,800	108,000
Water Utility Fund	6,359,000	1,400,000	990,000	1,640,000	1,100,000	1,229,000
Sewer Utility Fund	10,850,000	1,820,000	1,585,000	2,460,000	2,310,000	2,675,000
Storm Sewer Utility Fund	2,375,000	475,000	475,000	475,000	475,000	475,000
Electric Utility Fund	29,345,200	12,820,900	5,791,700	3,006,500	6,526,100	1,200,000
Sub-Total City Funds	50,433,000	17,014,300	9,096,500	8,164,300	10,470,900	5,687,000
Other:						
Drinking Water State Revolving Fund	47,572,000	3,440,000	13,902,000	22,900,000	5,948,000	1,382,000
IDNR Low-Head Dam Grant	75,000	75,000				
Private Contributions	25,000	25,000				
Iowa State University	3,916,800	2,719,100	1,070,300	68,500	58,900	
Watershed Improvement Review Board Grant	91,905	91,905				
Clean Water State Revolving Fund	2,450,000	2,450,000				
Sub-Total Other Funds	54,130,705	8,801,005	14,972,300	22,968,500	6,006,900	1,382,000
Total Revenues	121,743,101	25,815,305	35,658,196	36,722,800	16,477,800	7,069,000

# **UTILITIES - RESOURCE RECOVERY**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
<ol> <li>Resource Recovery System Improvements</li> <li>Resource Recovery Recyclables Building</li> </ol>	548,800 240,000	208,400 240,000	89,800	82,800	59,800	108,000	30 31
3 Pre-Process Material Handling Building	715,000	50,000	165,000	500,000			32
Total Expenditures	1,503,800	498,400	254,800	582,800	59,800	108,000	
REVENUES:							
City: Resource Recovery Fund	1,503,800	498,400	254,800	582,800	59,800	108,000	
Total Revenues	1,503,800	498,400	254,800	582,800	59,800	108,000	

This program is used 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 #2 rotary disc screen rollers (RDS) and chains and a 20% rebuild of the C-1 conveyor) and funding for sideliner #1 and #2 mills every three years. Resource Recovery personnel perform the work to complete the preventive maintenance projects.

# **COMMENTS**

COMMENTS	
Proposed projects:	
2010/11	#1 mill sideliners (\$37,000); #1 mill breaker plate liners (\$12,600); rebuild old-style shredder rotor (\$69,000); preventive maintenance materials
	for replacement of the #2 RDS rollers and chains (\$40,250); purchase 1/3 of pipe for PSI pipe replacement (\$30,000); and a 20% rebuild of
	the C-1 conveyor (\$19,550)
2011/12	Preventive maintenance materials for replacement of #2 RDS rollers and chains (\$40,250); purchase 1/3 of pipe for PSI pipe replacement
	\$30,000); and a 20% rebuild of the C-1 conveyor (\$19,550)
2012/13	4160V switch gear back-up batteries (\$23,000); preventive maintenance materials for replacement of the #2 RDS rollers and chains (\$40,250);
	and a 20% rebuild of the C-1 conveyor (\$19,550)
2013/14	Preventive maintenance materials for replacement of the #2 RDS rollers and chains (\$40,250); 20% rebuild of the C-1 conveyor (\$19,550)
2014/15	Preventive maintenance materials for replacement of the #2 RDS rollers and chains (\$46,000); 20% rebuild of the C-1 conveyor (\$21,000);
	and replacement of the #1 mill sideliners (\$41,000)

# **LOCATION**

Arnold O. Chantland Resource Recovery Plant, 110 Center Avenue - Map 5, location N-11

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
System Improvements		548,800	208,400	89,800	82,800	59,800	108,000
FINANCING:	TOTAL	548,800	208,400	89,800	82,800	59,800	108,000
FINANCING: Resource Recovery Fund		548,800	208,400	89,800	82,800	59,800	108,000
Resource Recovery Fund		340,000	200,400	09,000	02,000	39,000	100,000
	TOTAL	548,800	208,400	89,800	82,800	59,800	108,000
		2 12,000	_===,	22,000	<b>,</b>	,	110,000

PROGRAM – ACTIVITY: Utilities - Resource Recovery **DEPARTMENT:** Public Works

**ACCOUNT NO.** 590-8903-489

**PROJECT STATUS:** No Change

City of Ames, Iowa Capital Improvements Plan

## **DESCRIPTION/JUSTIFICATION**

The building will be for items (equipment and/or recyclables) currently stored in the Electric Department's coal yard storage buildings. The area immediately to the east of the processing area is planned to become a staging area for hauling equipment used for ferrous materials and rejects.

# COMMENTS

In 2008/09, the properties east of Borne Avenue between Lincoln Way and 2<sup>nd</sup> Street were purchased in anticipation of the erection of a recycling building on the site, and the Master Plan was developed. In 2009/10, the Phase I (parking lot) site plan was developed, and the parking lot was constructed.

# Proposed schedule:

2008/09 Land Purchase (\$168,325)

2009/10 Engineering – Master Plan, Phase I Site Plan (\$50,000)

Construction – Phase I (Parking Lot) (\$120,000)

2010/11 Construction – Phase II (Building, Parking) (\$200,000)

Alternative Market Analysis Study (\$40,000)

# LOCATION

Borne Avenue (Lincoln Way to 2<sup>nd</sup> Street) – Map 5, location N-11

		2				
	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
	200,000	200,000				
	40,000	40,000				
TOTAL	240,000	240,000				
	240,000	240,000				
TOTAL	240,000	240,000				
		200,000 40,000 <b>TOTAL</b> 240,000 240,000	TOTAL 2010/11 200,000 200,000 40,000 40,000 TOTAL 240,000 240,000	TOTAL 2010/11 2011/12 200,000 200,000 40,000 40,000  TOTAL 240,000 240,000 240,000	TOTAL 2010/11 2011/12 2012/13  200,000 200,000  40,000  TOTAL 240,000 240,000  240,000	TOTAL 2010/11 2011/12 2012/13 2013/14 200,000 200,000 40,000 40,000 TOTAL 240,000 240,000 240,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Resource RecoveryPublic Works590-8908-489

**PROJECT STATUS:** New

City of Ames, Iowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

This project will allow for acceptance of materials that do not need further processing to become Refuse Derived Fuel (RDF). In addition, in 2011/12, the fire system will be upgraded to meet current fire regulations.

Most materials now accepted at the Resource Recovery Plant are processed into RDF. There have also been numerous requests from, mostly, commercial entities to bring RDF-ready materials to the plant to be used for fuel. Because there is currently no means at the plant to separately receive and transfer RDF-ready materials to the Power Plant, such materials are not accepted. This project would allow for the acceptance of RDF-ready materials, to bypass the plant processing equipment, and to directly transfer the materials to the Power Plant boilers to be burned, thereby providing more RDF and additional revenue to the operation. This project would include a building attachment to the existing facility for receiving semi-trucks and housing equipment to transfer RDF-ready material to the Power Plant.

#### COMMENTS

The fire system upgrade will occur in 2011/12 and the planning and construction of the building will be phased over three years.

# Proposed schedule:

2010/11 Engineering for Pre-processed Material Handling Building and Truck Bay (\$50,000)

2011/12 Fire System Upgrade (\$165,000)

2012/13 Construction of the Pre-processed Material Handling Building and Truck Bay (\$500,000)

# LOCATION

Arnold O. Chantland Resource Recovery Plant, 110 Center Avenue - Map 5, location N-11

FISCAL YEAR PRIORITY			3	2	2		
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		50,000	50,000				
Construction		665,000	_	165,000	500,000		
	TOTAL	715,000	50,000	165,000	500,000		
FINANCING:	101/12	7 10,000	00,000_	100,000	000,000		
Resource Recovery Fund		715,000	50,000	165,000	500,000		
	TOTAL	715,000	50,000	165,000	500,000		

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Resource RecoveryPublic Works590-8909-489

# **UTILITIES - WATER TREATMENT**

P	ROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
E	XPENDITURES:							
1	New Water Treatment Plant	47,572,000	3,440,000	13,902,000	22,900,000	5,948,000	1,382,000	34
2	NADC Pump Station Improvements	425,000	425,000					35
3	Water Plant Facility Improvements	580,000	125,000	90,000	165,000	200,000		36
4	Low-Head Dam Modifications	150,000	150,000					37
5	Water Supply Expansion	575,000			575,000			38
6	Automatic Meter Reading Conversion	329,000					329,000	39
	Total Expenditures	49,631,000	4,140,000	13,992,000	23,640,000	6,148,000	1,711,000	
R	EVENUES:							
С	ity:							
W	ater Utility Fund	1,859,000	500,000	90,000	740,000	200,000	329,000	
S	ewer Utility Fund	100,000	100,000					
	Sub-Total City Funds	1,959,000	600,000		740,000	200,000	329,000	
0	ther:							
D	rinking Water State Revolving Fund	47,572,000	3,440,000	13,902,000	22,900,000	5,948,000	1,382,000	
ID	NR Low-Head Dam Grant	75,000	75,000					
Pı	rivate Contributions	25,000	25,000					
	Sub-Total Other Funds	47,672,000	3,540,000	13,902,000	22,900,000	5,948,000	1,382,000	
	Total Revenues	49,631,000	4,140,000	13,902,000	23,640,000	6,148,000	1,711,000	

PROJECT STATUS:

Cost Change Name Change Revenue Change

City of Ames, Iowa Capital Improvements Plan

## **DESCRIPTION/JUSTIFICATION**

The first step in preparing for a plant replacement began in FY 08/09 with the hiring of a consultant to perform an assessment of the existing plant's condition and to determine the timing and size of future capacity requirements. The results of the assessment, presented to Council in July 2009, recommended construction of a new 15 MGD lime softening facility on a new site.

The cost estimates shown below are based on the conceptual plan developed during the assessment process and will be refined as the design progresses. The actual timing for demolition of the old plant, shown in the final year of the CIP, is to be determined once the new facility nears completion. The proposed funding source for the project has changed. Staff is now proposing to fund the project through the lowa Drinking Water State Revolving Fund (DWSRF). The construction loans are currently offered at 3% (as compared to approximately 6% for revenue bonds) and will be repaid over 20 years. This fund also allows for a three-year interest-free planning and design loan that can be rolled into the final construction loan.

# **COMMENTS**

The anticipated project schedule and budget is as follows:

FY 2008/09	\$ 244,000	Alternative Analysis and Conceptual Design
FY 2009/10	1,910,000	Begin Final Design; Land Acquisition
FY 2010/11 - 2013/14	46,190,000	Complete Design; Construction
FY 2014/15	1,382,000	Demolition of Existing Plant
Total	\$ 49,726,000	

# LOCATION

Water Plant, 300 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY			1		1	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
<b>COST:</b> Engineering/Legal/Administrative		4,597,000	3,440,000	464,000	462,000	181,000	50,000
Construction		42,975,000		13,438,000	22,438,000	5,767,000	1,332,000
FINANCING:	TOTAL	47,572,000	3,440,000	13,902,000	22,900,000	5,948,000	1,382,000
Drinking Water State Revolving Fund		47,572,000	3,440,000	13,902,000	22,900,000	5,948,000	1,382,000
	TOTAL	47,572,000	3,440,000	13,902,000	22,900,000	5,948,000	1,382,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Water TreatmentWater & Pollution Control512-3933-489

City water and sewer services are provided to the National Animal Disease Center (NADC) on North Dayton Avenue. At the time the NADC campus was constructed in 1959, a water metering and booster pumping facility was constructed, as was a wastewater metering and sampling facility. The facilities were initially paid for by the City, and NADC reimbursed the cost over a period of years. The facilities are nearly 50 years old and have a number of components that need to be repaired or replaced. Additionally, there are a number of code issues that need to be addressed.

# **COMMENTS**

Over the life of the facilities, there have been minor maintenance needs that have been performed and paid for by the City. However, the needs that are becoming high priorities are more than routine maintenance. These priorities include things such as completely renovating the electrical systems; replacing large valves, pumps, and motors; replacing the wastewater meter; and other worker safety issues such as handrails, arc flash protections, and confined space safety. Staff has had preliminary discussions with staff from the NADC who concur that the facility needs attention.

An engineering evaluation of the existing structure will take place during the current fiscal year. The cost and scope change reflects a request from USDA staff that the wastewater metering from the National Veterinary Services Laboratory be evaluated as a part of the project. As this project serves only one customer, the USDA will repay 100% of the project costs. Once the magnitude of the repairs is ascertained, staff will negotiate an agreement with USDA staff as to the schedule for repayment of the improvements.

# LOCATION

NADC Campus, N. Dayton Avenue - Map 6, location Q-8

FISCAL YEAR PRIORITY			2				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Water Facility Improvements		325,000	325,000				
Wastewater Facility Improvements		100,000	100,000				
FINANCING:	TOTAL	425,000	425,000				
Water Fund		325,000	325,000				
Sewer Fund		100,000	100,000				
	TOTAL	425,000	425,000				

PROGRAM - ACTIVITY: Utilities – Water Pumping **DEPARTMENT:**Water & Pollution Control

**ACCOUNT NO.** 510-3939-489 520-3939-489

Cost Change

#### **DESCRIPTION/JUSTIFICATION**

This project involves annual equipment repairs, major maintenance activities, replacement, and upgrades at the Water Treatment Plant.

# **COMMENTS**

The schedule for these improvements is as follows:

10/11	Replace Meter Test Bench (	(\$125,000)	)
-------	----------------------------	-------------	---

- 11/12 Extend Security System to Remote Sites (Access Control - \$90,000)
- Installation of Variable Speed Drives for Wells (\$165,000) 12/13
- Extend Security System to Remote Sites (Distribution System Water Quality Monitoring \$125,000) 13/14
- Decommissioning of North Dakota Elevated Tank (\$75,000) 13/14

Because of the planned replacement of the Water Treatment Plant, no major facility improvements are planned for the existing plant. The projects identified are stand-alone improvements separate from the treatment plant. Additional improvements may be identified for future years. The schedule may change in response to impending failure, regulatory agency requirements, etc.

The Ammonia Feed System Construction (FY 10/11, \$75,000) shown last year has been dropped. This system would have provided improved stability to the disinfection residual during periods of peak summer demand. During the past summer, staff ran a pilot test using readily available off-the-shelf components and determined that a reliable system could be assembled on an as-needed basis until the new treatment plant comes online. New elements shown for the first time include the installation of variable speed drives for the wells in FY 12/13 as a "cool cities" project (depending on the outcome of a hydraulic analysis and a cost/payback evaluation) and the removal of the abandoned North Dakota Avenue elevated tank in FY 13/14.

# LOCATION

Water Plant, 300 East 5<sup>th</sup> Street, Building 1 - Map 5, location N-11

FISCAL YEAR PRIORITY			3	2	3	2	
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:			_				
Equipment		580,000	125,000	90,000	165,000	200,000	
	TOTAL	E00.000	405.000	00 000	405.000	200.000	
FINANCING:	TOTAL	580,000	125,000	90,000	165,000	200,000	
Water Utility Fund		580,000	125,000	90,000	165,000	200,000	
Trater Clinty Faria		333,333	120,000	00,000	.00,000	200,000	
	TOTAL	580,000	125,000	90,000	165,000	200,000	

**PROGRAM - ACTIVITY: Utilities - Water Treatment**  **DEPARTMENT:** Water & Pollution Control ACCOUNT NO. 510-3940-489

#### LOW-HEAD DAM MODIFICATIONS

# **PROJECT STATUS:** New

# **DESCRIPTION/JUSTIFICATION**

This project will modify the low-head dam in North River Valley Park. The primary purpose is to reduce the risk of drowning due to a hydraulic recirculation downstream of the dam. Additional benefits of the improvements include increasing the recreational opportunities for paddlers and kayakers, and creating an opportunity for fish to migrate upstream past the dam.

# **COMMENTS**

The low-head dam in River Valley Park serves an essential function during periods of sustained drought by pooling water in the primary recharge zone for the Water Plant's Downtown Well Field. This type of dam has the potential to create a dangerous hydraulic recirculation downstream of the dam. The recirculation can trap a person below the surface and can lead to drowning in just a few feet of water. A conceptual proposal has been developed jointly between the City of Ames and the lowa Department of Natural Resources that will achieve the primary goal of improved safety, while also providing additional recreational opportunities for paddlers and kayakers. The design would also facilitate the movement of fish upstream past the dam, helping to increase the upstream fish population diversity.

The overall project cost is estimated at \$150,000. The City has received notification that it is eligible for a Low-Head Dam Public Hazard Grant that will provide up to 50% of the funding for the project. On July 14, 2009, Council committed up to \$50,000 from the Water Fund for the project. The balance of the funding will come from donations from Ames residents and interested community groups and from in-kind donations of materials, equipment, and labor. Construction is anticipated during 2010 but will be highly dependent on river levels.

# **LOCATION**

North River Valley Park, E. 13<sup>th</sup> Street – Map 6, location O-9

FISCAL YEAR PRIORITY			4				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Construction		150,000	150,000				
	TOTAL	150,000	150,000				
FINANCING:		ŕ					
Water Utility Fund		50,000	50,000				
IDNR Low-Head Dam Grant		75,000	75,000				
In-kind Contributions/Donations		25,000	25,000				
	TOTAL	150,000	150,000				

PROGRAM - ACTIVITY: Utilities – Water Plant **DEPARTMENT:**Water & Pollution Control

**ACCOUNT NO.** 510-3938-489

The currently developed water supply is adequate to meet estimated municipal demands until approximately 2020. To allow sufficient reserve capacity, development of the next well field is proposed to begin in 2014. This project will expand the capacity of the source water supply in conjunction with the development of additional treatment plant capacity.

#### COMMENTS

The City currently owns approximately 77 acres of farmland (east of I-35 immediately north of the South Skunk River) that were purchased for use as a future well field. The original intent was to develop approximately 6 MGD of groundwater supply from this well field. Because of expanding withdrawals by others in this portion of the aquifer, staff recommended to Council in 2008 a plan to scale back the anticipated withdrawal in this area and spread the 6 MGD withdrawal between two smaller well fields. This will necessitate acquiring additional land for the second well field. The cost to acquire this additional land will be offset by the shorter length of piping needed to reach this intermediate well field. This project involves acquiring approximately 80 acres for a new well field site in FY 2010/11. Engineering, construction of a new pipeline, and construction of the first two of four wells in the new I-35 West Well Field will begin in FY 2014/15. The timing for the additional two wells will be driven by the growth in water demand. At some future time, wells can be constructed on the original I-35 east site. These future wells would be built with lower withdrawal rates than the 6 mgd originally envisioned to minimize the potential for interference with other wells.

The "delayed" status reflects the anticipated timing for additional capacity contained in the study for the new water plant project.

FY 12/1	3	Acquisition of land/easements for I-35 West Well Field (\$575,000)
FY 16/1	7	Design and construct pipeline and design wells in I-35 West Well Field (\$2,100,000)
FY 17/1	8	Construct two new wells in I-35 Well Field – adds 1.5 million gallons per day (\$600,000)
FY	20/21	Construct two additional wells in I-35 Well Field – adds 1.5 million gallons per day (\$600,000)
(est.)		
FY	30/31	Develop I-35 East Well Field – adds 3.0 million gallons per day (\$3,500,000)
(est.)		

#### LOCATION

Future wells will be located west of I-35 and south of Highway 30.

FISCAL YEAR PRIORITY					2		
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Land/Easements		575,000	_		575,000		
FINANCING:	TOTAL	575,000	_		575,000		
Water Utility Fund		575,000	_ _		575,000		
	TOTAL	575,000	_		575,000		
PROGRAM - ACTIVITY:		DEPA	ARTMENT:	AC	COUNT NO.		

PROGRAM - ACTIVITY: DEPARTMENT: Water & Pollution Control

**Utilities - Water Production** 

This begins a multi-year project to convert the meter reading system from the existing generator/remote technology to the current industry standard of automatic meter reading (AMR). This project is intended to complement the simultaneous AMR project being piloted in the current year by the Electric Services Department.

# **COMMENTS**

The water meter reading system currently in place is a mechanical system that transmits the reading from the water meter (located inside the property) to a remote register on the outside of a property using a low-voltage wire. This technology is rapidly falling out of use across the country, and some meter manufacturers are now cautioning customers that they plan to discontinue providing new equipment or repair parts over the next five years due to declining interest. The electric utility is proposing to begin implementing an automatic meter reading system as a part of its demand-side management program. It is important for efficient meter reading that the water and electric utilities continue to use compatible technologies.

The estimated cost to convert the entire inventory of water meters to the new reading technology is estimated at \$3,290,000 for equipment alone (18,800 meters @ \$175 per meter). One option to implement the new meter reading technology is to complete the entire conversion as one very large project during a single fiscal year. The workload would far surpass the ability of the Water Meter Division and would need to be contracted out at an additional expense. A second option would be to phase in the technology over a period of 10 years at an annual cost of \$329,000 per year. New equipment would be installed in discrete areas each year in coordination with the Electric Services Department and with the Utility Customer Service Division of the Finance Department. As existing equipment is taken out of service, it can be retained as spare parts to maintain the old inventory until the entire system is replaced.

# **LOCATION**

Throughout the City of Ames

FISCAL YEAR PRIORITY		TOTAL	2040/44	2044/42	2042/42	2042/44	2044/45
COST:		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
Equipment		329,000	_				329,000
FINANCINO	TOTAL	329,000	_				329,000
FINANCING: Water Utility Fund		329,000					329,000
	TOTAL	329,000	_ _				329,000

**PROGRAM - ACTIVITY:** 

**DEPARTMENT:** 

ACCOUNT NO.

Utilities - Water Meter

Water & Pollution Control

# **UTILITIES - WATER DISTRIBUTION**

Total Revenues	4,500,000	900,000	900,000	900,000	900,000	900,000	
Water Utility Fund	4,500,000	900,000	900,000	900,000	900,000	900,000	
REVENUES:							
Total Expenditures	4,500,000	900,000	900,000	900,000	900,000	900,000	
1 Water System Improvements	4,500,000	900,000	900,000	900,000	900,000	900,000	41
EXPENDITURES:							
PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE

This program provides for replacing water mains in areas that are experiencing rusty water problems. It also provides for installing larger distribution mains in areas that have a high concentration of 4" supply lines, transferring water services from 4" water mains in streets where larger water mains exist, and abandoning 4" 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" supply lines and less than desirable fire-fighting 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.

# **COMMENTS**

Identified water system improvements for 2010/11:

Center Avenue (East Lincoln Way to East 2<sup>nd</sup> Street) – Map 5, location N-11

Water service transfer locations identified for 2010/11:

Lincoln Way (North Riverside Drive to North Hazel Avenue) – Map 5, location K-11 Lincoln Way (Franklin Avenue to Hayward Avenue) – Map 4, location G-11 Main Street (Allan Drive to Clark Avenue) – Map 5, location L-11 Campus Avenue (Lincoln Way to Oakland Street) – Map 4, location G-11

Improvements to these water mains will result in reduced maintenance costs.

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		675,000	135,000	135,000	135,000	135,000	135,000
Construction		3,825,000	765,000	765,000	765,000	765,000	765,000
	TOTAL	4,500,000	900,000	900,000	900,000	900,000	900,000
FINANCING: Water Utility Fund		4,500,000	900,000	900,000	900,000	900,000	900,000
	TOTAL	4,500,000	900,000	900,000	900,000	900,000	900,000

PROGRAM – ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities – Water DistributionPublic Works510-8456-489

# **UTILITIES - STORM SEWER**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
<ol> <li>Storm Sewer Outlet Erosion Control</li> <li>Storm Water Facility Rehabilitation Program</li> <li>Low Point Drainage Improvements</li> </ol>	601,905 500,000 625,000	201,905 100,000 125,000	100,000 100,000 125,000	100,000 100,000 125,000	100,000 100,000 125,000	100,000 100,000 125,000	43 44 45
4 Intake Rehabilitation Program	750,000	150,000	150,000	150,000	150,000	150,000	46
Total Expenditures	2,476,905	576,905	475,000	475,000	475,000	475,000	
REVENUES:							
City: Storm Sewer Utility Fund	2,375,000	475,000	475,000	475,000	475,000	475,000	
Other: Iowa State University (in-kind) Watershed Improvement Review Board Grant	10,000 91,905	10,000 91,905					
Sub-Total Other Funds	101,905	101,905					
Total Revenues	2,476,905	576,905	475,000	475,000	475,000	475,000	

This annual program provides for stabilization of areas that have become eroded due to discharges of the storm sewer system into streams, channels, swales, gullies, or drainage ways in residential areas. This program will provide a more permanent control of the erosion and will reduce recurring maintenance costs in these areas.

An inventory of drainage ways within the City has been established based on National Pollution Discharge Elimination System (NPDES) Phase II requirements. As monitoring activities associated with the NPDES permit requirements continue, locations for future improvements will be further identified.

#### COMMENTS

A watershed assessment completed by scientists at Iowa State University has identified more than 4,000 tons/year of sediment delivered from within the Ames corporate limits due to degraded stream conditions. Water quality along College Creek caused by unstable stream banks and degrading stream channels will be improved through installation of engineered systems, stream channel and bank stabilization, and neighborhood learning circle techniques. The City of Ames, in partnership with Iowa State University, was awarded a 3-year Watershed Improvement Review Board (WIRB) Grant in the amount of \$115,695 in 2008/09, \$96,745 in 2009/10, and \$91,905 in 2010/11 for improvements to College Creek.

Residents of Stone Brooke Subdivision have approached staff regarding concerns about the creek adjacent to their property. During 2010/11, staff will consider cost effective options to mitigate those concerns for implementation in 2011/12.

# LOCATION

2010/11 College Creek (west corporate limits to South Dakota Avenue) – Map 4, location C-11

2011/12 Stone Brooke Subdivision creek – Map 2, location K-5

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:		_				
Public Education/Outreach	7,000	7,000				
Engineering	70,000	30,000	10,000	10,000	10,000	10,000
Construction	519,305	159,305	90,000	90,000	90,000	90,000
Monitoring and Maintenance	5,600	5,600				
TOTAL	601,905	201,905	100,000	100,000	100,000	100,000
FINANCING:	,	,	,	•	,	•
Storm Sewer Utility Fund	500,000	100,000	100,000	100,000	100,000	100,000
Iowa State University (In-Kind)	10,000	10,000				
Watershed Improvement Review Board Grant	91,905	91,905				
TOTAL	601,905	201,905	100,000	100,000	100,000	100,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Storm SewerPublic Works560-8694-489

# STORM WATER FACILITY REHABILITATION PROGRAM

**PROJECT STATUS:** No Change

# **DESCRIPTION/JUSTIFICATION**

In accordance with the Municipal Code, new developments within the community have been required to provide storm water management quantity control. This means regulating storm water runoff discharge to pre-developed conditions through 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. As these facilities age, sediment accumulates, vegetation becomes more prevalent, and structures need to be improved. This annual program addresses those concerns.

# **COMMENTS**

00 mm=1110		
Proposed locations:	2010/11	Spring Valley Subdivision (Utah Drive/Oklahoma Drive) – Map 4, location D-10
	2011/12	Ames Municipal Airport – Map 8, location L-16
	2012/13	Bloomington Heights West Subdivision – Map 2, location I-5
	2013/14	Somerset Subdivision – Map 2, location I-7
	2014/15	Pete Cooper's Subdivision – Map 6, location N-11

City staff is considering recommending, as part of a post-construction stormwater management ordinance, a new model agreement which would require an association/owner to maintain the facilities within their property.

FISCAL YEAR PRIORITY			2	2	2	2	2
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		75,000	15,000	15,000	15,000	15,000	15,000
Construction		425,000	85,000	85,000	85,000	85,000	85,000
FINANCING:	TOTAL	500,000	100,000	100,000	100,000	100,000	100,000
Storm Sewer Utility Fund		500,000	100,000	100,000	100,000	100,000	100,000
	TOTAL	500,000	100,000	100,000	100,000	100,000	100,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Storm SewerPublic Works560-8695-489

#### LOW POINT DRAINAGE IMPROVEMENTS

**PROJECT STATUS:** Site Change

### **DESCRIPTION/JUSTIFICATION**

This is the annual program for drainage improvements to decrease flooding at low points. Low point drainage improvements are not focused on residential street locations, but rather on those locations most in need of the improvements as affected by standing water, flooding, and insufficient pipe capacity. The program identifies core locations for improvements each year. In addition, improvements are made at miscellaneous locations identified throughout the year.

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. In 1994, the following criteria were established for evaluating and prioritizing drainage situations: 1) Potential damage from storm runoff; 2) Emergency vehicle access limitations created by runoff; 3) Number of people affected; 4) Number of structures affected; 5) Street classification; 6) Land use; and 7) Benefits of a project to adjacent areas. Based on these criteria, target areas for improvements are established. These improvements may include construction of detention areas, new pipe systems, and replacement systems for increasing the ability to control the runoff so that it can be carried by downstream systems.

# **COMMENTS**

2010/11	Ironwood Court – Map 8, location I-14
2011/12	South 2 <sup>nd</sup> Street/Oak Avenue area – Map 5, location L-11
2012/13	Little Bluestem Court – Map 5, location I-13
2013/14	Southdale Subdivision – Map 9, location N-16
2014/15	Oliver Circle – Map 4, location F-10

Addressing these drainage problems will reduce flooding problems on both public and private property. The amount of time spent on duty calls to set out barricades in areas that flood during heavy rains will also be reduced.

FISCAL YEAR PRIORITY			3	3	3	3	3
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		75,000	15,000	15,000	15,000	15,000	15,000
Construction		550,000	110,000	110,000	110,000	110,000	110,000
FINANCING: Storm Sewer Utility Fund	TOTAL	625,000	125,000	125,000	125,000	125,000	125,000
		625,000	125,000	125,000	125,000	125,000	125,000
	TOTAL	625,000	125,000	125,000	125,000	125,000	125,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Storm SewerPublic Works560-8696-489

This annual program is to repair or replace deteriorated storm sewer intakes. Areas of concentration for storm sewer intake repairs will be those locations programmed for street improvements.

Many intakes are brick or concrete and have experienced repeated "freeze/thaw" conditions during winters and springs. This repeated "freeze/thaw" action has caused the 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 to those intakes that pose an immediate concern for life, health, or safety.

FISCAL YEAR PRIORITY			4	4	4	4	4
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Engineering		50,000	10,000	40.000	10,000	10,000	10,000
				10,000			
Construction		700,000	140,000	140,000	140,000	140,000	140,000
Construction		700,000	140,000	140,000	140,000	140,000	140,000
	TOTAL	750,000	150,000	150,000	150,000	150,000	150,000
FINANCING: Storm Sewer Utility Fund		750,000	150,000	150,000	150,000	150,000	150,000
Storm Sewer Sunty Fund		700,000	100,000	100,000	100,000	100,000	100,000
	TOTAL	750,000	150,000	150,000	150,000	150,000	150,000

PROGRAM - ACTIVITY: Utilities - Storm Sewer **DEPARTMENT:** Public Works

**ACCOUNT NO.** 560-8697-489

# **UTILITIES - SANITARY SEWER**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
<ol> <li>Sanitary Sewer System Evaluation</li> <li>Sanitary Sewer Rehabilitation Program</li> <li>Clear Water Diversion</li> </ol> Total Expenditures	2,060,000 1,500,000 300,000 <b>3,860,000</b>	500,000 300,000 200,000 <b>1,000,000</b>	60,000 300,000 25,000 385,000	500,000 300,000 25,000 <b>825,000</b>	500,000 300,000 25,000 <b>825,000</b>	500,000 300,000 25,000 <b>825,000</b>	48 49 50
REVENUES:							
Sewer Utility Fund	3,860,000	1,000,000	385,000	825,000	825,000	825,000	
Total Revenues	3,860,000	1,000,000	385,000	825,000	825,000	825,000	

The ability of the sewer system to convey wastewater well into the future is dependent on the removal of the current large amount of infiltration and inflow (I/I) in the system that occurs during rain events. In order to convey flows from new development as the City grows, the City must work to reduce to the overall I/I in the system. It was recommended in the Sanitary Sewer System Study completed in 2008 to develop a full Sanitary Sewer System Evaluation (SSSE).

#### **COMMENTS**

This evaluation is a comprehensive and systematic program for identifying the defects that could contribute I/I in a sanitary sewer system, prioritizing those defects, and establishing rehabilitation costs so that repairs can then be included in the Capital Improvements Plan. The SSSE program typically consists of the following tasks: data collection, sewer televising, smoke testing, manhole inspection, and sump pump inspection. Not only would the SSSE identify and correct sources of I/I, it would also identify areas of aging infrastructure in need of repair to prevent unexpected failures and emergency repairs. Staff has begun Phase 1 for the highest priority areas revealed during the 2008 floods.

Additionally, this evaluation will analyze the benefit/cost of the current Footing Drain Grant Program and make a recommendation of how much longer this program may be beneficial to the community.

#### **LOCATION**

Phase 1: Inflow Identification - Manhole inspection, smoke testing, and manhole rehabilitation (2010/11) (\$500,000)

Phase 2: Flow monitoring (2011/12) (\$60,000)

Phase 3: Sewer video inspection of areas with greatest measured infiltration (2012/13 and 2013/14) (\$1,000,000)

Phase 4: Video inspection of remaining sewers to identify structural defects (2014/15 and 2015/16) (\$1,000,000)

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		295,000	60,000	10,000	75,000	75,000	75,000
Construction		1,765,000	440,000	50,000	425,000	425,000	425,000
EWANON 6	TOTAL	2,060,000	500,000	60,000	500,000	500,000	500,000
FINANCING: Sewer Utility Fund		2,060,000	500,000	60,000	500,000	500,000	500,000
	TOTAL	2,060,000	500,000	60,000	500,000	500,000	500,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Sanitary SewerPublic Works520-8514-489

This is the annual program for rehabilitation/reconstruction of deficient sanitary sewers and deteriorated manholes at various locations throughout the City.

Televising the sewer system has revealed problem areas that could result in future blockages. Most of these problem areas are in sewers that are deeper than 14 feet, and City forces are not equipped to make repairs on sewers of that depth. This program, therefore, provides for those repairs by outside firms.

#### **COMMENTS**

System improvement locations for future years have been further identified from the Sanitary Sewer System Study which was completed in 2007/08. Purchased or leased monitoring equipment is also used in determining problem areas. Suggested work activities included rehabilitating manholes, repairing pipe, and similar work. In addition, sewer maintenance crews systematically investigate interceptor and trunk sewers to identify major sources of inflow that could be eliminated as a means of lowering the peak wet weather flow at the treatment plant.

FISCAL YEAR PRIORITY			2	2	2	2	2
COST:		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
Engineering		225,000	45,000	45,000	45,000	45,000	45,000
Construction		1,275,000	255,000	255,000	255,000	255,000	255,000
FINANCING:	TOTAL	1,500,000	300,000	300,000	300,000	300,000	300,000
Sewer Utility Fund		1,500,000	300,000	300,000	300,000	300,000	300,000
	TOTAL	1,500,000	300,000	300,000	300,000	300,000	300,000

PROGRAM – ACTIVITY:

**DEPARTMENT:**Public Works

ACCOUNT NO.

**Utilities - Sanitary Sewer** 

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 involves 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 has authorized a grant to each participating property owner of either \$1,800 or \$2,200 depending upon the type of work involved on the property. Funding of these grants is provided on an annual basis, and the conversion work for qualified properties must be completed in the year for which the grants are given. 2,262 footing drain grants have been issued to property owners under this program as of October 1, 2009 (70 in 2008/09), and approximately 1,209 property owners are still eligible to participate in the grant program.

In addition to funding grants, this program also includes construction of collector lines as needed along city streets. Available funding for this program has always been split evenly between footing drain grants and construction. This would allow for funding approximately 50 grants per year. In recent years, however, the number of requests for grants has been declining, allowing additional money to become available for construction.

After 2010/11 and continuing until the Sanitary Sewer System Evaluation (SSSE) (page 48) is complete, **the footing drain grant portion of this program will be suspended and construction of collector line to eliminate icing on streets will be reduced**. Through completion of the SSSE, the future need of the footing drain grant program will be determined.

FISCAL YEAR PRIORITY			3	3	3	3	3
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		15,000	15,000				
Construction		285,000	185,000	25,000	25,000	25,000	25,000
FINANCING:	TOTAL	300,000	200,000	25,000	25,000	25,000	25,000
Sewer Utility Fund		300,000	200,000	25,000	25,000	25,000	25,000
	TOTAL	300,000	200,000	25,000	25,000	25,000	25,000

**PROGRAM - ACTIVITY:** Utilities - Sanitary Sewer

**DEPARTMENT:** Public Works

**ACCOUNT NO.** 520-8580-489

# **UTILITIES - WATER POLLUTION CONTROL**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
<ol> <li>WPC Plant Disinfection</li> <li>WPC Plant Facility Improvements</li> <li>WPC Plant Residuals Handling Improvements</li> <li>WPC Plant Digester Improvements</li> <li>Flow Equalization Expansion</li> </ol>	2,450,000 3,170,000 1,100,000 1,595,000 1,025,000	2,450,000 720,000	800,000 400,000	450,000 700,000 485,000	600,000 485,000 400,000	600,000 625,000 625,000	52 53 54 55 56
Total Expenditures	9,340,000	3,170,000	1,200,000	1,635,000	1,485,000	1,850,000	
REVENUES:							
City: Sewer Utility Fund	6,890,000	720,000	1,200,000	1,635,000	1,485,000	1,850,000	
Other: Clean Water State Revolving Fund	2,450,000	2,450,000					
Total Revenues	9,340,000	3,170,000	1,200,000	1,635,000	1,485,000	1,850,000	

This project will install an ultraviolet (UV) light disinfection system at the Water Pollution Control Plant. Disinfection will become a mandatory requirement when a new National Pollutant Discharge Elimination System (NPDES) permit for the plant is issued by the Iowa Department of Natural Resources (IDNR).

#### **COMMENTS**

The IDNR completed a Use Attainability Analysis of the South Skunk River for recreational uses during the summer of 2007. That analysis determined that the South Skunk River segment where Ames discharges can support primary contact recreation, such as swimming and skiing. As a result, all NPDES dischargers into this stream segment must meet the bacterial standards outlined in the Iowa Administrative Code.

Staff had anticipated that the IDNR would have issued a new discharge permit by now. Even though there has been no action yet by the IDNR, staff believes that providing disinfection is an important obligation and is proposing to proceed with the installation of disinfection before the permit is issued. The disinfection facility will be designed using the requirements contained in the Iowa Administrative Code.

At a workshop in November 2009, Council endorsed a staff recommendation to accomplish disinfection by designing and constructing an ultraviolet light system. Funds approved as part of the FY 09/10 CIP (\$595,000) will allow design of the system to begin immediately. It is anticipated that the project could be ready for bidding by the fall of 2010, with a construction contract entered into by early 2011. Allowing for an 18-month construction window, the system could be online by fall of 2012. Staff has applied for an I-JOBS grant to fund all or a portion of this project. Any portion not covered by an I-JOBS grant would be funded through the Clean Water State Revolving Fund (CWSRF). This will provide a lower interest rate than General Obligation Bonds, reducing the debt service expense to the Sewer Fund. It is estimated that the project will have an annual operations and maintenance expense of approximately \$18,000, consisting of increased power consumption, periodic UV bulb replacements, and labor.

#### LOCATION

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

FISCAL YEAR PRIORITY			1				
0007		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		50,000	50,000				
Construction		2,400,000	2,400,000				
FINANCING:	TOTAL	2,450,000	2,450,000				
Clean Water State Revolving Fund		2,450,000	2,450,000				
	TOTAL	2,450,000	2,450,000				

 PROGRAM - ACTIVITY:
 DEPARTMENT:
 ACCOUNT NO.

 Utilities - WPC Plant
 Water & Pollution Control
 522-3431-489

#### WPC PLANT FACILITY IMPROVEMENTS

PROJECT STATUS:

Cost Change

Scope Change

City of Ames, Iowa Capital Improvements Plan

## **DESCRIPTION/JUSTIFICATION**

This project involves annual equipment repairs, maintenance, replacement, and upgrades at the plant. This plant became operational in May 1989, and the entire plant became fully operational in November 1989. Life expectancies for plant equipment vary from five to six years to more than 10 years. It is necessary to plan for the orderly repair, replacement, and upgrade of the plant and equipment in order to continue high-quality treatment and comply with environmental regulations.

#### COMMENTS

Projects scheduled include:

10/11	Energy Management Study, \$30,000
10/11 – 11/12	Replace main electrical service transformer, \$50,000, and clean switchgear (\$100,000)
10/11	Clarifier Painting: Year four of a four-year project. Includes painting two clarifiers at an estimated cost of \$145,000 per clarifier
10/11 – 12/13	Vertical Turbine Pump Replacement: Years three through five of a five-year project
10/11	Purchase Spare Grinder, \$50,000
11/12	Rebuild South Dayton Avenue Lift Station: Includes pumps, motors, and chemical dosing system, \$400,000
12/13	Raw Water Pump Station Repainting, \$150,000
13/14	Grease Receiving Station Upgrade, \$250,000
13/14	Site Drive/Street Repairs, \$350,000
14/15	Install Third Bar Screen/Grinder, \$600,000

## LOCATION

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

FISCAL YEAR PRIORITY		2	2	3	3	3
	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:						
Service – Energy Management	30,000	30,000				
Equipment – Transformer/Switchgear	150,000	50,000	100,000			
Construction – Painting	290,000	290,000				
Equipment – Pumps	900,000	300,000	300,000	300,000		
Equipment – Bar Screen/Grinder	650,000	50,000				600,000
Equipment – Pump Station	400,000		400,000			
Equipment – Grease Receiving Station	250,000				250,000	
Construction – Pump Station Painting	150,000			150,000		
Construction – Street Repairs	350,000				350,000	
TOTAL	3,170,000	720,000	800,000	450,000	600,000	600,000
FINANCING:						
Sewer Utility Fund	3,170,000	720,000	800.000	450,000	600,000	600,000
Sewer Guilly Fullu	3,170,000	120,000	000,000	450,000	000,000	000,000
TOTAL	3,170,000	720,000	800,000	450,000	600,000	600,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - WPC PlantWater & Pollution ControlMultiple

PROJECT STATUS:

Cost Change Revenue Change Scope Change Delayed City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

This project provides for improvements to the solids handling component of the WPC Plant operation. This project began with a comprehensive review of the solids handling operations in FY 08/09, with recommended modifications being implemented in subsequent fiscal years.

#### **COMMENTS**

A number of factors are putting pressure on the solids handling portion of the plant operation. The land application equipment is approaching the end of its expected useful life (estimated at 22 years), and replacement costs are significant (>\$1,000,000). Future regulatory changes will require the facility to achieve a higher level of nutrient removal efficiency from the liquid phase, as well as possible restrictions on land application rates.

A study completed in the current fiscal year identified that contract land application is more cost-effective than continued city application, based primarily on the high capital cost to replace the land application equipment. The study also revealed a deficiency in the storage capacity of treated biosolids that will only continue to get worse as the community grows. This project will construct an additional 1.6 million gallons of storage capacity, with associated improvements in the biosolids load-out facilities. The cost for the storage facility has increased from what was shown in the previous CIP due to the increased storage capacity needs revealed by the study.

The project scope no longer includes replacement of the existing land application equipment at this time. The existing equipment will be retained for two years while staff evaluates the effectiveness of contracted land application. If contracted service proves to be a viable solution, the existing equipment will be sold for salvage; and the accumulated depreciation will be returned to the Sewer Fund. If contracted service turns out to be not in the City's best interest, then the existing land application equipment will be replaced and staff will resume the program.

Construction of the improvements has been delayed by one year to balance both workload and CIP expenses. Staff recommends using funds already appropriated in the current fiscal year to complete the engineering design now, even though construction is not shown until the summer of 2012. This will allow the project to be placed on the state's Intended Use Plan as a "shovel-ready" project in the event additional stimulus funding becomes available.

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

FISCAL YEAR PRIORITY				1	1		
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		35,000		15,000	20,000		
Construction		1,065,000		385,000	680,000		
FINANCING:	TOTAL	1,100,000	_	400,000	700,000		
Sewer Utility Fund		1,100,000		400,000	700,000		
	TOTAL	1,100,000		400,000	700,000		

PROGRAM - ACTIVITY: Utilities – WPC Plant **DEPARTMENT:** 

ACCOUNT NO.

Water & Pollution Control

#### **DIGESTER IMPROVEMENTS**

#### **DESCRIPTION/JUSTIFICATION**

The WPC Facility uses anaerobic digestion as a core treatment process for wastewater solids. The digestion process stabilizes the waste, reduces the volume of the solids, and provides a degree of pathogen destruction. The process also generates methane gas as a by-product. This gas is captured and used as a fuel source for on-site electrical generation.

The project couples together the scheduling of four maintenance activities to allow for both cost and workload efficiencies. Three of the activities had been shown previously as part of multiple WPC CIP projects (digester cleaning and interior painting were part of a stand-alone project, and the exterior lid painting was part of the WPC Plant Facility Improvements project). Inefficient digester mixing can result in lost digester capacity, as sand and inert grit become compacted in the corners. It can also result in lowered digester efficiency due to reduced solids destruction and a corresponding reduction in methane gas production. The Residuals Handling Study completed in 2009 identified improvements to digester mixing as an important element in ensuring solids handling capacity over the next 20 years. By coordinating the scheduling of these activities, the down-time of the digesters can be minimized.

#### **COMMENTS**

The anticipated project schedule and budget is as follows:

a	ie aina saagenie ae iei	
FY 2012/13	\$ 485,000	Clean 1 primary digester (\$75,000); repaint interior piping
		(\$225,000); replace mixing system (\$185,000)
FY 2013/14	485,000	Clean 1 primary digester (\$75,000); repaint interior piping
		(\$225,000); replace mixing system (\$185,000)
FY 2014/15	625,000	Clean secondary digester (\$75,000); repaint interior piping
		(\$225,000); repaint exterior lids on all three digesters
_		(\$325,000)
Total	\$ 1,595,000	

# **LOCATION**

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

FISCAL YEAR PRIORITY					2	2	2
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Digester Cleaning		225,000			75,000	75,000	75,000
Interior Painting		675,000			225,000	225,000	225,000
Mixing System Replacement		370,000	_		185,000	185,000	
Exterior Lid Painting		325,000					325,000
FINANCING.	TOTAL	1,595,000	-		485,000	485,000	625,000
FINANCING: Sewer Utility Fund		1,595,000	_ _		485,000	485,000	625,000
	TOTAL	1,595,000			485,000	485,000	625,000

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Utilities - WPC Plant Water & Pollution Control

## **FLOW EQUALIZATION EXPANSION**

PROJECT STATUS: New

#### **DESCRIPTION/JUSTIFICATION**

The Ames WPC Facility uses an advanced secondary (i.e. biological) treatment process. The biological processes are designed to operate within a range of flow rates. If the flows increase too high or too rapidly, the biomass can be washed out of the treatment basins, negatively impacting the treatment effectiveness for several days or weeks to follow. Facilities like Ames are commonly constructed with flow equalization basins. Ames currently has an effective flow equalization storage basin capacity of 4.4 million gallons.

When flows coming in to the plant exceed the hydraulic capacity of the biological process, the excess flow is diverted to the equalization basins and is then brought back through the treatment process once the incoming flow rate drops back below the capacity of the plant. On those rare occasions when the basins are completely filled and the influent flow rate has not yet dropped back below capacity, the equalization basins begin a controlled overflow. The overflow is combined with the treated plant effluent prior to discharge to the receiving stream, and the combined discharge complies fully with the facility's NPDES permit. From 1999 through 2006, this type of overflow only occurred for a total of a few hours. With the heavy rainfall and flooding that took place in 2007 and 2008, the overflow was used for at least a portion of 12 different days. The proposed project will increase the effective equalization basin storage from 4.4 million gallons to 10.4 million gallons. This project includes portions of the old "Wet-Weather Flow Treatment" project from the late 1990s. That project was presented to the lowa Department of Natural Resources (IDNR) in 1996, but staff was not able to secure a construction permit from the IDNR.

### **COMMENTS**

Discussions with Iowa Department of Natural Resources staff on a multitude of projects over the past 15 years have frequently involved conversations about flow equalization basin storage capacity. Some IDNR staff feels that Ames does not have the storage capacity required by IDNR design standards. City staff agrees that additional storage capacity would be a good thing but disagrees with IDNR's conclusion that there is a design deficiency when compared to IDNR design criteria. While IDNR has suggested that additional equalization capacity needs to be a mandatory facility upgrade, staff considers this to be a voluntary project. Keeping the project voluntary allows the Ames City Council the flexibility to reconsider project priorities if something unexpected should arise. If the project were to become mandatory, the City would lose that flexibility.

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

FIGURE VEAR PRIORITY	riigiiway oo, cast oi	1 00				1	
FISCAL YEAR PRIORITY		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		80,000	_			60,000	20,000
Construction		945,000				340,000	605,000
FINANCING:	TOTAL	1,025,000	-			400,000	625,000
Sewer Utility Fund		1,025,000	_			400,000	625,000
	TOTAL	1,025,000	_			400,000	625,000

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Utilities - WPC Plant Water and Pollution Control

# **UTILITIES - ELECTRIC PRODUCTION**

PRO	JECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPE	ENDITURES:							
Electric Services:								
6	Demand Side Management Programs	5,200,000	800,000	1,000,000	1,000,000	1,200,000	1,200,000	64
Trans	smission:							
1	Mid-American Energy Interconnection	9,621,396	5,500,000	4,121,396				59
11	Top-O-Hollow Substation Expansion	950,000	150,000	800,000				69
24	69 kV Switchyard Relay/Control Replacement	330,000		80,000	250,000			82
25	Ontario Substation 69 kV Breaker Addition	350,000			75,000	275,000		83
Distr	ibution:							
2	Vet Med Substation Expansion	3,600,000	3,600,000					60
Powe	er Plant:							
3	Unit #8 Boiler Tube Repair	2,800,000	300,000	2,500,000				61
4	Feedwater Heater Tube Replacement	1,000,000	1,000,000					62
5	Unit #8 Air Heater Basket Replacement	175,000	75,000	100,000				63
7	MGMC Steam Line Evaporator Replacement	880,000	80,000	800,000				65
8 Units #7 & #8 DCS Upgrade		350,000	350,000					66
9	Power Plant Roof Replacement	450,000	450,000					67
10	Gas Turbine #1 Inspection & Overhaul	1,400,000	650,000	250,000	500,000			68

# **UTILITIES - ELECTRIC PRODUCTION, continued**

PRO	PROJECT/REVENUE DESCRIPTION		2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPE	ENDITURES, continued:							
Powe	er Plant (continued):							
12	Power Plant Fire Protection System	550,000	550,000					70
13	Unit #8 Nitrogen Oxide Control Capital	3,350,000	350,000	1,000,000	2,000,000			71
14	Unit #7 Nitrogen Oxide Control Capital	2,050,000	150,000	500,000	1,400,000			72
15	Oil Guns and Ignitors	625,000	625,000					73
16	Inlet Heating for CT2	750,000	750,000					74
17	Unit #7 Boiler Tube Repair	4,000,000	150,000	3,850,000				75
18	RDF Bin Work	250,000		250,000				76
19	Cooling Tower Repairs	1,050,000		750,000	300,000			77
20	Unit #8 Turbine Generator 5-Year Overhaul	1,500,000		1,500,000				78
21	Unit #8 Mercury Capital	5,100,000		300,000	1,690,000	3,110,000		79
22	Unit #7 Mercury Capital	2,700,000		200,000	500,000	2,000,000		80
24	Turbine Controls Upgrade	650,000		450,000	200,000			81
26	Unit #7 Turbine Generator 5-Year Overhaul	750,000			750,000			84
	Total Expenditures	50,431,396	15,530,000	18,451,396	8,665,000	6,585,000	1,200,000	
REVE	ENUES:							
Bono	ls:							
	ric Revenue Bonds	17,179,396		11,589,396	5,590,000			
City:								
Elect	ric Utility Fund	29,345,200	12,820,900	5,791,700	3,006,500	6,526,100	1,200,000	
Othe	r:							
Iowa	State University	3,906,800	2,709,100	1,070,300	68,500	58,900		
	Total Revenues	50,431,396	15,530,000	18,451,396	8,665,000	6,585,000	1,200,000	

This project is to construct a 161kV line from Ames to Mid-American Energy Company's (MEC) 161kV switching station northwest of Ankeny. This will complete a multi-year project started in FY 2003/04.

In FY 06/07, Ames converted its 69kV line interconnection with Alliant Utilities at Boone from 69kV operation to 161kV operation. During this time, work was completed to create two 161kV terminations at Stange Substation and Ames Plant Substation. MEC has also completed construction of an additional 161kV terminal at its northeast Ankeny Substation to allow for the interconnection of the Ames Plant/Northeast Ankeny 161kV line.

Ames also has a 69kV line interconnection that is with MEC at Ankeny. This line was built in 1958, and over the years has served the Ames system well. Because of the age of this line and its limited capacity, an additional line is needed from Ames to the south. This 161kV interconnection is essential to provide Ames with needed transmission capacity and to satisfy the current and future needs of our customers.

The total cost of this project is now estimated at \$29,600,000 with \$6,334,400 in funding from Iowa State University, and \$23,176,800 from Electric Utility funding.

This project is the last portion of the Ames to MidAmerican Energy substation project, as the in-town line was completed in FY09/10. This project primarily represents the remaining Ankeny line work; this is a preliminary estimate pending review of materials and professional services actuals-to-date.

Actual	\$	14,572
Actual		741,086
Actual		6,663,462
Actual		7,064,210
Actual		(234,726)
Actual		208,245
Subtotal	\$	14,456,849
Amended		1,091,755
FY 11/12		9,621,396
In-Town Project		4,430,000
Total	\$	29,600,000
	Actual Actual Actual Actual Actual Actual Subtotal Amended FY 11/12 In-Town Project	Actual Actual Actual Actual Actual Subtotal Amended FY 11/12 In-Town Project

#### **LOCATION**

A route between Ames Plant Substation and MEC 161kV switch station near Ankeny

FISCAL YEAR PRIORITY		1	1			
	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:						
Professional Services	180,000	100,000	80,000			
Construction	9,441,396	5,400,000	4,041,396			
тот	TAL 9,621,396	5,500,000	4,121,396			
FINANCING:						
Electric Revenue Bonds	3,239,396		3,239,396			
Electric Utility Fund	4,323,000	4,323,000				
Iowa State University	2,059,000	1,177,000	882,000			
TOI	TAL 9,621,396	5,500,000	4,121,396			

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Electric ProductionElectric530-4871-489

#### **VET MED SUBSTATION EXPANSION**

**PROJECT STATUS:** Cost Increase

Advanced

City of Ames, Iowa Capital Improvements Plan

## **DESCRIPTION/JUSTIFICATION**

The expansion of the Vet Med Substation is needed to accommodate Iowa State University's Vet Med Campus load additions, football stadium load additions, and Ames' load additions south of Highway 30 and along 16<sup>th</sup> Street in the vicinity of the Vet Med Substation. This project has been advanced to accommodate ISU's advanced schedule for the Vet Med Campus load additions and increased in scope and cost to include an additional transformer to better accommodate Ames' and ISU's future needs for capacity and reliable service in this area.

Currently, the Vet Med Substation is a jointly owned substation with two transformers -- one 12MVA transformer that serves City of Ames' load and one 5MVA transformer that serves ISU's Veterinary Medicine campus load. ISU's planned additions will exceed the capacity of their existing 5MVA transformer by the Spring of 2011. This work includes the replacement of the existing 5MVA transformer with a new 15 MVA unit as well as the addition of a third transformer. In addition, this project will include the expansion of the existing 69kV bus, addition of transformer protection, and 13.8kV metalclad switchgear and feeders associated with each of the two new transformers. This will allow Ames Electric Services to serve load growth in the remainder of its electric service territory south of Highway 30 and along 16<sup>th</sup> Street west of Duff. One of the new transformers will primarily be dedicated to ISU Vet Med Campus loads and will provide limited emergency backup capacity to other Ames feeders. The second new transformer will allow Ames Electric Services to serve Ames' electric load and provide adequate emergency capacity for loads served by this substation in the event of a transformer outage. It is anticipated that a portion of the electric load currently served by Mortensen Road Substation will also be transferred to the Vet Med Substation.

## **COMMENTS**

FY 2009/10	Engineering		\$ 400,000
FY 2010/11	Engineering and construction		3,600,000
		Total	\$ 4.000.000

#### LOCATION

Vet Med Substation, north of Highway 30, east of University Drive - Map 8, location K-14

COST:		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
Engineering		100,000	100,000				
Construction		3,500,000	3,500,000				
FINANCING:	TOTAL	3,600,000	3,600,000				
Electric Utility Fund		2,100,000	2,100,000				
Iowa State University		1,500,000	1,500,000				
	TOTAL	3,600,000	3,600,000				

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Electric Extension/ImprovementsElectric530-4834-489

#### **UNIT #8 BOILER TUBE REPAIR**

**PROJECT STATUS:** Cost Change

Delayed

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

The Unit #8 Boiler is twenty years old and in need of tube repairs. The three-year plan for engineering and re-tubing of the boiler includes materials and labor to install. The lower 50 feet of the boiler and the super-heater need to be replaced.

#### COMMENTS

Staff has done preliminary engineering work with Zachary Engineering Company, a utility engineering company. Approximately \$1.8 million was spent in FY 2009/10 to begin acquisition of tube material.

FY 2007/08	Engineering for wall tubes - actual	\$ 31,605
FY 2008/09	Engineering for wall tubes – actual	23,894
FY 2009/10	Materials & labor for wall tube installation	4,876,106
FY 2010/11	Engineering for superheater	300,000
FY 2011/12	Materials and labor for superheater installation	2,500,000
	Total	\$ 7,731,605

# LOCATION

Power Plant, 200 East 5<sup>th</sup> Street - Map 5, location N-11

FISCAL YEAR PRIORITY			3	2			
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		300,000	300,000				
Labor and Materials		2,500,000	_	2,500,000			
FINANCING:	TOTAL	2,800,000	300,000	2,500,000			
Electric Revenue Bonds		2,500,000	_ _	2,500,000			
Electric Utility Fund		300,000	300,000				
	TOTAL	2,800,000	300,000	2,500,000			

PROGRAM - ACTIVITY: Utilities – Electric Production DEPARTMENT:

ACCOUNT NO. 530-4898-489

Electric

**PROJECT STATUS:** Delayed

City of Ames, Iowa Capital Improvements Plan

### **DESCRIPTION/JUSTIFICATION**

Feedwater heaters are devices that use extraction steam from the turbine to preheat the feedwater prior to returning to the boiler. This increases the efficiency of the entire steam generating system. Two units were installed in 1982 and two units in 1967. Due to the copper found in deposit weight density (DWD) testing of boiler tubes, staff anticipates that these feedwater heaters are deteriorating, and will require replacement. Testing programs will be employed to analyze the copper loss and subsequent thinning of feedwater heater tubes to determine scheduling of replacement.

## **COMMENTS**

Due to copper loss on the units, staff recommends re-tubing at an estimated cost of \$250,000 each. There are currently four feedwater heaters that need to be re-tubed.

FY 2010/11 \$1,000,000

## **LOCATION**

Power Plant, 200 East 5<sup>th</sup> Street- Map 5, location N-11

FISCAL YEAR PRIORITY			4				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:		4 000 000	4 000 000				
Equipment and Labor		1,000,000	1,000,000				
FINANCING:	TOTAL	1,000,000	1,000,000				
Electric Utility Fund		1,000,000	1,000,000				
	TOTAL	1,000,000	1,000,000				

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Electric ProductionElectric530-4831-489

The air heater is a large rotating set of three stacked metal elements. The flue gas exiting from the boiler passes across the metal elements, heating them. The rotation of the assembly then brings the elements into the cold air forced draft fan side. As the cold air passes through the heated metal elements, the air is heated to 600 degrees Fahrenheit and is used for combustion, drying, and transport of pulverized coal to the boiler. This recovery of the heat from the flue gas increases the efficiency of the boiler. The lower levels of the metal elements have become loose and are falling out, allowing air to pass through without being heated properly.

## **COMMENTS**

This is the second set of baskets that has been installed; each set lasted about twelve years.

#### LOCATION

Power Plant, 200 East 5<sup>th</sup> Street - Map 5, location N-11

FISCAL YEAR PRIORITY			5	8			
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Material/Parts		75,000	75,000				
Installation		100,000		100,000			
FINANCING:	TOTAL	175,000	75,000	100,000			
Electric Utility Fund		175,000	75,000	100,000			
	TOTAL	175,000	75,000	100,000			

PROGRAM - ACTIVITY:
Utilities - Electric Production

DEPARTMENT:

Electric

**ACCOUNT NO.** 530-4832-489

**PROJECT STATUS:** No Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

This project is to develop and administer programs aimed at reducing demand for electricity. Reductions in the demand for electricity positively impact future energy production/supply costs.

Demand side management (DSM) programs are utility programs aimed at reducing consumer use of energy through conservation or efficiency measures. Ongoing programs are:

- Residential energy audits
- Residential high efficiency air conditioner rebates
- Residential low income weatherization
- Residential high efficiency lighting rebates
- Residential efficient appliance rebates
- Commercial custom rebates

- Residential new construction rebates
- Commercial high efficiency lighting rebates
- Commercial audits
- Power Watch education
- Green Choices alternative energy contribution

Load management (LM) programs control energy consumption at any instant through the use of mechanical or electronic devices. Ongoing programs are:

Prime Time Power air conditioner load control

Commercial/industrial power factor correction rebates

New Load Management programs under consideration are:

- Upgrade of digital control unit (DCU) signal control and transmission equipment
- Upgrade of digital control unit (DCU) circuit boards

- Time-of-day rate design
- Wireless 2-way communication system

# **LOCATION**

Electric Administration, 502 Carroll Avenue - Map 5, location M-11

FISCAL YEAR PRIORITY			6	4	2	1	1
0007		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Program Development and Adm	ninistration	5,200,000	800,000	1,000,000	1,000,000	1,200,000	1,200,000
FINANCING:	TOTAL	5,200,000	800,000	1,000,000	1,000,000	1,200,000	1,200,000
Electric Utility Fund		5,200,000	800,000	1,000,000	1,000,000	1,200,000	1,200,000
	TOTAL	5,200,000	800,000	1,000,000	1,000,000	1,200,000	1,200,000

PROGRAM – ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities – Electric AdministrationElectric530-4815-489

The existing evaporator at the Power Plant that supplies steam to Mary Greeley Medical Center (MGMC) is capable of providing steam for the existing MGMC load. However, because of several plugged tubes and aging (30 years of service), an increase in steam load to match the new MGMC steam requirements is not possible. In fact, the unit is near the end of its useful life and should be replaced in the near future to avoid interruptions in service.

This project will install a new evaporator in a more accessible area of the Power Plant. It will be sized for the projected growth of MGMC and other potential steam customers. There is associated processing equipment (piping, meters, valving, controls, and instrumentation) that needs to be replaced so the steam source equipment at the Plant is available for ongoing service to MGMC. MGMC does pay the City for the steam supplied. Revenue is anticipated to be \$250,000 to \$315,000 per year. Cost recovery of this project will be included in the rates for sale of the steam.

#### COMMENTS

The existing evaporator unit will be abandoned in place. This will eliminate unnecessary abatement and demolition costs on this project.

#### LOCATION

Power Plant, 200 East 5<sup>th</sup> Street - Map 5, location N-11

FISCAL YEAR PRIORITY			7	6			
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Engineering		80,000	80,000				
Equipment		500,000		500,000			
Installation		300,000		300,000			
	TOTAL	880,000	80,000	800,000			
FINANCING:							
Electric Utility Fund		880,000	80,000	800,000			
	TOTAL	880,000	80,000	800,000			

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Electric ProductionElectric530-4835-489

The distributive control system's CDDI software and some hardware on Units #7 and #8 boilers have become obsolete. These systems are critical to the operation of the units because they transfer vital information from equipment in the field to the operators' control station. The reliability of the units can be greatly affected by failure of the CDDI system and the inability to find spare parts for these systems.

## **COMMENTS**

Staff believes that it is necessary to upgrade the current systems, especially the communication portion. This upgrade will include software and some hardware. The current system is a Westinghouse ovation system. The estimates used are preliminary. Staff recommends upgrading systems for Unit #8 first, followed by Unit #7.

FY 2008/09	\$ 14,620
FY 2009/10	620,000
FY 2010/11	350,000
	\$ 984 620

## LOCATION

Power Plant, 200 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY			8				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Equipment and Installation		350,000	350,000				
FINANCING.	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 ProductionElectric530-4820-489

The Power Plant is executing a multi-year roof replacement and repair plan to address roof maintenance in the Plant. Phases I and II of the plan were completed in FY 08/09 and FY 09/10 and addressed the roof sections over the turbine room and auxiliary bay. These phases were included in the operating budget of the Plant. This project is Phase III of the plan and will replace the roof sections over the boiler equipment. Leaking roofs can cause equipment failure if water penetrates electrical cabinet enclosures.

## LOCATION

Power Plant, 200 East 5<sup>th</sup> Street - Map 5, location N-11

FISCAL YEAR PRIORITY			9				_
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Engineering		20,000	20,000				
Unit #7 Boiler Roof		30,000	30,000				
Unit #8 Boiler High Roof		100,000	100,000				
Units #5 and #6 Boiler Roofs		300,000	300,000				
	TOTAL	450,000	450,000				
FINANCING:							
Electric Utility Fund		450,000	450,000				
			_				
	TOTAL	450,000	450,000				

PROGRAM - ACTIVITY:

DEPARTMENT:

**ACCOUNT NO.** 530-4836-489

Utilities - Electric Production

# **GAS TURBINE #1 ENGINE/GENERATOR/TURBINE** INSPECTION AND OVERHAUL

**PROJECT STATUS:** Cost Change

Delayed

City of Ames, Iowa Capital Improvements Plan

#### DESCRIPTION/JUSTIFICATION

Gas Turbine #1 (GT-1) was built in 1972. The unit consists of three separate pieces of equipment: an engine, a free turbine, and a generator. The engine has had one major hot section inspection in the last thirty-five years. The free turbine has had only external work done on it in the last twenty-five years. The generator has had inspections performed on the bearings and diodes, but has never been completely disassembled. The industry standard for inspection of each of these pieces of equipment is an inspection/overhaul every five years.

#### **COMMENTS**

There are several reasons that these inspections have not been done according to standard schedules. The GT-1 unit runs very little and there are very few hours on the unit. The work involved in disassembling the generator and free turbine is considerable. Staff believes this work should be split into two outage periods; the first for the engine and free turbine inspection, and the second for the generator.

FY 2010/11	Engine	\$ 650,000
FY 2011/12	Generator	250,000
FY 2012/13	Turbine	500,000
		\$ 1,400,000

## LOCATION

Power Plant, 200 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY		10	10	5		
	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:						
Inspection Labor and Parts - Engine	650,000	650,000				
Inspection Labor and Parts – Generator	250,000		250,000			
Inspection Labor and Parts – Turbine	500,000			500,000		
TOTAL	1,400,000	650,000	250,000	500,000		
FINANCING:						
Electric Utility Fund	1,400,000	650,000	250,000	500,000		
TOTAL	4 400 000	050.000	050 000	F00 000		
TOTAL	1,400,000	650,000	250,000	500,000		

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Utilities - Electric Production Electric 530-4827-489

# TOP-O-HOLLOW SUBSTATION EXPANSION AND BREAKER ADDITION

**PROJECT STATUS:** Delayed

elaved

Cost Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

This project will convert the existing underground 69kV transmission connection at the Top-O-Hollow substation to a more reliable looped overhead transmission connection. It will also add relaying and breakers for line and transformer protection. The addition of the dual transmission source and relay protection will improve reliability of the 69 kV transmission system, and improve service to the customers served by this substation. The land for this project has been previously purchased to allow for the expansion of the existing substation.

Use of breakers for transmission line and transformer protection is consistent with good engineering practices in the electric utility industry. Expanding the existing substation requires land purchase, substation design, and construction.

#### **COMMENTS**

FY 2008/09		\$ 24,883
FY 2009/10		
FY 2010/11	Engineering	150,000
FY 2011/12	Construction	800,000
	Total	\$ 974,883

Note: This project has been delayed due to a change in schedule for the Vet Med Substation expansion.

#### **LOCATION**

Top-O-Hollow Road west of Calhoun Avenue - Map 2, location L-5

FISCAL YEAR PRIORITY			11	11			
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		150,000	150,000				
Construction		800,000		800,000			
FINANCING:	TOTAL	950,000	150,000	800,000			
Electric Utility Fund		746,700	117,900	628,800			
Iowa State University		203,300	32,100	171,200			
	TOTAL	950,000	150,000	800,000			

PROGRAM – ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities – Electric Extension/ImprovementsElectric530-4882-489

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Project Change

#### City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

The City's insurance carrier has made several loss prevention recommendations for the Power Plant. These recommendations are for fire suppression systems for the coal conveying equipment, coal pulverizers, and related coal processing and conveyor equipment. The cost and schedule for installation of the recommendations is as follows. Projects originally planned for 2012/13 and 2013/14 have been dropped pending further analysis of need and costs.

**PROJECT STATUS:** Cost Change

FY 2004/05	Upgrading City Water Service (in plant)	\$ 475,000
FY 2006/07	Coal Handling Sprinkler System (delayed)	
FY 2008/09	Coal Handling Sprinkler System phase 1	650,000
FY 2009/10	Coal Handling Sprinkler System phase 2	300,000
FY 2010/11	Coal Handling Sprinkler System phase 3/mill inverting	550,000
		\$ 1,975,000

#### **COMMENTS**

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

## **LOCATION**

Power Plant, 200 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY			12				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Construction		550,000	550,000				
	TOTAL	550,000	550,000				
FINANCING: Electric Utility Fund		550,000	550,000				
	TOTAL	550,000	550,000				

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Electric ProductionElectric530-4876-489

The Environmental Protection Agency (EPA) regulates nitrogen oxide ( $NO_x$ ) emissions through means of a "cap and trade" market. The current legislation is in effect until the end of 2010. This current "cap and trade" market may be extended or replaced by other methods of emissions reduction after 2010.  $NO_x$  forms during the combustion process when fuel is burned at high temperatures.  $NO_x$  production can be reduced effectively by lowering the temperature of the combustion process. The  $NO_x$  emissions from unit #8 can be lowered by reducing the combustion temperature by means of Low  $NO_x$  Burner and Over-Fire Air (LNB – SOFA) system.

Detailed equipment cost and specific design engineering work will be completed after regulations are known. Equipment procurement and installation will be done in the second and third years.

#### **COMMENTS**

FY 2007/08	Engineering – actual		\$ 25,625
FY 2008/09	Engineering – actual		30,306
FY 2009/10	Engineering		25,000
FY 2010/11	Engineering		350,000
FY 2011/12	Materials & labor for installation		1,000,000
FY 2012/13	Labor for installation		2,000,000
		Total	\$ 3,430,931

# **LOCATION**

Power Plant, 200 East 5<sup>th</sup> Street - Map 5, location N-11

FISCAL YEAR PRIORITY			13	12	6		
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		350,000	350,000				
Materials & Installation		3,000,000		1,000,000	2,000,000		
FINANCING:	TOTAL	3,350,000	350,000	1,000,000	2,000,000		
Electric Revenue Bonds		3,000,000		1,000,000	2,000,000		
Electric Utility Fund		350,000	350,000				
	TOTAL	3,350,000	350,000	1,000,000	2,000,000		

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.
Utilities – Electric Production Electric 530-4887-489

The Environmental Protection Agency (EPA) regulates nitrogen oxide (NO<sub>x</sub>) emissions by a "cap and trade" market. The current legislation is in effect until the end of 2010. This current "cap and trade" market may be extended or replaced by other methods of emissions reduction after 2010. NO<sub>x</sub> forms during the combustion process when fuel is burned at high temperatures. NO<sub>x</sub> production can be effectively reduced by lowering the temperature of the combustion process. The NO<sub>x</sub> emissions from Unit #7 can be lowered by reducing the combustion temperature with a Low NO, Burner and Over-Fire Air (LNB – SOFA) system.

Detailed equipment cost and specific design engineering work will be completed after regulations are known. Equipment procurement and installation will occur in the second and third years of the project.

## COMMENTS

FY 2007/08		\$ 51,692
FY 2008/09		17,599
FY 2009/10		20,000
FY 2010/11		150,000
FY 2011/12		500,000
FY 2012/13		1,400,000
	Total	\$ 2,139,291

#### LOCATION

Power Plant, 200 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY			14	13	7		
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		150,000	150,000				
Materials and Installation – LNB-S0	OFA	1,900,000		500,000	1,400,000		
FINANCING:	TOTAL	2,050,000	150,000	500,000	1,400,000		
Electric Revenue Bonds		1,900,000		500,000	1,400,000		
Electric Utility Fund		150,000	150,000				
	TOTAL	2,050,000	150,000	500,000	1,400,000		

PROGRAM - ACTIVITY: **DEPARTMENT:** ACCOUNT NO. Utilities - Electric Production Electric 530-4887-489

OIL GUNS AND IGNITORS PROJECT STATUS: Cost Change City of Ames, lowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

New start-up fuel oil ignitors and oil guns are needed in both Units #7 and #8 to achieve reliable operation.

# **COMMENTS**

This project was previously split into two parts and included in the nitrogen oxide reduction projects for each respective unit. This work will now be done at the same time the boiler tube repair will occur on Unit #8. The actual installation on the units is expected to occur in the spring of 2011.

FY 2009/10	•	\$ 350,000
FY 2010/11		625,000
	Total	\$ 975 000

# **LOCATION**

Power Plant, 200 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY			15				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:		400.000	400.000				
Engineering		100,000	100,000				
Materials and Installation		525,000	525,000				
	TOTAL	005.000	225 222				
FINANCING:	TOTAL	625,000	625,000				
Electric Utility Fund		625,000	625,000				
	TOTAL	625,000	625,000				

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Electric ProductionElectric530-4826-489

INLET HEATING FOR GT2 PROJECT STATUS: Cost Change City of Ames, lowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

Gas Turbine #2 (GT2) can only be run for about five months of the year because there is no pre-heater for cold weather operation. This causes issues with having our reserve generating capacity available if there is an outage with unit #8 during the winter months. The project will involve the installation of a pre-heater which will heat air going into the unit to prevent it from icing up.

# **COMMENTS**

Cost estimates obtained last year ranged between \$400,000 and \$700,000.

# **LOCATION**

Pullman Street - Map 6, location P-10

FISCAL YEAR PRIORITY			16				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Equipment		750,000	750,000				
	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 ProductionElectric530-4830-489

Unit #7 boiler is forty years old and in need of tube repairs. Staff has devised a six-year plan to maintain the operation of the unit through maintenance, engineering, and re-tubing of the boiler. The cost estimates include labor and materials. The bottom throat of the boiler also needs to be enlarged to allow for an increased rate of refuse derived fuel (RDF) burning.

# **COMMENTS**

FY 2010/11	Engineering	\$ 150,000
FY 2011/12	Material and labor for installation	3,850,000
		\$ 4,000,000

# **LOCATION**

Power Plant, 200 East 5<sup>th</sup> Street - Map 5, location N-11

FISCAL YEAR PRIORITY			17	3			
COST:		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
Engineering		150,000	150,000				
Materials & Labor		3,850,000		3,850,000			
FINANCING:	TOTAL	4,000,000	150,000	3,850,000			
Electric Revenue Bonds		3,850,000		3,850,000			
Electric Utility Fund		150,000	150,000				
	TOTAL	4,000,000	150,000	3,850,000			

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Utilities - Electric ProductionElectric530-4837-489

This project is to repair/replace a number of major components on the refuse derived fuel (RDF) bin (traverse augers, metering bins, out-feed conveyors, structure steel and receiving bin walls). The entire structure of the RDF bin is composed of Cor-ten steel. This steel is used where there is no protective covering to be applied and it rusts to create a corrosion shield for itself. Because the RDF material sticks to the exposed steel and then stays wet due to the weather or humidity created by the condensation in the bin, the Cor-ten simply continues to rust because it never dries out. The bin is twelve years old and requires almost constant attention now. Past experience with the old RDF bin indicates that after fifteen years, the steel of the bin will require repair or replacement. Heavy corrosion on the firewall, the out-feed conveyors, and the traverse auger rails has already been addressed. Some major work is needed to replace the receiving bin walls and the roof steel. Both of these areas are currently being patched.

# **COMMENTS**

Staff expects the frequency of these repairs to increase throughout the current year. The price estimate was provided by the original equipment manufacturer in 2006. Since it is difficult to coordinate outages when there isn't conflict with the Resource Recovery Plant, staff plans on having materials on hand and scheduling repairs as the opportunity presents itself.

#### LOCATION

Power Plant, 200 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY				5			
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
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

The #7 and #8 cooling towers are in need of repair. Their proper operation is critical to the efficiency of the Power Plant. These towers are outdoor evaporative cross flow towers that are subject to severe environmental operating conditions. The #7 tower had a major rework in the late 1980s when most of the structure, fill, louvers and drift eliminators were replaced. The #8 tower has had minor repairs on several occasions during the last ten years including limited structure repairs and fill and drift eliminator replacements.

## **COMMENTS**

The #8 louvers have deteriorated and need to be replaced. They are made of pressed asbestos which increases the cost of construction and disposal. Due to operating requirements of the Power Plant, it is difficult to schedule these units for repairs because the plant can't be operated without them. Normally these repairs are made during the scheduled five-year turbine generator overhauls, but the #8 tower needs some repairs before that. The louvers will be replaced and some structural repairs on #8 will be made during the planned outage in 2011/2012. The #7 tower needs major structural repair in the fan mounting areas and replacement of the fan drive shafts. The fan hubs, blades and shrouds are 42 years old and need to be replaced. The fan deck, hot water basin and its support also need to be replaced. These projects will be accomplished during the planned outage of FY 2012/13.

#### LOCATION

Power Plant, 200 East 5<sup>th</sup> Street - Map 5, location N-11

FISCAL YEAR PRIORITY				7	1		
COST:		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
Material and Labor - #8		750,000	_	750,000			
Material and Labor - #7		300,000			300,000		
FINANCING:	TOTAL	1,050,000		750,000	300,000		
Electric Utility Fund		1,050,000	_	750,000	300,000		
	TOTAL	1,050,000		750,000	300,000		

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Utilities – Electric Production Electric

Unit #8 turbine generator will be disassembled and inspected after 20,000 hours of operation. An inspection was done in 2005 and will be due again in 2010/2011. Repairs and replacement of worn parts will be completed as the inspection progresses.

#### **COMMENTS**

This work is required to replace worn parts and inspect the turbine and generator for repairs that may be needed to avoid catastrophic failure of equipment. This overhaul is recommended by boiler and machinery insurance carriers and follows accepted industry standards. The budget includes the cost of the inspection and normal repairs anticipated after 20,000 hours of operation.

## **LOCATION**

Power Plant, 200 East 5<sup>th</sup> Street - Map 5, location N-11

FISCAL YEAR PRIORITY				9			
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Construction		1,500,000		1,500,000			
	TOTAL	1,500,000	_ _	1,500,000			
FINANCING: Electric Utility Fund		1,500,000	_	1,500,000			
	TOTAL	1,500,000	_	1,500,000			

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Utilities – Electric Production Electric

#### **UNIT #8 MERCURY CAPITAL**

**PROJECT STATUS:** Cost Change

Delayed

ACCOUNT NO.

City of Ames, Iowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

Future Environmental Protection Agency (EPA) regulations likely will require reduction of mercury emissions. If mercury reduction equipment is not in place, allowances will need to be purchased.

#### COMMENTS

Staff believes that Unit #8 will require a mercury control, based on anticipated regulations. Engineering for the modifications to Unit #8 are planned for FY 2011/12, in the expectation that regulations will be in place by that time.

# **LOCATION**

Power Plant, 200 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY				14	9	2	
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		300,000		300,000			
Equipment and Installation		4,800,000			1,690,000	3,110,000	
FINANCING:	TOTAL	5,100,000		300,000	1,690,000	3,110,000	
Electric Revenue Bonds		1,990,000		300,000	1,690,000		
Electric Utility Fund		3,110,000				3,110,000	
	TOTAL	5,100,000		300,000	1,690,000	3,110,000	

PROGRAM - ACTIVITY:

DEPARTMENT:

Electric

Utilities - Electric Production

#### **UNIT #7 MERCURY CAPITAL**

**PROJECT STATUS:** Cost Change

Delayed

ACCOUNT NO.

City of Ames, Iowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

Future Environmental Protection Agency (EPA) regulations likely will require reduction of mercury emissions. If mercury reduction equipment is not in place, allowances will need to be purchased. This project is delayed due to the lack of known regulations and the extent to which Unit #7 may require modification.

## **COMMENTS**

Unit #7 may require a mercury control.

## LOCATION

Power Plant, 200 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY				15	11	3	
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Equipment and Installation		2,700,000	-	200,000	500,000	2,000,000	
	TOTAL	2,700,000	— —	200,000	500,000	2,000,000	
FINANCING: Electric Revenue Bonds		700,000		200,000	500,000		
Electric Utility Fund		2,000,000				2,000,000	
	TOTAL	2,700,000		200,000	500,000	2,000,000	

PROGRAM - ACTIVITY:

DEPARTMENT:

Electric

Utilities - Electric Production

This project converts the supervisory controls on Units #7 and #8 turbine generators from electric-mechanical to electronic.

# **COMMENTS**

This conversion will enable more effective scheduling of the units. The electric-mechanical systems are worn and in need of repair. Replacement of these components is more cost-effective than attempting to repair them, and will result in more effective operation of the units.

FY 11/12	Unit #8	\$ 450,000
FY 12/13	Unit #7	200,000
	Total	\$ 650,000

# **LOCATION**

Power Plant, 200 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY				16	4		
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Construction		650,000	_ _	450,000	200,000		
FINANCING: Electric Utility Fund	TOTAL	650,000		450,000	200,000		
		650,000		450,000	200,000		
	TOTAL	650,000		450,000	200,000		

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Utilities – Electric Production Electric

**PROJECT STATUS:** Delayed

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

The 69kV switchyard relaying and controls are currently located inside the Power Plant. This requires long runs of old control cable between the Power Plant and switchyard, running beneath portions of the W&PC's newer office expansion. The existing relays are obsolete electro-mechanical devices which are becoming difficult to maintain/repair and will need replacement with modern relays. The relaying and controls for the 69kV switchyard are critical components that play a significant role in overall electric system reliability. Properly applied protective relaying initiates the rapid isolation of a system fault to mitigate system damage and isolates a system problem to allow continued operation and service of the rest of the system. With the installation of the Ames Plant 161kV/69 kV substation, a relay and control enclosure was installed adjacent to the 69 kV switchyard with sufficient room to house the relays and controls needed for the 69 kV switchyard. By installing modern, programmable relays and updated controls in this location, long-term reliability can be improved by eliminating the obsolete and maintenance-intensive electro-mechanical relays and aged, lengthy control circuits that are no longer accessible for repair.

#### LOCATION

Power Plant, 200 East 5<sup>th</sup> Street – Map 5, location N-11

FISCAL YEAR PRIORITY		17	3				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		80,000		80,000			
Construction		250,000			250,000		
FINANCING:	TOTAL	330,000		80,000	250,000		
Electric Utility Fund		259,400		62,900	196,500		
Iowa State University		70,600		17,100	53,500		
	TOTAL	330,000		80,000	250,000		

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Electric

Utilities – Electric Extension/Improvements

Add 69 kV breakers and related equipment to Ontario Substation.

The addition of 69 kV breakers at Ontario Substation will improve the reliability of transmission service to the substation. This will also improve service provided to customers served by this substation by shortening the duration of outages which may occur.

The use of breakers for 69 kV transmission service to distribution substations is consistent with good electric utility industry engineering practices.

## **LOCATION**

Delaware Avenue and Utah Drive - Map 4, location E-10

FISCAL YEAR PRIORITY					8	4	_
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		75,000			75,000		
Construction		275,000				275,000	
FINANCING:	TOTAL	350,000			75,000	275,000	
Electric Utility Fund		276,100			60,000	216,100	
Iowa State University		73,900			15,000	58,900	
	TOTAL	350,000			75,000	275,000	

PROGRAM - ACTIVITY:

DEPARTMENT:

ACCOUNT NO.

Utilities - Electric Extension Improvements

Electric

The Unit #7 turbine generator will be disassembled and necessary repairs made after 20,000 hours of operation. An inspection was done in 2007 and will be due again in 2012/2013, based on current levels of operation of the unit.

#### COMMENTS

This work is required to inspect the turbine and generator for repairs that may be needed to avoid catastrophic failure of equipment. This overhaul is recommended by boiler and machinery insurance carriers and follows accepted industry standards. Repairs and replacement of worn parts will be done as problems are located during the inspection. The budget covers the inspection process and normal repair/replacement work that should be expected after 20,000 hours of operation.

#### LOCATION

Power Plant, 200 East 5<sup>th</sup> Street - Map 5, location N-11

FISCAL YEAR PRIORITY					10		
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Construction		750,000	_		750,000		
FINANCING:	TOTAL	750,000			750,000		
Electric Utility Fund		750,000			750,000		
	TOTAL	750,000	_		750,000		

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Utilities – Electric Production Electric



Fare Free Summer \* May 15-Aug 15





During the summer of 2009, the Ames Transit System (CyRide) provided fare-free service to introduce the use of public transit to a wider group of users. Additional "Go-Green" projects included a demonstration program to add bike racks to several buses, purchase of a hybrid car, and the addition of solar panels on a bus stop.



# **TRANSPORTATION - SUMMARY**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
Streets/Engineering	50,943,000	7,763,000	9,020,000	17,610,000	8,365,000	8,185,000	87
Streets/Maintenance	1,590,000	340,000	605,000	215,000	215,000	215,000	98
Transit	22,924,341	3,900,000	3,269,000	8,038,316	3,424,338	4,292,687	106
Airport	2,960,000	1,345,000	900,000	715,000			114
Total Expenditures	78,417,341	13,348,000	13,794,000	26,578,316	12,004,338	12,692,687	
REVENUES:							
Bonds:							
G.O. Bonds	27,823,000	5,990,000	6,088,000	3,219,000	6,438,000	6,088,000	
City:							
Road Use Tax	2,824,634	529,634	575,000	625,000	520,000	575,000	
Local Option Sales Tax	1,000,000	200,000	200,000	200,000	200,000	200,000	
Electric Utility Fund	1,560,000	425,000	200,000	100,000	360,000	475,000	
Transit Fund	3,661,238	365,000	605,380	1,481,164	631,187	578,507	
Airport Construction Fund	148,000	67,250	45,000	35,750	·	•	
Sub-Total City Funds	9,193,872	1,586,884	1,625,380	2,441,914	1,711,187	1,828,507	

# **TRANSPORTATION - SUMMARY**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
REVENUES, continued:						
Other:						
MPO/STP Funds	4,936,000	688,000	1,062,000	1,062,000	1,062,000	1,062,000
Story County	269,000		50,000	219,000		
I-JOBS Funds	270,366	270,366				
Congressionally Directed Funds	13,600,000		1,200,000	12,400,000		
State Grant	150,000		150,000			
Iowa State University	350,000		50,000			300,000
Ames Community School District	50,000		50,000			
Federal Transit Administration	18,286,703	3,018,600	2,623,620	6,517,152	2,753,151	3,374,180
Federal Grants	676,400	516,400	40,000	40,000	40,000	40,000
FAA Grant Funds	2,812,000	1,277,750	855,000	679,250		
Sub-Total Other Funds	41,400,469	5,771,116	6,080,620	20,917,402	3,855,151	4,776,180
Total Revenues	78,417,341	13,348,000	13,794,000	26,578,316	12,004,338	12,692,687

# TRANSPORTATION - STREET ENGINEERING

PI	ROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
E	XPENDITURES:							
1	CyRide Route Pavement Improvements	4,700,000	950,000	1,500,000		750,000	1,500,000	89
2	Arterial Street Pavement Improvements	6,003,000	1,553,000	675,000	1,500,000	1,600,000	675,000	90
3	Collector Street Pavement Improvements	5,020,000	925,000	1,575,000		1,770,000	750,000	91
4	Concrete Pavement Improvements	4,635,000	1,050,000	1,550,000		1,035,000	1,000,000	92
5	Asphalt Pavement Improvement Program	3,955,000	850,000	1,000,000		1,680,000	425,000	93
6	Downtown Street Pavement Improvements	4,110,000	1,610,000	750,000		825,000	925,000	94
7	Asphalt Resurfacing/Seal Coat Removal	2,970,000	825,000	470,000	610,000	505,000	560,000	95
8	Grand Avenue Extension	17,000,000		1,500,000	15,500,000			96
9	South Dakota Widening (L'Way to Mortensen)	2,550,000				200,000	2,350,000	97
	Total Expenditures	50,943,000	7,763,000	9,020,000	17,610,000	8,365,000	8,185,000	

# TRANSPORTATION - STREET ENGINEERING, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
REVENUES:						
Bonds:						
G.O. Bonds	27,658,000	5,825,000	6,088,000	3,219,000	6,438,000	6,088,000
City:						
Road Use Tax	2,199,634	454,634	370,000	510,000	405,000	460,000
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000
Electric Utility Fund	1,560,000	425,000	200,000	100,000	360,000	475,000
Sub-Total City Funds	4,259,634	979,634	670,000	710,000	865,000	1,035,000
Other:						
MPO/STP Funds	4,936,000	688,000	1,062,000	1,062,000	1,062,000	1,062,000
Story County	219,000		1,00=,000	219,000	1,00=,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
I-JOBS Funds	270,366	270,366		-,		
Congressionally Directed Funds	13,600,000	,	1,200,000	12,400,000		
,			, ,	, ,		
Sub-Total Other Funds	19,025,366	958,366	2,262,000	13,681,000	1,062,000	1,062,000
		•				
Total Revenues	50,943,000	7,763,000	9,020,000	17,610,000	8,365,000	8,185,000

**PROJECT STATUS:** Cost Change Revenue Change

Site Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

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

These streets were designed and built for light, residential traffic. With these streets designated as bus routes, accelerated deterioration of the street surface has occurred. Pavement improvements will restore street sections that will carry projected traffic volumes.

#### **COMMENTS**

Proposed locations:	2010/11	Ontario Street (Kentucky Avenue to Idaho Avenue) – Map 4, location D-9
•	2011/12	Lincoln Way (Franklin Avenue to Hayward Avenue) - Map 5, location G-11; and Emerald Drive (Ken Maril Road to Jewel
		Drive) – Map 9, location N-17
	2013/14	Todd Drive (South Dakota Avenue to Thackeray Avenue) – Map 4, location E-11; Bloomington Road (Eisenhower Avenue
		west 500 feet) - Map 2, location J-5
	2014/15	24th Street (Union Pacific Railroad (UPRR) tracks to Northwestern Avenue) – Map 5, location K-8

Site change is due to re-prioritization of locations and the addition of Ontario Street (Kentucky Avenue to Idaho Avenue) in 2010/11, Bloomington Road (Eisenhower Avenue west 500 feet) in 2013/14, and the 24<sup>th</sup> Street (UPRR tracks to Northwestern Avenue) location in 2014/15.

Cost change is due to updated project estimates; revenue change is the result of adding Electric participation in 2010/11.

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

FISCAL YEAR PRIORITY			1	3		3	3
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Engineering		725,000	150,000	225,000		150,000	200,000
Construction		3,925,000	750,000	1,275,000		600,000	1,300,000
Electric (System Relocation)		50,000	50,000				
	TOTAL	4,700,000	950,000	1,500,000		750,000	1,500,000
FINANCING:							
G. O. Bonds		3,588,000	900,000	1,500,000		750,000	438,000
Electric Utility Fund		50,000	50,000				
MPO/STP Funds		1,062,000					1,062,000
	TOTAL	4,700,000	950,000	1,500,000		750,000	1,500,000

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Streets Engineering	Public Works	371-8180-439
		530-8180-439

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**

2010/11	Duff Avenue (Lincoln Way to 7 <sup>th</sup> Street) - Map 5, location M-11 (\$963,000: GO Bonds, \$275,000; MPO/STP, \$688,000; Electric, \$40,000), and
	6 <sup>th</sup> Street (Grand Avenue to Northwestern Avenue) (\$500,000, GO Bonds; Electric - \$50,000) – Map 5, location L-10
2011/12	Lincoln Way (Squaw Creek to Oak Avenue) - Map 5, location K-11
2012/13	State Avenue (Oakwood Road to US Highway 30 overpass) – Map 8, location G-15
2013/14	East Lincoln Way (South Duff Avenue to Skunk River) – Map 5, location M-11
2014/15	Lincoln Way (South Dakota Avenue to Hickory Drive) – Map 4, location E-11

Site change is due to re-prioritization of locations and the addition of Lincoln Way (South Dakota Avenue to Hickory Drive) in 2014/15.

Cost change is due to updated cost estimates; revenue change is due to updated estimates, the addition of MPO/STP funding in 2010/11 for Duff Avenue (Lincoln Way to 7<sup>th</sup> Street location), the addition of funding from Story County in 2012/13, and the addition of Electric participation.

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

FISCAL YEAR PRIORITY			2	1	2	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:			_				
Engineering		820,000	240,000	90,000	200,000	200,000	90,000
Construction		4,843,000	1,223,000	510,000	1,300,000	1,300,000	510,000
Electric (Street Lights)		340,000	90,000	75,000		100,000	75,000
,	TOTAL	6,003,000	1,553,000	675,000	1,500,000	1,600,000	675,000
FINANCING:				•	, ,	, ,	·
G. O. Bonds		2,632,000	775,000	600,000	219,000	438,000	600,000
Electric Utility Fund		340,000	90,000	75,000		100,000	75,000
Story County		219,000	, _	,	219,000		
MPO/STP Funds		2,812,000	688,000		1,062,000	1,062,000	
	TOTAL	6,003,000	1,553,000	675,000	1,500,000	1,600,000	675,000
		. ,	_	,		•	•

PROGRAM – ACTIVITY:	DEPARTMENT:	ACCOUNT NO.	
Transportation - Streets Engineering	Public Works	371-8140-439 530-8140-439	
		320-8140-439 530-8141-439	
		371-8141-439	

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**

2010/11	Storm Street (Ash Avenue to Hayward Avenue) – Map 5, location I-12
2011/12	Ash Avenue (Mortensen Parkway to Knapp Street) – Map 5, location I-13
2012/13	No project scheduled
2013/14	Ridgewood Avenue (13 <sup>th</sup> Street to 16 <sup>th</sup> Street) – Map 5, location K-9; and Hayes Avenue (20 <sup>th</sup> Street to 24 <sup>th</sup> Street) – Map 5, location K-8
2014/15	Meadowlane Avenue (East 13 <sup>th</sup> Street to Carr Pool) – Map 5, location N-9

Site change is due to re-prioritization based on the Pavement Management System and elimination of the George W. Carver Avenue (Stange Road to Bloomington Road) location previously scheduled in 2011/12 (that location was completed with STIMULUS (ARRA) funds in 2009/10). In addition, the Meadowlane Avenue (East 13<sup>th</sup> Street to Carr Pool) location was added in 2014/15 to continue this program.

Cost change is due to updated estimates; revenue change is due to the introduction of MPO/STP funding in 2011/12 and Electric participation in these projects.

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

FISCAL YEAR PRIORITY			3	2		2	2
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:			_				
Engineering		730,000	150,000	200,000		280,000	100,000
Construction		4,020,000	700,000	1,300,000		1,420,000	600,000
Electric (Street Lights)		270,000	75,000	75,000		70,000	50,000
`	OTAL	5,020,000	925,000	1,575,000		1,770,000	750,000
FINANCING:		, ,	ŕ	, ,			·
G. O. Bonds		3,688,000	850,000	438,000		1,700,000	700,000
Electric Utility Fund		270,000	75,000	75,000		70,000	50,000
MPO/STP Funds		1,062,000		1,062,000			
Т	OTAL	5,020,000	925,000	1,575,000		1,770,000	750,000

PROGRAM - ACTIVITY:

Transportation - Streets Engineering

**DEPARTMENT:**Public Works

ACCOUNT NO. 371-8133-439 530-8133-439

#### **CONCRETE PAVEMENT IMPROVEMENTS**

PROJECT STATUS:

Cost Change Revenue Change Site Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

This annual program is to rehabilitate or reconstruct concrete street sections that have deteriorated. This work will provide enhanced rideability to residents and visitors.

#### LOCATION

2010/11:

Oakland Street (Hyland Avenue to Franklin Avenue) – Map 4, location G-10; and Lincoln Swing (South Dakota Avenue to Beedle Drive) – Map 4, location E-11

2013/14:

Ridgewood Avenue (9<sup>th</sup> Street to 13<sup>th</sup> Street) – Map 5, location K-10

#### 2011/12:

Southeast 16<sup>th</sup> Street (Duff Avenue to 1,000' east) – Map 8, location M-14; South Kellogg Avenue (South 16<sup>th</sup> Street to South 17<sup>th</sup> Street) – Map 8, location M-14; Des Moines Avenue (Lincoln Way to East 3<sup>rd</sup> Street) – Map 5, location M-11; Center Avenue (Lincoln Way to East 2<sup>nd</sup> Street) – Map 5, location N-11; East 3<sup>rd</sup> Street (Duff Avenue to East Avenue) – Map 5, location N-11; East 2<sup>nd</sup> Street (Duff Avenue to Center Avenue) – Map 5, location N-11; and East Avenue (Lincoln Way to East 3<sup>rd</sup> Street) – Map 5, location N-11

2014/15:

Sherman Avenue (Lincoln Way north) – Map 5, location M-11 and Market Street (\$400,000) – Map 5, location M-11; and Airport Road (South Riverside Drive to University Boulevard) (patch and grind) (\$400,000) – Map 8, location K-15

Cost change is due to updated estimates; revenue change is due to the elimination of Road Use Tax funding from this program and the addition of Electric participation in 2010/11 and 2013/14. Re-prioritization of locations led to the change to Ridgewood Avenue (9<sup>th</sup> Street to 13<sup>th</sup> Street) in 2013/14.

Repair of these streets will reduce maintenance and repairs needed for them.

FISCAL YEAR PRIORITY			4	4		4	4
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Engineering		850,000	200,000	250,000		200,000	200,000
Construction		3,700,000	800,000	1,300,000		800,000	800,000
Electric (Street Lights)		35,000				35,000	
Electric (System Relocation)		50,000	50,000				
	TOTAL	4,635,000	1,050,000	1,550,000		1,035,000	1,000,000
FINANCING:							
G.O. Bonds		4,550,000	1,000,000	1,550,000		1,000,000	1,000,000
Electric Utility Fund		85,000	50,000			35,000	
	TOTAL	4,635,000	1,050,000	1,550,000		1,035,000	1,000,000

PROGRAM – ACTIVITY:DEPARTMENT:ACCOUNT NO.Transportation - Streets EngineeringPublic Works371-8167-439

530-8167-439

This is the annual program for reconstruction of full-depth 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. This new program has been created in accordance with City Council's goal of strengthening our neighborhoods.

#### **COMMENTS**

2010/11	Grove Avenue (Duff Avenue to Northwood Drive) - Map 2, location L-6; River Oak Drive (Grove Avenue east through cul-de-sac) - Map 5,
	location M-6; and Kellogg Avenue (River Oak Drive to Duff Avenue) – Map 5, location L-6
2011/12	South Oak Avenue (South 4 <sup>th</sup> Street to Lincoln Way) – Map 5, location L-12; and Ironwood Court – Map 8, location I-14
2013/14	Hickory Drive (Lincoln Way to Westbrook Drive) - Map 4, location E-11; Trail Ridge Road/Trail Ridge Circle - Map 4, location E-11; Westbend
	Drive - Map 4, location D-11; Southbend Drive - Map 4, location D-11; Northbrook Circle - Map 4, location D-11; Parkridge Circle - Map 4,
	location D-11; and Westbend Circle – Map 4, location D-11
2014/15	Delaware Avenue (Ontario Street to Reliable Street) – Map 4, location E-9

Cost changes are the result of updated estimates; revenue change is the result of Electric's participation. Locations have been re-prioritized by ratings in the Pavement Management System.

Reconstructing these streets will reduce maintenance costs.

FISCAL YEAR PRIORITY			5	5		5	5
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:			_				
Engineering		555,000	120,000	135,000		240,000	60,000
Construction		3,195,000	680,000	815,000		1,360,000	340,000
Electric (Street Lights)		55,000	, _	,		30,000	25,000
Electric (System Relocate)		150,000	50,000	50,000		50,000	,
,	TOTAL	3,955,000	850,000	1,000,000		1,680,000	425,000
FINANCING:		2,227,22		,,		, ,	-,
G.O. Bonds		3,750,000	800,000	950.000		1,600,000	400,000
Electric Utility Fund		205,000	50,000	50.000		80.000	25,000
	TOTAL	3,955,000	850,000	1,000,000		1,680,000	425,000

PROGRAM - ACTIVITY:

Transportation – Streets Engineering

**DEPARTMENT:** Public Works

**ACCOUNT NO.** 371-8114-439 530-8114-439

## DOWNTOWN STREET PAVEMENT IMPROVEMENTS

PROJECT STATUS:

Revenue Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

This annual program is for the rehabilitation/reconstruction of streets within the downtown area (Lincoln Way to 7<sup>th</sup> Street and Grand Avenue to Duff Avenue). The Downtown Improvements Study (1996/97) recommended several improvement projects in the downtown area. Since that time, Main Street, 5<sup>th</sup> Street, and 6<sup>th</sup> Street have all benefited from improvement projects recommended by the Downtown Improvements Study. These projects involved pavement reconstruction, rehabilitation of storm and sanitary sewers, and streetscapes.

Cost Change

This project will meet the recommendations of the Downtown Improvements Study for the side streets in the downtown area. These streets have not had any improvements in recent years.

#### **COMMENTS**

Improvements to the streets in the downtown area will enhance the Main Street Cultural District.

#### LOCATION

2010/11	Kellogg Avenue (Main Street to 7" Street) – Map 5, location M-11; and Main Street (Allan Drive to Clark Avenue) – Map 5, location L-11
2011/12	Gilchrist Street (Lincoln Way to Kellogg Avenue) – Map 5, location L-11
2012/13	No project planned
2013/14	Douglas Avenue (Main Street to 7 <sup>th</sup> Street) – Map 5, location M-11
2014/15	Clark Avenue (Lincoln Way to Main Street) - Map 5, location L-11

Cost change is due to updated construction estimates; revenue change is the result of Electric participation. No project is scheduled in 2012/13 to allow for G.O. Bond funding for the Grand Avenue Extension project (see page 96).

Future years of this program will focus on reconstruction of alleys in the downtown area.

FISCAL YEAR PRIORITY			6	7		6	6
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Engineering		600,000	240,000	120,000		120,000	120,000
Construction		3,150,000	1,260,000	630,000		630,000	630,000
Electric (Street Lights)		260,000	110,000			75,000	75,000
Electric (System Relocation)		100,000					100,000
FINANCINO.	TOTAL	4,110,000	1,610,000	750,000		825,000	925,000
FINANCING: G. O. Bonds		3,750,000	1,500,000	750,000		750,000	750,000
Electric Utility Fund		360,000	110,000			75,000	175,000
	TOTAL	4,110,000	1,610,000	750,000		825,000	925,000

PROGRAM - ACTIVITY:

**DEPARTMENT:** 

371-8156-439

Transportation – Streets Engineering

Public Works

530-8156-439

ACCOUNT NO.

This is the annual program for removal of built-up seal coat from streets with asphalt surface as well as asphalt resurfacing of various streets. It is now combined with the Seal Coat Removal/Asphalt Reconstruction Program that appeared as a separate program in prior years.

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 that 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 3" of asphalt surface.

#### **COMMENTS**

The areas to be resurfaced are chosen each spring based on the current street condition inventory. Cost estimates include funding for concrete curb and gutter repairs that need to be made prior to asphalting the street. Typically, curb and gutter repairs are between 20- and 25-percent of the total cost.

Based on current pavement conditions, a high number of seal coat streets will require reconstruction in 2012/13.

The revenue change is the result of the shift of Local Option Sales Tax funding to available I-JOBS funding in 2010/11. In 2011/12, the revenue change reflects the purchase of property at 629 13<sup>th</sup> Street with the Local Option Sales Tax funding previously slated for this Asphalt Resurfacing project.

This program supports the City Council's goal of strengthening our neighborhoods. Street maintenance operation costs for patching will be reduced for the streets involved in this program.

FISCAL YEAR PRIORITY		7	8	3	7	7
	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:						
Engineering	410,000	100,000	65,000	90,000	75,000	80,000
Construction	2,560,000	725,000	405,000	520,000	430,000	480,000
			4==			
TOTAL FINANCING:	2,970,000	825,000	470,000	610,000	505,000	560,000
	2 100 624	151 621	270 000	F10 000	405.000	460,000
Road Use Tax	2,199,634	454,634	370,000	510,000	405,000	460,000
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000
I-JOBS Funds	270,366	270,366				
TOTAL	2 070 000	925 000	470.000	640.000	E0E 000	E60 000
TOTAL	2,970,000	825,000	470,000	610,000	505,000	560,000

PROGRAM – ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation – Streets Engineering	Public Works	060-8103-439
		030-8103-439
		320-8103-439

#### **GRAND AVENUE EXTENSION**

**PROJECT STATUS:** Cost Change

Delayed

Revenue Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

This project is for the extension of Grand Avenue from Lincoln Way to South 16<sup>th</sup> Street. Included is a segment of South 5<sup>th</sup> Street (Grand Avenue to South Duff Avenue) as well as improvement to the South Duff Avenue (US 69) / South 16<sup>th</sup> Street intersection.

Extending Grand Avenue to South 16<sup>th</sup> Street will divert traffic from the US Highway 69 (Grand Avenue to Lincoln Way to South Duff Avenue) corridor to the new extension. It will help to alleviate the existing congestion and allow for easier access to area businesses along that portion of Lincoln Way and South Duff Avenue. In addition, through-traffic on the Grand Avenue extension will also encounter less traffic congestion.

#### COMMENTS

Planning and land acquisition will occur in 2011/12 for the Grand Avenue (Squaw Creek Drive to South 16th Street) and the South 5th Street (Grand Avenue to South Duff Avenue) segments of the project. Engineering design and construction is projected to commence in 2012/13. This four-lane roadway will include turn lanes at South 16<sup>th</sup> Street, a bridge over Squaw Creek, a golf cart underpass at Coldwater Creek Golf Course, and a bike path along the west side of the roadway. Street lighting has also been included in the project costs.

A concept and cost allocation study (\$37,500) for this project was completed in 2002/03. Design for the Lincoln Way to South 4<sup>th</sup> Street segment of the project was funded in 2005/06. Construction and land acquisition for that segment was completed in the fall of 2008.

The addition of this street extension will result in increased snow removal and ice control costs.

#### LOCATION

Grand Avenue (Squaw Creek Drive to South 16<sup>th</sup> Street) and South 5<sup>th</sup> Street (Grand Avenue to South Duff Avenue) (planning and land 2011/12

acquisition) – Map 5, location L-12

Grand Avenue (Squaw Creek Drive to South 16th Street) and South 5th Street (Grand Avenue to South Duff Avenue) (engineering and 2012/13 construction) – Map 5. location L-12

The cost change is due to updated acquisition and construction costs reflecting market conditions. The revenue change is due to Electric participation in this project. The project was delayed due to not receiving congressionally directed funding for FY 2010/11. Application for this funding will again be made for 2011/12.

PROGRAM – ACTIVITY:		DEPA	ARTMENT:	A	ACCOUNT NO.		
	TOTAL	17,000,000		1,500,000	15,500,000		
Congressionally Directed Funds		13,600,000		1,200,000	12,400,000		
Electric Utility Fund		100,000			100,000		
G. O. Bonds		3,300,000		300,000	3,000,000		
FINANCING:				· •	•		
	TOTAL	17,000,000		1,500,000	15,500,000		
Electric		100,000			100,000		
Construction		15,000,000			15,000,000		
Land Acquisition		900,000		900,000			
Engineering		400,000			400,000		
Planning		600,000		600,000			
COST:			_				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
FISCAL YEAR PRIORITY				6	1		

**DEPARTMENT:** 

Public Works

Transportation – Streets Engineering

# SOUTH DAKOTA AVENUE WIDENING (LINCOLN WAY TO MORTENSEN ROAD)

PROJECT STATUS:

Cost Change Revenue Change Delayed

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

This project is for widening South Dakota Avenue to a five-lane roadway south of Lincoln Way. Continued growth will result in an increase in traffic volumes on South Dakota Avenue. A widened roadway is necessary to increase capacity and improve safety.

#### **COMMENTS**

Widening the highway will increase traffic volume capacity and will improve safety in the area.

The cost change provides for engineering during construction (2013/14); revenue change is the result of Electric participation in the project. The project is delayed to balance G.O. Bond funding within the 2010 – 2015 CIP.

The addition of this street extension will result in increased snow removal and ice control costs.

#### **LOCATION**

South Dakota Avenue (Lincoln Way to Mortensen Road) - Map 4, location E-11

FISCAL YEAR PRIORITY						8	8
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Engineering		400,000				200,000	200,000
Construction		2,000,000					2,000,000
Electric (Street Lights)		150,000					150,000
	TOTAL	2,550,000				200,000	2,350,000
FINANCING:							
G. O. Bonds		2,400,000				200,000	2,200,000
Electric Utility Fund		150,000					150,000
	TOTAL	2,550,000				200,000	2,350,000

PROGRAM - ACTIVITY:

**DEPARTMENT:** Public Works

Transportation – Streets Engineering

ACCOUNT NO.

# **TRANSPORTATION - STREET MAINTENANCE**

PROJECT/REVENUE DESCRIPTION		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
E	(PENDITURES:							
1	Neighborhood Curb Replacement Program	375,000	75,000	75,000	75,000	75,000	75,000	100
2	Bridge Rehabilitation Program	165,000	165,000					101
3	Shared Use Path Pavement Improvements	250,000	50,000	50,000	50,000	50,000	50,000	102
4	Sidewalk Safety Program	250,000	50,000	50,000	50,000	50,000	50,000	103
5	Salt Storage Facility	350,000		350,000				104
6	Retaining Wall Reconstruction	200,000		80,000	40,000	40,000	40,000	105
	Total Expenditures	1,590,000	340,000	605,000	215,000	215,000	215,000	

## **REVENUES:**

Bonds:

G.O. Bonds 165,000 165,000

# **TRANSPORTATION - STREET MAINTENANCE, continued**

PROJECT/REVENUE DESCRIPTION TOTAL		2010/11	2011/12	2012/13	2013/14	2014/15
REVENUES, continued:						
City:						
Road Use Tax	625,000	75,000	205,000	115,000	115,000	115,000
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000
Sub-Total City Funds	1,125,000	175,000	305,000	215,000	215,000	215,000
Other:						
State Grant	150,000		150,000			
Story County	50,000		50,000			
Iowa State University	50,000		50,000			
Ames Community School District	50,000		50,000			
Sub-Total Other Funds	300,000		300,000			
Total Revenues	1,590,000	340,000	605,000	215,000	215,000	215,000

This is the annual program for replacement of deteriorated curb and gutter in selected neighborhood areas.

Areas to receive curb and gutter replacement are selected by comparing and prioritizing applications received from neighborhoods using evaluation criteria that have been approved by Council.

#### **COMMENTS**

Neighborhood Curb Replacement Program decision criteria approved by Council includes extent of curb deterioration, number of residential structures in the block, and longitudinal grade. This project supports Council's goal to strengthen neighborhoods.

Curb and gutter replacement enhances neighborhood aesthetics.

Site change is due to carrying over one block of Marston Avenue into 2010/11 (from 2009/10) to adjust for updated cost estimates. In addition, the Maxwell Avenue (16<sup>th</sup> Street to George Allen Avenue) location was removed from 2011/12 because that location was replaced during the 2008/09 Seal Coat Program; the work on Curtiss Avenue was then divided between 2011/12 and 2012/13 due to projected cost estimates to complete that location.

#### **LOCATION**

2010/11	Marston Avenue (12 <sup>th</sup> Street to 13 <sup>th</sup> Street) – Map 5, location L-10
2011/12	Curtiss Avenue (10 <sup>th</sup> Street to 12 <sup>th</sup> Street) – Map 5, location L-10
2012/13	Curtiss Avenue (12 <sup>th</sup> Street to 13 <sup>th</sup> Street) – Map 5, location L-10
2013/14	Brookridge Avenue (9 <sup>th</sup> Street to Park Way) – Map 5, location K-10
2014/15	Brookridge Avenue (Park Way to Ridgewood Avenue) – Map 5, location K-10

FISCAL YEAR PRIORITY			1	3	1	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		50,000	10,000	10,000	10,000	10,000	10,000
Construction		325,000	65,000	65,000	65,000	65,000	65,000
FINANCINO	TOTAL	375,000	75,000	75,000	75,000	75,000	75,000
FINANCING: Road Use 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.Transportation – Streets MaintenancePublic Works060-7770-439

**PROJECT STATUS:** No Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

This program provides funding for necessary repairs recommended by the biennial lowa Department of Transportation (IDOT) bridge inspections. The IDOT requires these inspections for bridges within the City of Ames.

#### **COMMENTS**

The 2008 Bridge Inspection and Maintenance Report highlights the recommended maintenance/improvements to the bridges in Ames at this time.

The steel girder bridge on Sixth Street over Squaw Creek has developed pack rust between the bottom flange cover plates on both girders. The ends of the girders and bearings are also rusty. A feasibility study confirmed repainting the bridge in 2010/11.

#### **LOCATION**

2010/11

6<sup>th</sup> Street bridge over Squaw Creek – Map 5, location K-10

FISCAL YEAR PRIORITY			2				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		15,000	15,000				
Construction		150,000	150,000				
	TOTAL	165,000	165,000				
FINANCING:		107.000					
G.O. Bonds		165,000	165,000				
	TOTAL	165,000	165,000				

PROGRAM - ACTIVITY:

Transportation - Streets Maintenance

**DEPARTMENT:** Public Works

ACCOUNT NO.

371-7750-439

The shared use path 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 of the causes for the need to improve the pavement. This annual program provides for those improvements.

#### **COMMENTS**

A recently completed pavement management system for shared use paths will provide information to identify <u>segments</u> of the shared use path system that are in need of repair and will prioritize those segments accordingly. Some of the identified segments are shared use paths located along Bloomington Road, 24<sup>th</sup> Street, Lincoln Way, and Grand Avenue and at Daley Park and Stuart Smith Park.

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

Improvement to the shared use path pavement will enhance the safety and usability of the transportation/recreational system.

FISCAL YEAR PRIORITY			3	4	3	3	3
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		32,500	6,500	6,500	6,500	6,500	6,500
Construction		217,500	43,500	43,500	43,500	43,500	43,500
FINANCING:	TOTAL	250,000	50,000	50,000	50,000	50,000	50,000
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:

Transportation - Streets Maintenance

**DEPARTMENT:** Public Works

**ACCOUNT NO.** 030-7719-439

This is the annual program to remove and replace sidewalk intersection crosswalk panels and handicap ramps at locations that fail to meet the City Sidewalk Improvement Program requirements or are required by the Americans with Disability Act (ADA) to have truncated dome warning panels installed at crosswalks.

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

#### COMMENTS

Staff is completing an inventory to determine the future need for this program.

This project has no direct impact on the operating budget.

FISCAL YEAR PRIORITY			4	5	4	4	4
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Construction		250,000	50,000	50,000	50,000	50,000	50,000
FINANCING: Local Option Sales Tax	TOTAL	250,000	50,000	50,000	50,000	50,000	50,000
		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:

Transportation - Streets Maintenance

**DEPARTMENT:** Public Works

**ACCOUNT NO.** 030-7741-439

PROJECT STATUS:

Delayed Revenue Change Cost Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

The City of Ames has one facility for the storage of salt for winter snow and ice operations. The salt storage dome is located near the intersection of Edison Street and Carnegie Avenue in east Ames. Growth within the City limits and additional snow routes have made it necessary for another storage facility for salt. Future salt spreader storage is also being considered as a portion of this project. The potential for a shared facility with Story County, the Ames Community School District, and Iowa State University in the west part of Ames has been presented to all those agencies.

#### **COMMENTS**

The salt dome on Edison Street/Carnegie Avenue has for many years met the salt storage needs for the City of Ames. Because of growth, however, an additional storage facility is needed to enhance the snow and ice control efforts of City crews to every part of the City. By strategically locating a new salt storage dome, and refining snow routes and operational procedures based on two salt storage domes, customer service during winter operations will be improved.

A hoop building at the Water Plant has been retrofitted and is being used for temporary salt storage capacity. This has provided for salt storage only; throughout the winter, the salt is moved to the storage dome for loading onto snow plows.

Delay in determining a location for the salt storage dome and an increase in the cost estimate for the facility have resulted in the delay of this project. Story County, the Ames Community School District, and Iowa State University have all been approached to determine if a shared facility would be a feasible option for all entities. The revenue change is the result of the addition of a state grant as partial funding for this project.

#### LOCATION

To be determined

FISCAL YEAR PRIORITY				1			
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Building		350,000		350,000			
	TOTAL	350,000		350,000			
FINANCING:	. •	333,533		333,333			
Road Use Tax Fund		50,000		50,000			
ISU, ACSD, Story County		150,000		150,000			
State Grant		150,000		150,000			
	TOTAL	250.000		250.000			
	TOTAL	350,000		350,000			

PROGRAM - ACTIVITY:

**DEPARTMENT:** Public Works

ACCOUNT NO.

Transportation – Streets Maintenance

This annual program is to reconstruct/repair retaining walls located within the rights-of-way that have been identified as structurally failing. These retaining walls have become priorities for reconstruction and/or repair due to safety concerns. Drainage improvements and structural changes to the retaining walls will be included with this program.

#### COMMENTS

Proposed locations:

2011/12 13<sup>th</sup> Street (at Crescent Street) – Map 5, location K-9

2012/13 South Dayton Avenue – Map 6, location Q-12

2013/14 Airport Road – Map 8, location L-15 2014/15 Hyland Avenue – Map 4, location G-10

This program identifies core locations for each year. In addition, miscellaneous locations are repaired as necessary and within budget constraints.

The site change is due to prioritization of locations based on current conditions. No project is planned for 2010/11 so that funding can be used for the 13<sup>th</sup> Street (at Crescent Street) location the following year.

FISCAL YEAR PRIORITY				2	2	2	2
0007		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		31,000		16,000	5,000	5,000	5,000
Construction		169,000		64,000	35,000	35,000	35,000
FINANCING:	TOTAL	200,000	_	80,000	40,000	40,000	40,000
Road Use Tax		200,000		80,000	40,000	40,000	40,000
	TOTAL	200,000		80,000	40,000	40,000	40,000

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Transportation – Streets Maintenance Public Works

# **TRANSPORTATION - TRANSIT**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
<ul><li>1 Vehicle Replacement</li><li>2 Building Expansion and Modernization</li></ul>	12,357,681 6,506,660	2,070,000 1,765,000	1,614,000 1,030,000	4,216,656 1,711,660	1,789,338 1,500,000	2,667,687 500,000	107 108
3 CyRide Shop/Office Equipment	610,000	15,000	375,000	60,000	85,000	75,000	109
4 Bus Stop Improvements	250,000	50,000	50,000	50,000	50,000	50,000	110
5 Alternative Route Analysis	200,000		200,000				111
6 Automatic Vehicle Location Technology	2,000,000			2,000,000			112
7 Iowa State Center Commuter Lot Resurfacing	1,000,000					1,000,000	113
Total Expenditures	22,924,341	3,900,000	3,269,000	8,038,316	3,424,338	4,292,687	
REVENUES:							
City:							
Transit Fund	3,661,238	365,000	605,380	1,481,164	631,187	578,507	
Other:							
Federal Transit Administration	18,286,703	3,018,600	2,623,620	6,517,152	2,753,151	3,374,180	
Federal Grants	676,400	516,400	40,000	40,000	40,000	40,000	
Iowa State University	300,000					300,000	
Sub-Total Other Funds	19,263,103	3,535,000	2,663,620	6,557,152	2,793,151	3,714,180	
Total Revenues	22,924,341	3,900,000	3,269,000	8,038,316	3,424,338	4,292,687	

CyRide's average large bus fleet age is currently 16 years and after delivery of 15 stimulus and earmark-funded buses in 2010, will decline to 12 years. Replacement buses are subject to federal funding levels and statewide distribution of federal funds, therefore the predictability of adequate financial support for vehicle replacements varies each year. With record ridership in 2008/09 and continued record levels in 2009/10, CyRide has been forced to continue operating buses that were scheduled to be replaced. The end result is that CyRide continues to operate an older fleet, 14<sup>th</sup> oldest in the nation.

A second challenge is the size of the fleet in light of record ridership levels. CyRide will need to increase its fleet size to meet this new demand and have adequate spare vehicles when vehicles are in for scheduled or unscheduled maintenance repairs. Currently, CyRide is operating with two spare buses, which does not allow for adequate maintenance of the fleet or to maintain service reliability. The Federal Transit Administration recommends that a fleet CyRide's size have at least 12 spare vehicles. The fleet size will be increased from a large bus fleet of 59 to 76 through new (18) and used (30) bus purchases over the next five years to accommodate this increased spare ratio and growth. Used buses average \$20,000 for purchase and refurbishment compared to \$390,000 for purchase of a new large diesel bus. New buses are funded 83% with grant funds; used buses are funded with 100% local dollars. Also in 2011/12, CyRide will purchase 38 additional bus camera systems to complete their installation in all CyRide buses.

A majority of CyRide's small bus fleet was replaced in 2008/09 and 2009/10 with federal dollars; the last two vehicles are scheduled for replacement in 2013.

CyRide currently operates three vehicles for driver reliefs and for administrative purposes. With the additional buses and drivers, CyRide will need to expand this fleet of small vehicles by one vehicle to meet its needs beginning in 2011/12. Each of the current vehicles will need to be replaced in this five-year plan.

CyRide's maintenance truck is scheduled for replacement in 2013/14.

2010/11 - Replace large buses 941, 942, 943, 952, 962, expand 5 large buses

2011/12 - Replace 6 large buses, expand 2 large buses, replace administrative vehicle 969, expand 1 administrative vehicle, purchase 38 additional bus cameras

2012/13 - Replace 6 large buses, expand 4 large buses, replace minibuses 978, 979

2013/14 - Replace 6 large buses, expand 3 large buses, replace administrative 905, 906, and maintenance truck 999

2014-15 - Replace 8 large buses, expand 3 large buses, replace administrative 969 replacement vehicle

FISCAL YEAR PRIORITY	•	·	1	1	1	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Large Buses – New		11,318,625	1,920,000	1,152,000	3,993,600	1,661,338	2,591,687
Large Buses – Used		350,000	150,000	50,000	50,000	50,000	50,000
Minibuses		173,056			173,056		
Cameras		292,000		292,000			
Administrative Vehicles		224,000		120,000		78,000	26,000
	TOTAL	12,357,681	2,070,000	1,614,000	4,216,656	1,789,338	2,667,687
FINANCING:							
Transit Fund		1,748,906		274,380	716,832	304,187	453,507
Federal Transit Administration		10,132,375	1,593,600	1,339,620	3,499,824	1,485,151	2,214,180
Other Federal Grants		476,400	476,400				
	TOTAL	12,357,681	2,070,000	1,614,000	4,216,656	1,789,338	2,667,687

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Transportation - TransitCyRide552-1159-439

CyRide's current building was constructed in 1983 and was originally designed to accommodate 25 vehicles. The building was expanded in 1990, 2002, 2004 and 2008 and can now accommodate 59 large buses, eight minibuses and three support vehicles. With CyRide's expansion to 76 large buses in 2010/11 and an estimated fleet size in ten years of 85 large buses, CyRide will need to construct additional bus storage and maintenance facilities. Expansion of CyRide's facilities could occur at its existing site or a satellite location. The specific location where this expansion will occur will be identified in the spring/summer of 2010. This facility would be constructed in phases as federal dollars become available and is reflected in multiple years in the CIP.

In addition, CyRide's existing building will need to be maintained and repaired to meet safety, modernization and regular maintenance repairs. Major projects include an actuated shutoff system in the fuel lane, fuel pump improvements, reconfiguration of the storage ceiling to accommodate taller buses, electric distribution rehabilitation, fire sprinkler system upgrade, replacement of the storage area air handling system, reconfiguration of the in-ground lift supply pipes, relocation of the flammable liquids room, and re-roofing the maintenance facility. Federal or State grants will be sought to fund 80% of these repairs.

#### LOCATION

CyRide – Map 5, location J-10

FISCAL YEAR PRIORITY			2	2	2	2	2
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Architect/Engineering		100,000	50,000	20,000	10,000	10,000	10,000
Repairs/Modifications		6,406,660	1,715,000	1,010,000	1,701,660	1,490,000	490,000
EINANCING.	TOTAL	6,506,660	1,765,000	1,030,000	1,711,660	1,500,000	500,000
FINANCING: Transit Fund		1,301,332	353,000	206,000	342,332	300,000	100,000
Federal Transit Administration		5,205,328	1,412,000	824,000	1,369,328	1,200,000	400,000
	TOTAL	6,506,660	1,765,000	1,030,000	1,711,660	1,500,000	500,000

**PROGRAM - ACTIVITY:** Transportation – Transit

**DEPARTMENT:** CyRide

ACCOUNT NO. 552-1167-439

108

CyRide receives approximately \$500,000 per year in Small Transit Intensive Cities (STIC) funds from the Federal Transit Administration (FTA). Most of the grant is spent on large items such as buses, Automatic Vehicle Location (AVL), and shelters, but some is used every year to pay for smaller capital items for the shop and office. These items are either too minor or too far down the eligibility list to be funded under the lowa Department of Transportation (IDOT) grant process.

Four replacement computers will be funded each year, and approximately \$50,000 per year will fund other shop and office items such as floor scrubbers, refrigerant recovery machines, sign post installers/removers, forklift, etc. Because these are smaller items where replacement need is less predictable, they have been generally described in this document and specific needs will be identified annually to efficiently operate CyRide and to address OSHA, Department of Natural Resources and other federal requirements.

In 2011/12, CyRide anticipates the procurement of transit scheduling software to prepare passenger schedules, prepare drivers' work assignments and efficiently schedule the service. This is currently being done manually. Grants will be sought to pay for 80% of this project.

#### **LOCATION**

CyRide - Map 5, location J-10

FISCAL YEAR PRIORITY			3	3	3	3	3
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Computers		50,000	10,000	10,000	10,000	10,000	10,000
Other Shop Equipment		295,000	5,000	115,000	50,000	75,000	50,000
Other Office Equipment		265,000		250,000			15,000
	TOTAL	610,000	15,000	375,000	60,000	85,000	75,000
FINANCING:							
Transit Fund		121,000	2,000	75,000	12,000	17,000	15,000
FTA - Small Transit Intensive Cities		489,000	13,000	300,000	48,000	68,000	60,000
	TOTAL	610,000	15,000	375,000	60,000	85,000	75,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Transportation - TransitCyRide552-1159-439

109

BUS STOP IMPROVEMENTS PROJECT STATUS: No Change City of Ames, Iowa Capital Improvements Plan

## **DESCRIPTION/JUSTIFICATION**

One of the most numerous customer suggestions CyRide receives regard the condition or lack of amenities at its more than 400 bus stop locations throughout the city. In FY 2007/08, CyRide began to systematically identify needs at each stop, with improvements scheduled each year thereafter. It is anticipated that five to ten bus stop locations will receive improvements each year.

FISCAL YEAR PRIORITY			4	4	4	4	4
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Pads, Benches, Shelters		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:							
Transit Fund		50,000	10,000	10,000	10,000	10,000	10,000
E			40.000	40.000	40.000	40.000	40.000
Federal 5310 Grants		200,000	40,000	40,000	40,000	40,000	40,000
	TOTAL	250,000	50,000	E0 000	E0 000	<b>50 000</b>	E0 000
	TOTAL	250,000	50,000	50,000	50,000	50,000	50,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Transportation - TransitCyRide552-1174-439

In May 2007, CyRide completed a Transit Feasibility Study which identified a need to implement major service-level changes on its highest ridership route from the lowa State Center to campus. The study recommended a Bus Rapid Transit (BRT) service that would increase capacity and comfort on this route and reduce travel time for customers. Through public input, it has been determined that additional information is needed regarding the route, right-of-way for the bus, and specifics on how this new service would work. Therefore, a federal grant was secured to complete a detailed analysis of the BRT type service concept to provide this information to the community.

FISCAL YEAR PRIORITY				5			
COST:		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
Alternatives Analysis Study		200,000		200,000			
FINANCING:	TOTAL	200,000	_ _	200,000			
Transit Fund		40,000		40,000			
Federal Transit Administration		160,000	_ _	160,000			
	TOTAL	200,000	_	200,000			

PROGRAM - ACTIVITY:

DEPARTMENT:

ACCOUNT NO.

Transportation – Transit

CyRide

**PROJECT STATUS:** Advanced

Cost Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

The purchase of Automatic Vehicle Location (AVL) technology will enable CyRide to track the exact location of buses to give better service on both Fixed Route and Moonlight Express. It will also improve overall security on buses. Moonlight Express scheduling will be improved, resulting in fewer scheduling errors and the possibility of slightly lower operating costs per passenger.

AVL technology is the first step toward enabling customer-friendly bus information to be relayed through CyRide's website, at kiosks, and at shelters throughout the transit system. This technology has been placed in the Federal TIGER grant application as part of a proposed intermodal facility and, if funded, would be purchased in 2010/11 for implementation in 2011/12.

FISCAL YEAR PRIORITY				5		
	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:						
Global Positioning/Design Installation	2,000,000		2,0	000,000		
TOTAL	2,000,000		2,0	000,000		
FINANCING:						
Transit Fund	400,000		4	400,000		
Federal Transit Administration	1,600,000		1,6	600,000		
TOTAL	0.000.000			200 000		
TOTAL	2,000,000		2,0	000,000		

PROGRAM - ACTIVITY:

DEPARTMENT:

ACCOUNT NO.

Transportation – Transit

CyRide

#### IOWA STATE CENTER COMMUTER LOT RESURFACING

#### **DESCRIPTION/JUSTIFICATION**

This project is to resurface commuter lots at Iowa State Center.

#### **COMMENTS**

In 2000, commuter parking lots A-2, 3, 4, and B-4, 5, 6 were resurfaced. Federal Transit Administration (FTA) funds provided 70% of the cost. CyRide passengers occupy the spaces 88% of the time they are used.

PROJECT STATUS:

Currently, commuter parking has spilled over into lots C-5 and C-6 and these areas also need repair. Lot D-3 is used as a staging area for buses between scheduled trips. FTA funds will provide up to 70% of the cost and lowa State University will provide the remainder.

This project was delayed one year in light of vehicle and facility capital needs in the next three to four years.

#### **LOCATION**

Iowa State Center – Map 5, location J-12

FISCAL YEAR PRIORITY							5
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Engineering		100,000					100,000
Construction		900,000					900,000
FINANCINO	TOTAL	1,000,000					1,000,000
FINANCING:		700,000					700,000
Federal Transit Administration		700,000					700,000
Iowa State University		300,000					300,000
	TOTAL	1,000,000					1,000,000

PROGRAM - ACTIVITY:

DEPARTMENT:

ACCOUNT NO.

Transportation – Transit

CyRide

# **TRANSPORTATION - AIRPORT**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
1 Airport Improvements	2,960,000	1,345,000	900,000	715,000			115
Total Expenditures	2,960,000	1,345,000	900,000	715,000			
REVENUES:							
City: Airport Construction Fund	148,000	67,250	45,000	35,750			
Other: FAA Grant Funds	2,812,000	1,277,750	855,000	679,250			
Total Revenues	2,960,000	1,345,000	900,000	715,000			

AIRPORT IMPROVEMENTS PROJECT STATUS: No Change City of Ames, lowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

Airport improvement projects are accomplished through this program.

#### **COMMENTS**

The projects included in this program are determined by the Airport Master Plan which details Airport development needs for a ten-year period. The Master Plan Update that was completed in 2007 identifies projects that qualify for Federal Aviation Administration (FAA) funding. (FAA funding provides for 95% of the cost of identified projects.) These projects have been prioritized and included in this 2010 – 2015 Capital Improvements Plan:

2010/11	West apron rehabilitation
2011/12	Reconstruct internal vehicle circulation and parking lot
2012/13	Replace terminal building

In accordance with the Airport Master Plan, the next improvement program is anticipated in 2016/17.

#### LOCATION

Ames Municipal Airport - Map 8, location L-16

FISCAL YEAR PRIORITY			1	1	1		
COST:		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
Engineering		490,460	221,415	149,795	119,250		
Construction		2,469,540	1,123,585	750,205	595,750		
FINANCING:	TOTAL	2,960,000	1,345,000	900,000	715,000		
Airport Construction Fund		148,000	67,250	45,000	35,750		
FAA Grant (AIP) Funds		2,812,000	1,277,750	855,000	679,250		
	TOTAL	2,960,000	1,345,000	900,000	715,000		

PROGRAM – ACTIVITY:DEPARTMENT:ACCOUNT NO.Transportation – AirportPublic Works330-7074-439

## **BRIDGE IN BROOKSIDE PARK**

A new pre-fabricated steel bridge replaced a wooden suspension bridge in Brookside Park over Squaw Creek. The old bridge was scheduled for replacement when the flood of May 2008 contributed to the bridge's poor condition. The new structure is eight feet wide and 120 feet in length.



Brookside Park Bridge – Under Construction

Brookside Park Bridge - Finished

## ADA HAYDEN HERITAGE PARK NATURE SCULPTURE



"Restless By Nature"

Environmental artist, Patrick Dougherty, sculptures art out of nature. At the northwest corner of Ada Hayden Heritage Lake, he wove saplings, sticks, and twigs into the existing willows. Dougherty, from North Carolina, has created more than 150 sculptures in the U. S., Europe, and Asia.

The sculpture, named "Restless By Nature", forms a meandering series of shelters with windows and views out all angles.

# COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
Parks and Recreation	3,935,100	451,100	557,000	799,000	1,538,000	590,000	119
Library	408,800	48,000	180,800	180,000			128
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	132
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	134
Internal Services/Facilities	1,885,000	830,000	350,000	230,000	235,000	240,000	136
Total Expenditures	6,728,900	1,429,100	1,187,800	1,309,000	1,873,000	930,000	
REVENUES:							
Bonds:							
G.O. Bonds	380,000	80,000	300,000				
City:							
Local Option Sales Tax	3,901,800	633,500	795,300	895,000	913,000	665,000	
Park Development Fund	222,100	138,100		84,000			
Hotel/Motel Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Road Use Tax	138,750			45,000	46,250	47,500	
Water Utility Fund	138,750			45,000	46,250	47,500	
Sewer Utility Fund	138,750			45,000	46,250	47,500	
Fleet Services Fund	138,750			45,000	46,250	47,500	
Sub-Total City Funds	4,928,900	821,600	845,300	1,209,000	1,148,000	905,000	

# COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

Total Revenues	6,728,900	1,429,100	1,187,800	1,309,000	1,873,000	930,000
Sub-Total Other Funds	1,420,000	527,500	42,500	100,000	725,000	25,000
Energy Efficiency & Conservation Block Grant	500,000	500,000				
Private Contributions	700,000				700,000	
Other: Ames Community School District	220,000	27,500	42,500	100,000	25,000	25,000
REVENUES, continued:						
PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15

# **COMMUNITY ENRICHMENT - PARKS AND RECREATION**

PI	ROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
E	KPENDITURES:							
1	Municipal Pool Maintenance	400,000	15,000	85,000	200,000	50,000	50,000	121
2	Tennis Court Improvements	365,000	45,000	305,000	5,000	5,000	5,000	122
3	Parks and Recreation Facility Improvements	1,343,000	178,000	137,000	480,000	243,000	305,000	123
4	Playground/Park Equipment Improvements	205,000	75,000	30,000	30,000	40,000	30,000	124
5	Greenbriar Park Development	138,100	138,100					125
6	Ada Hayden Heritage Park	484,000			84,000	200,000	200,000	126
7	Interactive Fountain	1,000,000				1,000,000		127
	Total Expenditures	3,935,100	451,100	557,000	799,000	1,538,000	590,000	

# **COMMUNITY ENRICHMENT - PARKS AND RECREATION, continued**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
REVENUES:						
City:						
Local Option Sales Tax	2,793,000	285,500	514,500	615,000	813,000	565,000
Park Development Fund	222,100	138,100		84,000		
Sub-Total City Funds	3,015,100	423,600	514,500	699,000	813,000	565,000
Other:						
Ames Community School District	220,000	27,500	42,500	100,000	25,000	25,000
Private Contributions	700,000				700,000	
Sub-Total Other Funds	920,000	27,500	42,500	100,000	725,000	25,000
Total Revenues	3,935,100	451,100	557,000	799,000	1,538,000	590,000

In 2006, consultants were retained to provide recommendations regarding mechanical, electrical, structural, and any other needed improvements for the Municipal Pool. With the goal of keeping this 42-year old facility operational a minimum of 8 to 10 additional years, the 2006 study indicated that substantial improvements, totaling \$815,000, were needed between 2007/08 and 2011/12. All costs are shared equally by the City and Ames Community School District.

The projects included in 2012/13 will require the pool to be closed for approximately 8 weeks during the summer of 2012.

The consultants have warned that following approximately 2015, the cost of further repairs to this facility could be cost prohibitive. It should be noted that the City and Ames Community School District's joint use agreement for the pool expires on **April 30, 2015.** Therefore, it appears that the City and School District will need to address the need for a new indoor aquatics facility prior to 2015.

#### **COMMENTS**

2010/11: Total \$15,000

Replace electrical panels, roof patching allowance (\$10,000), replace plywood veneer and flashing at arch bases, and other miscellaneous and unknown projects (\$5,000)

2011/12: Total \$85,000

Replace lighting in pool, temperature controls integration with District NOVAR system, roof patching allowance (\$10,000), and other miscellaneous and unknown projects (\$75,000)

2012/13: Total \$200,000

Replace boiler / pumps (\$150,000) (closed summer of 2012 for this project), other projects to be determined (\$50,000)

2013/14: Total \$50,000

To be determined

2014/15: Total \$50,000

To be determined

Over a 19-year period (FY95/96 and continuing through FY14/15), the City and School District will have invested approximately \$2,172,589 (\$114,000 per year average) in capital improvements at this facility.

## **LOCATION**

Ames High School - Map 5, location J-8

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Construction		361,500	15,000	76,500	180,000	45,000	45,000
Architects/Engineering		38,500	· –	8,500	20,000	5,000	5,000
0 0	TOTAL	400,000	15,000	85,000	200,000	50,000	50,000
FINANCING:		ŕ	•	,	,	,	ŕ
Local Option Sales Tax		200,000	7,500	42,500	100,000	25,000	25,000
Ames School District		200,000	7,500	42,500	100,000	25,000	25,000
	TOTAL	400,000	15,000	85,000	200,000	50,000	50,000
		ŕ	•	ŕ	ŕ	ŕ	•

PROGRAM – ACTIVITY:DEPARTMENT:ACCOUNT NO.Community EnrichmentParks and Recreation030-4915-459

In 1997, the decision was made to shift \$100,000 in funding that would have been used to renovate the tennis courts at Brookside Park to partnering with the Ames Community School District and Friends of Ames Tennis to construct a new 8-court facility at Ames High. In addition, the School District agreed to pay the City \$2,500 annually for a period of ten years (through FY 07/08) to help pay for the ongoing maintenance costs of the tennis courts at Brookside. At that time, the City Council decided that the four courts at Brookside would be maintained at a "recreational level" until the City made a final decision regarding the future existence of these courts. The Brookside courts have been successfully maintained during the past twelve years (1997 – 2009). Staff anticipates that they will continue to serve the public a minimum of three more years (2012) at the "recreational level". During 2010, staff will host a public input session to gain insight on the role that these courts play within the neighborhood and the overall community. Additionally, staff will analyze the condition of these courts and determine if reconstruction is needed or if the project can be delayed.

The tennis courts located at Ames High School, and owned by the City, need to be resurfaced at a cost of \$40,000. This expense will be shared 50/50 with the School District in FY 10/11.

#### **COMMENTS**

2010-2015: Total = \$5,000 each year

City will contribute \$5,000/year for tennis court maintenance for the City's courts located at Ames High / Brookside / Inis Grove / McCarthy Lee

2010/11: Total = \$40,000

Resurface the tennis courts located at Ames High School

2011/12: If an analysis conducted in 2010 indicates the project is warranted, the Brookside courts will be totally reconstructed (\$300,000).

## **LOCATION**

Ames High – Map 5, location J-8; Brookside Park – Map 5, location K-10; Inis Grove Park – Map 2, location M-7; and Emma McCarthy Lee Park – Map 4, location G-10

FISCAL YEAR PRIORITY			2	4	4	4	4
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:							
Engineering / Design		34,000	4,000	30,000			
Maintenance		25,000	5,000	5,000	5,000	5,000	5,000
Resurfacing / Reconstruction		306,000	36,000	270,000	,	,	•
	TOTAL	365,000	45,000	305,000	5,000	5,000	5,000
FINANCING:		0.45.000	05.000	005.000	5.000	5.000	<b>5</b> 000
Local Option Sales Tax		345,000	25,000	305,000	5,000	5,000	5,000
Ames School District		20,000	20,000				
	TOTAL	365,000	45,000	305,000	5,000	5,000	5,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Community EnrichmentParks and Recreation030-4902-459

# PARKS AND RECREATION FACILITY IMPROVEMENTS

**PROJECT STATUS:** Cost Change

City of Ames, Iowa Capital Improvements Plan

#### DESCRIPTION/JUSTIFICATION

To maintain City facilities in a safe and quality manner, the FY 2010 to 2015 projects listed below address maintenance issues at various facilities within the Parks and Recreation Department.

#### **COMMENTS**

### 2010/11: Total = \$178,000

Bandshell Park: Due to increased usage of this park, irrigate the turf between the Bandshell building and the pathway (\$18,000) – Map 5, location M-11 Homewood Golf Course: Install asphalt cart paths (Phase I - \$30,000) and tee renovations (\$25,000) – Map 5, location M-8

Auditorium: Replace the existing sound system (\$60,000) - Map 5, location L-11

Forest Management of Brookside Park – Phase II: (\$25,000) – Map 5, location K-10

Dog Park: Drinking fountain (\$20,000) – Map 9, location N-14

# 2011/12: Total = \$137,000

Auditorium: Replace stage curtains (\$37,000) – Map 5, location L-11

Bandshell: Replace stage lighting (\$50,000) - Map 5, location M-11

Carr Pool: Anticipated demolition of the pool basin and pool mechanical system to occur no earlier than Summer 2011 (\$50,000) – Map 6, location N-8

# 2012/13: Total = \$480,000

Homewood Golf Course: Replace the existing footbridge at #9 (\$170,000) and install asphalt cart paths (Phase II - \$30,000) – Map 5, location M-8 Franklin Park: Asphalt overlay on existing crushed rock pathway through the park (\$20,000) - Map 4, location F-12

South River Valley Softball Fields: Replace fencing on two diamonds (\$60,000 total) and install new lights on both diamonds (\$200,000 total) - Map 6, location O-9

#### 2013/14: Total = \$243,000

Brookside: Renovate the restroom (\$48,000) – Map 5, location K-10

Skate Park: Replace metal coping (\$75,000) - Map 5, location K-10

Inis Grove: Sanitary sewer installation (\$60,000) - Map 2, location M-7

Homewood Golf Course: Replace green #1 (\$60,000) - Map 5, location M-8

### 2014/15: Total = \$305.000

Administrative Office: Relocation of Administrative Office from Gateway Park to the Park Maintenance Facility on East 13<sup>th</sup> Street; (demolition of Gateway) building \$100,000); and addition to the Park Maintenance Facility (\$150,000) - Map 6, location N-9

Pandaball: Weatherproof the demod roof (\$55,000) Man 5 Jacotion M 11

FISCAL YEAR PRIORITY			3	2	2	2	2
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST:			_				
Construction		1,215,000	159,500	127,000	437,500	216,000	275,000
Engineering		128,000	18,500	10,000	42,500	27,000	30,000
	TOTAL	1,343,000	178,000	137,000	480,000	243,000	305,000
FINANCING: Local Option Sales Tax		1,343,000	178,000	137,000	480,000	243,000	305,000
	TOTAL	1,343,000	178,000	137,000	480,000	243,000	305,000

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

Parks and Recreation 030-4902-459

Due to the emergence of the U.S. Consumer Products Safety Commission's recommendations for public playground safety, questionable, antiquated metal playground equipment in the park system was removed and replaced with equipment that complies with recognized safety standards. That phase of the program was completed in 1996/97.

The second phase of the equipment replacement program was to replace all wood structures. This effort began in FY 97/98 and was completed in FY 07/08.

The next phase of this program calls for the installation of independent/unique pieces of play equipment (swings, boulders, large slides, etc.) in both neighborhood and community parks.

#### **COMMENTS**

2010/11: Brookside Park (\$75,000) play equipment - dual tube slides - Map 5, location K-10

2011/12: Emma McCarthy Lee Park (\$30,000) rock climber – Map 4, location G-10

2012/13: Brookside Park (\$30,000) replace tot piece – Map 5, location K-10

2013/14: Christopher Gartner Park (\$25,000) - Map 4, location E-12; Teagarden Park (\$15,000) - Map 9, location N-17

**2014/15**: <u>Duff Avenue Park</u> (\$15,000) – Map 5, location M-9; <u>Hutchinson Park</u> (\$15,000) – Map 4, location D-9

FISCAL YEAR PRIORITY			4	3	3	3	3
COST		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Construction		205,000	75,000	30,000	30,000	40,000	30,000
FINANCING:	TOTAL	205,000	75,000	30,000	30,000	40,000	30,000
Local Option Sales Tax		205,000	75,000	30,000	30,000	40,000	30,000
	TOTAL	205,000	75,000	30,000	30,000	40,000	30,000

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Community EnrichmentParks and Recreation030-4967-459

This site, located on South 16<sup>th</sup> Street, is undeveloped except for a dirt bike course located in the southwest corner of the site. Historically, this parcel has been utilized for snow and brush storage during community-wide storm events.

An unnamed stream flows through this site and enters Worle Creek west of the adjacent bike path. This stream transports stormwater run-off from a 1.9 square mile area in southwest Ames. As the water flowed north, it was restricted by small culverts located under the bike path, west of Greenbriar Park. These culverts restricted the flow so significantly that during high rain events, storm water was forced out of the channel onto Cold Water Golf Links. During 2009, Public Works addressed the stormwater management issue by replacing the culverts under the bike path with a 50' x 12' bridge, re-channeling the stream, and constructing a berm on the eastern side of Greenbriar Park.

Following the Public Works improvements to this site, City Council requested that the site be developed in FY 10/11 into a park with the following features included:

- Relocate the dirt BMX course to the center of the park (\$10,000)
- Bring in fill dirt and seed the entire area with native plant material (\$46,000)
- Install a small parking lot (\$35,300)
- Construct a mini-shelter with a trail map kiosk so the park can serve as a trail head for the overall Shared Use Path system from south to north Ames (\$2,600)
- Install a bike trail adjacent to South 16<sup>th</sup> Street (\$44,200)

#### **COMMENTS**

2010/11: Development of Greenbriar Park - \$138,100

#### LOCATION

Map 8, location K-13

FISCAL YEAR PRIORITY			5				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		12,210	12,210				
Construction		125,890	125,890				
FINANCING:	TOTAL	138,100	138,100				
Park Development Fund		138,100	138,100				
	TOTAL	138,100	138,100				

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Community EnrichmentParks and Recreation110-4982-459

The park master plan, developed when Ada Hayden Heritage Park opened in 2004, includes constructing a hard surface parking lot at the northwest part of the overall site after Grant Road is improved. Park visitors that want to use the northwest part of this park currently have to walk over a mile to enjoy the overlook features that have been installed by three civic organizations. A parking lot in the northwest area will provide residents with mobility issues the opportunity to access one of the best vistas of this 437-acre parcel.

#### **COMMENTS**

2012/13: \$ 84,000 - Construct a small parking lot in the northwest corner of this park 2013/14: \$200,000 - Resurface the north loop trail adjacent the lake (1.6 miles) 2014/15: \$200,000 - Resurface the south loop trail adjacent the lake (1.6 miles)

## **LOCATION**

Map 2, location K-3

FISCAL YEAR PRIORITY					5	5	5
COST:		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
Engineering		48,400			8,400	20,000	20,000
Construction		435,600			75,600	180,000	180,000
FINANCING:	TOTAL	484,000			84,000	200,000	200,000
Local Option Sales Tax		400,000				200,000	200,000
Park Land Acquisition / Developmen	nt Fund	84,000			84,000		
	TOTAL	484,000			84,000	200,000	200,000

PROGRAM - ACTIVITY:

DEPARTMENT:

ACCOUNT NO.

Community Enrichment

Parks and Recreation

# INTERACTIVE FOUNTAIN / COMMUNITY GATHERING VENUE

**PROJECT STATUS:** No Change

City of Ames, Iowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

Throughout the country, a popular facility that has been emerging for the past several years is the installation of interactive fountains. These facilities are not fenced, nor staffed, and no admission fee is collected. No water accumulates at grade. During the daytime, spray features allow children to direct water at others and themselves. In the evening, the fountain will convert into an appealing visual feature for viewing only.

Due to the cost of constructing a facility that has water as its main attraction, staff recommends one large, centralized facility in the Downtown area. During the next few years, staff will assess possible business district locations and research the level of interest in raising private funds to expand the project.

The Ames Foundation expressed interest in expanding this project to include green open space and a community gathering space/pavilion to host special events in the Downtown area. As a demonstration of their support in expanding this project, they will privately raise the needed balance of \$700,000 during the next four years while a site to accommodate the facilities is identified.

#### **COMMENTS**

**2013/14:** Interactive fountain, pavilion and green open space (\$1,000,000)

### LOCATION

To be determined

FISCAL YEAR PRIORITY						6	
COST:		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
Construction		900,000				900,000	
Engineering / Design		100,000				100,000	
FINANCING:	TOTAL	1,000,000				1,000,000	
Local Option Sales Tax		300,000				300,000	
Private Contributions		700,000				700,000	
	TOTAL	1,000,000				1,000,000	

**PROGRAM - ACTIVITY:** 

**DEPARTMENT:** 

ACCOUNT NO.

Community Enrichment

Parks and Recreation

# **COMMUNITY ENRICHMENT - LIBRARY**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
<ul> <li>Skylight Replacement</li> <li>Air Conditioning System Replacement</li> <li>Floor Covering Replacement</li> <li>Total Expenditures</li> </ul>	48,000 180,800 180,000 <b>408,800</b>	48,000 <b>48,000</b>	180,800 <b>180,800</b>	180,000 <b>180,000</b>			129 130 131
REVENUES:							
CITY: Local Option Sales Tax	408,800	48,000	180,800	180,000			
Total Revenues	408,800	48,000	180,800	180,000			

SKYLIGHT REPLACEMENT PROJECT STATUS: No Change City of Ames, lowa Capital Improvements Plan

#### **DESCRIPTION/JUSTIFICATION**

This project is to replace six pyramid shaped skylights on the roof of the library. Twenty-six years of weathering have deteriorated the fiberglass composition of these skylights. The glazing is drying out. The combined weathering problems create the risk of leakage into the building.

#### COMMENTS

Replacement of six, 8-ft. square pyramid skylights: \$48,000.

This project has been prepared under the assumption that the long-term solution to the Library's facility needs continues to use the existing building as is. However, a library expansion plan is currently being considered by the Library Board of Trustees, which may result in a decision not to renovate or use the existing facility as it now stands. Pending a decision on the future of the library building, this project may be eliminated or modified.

#### LOCATION

Ames Public Library, 515 Douglas - Map 5, location M-10

FISCAL YEAR PRIORITY			1				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Construction		48,000	48,000				
	TOTAL	48,000	48,000				
FINANCING: Local Option Sales Tax		48,000	48,000				
	TOTAL	48,000	48,000				

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.Community EnrichmentLibrary030-2687-459

This project provides replacement of the 130-ton air chilling unit with a contemporary model. The old unit, installed during the expansion of the Library in 1985, has served beyond its service capability which is typically about 15 years. The current model failed in the summers of 2005, 2006, 2007, and 2008. Within the past two years, two of the four compressors were replaced. Fan blades, replaced in 2006 and 2009, had to be fabricated as this model is no longer in production and some replacement parts are no longer available.

**PROJECT STATUS:** No Change

#### **COMMENTS**

This replacement unit will provide energy efficiency. The existing unit has an EER (energy efficiency rating) of 6.0. The recommended model has an EER of 10.0 at full load or 14.5 EER at half-load. Savings in energy costs with the newer, more efficient model are estimated to be about \$2,900 each cooling season if the unit operates at full load. The unit is also expected to save on costly service calls and repair bills.

This project has been prepared under the assumption that the long-term solution to the Library's facility needs continues to use the existing building as is. However, a library expansion plan is currently being considered by the Library Board of Trustees, which may result in a decision not to renovate or use the existing facility as it now stands. Pending a decision on the future of the library building, this project may be eliminated or modified.

### **LOCATION**

Ames Public Library, 515 Douglas - Map 5, location M-10

FISCAL YEAR PRIORITY				1			
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Equipment		180,800	_ _	180,800			
	TOTAL	180,800	_	180,800			
FINANCING: Local Option Sales Tax		180,800	_ _	180,800			
	TOTAL	180,800		180,800			

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Community Enrichment Library

The current carpeting in the Library is 10-12 years old and is showing serious wear damage in high-traffic areas. Because 400,000 to 500,000 visitors come to the Library annually, the carpeting will continue to deteriorate in the next few years.

#### **COMMENTS**

Prior carpet replacement occurred after only 9-11 years of usage and annual foot traffic has greatly increased since that time.

This project has been prepared under the assumption that the long-term solution to the Library's facility needs continues to use the existing building as is. However, a library expansion plan is currently being considered by the Library Board of Trustees, which may result in a decision not to renovate or use the existing facility as it now stands. Pending a decision on the future of the library building, this project may be eliminated or modified.

#### LOCATION

Ames Public Library, 515 Douglas - Map 5, location M-10

FISCAL YEAR PRIORITY			_		1		
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Carpeting		180,000	_		180,000		
	TOTAL	180,000	_		180,000		
FINANCING: Local Option Sales Tax		180,000	- -		180,000		
	TOTAL	180,000	_		180,000		

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Community Enrichment Library

# **COMMUNITY ENRICHMENT - CITY MANAGER**

PROJECT/REVENUE DESCRIPTION	N TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
1 Neighborhood Improvement Prog	ram 250,000	50,000	50,000	50,000	50,000	50,000	133
Total Expenditures	250,000	50,000	50,000	50,000	50,000	50,000	
REVENUES:							
CITY: Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Total Revenues	250,000	50,000	50,000	50,000	50,000	50,000	

# 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 1996/97, 107 neighborhood projects have been funded by the City, totaling \$311,215. Projects have included cul-de-sac, right-of-way and median landscaping; playground construction and/or restoration; alleyway beautification; street trees; pond renovation; historic house plaques and medallions; prairie restoration; construction of a neighborhood message center; construction of a shelter house in a neighborhood City park; park sidewalks; neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood basketball courts; landscaping of neighborhood entryways; landscaping of neighborhood

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.

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Construction		250,000	50,000	50,000	50,000	50,000	50,000
FINIANIONO.	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: Community Enrichment **DEPARTMENT:**City Manager's Office

**ACCOUNT NO.** 030-0420-459

# **COMMUNITY ENRICHMENT - PLANNING & HOUSING**

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
1 Downtown Facade Program	250,000	50,000	50,000	50,000	50,000	50,000	135
Total Expenditures	250,000	50,000	50,000	50,000	50,000	50,000	
REVENUES:							
City: Hotel/Motel Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Total Revenues	250,000	50,000	50,000	50,000	50,000	50,000	

This project was introduced in 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. However, with the establishment of the Downtown Cultural District, excitement in this commercial area has increased along with requests for façade improvement 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. In order 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.

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. To date, the program has awarded twelve (12) grants for a total amount of \$100,123.

#### **COMMENTS**

This program supports one of the City Council's six priorities for the year, the commercial revitalization of the Downtown. If interest continues in this program, funding can be expanded.

#### LOCATION

Downtown Ames - Map 5, location M-11

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Incentives (Loans or Grants)		250,000	50,000	50,000	50,000	50,000	50,000
FINANOINO	TOTAL	250,000	50,000	50,000	50,000	50,000	50,000
FINANCING: Hotel/Motel 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 EnrichmentPlanning & Housing040-1030-459

# INTERNAL SERVICES - FACILITIES/FLEET SERVICES

PROJECT/REVENUE DESCRIPTION	TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15	PAGE
EXPENDITURES:							
<ol> <li>City Hall Mechanical/Structural Improvements</li> <li>Cool Cities: Facility Energy Improvements</li> </ol>	1,130,000 200,000	630,000 200,000	350,000	50,000	50,000	50,000	137 138
3 City Maintenance Facility Improvements	555,000	,		180,000	185,000	190,000	139
Total Expenditures	1,885,000	830,000	350,000	230,000	235,000	240,000	
REVENUES:							
Bonds:							
G.O. Bonds	380,000	80,000	300,000				
City:							
Local Option Sales Tax	450,000	250,000	50,000	50,000	50,000	50,000	
Road Use Tax	138,750			45,000	46,250	47,500	
Water Utility Fund	138,750			45,000	46,250	47,500	
Sewer Utility Fund	138,750			45,000	46,250	47,500	
Fleet Services Fund	138,750			45,000	46,250	47,500	
Sub-Total City Funds	1,005,000	250,000	50,000	230,000	235,000	240,000	
Other:							
Energy Efficiency & Conservation Block Grant	500,000	500,000					
Total Revenues	1,885,000	830,000	350,000	230,000	235,000	240,000	

# CITY HALL MECHANICAL AND STRUCTURAL IMPROVEMENTS

**PROJECT STATUS:** Cost Change

Change Projects Added

City of Ames, Iowa Capital Improvements Plan

## **DESCRIPTION/JUSTIFICATION**

This City Hall improvements program is focused on major maintenance items for the building.

The City Hall's mechanical and electrical systems were installed in 1990. Heat pumps have a 12-15 year life expectancy. This system is now 20 years old. The project listed below will replace the existing heat pumps and upgrade them to be reliable, more efficient, and environmentally friendly.

In FY 09/10, \$15,000 will also be used for a feasibility study to evaluate geo-thermal loops and wells. Future potential projects will include replacing the cooling towers, geo-thermal loops and wells, carpet and wallpaper, and roof replacement estimated to cost \$1,700,000.

# **COMMENTS**

Begin heat pump replacement	\$	580,000
Major maintenance as needed	•	50,000
Complete heat pump replacement		300,000
		50,000
,		,
Major maintenance as needed		50,000
•		•
Major maintenance as needed		50,000
Major maintenance as needed		50,000
	Complete heat pump replacement Major maintenance as needed  Major maintenance as needed  Major maintenance as needed	Major maintenance as needed  Complete heat pump replacement Major maintenance as needed  Major maintenance as needed  Major maintenance as needed

## **LOCATION**

City Hall (515 Clark Avenue) - Map 5, location L-11

	1	1	1	1	1
TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
1,080,000	580,000	350,000	50,000	50,000	50,000
50,000	50,000				
1,130,000	630,000	350,000	50,000	50,000	50,000
380,000	80,000	300,000			
250,000	50,000	50,000	50,000	50,000	50,000
500,000	500,000				
1,130,000	630,000	350,000	50,000	50,000	50,000
	· –	•		•	
	1,080,000 50,000 <b>1,130,000</b> 380,000 250,000 500,000 <b>1,130,000</b>	1,080,000       580,000         50,000       50,000         1,130,000       630,000         380,000       80,000         250,000       50,000         500,000       500,000	1,080,000       580,000       350,000         50,000       50,000       350,000         1,130,000       630,000       300,000         380,000       80,000       300,000         250,000       50,000       50,000         500,000       500,000       350,000         1,130,000       630,000       350,000	1,080,000       580,000       350,000       50,000         50,000       50,000       350,000       50,000         380,000       80,000       300,000       50,000         250,000       50,000       50,000       50,000         500,000       500,000       350,000       50,000         1,130,000       630,000       350,000       50,000	1,080,000     580,000     350,000     50,000       50,000     50,000     50,000     50,000       1,130,000     630,000     350,000     50,000     50,000       380,000     80,000     300,000     50,000     50,000     50,000       500,000     500,000     50,000     50,000     50,000

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.	PROJECT NO.
Internal Services	Facilities	030-2930-419	
		333-2942-419	
		371-2930-419	

# COOL CITIES: CITY FACILITY ENERGY IMPROVEMENTS PROJECT STATUS: New

#### **DESCRIPTION/JUSTIFICATION**

In response to the City Council's environmental sustainability goal to reduce by 15% the carbon emissions generated from non-utility City operations, energy reduction projects involving lighting, heating and electronic controls have been identified for various City buildings. These improvements and upgrades for non-utility operations will be installed over a five-year period and will be funded from this program.

#### **COMMENTS**

Rather than each department being responsible for supervising these projects, a third-party project manager will be hired to develop plans and specifications as well as oversee the installation at each location. Although the Power Plant, Water Plant, WPC Plant, and Resource Recovery Plant will not be included in this program, energy reduction projects will be included in their budgets over the next five years.

There is an additional \$200,000 included in the 2009/10 budget for this program.

#### LOCATION

Non-utility City buildings – to be determined

FISCAL YEAR PRIORITY			2				
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
COST: Engineering		50,000	50,000				
Construction		150,000	150,000				
FINANCING:	TOTAL	200,000	200,000				
Local Option Sales Tax		200,000	200,000				
	TOTAL	200,000	200,000				

PROGRAM - ACTIVITY:DEPARTMENT:ACCOUNT NO.PROJECT NO.Internal ServicesFacilities030-2950-419

PROJECT STATUS: Delayed

Cost Change

City of Ames, Iowa Capital Improvements Plan

# **DESCRIPTION/JUSTIFICATION**

These projects are for major maintenance and improvements at the City Maintenance Facility. This building (built in four phases from 1967 to 1997) provides shop and office space for Fleet Services and Public Works divisions of Street Maintenance, Traffic Sign & Signal, Parking Meter, Utility Maintenance, and Engineering Construction Inspection.

2012/13	Roof Replacement – Phase I (\$180,000)
2013/14	Roof Replacement – Phase II (\$185,000)
2014/15	Roof Replacement – Phase III (\$190,000)

#### **COMMENTS**

The cost of flat roof systems has increased significantly. Evaluation of roof condition will be done in 2010.

## **LOCATION**

City Maintenance Facility, 2207 Edison Street - East Ames, north of Lincoln Way, just west of Dayton Ave - Map 6, location P-11

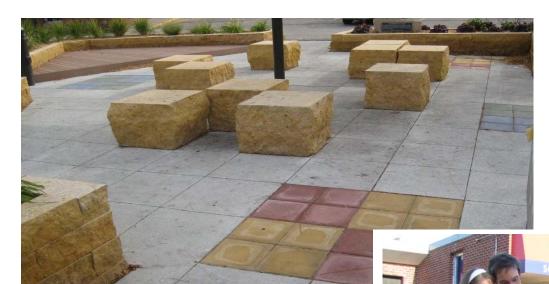
	TOTAL	555,000			180,000	185,000	190,000
Fleet Services Fund		138,750	_		45,000	46,250	47,500
Sewer Utility Fund		138,750			45,000	46,250	47,500
Water Utility Fund		138,750			45,000	46,250	47,500
FINANCING: Road Use Tax		138,750	_		45,000	46,250	47,500
	TOTAL	555,000	_		180,000	185,000	190,000
COST: Construction		555,000	_ _		180,000	185,000	190,000
		TOTAL	2010/11	2011/12	2012/13	2013/14	2014/15
FISCAL YEAR PRIORITY					2	2	2

PROGRAM - ACTIVITY: DEPARTMENT: ACCOUNT NO.

Internal Services Fleet Services

## CAMPUSTOWN COURT RENOVATION

The Campustown Court renovation was a unique collaboration between the City, the Government of the Student Body, and the administration of Iowa State University. The small park is located at the corner of Welch and Chamberlain Avenues in Campustown. The features include an overhead shade structure, a raised performance stage, limestone planters and seats, lights, and colored brick pavers representing the colors of Iowa State University and the City of Ames. The park is also a City of Ames WiFi hotspot.



Mayor Campbell and members of the committee unveil the plaque.

# **BLOCK PARTY TRAILER**



"Street 'N' Greet", the new block party trailer sponsored by the Strengthening Neighborhoods Action Team, is available for reservations by any Ames resident. This block party trailer is intended to encourage conversation and new connections for all people in the community and welcome the diversity that makes Ames a unique place to live.

Use of the trailer is free for any neighborhood block party and the City of Ames will close down the street, get any necessary permits, and deliver and pick up the trailer.

The trailer is stocked with tables and chairs, outdoor games, a sound system, a first-aid kit, community information, nametags, and barricades. Signage to advertise the party and fliers to invite the neighbors are available upon reservation of the trailer.

The goal of this trailer is to encourage neighborhoods that may not have a tradition of block parties to start having them, helping to connect residents to new neighbors.

