

City of Ames, Iowa Capital Improvement Plan 2008 - 2013

PUBLIC ART IN AMES, IOWA

Ames became the first city in Iowa to establish a Public Art Commission. This ongoing municipal public art program was founded in 1990 by the Mayor and City Council. A unique partnership of city funding, state grants, and private donations from individuals and businesses makes Ames a leader in the use of art to enhance public spaces.

The Commission has a one-sentence mission statement that speaks volumes about its responsibilities:

“The Ames Public Art Commission is committed to creating a visual and aesthetic environment that incorporates art into the lives of all Ames citizens.”

The 16-member Public Art Commission has several subcommittees, including:

- **Art Collection / Archive / Maintenance Committee** – This committee is charged with the tasks of creating and maintaining an illustrated catalog of artwork owned by the City, in both printed and electronic forms.
- **Education / Information Committee** – The purpose of this committee is to increase public awareness of art acquisition processes and communicate the value of public art and art in public places to the Ames community.
- **Art Around The Corner Committee** – This committee improves Ames by facilitating the selection and temporary placement of sculpture exhibits in the Main Street Cultural District (Downtown). This involves an annual call for entries from Iowa and regional artists, juried selection of art, rotation and installation of art, and publicity of public arts in the Downtown area.
- **Neighborhood Sculpture Committee** – This committee selects one or two pieces of art currently on display in the Art Around the Corner Exhibit and places these sculptures throughout the community. The artwork must be displayed in a “public” area that is open and accessible to the citizens of Ames, such as a neighborhood park or cul-de-sac. Visibility and safety considerations for both drivers and pedestrians are deciding factors in the placement of the artwork.

This document salutes several of the outdoor pieces of the collection.



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January 2008

Mayor and Members of the Ames City Council:

I have attached for your approval the City Manager's Recommended Capital Improvements Plan (CIP) for fiscal years 2008-09 through 2012-2013. This Plan reflects total expenditures of \$239,898,127 over the next five years to improve the overall quality of life for our residents and visitors to the City of Ames. Of this total, improvements are earmarked as follows:

PUBLIC SAFETY		UTILITIES		TRANSPORTATION		COMMUNITY ENRICHMENT	
Police	\$ 477,797	Resource Recovery	\$ 1,990,000	Streets	\$ 40,735,000	Parks & Recreation	\$ 8,771,500
Fire	616,000	Water Treatment	37,840,000	CyRide	13,416,410	Library	491,700
Sirens	215,000	Water Distribution	4,500,000	Airport	6,205,000	City Hall	250,000
Traffic	7,938,875	Storm Sewer	2,574,345			Neighborhood Improvements	250,000
		Sanitary Sewer	2,500,000			Downtown Facades	250,000
		WPC Treatment	8,795,000			Fleet Services	406,500
		Electric	101,675,000				
TOTAL	\$ 9,247,672		\$159,874,345		\$ 60,356,410		\$10,419,700

Funding for these improvements will come from a variety of sources including: \$42,234,633 from G.O. Bond proceeds, \$98,000,000 from Utility Revenue Bond proceeds, \$5,269,266 from Local Option Sales Tax receipts, \$7,164,125 from Road

Use Tax funds, \$10,841,625 from Water Utility user fees, \$6,541,625 from Sewer Utility user fees, \$29,457,380 from Electric Utility user fees, \$2,250,000 from Storm Water Utility user fees, \$1,165,000 from Resource Recovery Utility revenues, \$2,088,092 from CyRide revenue, and \$34,886,38 from other user fees and governmental grants/loans.

While the timing, cost, and description for the majority of the projects reflected in this CIP are consistent with previous documents, there are a number of new or modified projects that I would like to highlight.

PUBLIC SAFETY - \$ 9,247,672

A new **Document Imaging** project for the Police Department (page 11) is being introduced into this CIP. Previous funding allowed for the consolidation of the emergency communications activities into a common platform shared by the City of Ames, Story County, and Iowa State University. The same three parties would like to move ahead to jointly fund a new document imaging system to help facilitate the sharing of law enforcement records among these agencies.

In past years, we have attempted to upgrade our 1970's vintage emergency siren system by replacing one unit each year. We have come to the point where this system is underpowered and reaching the end of its useful life. Furthermore, ISU officials will be installing a modern system which will not be compatible with our equipment. In order to ensure reliability of this critical emergency system and promote redundancy with the ISU system, I have included in the first year of the CIP the total replacement of our outdated equipment in the **Outdoor Storm Warning System** project (page 16).

You will note that most of the traffic improvement locations shown in this document are consistent with previous CIPs, as evidenced in the **US 69 Intersection Improvements** project (page 19) and the **Traffic Signal Program** (page 24). However, these locations and prioritization could be modified in the future based on the findings of the update to our Transportation Plan as scheduled in the **Engineering Studies** (page 25). **Railroad Crossing Safety Improvements** (page 23) along our north/south routes remain a priority in this plan with anticipated median installations at 13th Street, 20th Street, and 24th Street and gate additions, flashing lights, and warning detection at 9th and 16th Streets.

UTILITIES – 159,874,345

Resource Recovery - \$1,990,000

An exciting new recycling initiative, the **Resource Recovery Non-Ferrous System** (page 31), is being introduced in this CIP. Through the assistance of a Department of Natural Resources low-interest loan, we hope to modify our plant to allow us to remove copper, brass, stainless steel, and aluminum from the waste stream in order to reduce landfill costs and increase revenue from the additional sale of metals.

Water - \$42,340,000

Prior CIPs have indicated the need to expand/renovate our existing water plant that has numerous components that date back to the 1920s. We had anticipated that this project would not be needed for approximately ten years. However, significant increases in peak load summer peak water consumption by our customers have caused us to accelerate the **Water Plant Expansion** project (page 34). This project represents the “worst case scenario” where user fees could have to almost double to cover the construction debt. In FY 2008-09, we will engage a consulting firm(s) to assist us in developing an alternatives analysis and conceptual design. It is hoped that this step will allow us to identify a more cost-effective approach to meet our ever increasing peak water demand.

Storm Water - \$2,574,345

Developers in the community have been required to construct retention and/or detention ponds in order to regulate the amount of storm water discharge from their property onto surrounding properties. Agreements have placed the responsibility for daily maintenance of these ponds on the developers, while the City retained the ultimate responsibility to clean out these public facilities. We have reached a point where some of the older storm water cells have filled with sediment and need cleaning in order to remain operational. The CIP includes, for the first time, the **Storm Water Facility Rehabilitation Program** (page 45) so that the City can accomplish this rehabilitation function.

Water Pollution Control - \$11,295,000

In support of the Iowa Department of Natural Resources’ (IDNR) Use Attainability Analysis of the South Skunk River which determined that the segment where we discharge can support “primary contact”, this CIP reflects a new **WPC Plant Disinfection** project (page 50). While the project is planned to be completed over a three-year period, the final determination of a completion schedule will be in the hands of the IDNR.

Another new project is detailed in the **WPC Plant Residuals Handling Improvements** project (page 52). These improvements are an expansion of the previously identified Biosolids Storage/Thickening project. This project is being considered because our solids handling equipment is approaching the end of its useful life and future regulations will require us to achieve a higher level of nutrient removal. The initial phase of this project will be a feasibility study to determine whether we should contract for the removal of the biosolids or continue with the second phase of the project to purchase more farm land and/or dewatering equipment.

Electric - \$101,675,000

You will recall that last year we emphasized the importance of developing a strategy for meeting the future electric demands of our customers. Like our water utility, our power plant facilities are in need of replacement and customer demands continue to increase. Given the extensive lead time required to accomplish any improvement of this magnitude, it is time for us to finalize our strategy.

Over the past months, we have been working with a consulting firm, Burns and McDonnell, to help us identify the most cost-effective and environmentally sensitive options for meeting our customers' needs. Unfortunately, by the time the staff had to finalize our CIP recommendations, we had not received a final report from our consultant. Absent these recommendations, the staff has included in the CIP a two-part strategy.

First, numerous new projects have been added to the CIP for the first time to maintain our existing Unit #7, Unit #8, and gas turbines so that our current installed capacity of 153 MW will be in a condition to function well into the future. These projects totaling \$19,335,000 include:

#8 Nitrogen Oxide Control Capital (page 57), **#8 Mercury Emission Monitoring System** (page 58), **#8 Mercury Capital** (page 59), **#7 & #8 Distributive Control System Upgrade** (page 61), **#7 Nitrogen Oxide Control Capital** (page 63), **#8 Boiler Repair & Tube Replacement** (page 64), **#7 Precipitator Enclosure** (page 71), **#7 Mercury Capital** (page 72), **#8 Feedwater Heater Tubes** (page 76), **#8 Turbine Generator Overhaul** (page 77), and **#7 Boiler Repair and Tube Replacement** (page 80).

The second part of this strategy involves the construction of a new 25 MW unit that will burn natural gas and/or some alternative energy source or the purchase of additional capacity from an outside utility, **Base Load Generating Capacity** (page 62). It should be emphasized that once the consultant's recommendations are reviewed, the City Council could choose to modify the CIP to reflect a more preferred strategy.

In order to help reduce customers' demand for electricity and the associated capital improvements that will be needed, we remain committed to the **Demand Side Management Conservation Programs** (page 68). This program has been increased by \$600,000 over the next five years to a total of \$3,800,000 for various incentives to help reduce electric consumption.

Other new projects introduced in this CIP include: upgrading the **Downtown Network** (page 65) to ensure more reliability in this important underground system, completing **Cyber Security Assessment** (page 66) to safeguard against a terrorist attack, accomplishing the **Street Light and Line Relocations** (page 70) associated with the Public Works Department's road projects, improving the reliability of the **Ames Plant 69kV Switchyard Relay and Controls** (page 74), upgrading the **RDF Bin** (page 78), and expanding the **Ames Plant Distribution Substation** (page 79) to accommodate expected customer growth.

TRANSPORTATION - \$60,356,410

In order to support walking and bicycling as alternative forms of transportation, this CIP invests \$2,686,375 over the next five years in the following five projects: the **Sidewalk Safety Program** that replaces crosswalk panels at intersections (page 98), the **Shared Use Path System Expansion Project** (page 21) that focuses on the Skunk River Trail, the **Pedestrian Walkway**

Program (page 22) that completes our commitment to safe routes to schools, a new **Shared Use Path Pavement Improvements** project (page 99) that earmarks for the first time funds to repair the existing paths, and the **Northeast Area Regional Commercial Improvement** (page 20) that will connect our bike path system to the new regional mall on E. 13th Street.

Traditionally, the majority of the local financial support for repairing or extending major arterial streets comes from G.O. Bond proceeds. The proposed CIP calls for \$28,745,633 over the next five years to accomplish this objective. This total represents an average of \$5,749,127 per year as compared to \$5,891,127 per year in the current CIP.

In order to improve the appearance of our neighborhoods, two programs should be highlighted. Funding for the **Neighborhood Curb Replacement Program** (page 89) totals \$375,000 which represents a \$125,000 increase over the five years of the Plan. In addition, a new **Asphalt Pavement Replacement Program** (page 92) totaling \$2,350,000 is being incorporated in this CIP to allow for the replacement of full-depth asphalt streets that are predominantly found in our neighborhoods.

A final new transportation program, **Retaining Wall Reconstruction** (page 91), is being included in the CIP for the first time since several of the retaining walls within the City's street rights-of-way are failing structurally and are, therefore, in need of repair.

In the first year of the plan, it is contemplated that an **Alternative Analysis** (page 104) for CyRide will be conducted as a follow-up to the Transit Feasibility Study that was completed in May 2007. This analysis will explore in greater detail the feasibility of a Bus Rapid Transit service from Iowa State Center to the ISU campus.

COMMUNITY ENRICHMENT - \$10,419,700

Parks and Recreation - \$8,771,500

The CIP reflects for the first time the **Donald and Ruth Furman Aquatic Center** (page 115). According to our most current construction schedule, \$3,210,000 will be spent in FY 2007-08 for surveying, soil testing, excavating, designing and constructing a portion of the facility, with the remaining \$6,278,000 being expended in FY 2008-09 to complete the bulk of the construction and to pay for construction inspection fees.

Since opening our newest park, we have found that the fishing pier is inadequate to accommodate the many visitors who take advantage of this wonderful amenity. To correct this situation, we hope to leverage a Department of Natural Resources grant and construct a larger, permanent overlook/fishing pier along the north shore of Ada Hayden Heritage Park in FY 2008-09 (page 117).

In order to determine the facility opportunities for two of our existing buildings, a **Parks and Recreation Facility Assessment** (page 121) is scheduled in this CIP for the Carr Pool bathhouse/concession and the Gateway office buildings.

Library

The Library receives further support in this CIP with two new projects, **Exterior Building Repair** and **Skylight Replacement** (pages 126 & 127), that focus on stabilizing the building.

Finally, our commercial and residential neighborhoods benefit from the CIP. The **Downtown Façade Program** (page 134), which started out slowly, has gained some steam with the conversion from a low-interest loan to a grant program. To date, ten properties in the Downtown have been improved. In addition, the **Neighborhood Improvement Program** (page 132) is also meeting its objective. Since its inception, 101 projects have been funded for not only physical improvements, but also such activities as interns to facilitate code enforcement and the printing and distribution of neighborhood newsletters.

I want to give special thanks to our department heads and their employees who have the unique capacity to anticipate the future as well as current needs of our citizens. And we must not forget the contributions of Duane Pitcher, Carol Collings, Nancy Masteller, Sharon Hjortshoj, Sheila Lundt, and Bob Kindred for their efforts to develop this important document.

Sincerely,

Steven L. Schainker
City Manager



Bouquet

By V. Skip Willets, 2007

Brookside Park Near Tennis Courts



Orange Dragon

By Dave Johnson, 1998

Southwest corner outside City Hall

CITY OF AMES, IOWA
FIVE-YEAR CAPITAL IMPROVEMENT PLAN
2008-2013

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HOW TO USE THE C.I.P. DOCUMENT

The 2008-2013 Capital Improvements Plan for the City of Ames is organized according to the City's program structure of services. This format allows decision makers to consider proposed improvements in much the same manner as the annual operating budget. First-year portions of these projects can also be identified in the annual operating program budget.

1. The **Description/Justification** section outlines the basic work to be done and the intended outcome or result of the project, outlines the reasons behind the proposal of the project, and also the advantages to the City of undertaking the project. The section may also describe the disadvantages to the City of either waiting to do the project, or of disapproving it altogether.
2. The **Comments** section outlines any additional information related to the project, including status changes from a previous year, its relationship to other projects or future developments, impacts on operating budgets and others.
3. The **Location** section will list a street location or various locations and a map location is listed which refers to the sectioned City map on pages 137-146.

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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CITY OF AMES, IOWA**

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PROJECTION OF DEBT CAPACITY

	2006/07 ACTUAL	2007/08 BUDGETED	2008/09 PROJECTED	2009/10 PROJECTED	2010/11 PROJECTED	2011/12 PROJECTED	2012/13 PROJECTED
1. Total Actual Valuation	2,995,573,229	3,111,701,831	3,215,637,638	3,344,263,144	3,478,033,670	3,617,155,017	3,761,841,218
2. State Mandated Debt Limit	149,778,661	155,585,092	160,781,882	167,213,157	173,901,684	180,857,751	188,092,061
3. City Reserve (25% of Limit)	37,444,665	38,896,273	40,195,471	41,803,289	43,475,421	45,214,438	47,023,015
Un-Reserved Debt Capacity	112,333,996	116,688,819	120,586,411	125,409,868	130,426,263	135,643,313	141,069,046
4. Outstanding Debt	37,665,000	41,195,000	34,875,000	28,865,000	23,515,000	18,440,000	13,840,000
5. Proposed Issues	-	-	13,120,573	10,222,060	7,357,000	7,185,000	5,300,000
6. Balance of Proposed Issues	-	-	-	12,247,370	20,880,998	26,096,405	30,575,971
Total Debt Subject to Limit	37,665,000	41,195,000	47,995,573	51,334,430	51,752,998	51,721,405	49,715,971
7. Available Un-Reserved Debt Capacity (\$)	74,668,996	75,493,819	72,590,838	74,075,438	78,673,265	83,921,908	91,353,075
8. Available Un-Reserved Debt Capacity (%)	66.47%	64.70%	60.20%	59.07%	60.32%	61.87%	64.76%
9. Total Debt Capacity (\$)	112,113,661	114,390,092	112,786,309	115,878,727	122,148,686	129,136,346	138,376,090
10. Total Debt Capacity (%)	74.85%	73.52%	70.15%	69.30%	70.24%	71.40%	73.57%

Notes:

1. Total assessed valuation plus utility valuation growth assumption is 4.0% per year.
2. State of Iowa statutory debt limit is 5% of total actual valuation.
3. City Policy reserves 25% percent of available debt capacity.
4. Current outstanding debt subject to limit at Fiscal Year End includes all debt in which property taxes are pledged.
5. Debt issues subject to limit proposed are part of Capital Improvement Plan.
6. Debt Balance on Issues in Capital Improvement Plan.
7. Debt capacity available after deducting the reserved capacity.
8. Percentage of debt capacity available after deducting the reserved capacity.
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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
2008/09:				
TRAFFIC		350,000		
NE Commercial Area Shared Use Path	350,000		70%	Developer
STREETS ENGINEERING		3,617,573		
Arterial Street Pavement Improvements (North Dakota)	467,573		43%	MPO/STP Funds
CyRide Rte Pavement Improvements (various locations)	1,000,000		100%	
Collector Street Pavement Improvements	1,000,000		100%	
Downtown Street Pavement Improvements (Burnett Ave)	750,000		100%	
Asphalt Pavement Improvement Program (Arizona Ave)	400,000		100%	
STREETS MAINTENANCE		1,425,000		
Concrete Pavement Improvements	1,425,000		100%	
PARKS AND RECREATION		5,278,000		
Donald and Ruth Furman Aquatic Center	5,278,000		84%	Private Contribution
2008/09 SUBTOTAL		10,670,573		
WATER (ABATED G.O. BONDS)		1,500,000		
Raw Well Water Loop Line	1,500,000		100%	Abated by Water Revenues
2008/09 YEAR TOTAL		12,170,573		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2009/10:				
FIRE		536,000		
Fire Apparatus Replacement	536,000		100%	
TRAFFIC		470,000		
West Lincoln Way Intersection Improvements	470,000		44%	Developer/IDOT Grant
STREETS ENGINEERING		3,341,060		
Arterial St Pavement Improvements (13th Street)	641,060		43%	MPO/STP Funds
CyRide Rte Pavement Improvements (Ash Ave & Knapp)	600,000		100%	
Collector Street Pavement Improvements	1,000,000		100%	
Downtown Street Pavement Improvements (Kellogg Ave)	500,000		100%	
South Dakota Widening	200,000		100%	
Asphalt Pavement Improvement Program (Northwood Dr)	400,000		100%	
STREETS MAINTENANCE		1,625,000		
Concrete Pavement Improvements	1,625,000		100%	
2009/10 SUBTOTAL		5,972,060		
WATER (ABATED G.O. BONDS)		2,000,000		
Raw Well Water Loop Line	2,000,000		100%	Abated by Water Revenues
SEWER (ABATED G.O. BONDS)		2,250,000		
WPC Plant Disinfection	2,250,000		100%	Abated by Sewer Revenues
2009/10 YEAR TOTAL		10,222,060		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2010/11:				
STREETS ENGINEERING		5,632,000		
Arterial St Pavement Improvements (Duff Ave; 6th St)	750,000		100%	
CyRide Rte Pavement Improvements (Emerald Drive)	600,000		100%	
Collector Street Pavement Improvements	312,000		31%	MPO/STP Funds
Downtown Street Pavement Improvements (Kellogg Ave)	500,000		100%	
South Dakota Widening	2,000,000		100%	
Asphalt Pavement Improvement Prgm (various locations)	750,000		100%	
Grand Avenue Extension	720,000		100%	
STREETS MAINTENANCE		625,000		
Concrete Pavement Improvements	625,000		63%	Road Use Tax
2010/11 SUBTOTAL		6,257,000		
SEWER (ABATED G.O. BONDS)		1,100,000		
WPC Plant Alternative Energy	1,100,000		100%	Abated by Sewer Revenues
2010/11 YEAR TOTAL		7,357,000		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2011/12:				
TRAFFIC		635,000		
U.S. 69 Intersection Improvements	235,000		100%	
West Lincoln Way Intersection Improvements	400,000		57%	Developer
STREETS ENGINEERING		5,100,000		
Arterial St Pavement Improvements (Lincoln Way)	150,000		20%	MPO/STP Funds
CyRide Rte Pavement Improvements (Lincoln Way)	600,000		100%	
Collector Street Pavement Improvements	1,000,000		100%	
Downtown Street Pavement Improvements (Main Street)	750,000		100%	
Asphalt Pavement Improvement Program (Southdale Dr)	400,000		100%	
Grand Avenue Extension	2,200,000		31%	Federal Earmark Funds
STREETS MAINTENANCE		625,000		
Concrete Pavement Improvements	625,000		63%	Road Use Tax
2011/12 SUBTOTAL		6,360,000		
SEWER (ABATED G.O. BONDS)		825,000		
WPC Plant Alternative Energy	825,000		100%	Abated by Sewer Revenues
2011/12 YEAR TOTAL		7,185,000		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2012/13:				
TRAFFIC				
U.S. 69 Intersection Improvements	1,600,000	1,600,000	100%	
STREETS ENGINEERING				
Arterial St Pavement Improvements (Lincoln Way)	150,000	2,900,000	20%	MPO/STP Funds
CyRide Rte Pavement Improvements (Todd Drive)	600,000		100%	
Collector Street Pavement Improvements	1,000,000		100%	
Downtown Street Pavement Improvements (Douglas Ave)	750,000		100%	
Asphalt Pavement Improvement Program (Jewel Drive)	400,000		100%	
STREETS MAINTENANCE				
Concrete Pavement Improvements	800,000	800,000	100%	
2012/13 YEAR TOTAL		5,300,000		
GRAND TOTAL GENERAL OBLIGATION BONDS		42,234,633		

SUMMARY OF MAJOR BOND ISSUES, continued

REVENUE BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT BOND FUNDED	OTHER SOURCES OF FUNDING
2008/09:				
ELECTRIC		10,400,000	100%	
Unit #8 Nitrogen Oxide Control Capital	2,800,000			
Unit #8 Mercury Capital	1,500,000			
Base Load Generating Capacity	3,000,000			
Unit #8 Boiler Tube Repair	3,100,000			
2008/09 YEAR TOTAL		10,400,000		
2009/10:				
ELECTRIC		6,000,000	100%	
Base Load Generating Capacity	6,000,000			
2009/10 YEAR TOTAL		6,000,000		
2010/11:				
WATER		10,150,000	100%	
Water Plant Expansion	10,150,000			
ELECTRIC		10,000,000	100%	
Base Load Generating Capacity	10,000,000			
2010/11 YEAR TOTAL		20,150,000		

SUMMARY OF MAJOR BOND ISSUES, continued

REVENUE BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT BOND FUNDED	OTHER SOURCES OF FUNDING
2011/12:				
WATER		15,150,000		
Water Plant Expansion	15,150,000		100%	
ELECTRIC		20,000,000		
Base Load Generating Capacity	20,000,000		100%	
2011/12 YEAR TOTAL		35,150,000		
2012/13:				
WATER		2,800,000		
Water Plant Expansion	2,800,000		100%	
ELECTRIC		23,500,000		
Base Load Generating Capacity	23,500,000		100%	
2012/13 YEAR TOTAL		26,300,000		
GRAND TOTAL REVENUE BONDS		98,000,000		



Ames Circle of Arts

By William C. Culbertson, 2002

Bandshell Park

CAPITAL IMPROVEMENT PLAN - GRAND TOTALS

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
Public Safety	9,247,672	2,798,672	2,231,000	550,000	1,620,000	2,048,000	7
Utilities	159,874,345	25,032,695	26,961,745	31,303,905	45,297,000	31,279,000	27
Transportation	60,356,410	11,900,410	11,246,500	11,876,500	16,771,500	8,561,500	81
Community Enrichment	10,419,700	7,210,800	539,900	906,000	1,025,000	738,000	111
Total Expenditures	239,898,127	46,942,577	40,979,145	44,636,405	64,713,500	42,626,500	
REVENUES:							
Bonds	140,234,633	22,570,573	16,222,060	27,507,000	42,335,000	31,600,000	
City	66,118,988	14,975,508	18,207,955	12,889,125	12,521,300	7,525,100	
Other	33,544,506	9,396,496	6,549,130	4,240,280	9,857,200	3,501,400	
Total Revenues	239,898,127	46,942,577	40,979,145	44,636,405	64,713,500	42,626,500	

CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
Public Safety:							
Police	477,797	477,797					9
Fire	616,000		536,000		80,000		12
Electric	215,000	215,000					15
Traffic	7,938,875	2,105,875	1,695,000	550,000	1,540,000	2,048,000	17
Total Public Safety	9,247,672	2,798,672	2,231,000	550,000	1,620,000	2,048,000	
Utilities:							
Resource Recovery	1,990,000	1,277,000	185,000	152,000	152,000	224,000	29
Water Treatment	37,840,000	2,050,000	3,825,000	10,640,000	17,650,000	3,675,000	32
Water Distribution	4,500,000	900,000	900,000	900,000	900,000	900,000	39
Storm Sewer	2,574,345	570,695	551,745	551,905	450,000	450,000	41
Sanitary Sewer	2,500,000	500,000	500,000	500,000	500,000	500,000	46
WPC Treatment	8,795,000	565,000	3,435,000	3,010,000	1,605,000	180,000	49
Electric	101,675,000	19,170,000	17,565,000	15,550,000	24,040,000	25,350,000	55
Total Utilities	159,874,345	25,032,695	26,961,745	31,303,905	45,297,000	31,279,000	

CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES, continued:							
Transportation:							
Streets/Engineering	32,010,000	4,860,000	4,800,000	6,935,000	11,315,000	4,100,000	83
Streets/Maintenance	8,725,000	2,150,000	2,350,000	1,350,000	1,350,000	1,525,000	95
Transit	13,416,410	2,770,410	2,971,500	2,246,500	3,206,500	2,221,500	101
Airport	6,205,000	2,120,000	1,125,000	1,345,000	900,000	715,000	109
Total Transportation	60,356,410	11,900,410	11,246,500	11,876,500	16,771,500	8,561,500	
Community Enrichment/Internal Services:							
Parks and Recreation	8,771,500	6,782,500	254,000	685,000	470,000	580,000	113
Library	491,700	180,800	82,900	48,000	180,000		124
Public Works	250,000	50,000	50,000	50,000	50,000	50,000	129
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	131
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	133
Fleet Services	406,500	97,500	53,000	23,000	225,000	8,000	135
Total Community Enrichment	10,419,700	7,210,800	539,900	906,000	1,025,000	738,000	
GRAND TOTAL EXPENDITURES	239,898,127	46,942,577	40,979,145	44,636,405	64,713,500	42,626,500	

CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
REVENUES:						
Bonds:						
G.O. Bonds	42,234,633	12,170,573	10,222,060	7,357,000	7,185,000	5,300,000
Water Revenue Bonds	28,100,000			10,150,000	15,150,000	2,800,000
Electric Revenue Bonds	69,900,000	10,400,000	6,000,000	10,000,000	20,000,000	23,500,000
Total Bonds	140,234,633	22,570,573	16,222,060	27,507,000	42,335,000	31,600,000
City:						
Road Use Tax	7,164,125	1,611,875	1,333,250	1,445,750	1,421,250	1,352,000
Local Option Sales Tax	5,269,266	1,575,766	786,875	1,032,125	1,144,500	730,000
Hotel/Motel Tax	250,000	50,000	50,000	50,000	50,000	50,000
Resource Recovery Fund	1,165,000	452,000	185,000	152,000	152,000	224,000
Water Utility Fund	10,841,625	1,474,375	2,738,250	1,395,750	3,456,250	1,777,000
Sewer Utility Fund	6,541,625	1,089,375	1,698,250	1,735,750	1,336,250	682,000
Storm Sewer Utility Fund	2,250,000	450,000	450,000	450,000	450,000	450,000
Electric Utility Fund	29,457,380	7,625,100	10,445,780	5,496,500	4,040,000	1,850,000
Transit Fund	2,088,092	516,642	451,050	378,250	369,800	372,350
Airport Construction Fund	310,250	106,000	56,250	67,250	45,000	35,750
Fleet Services Fund	781,625	24,375	13,250	685,750	56,250	2,000
Total City	66,118,988	14,975,508	18,207,955	12,889,125	12,521,300	7,525,100

CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
REVENUES, continued:						
Other:						
E911 Service Fees	219,223	219,223				
Iowa State University	2,668,821	1,181,101	1,124,220	63,500	300,000	
FEMA Grant	152,906	152,906				
Story County	31,201	31,201				
Iowa D.O.T. Grant Funds	200,000		200,000			
Union Pacific Railroad	112,500	112,500				
Developer	850,000	150,000	400,000		300,000	
MPO Planning Funds	400,000	320,000	80,000			
MPO/STP Funds	3,742,442	703,602	931,465	761,375	673,000	673,000
Recreation Trail Grant	375,000	150,000	50,000	25,000	150,000	
Iowa DNR SWAP Funds	825,000	825,000				
Watershed Improvement Review Board Grant	304,345	115,695	96,745	91,905		
Federal Earmark Funds	5,000,000				5,000,000	
Federal Transit Administration	10,524,175	2,119,625	2,390,450	1,788,250	2,456,700	1,769,150
Federal Grants	454,143	134,143	80,000	80,000	80,000	80,000
FAA Grants	5,894,750	2,014,000	1,068,750	1,277,750	855,000	679,250
Ames Community School District	340,000	87,500	77,500	107,500	42,500	25,000
Iowa DNR Grant	80,000	80,000				
Private Contributions	1,195,000	1,000,000	50,000	45,000		100,000
State Grants	175,000					175,000
Total Other	33,544,506	9,396,496	6,549,130	4,240,280	9,857,200	3,501,400
GRAND TOTAL REVENUES	239,898,127	46,942,577	40,979,145	44,636,405	64,713,500	42,626,500



Eagle

By Bruce Mainquist, 1997

Stuart Smith Park



Cynthia Duff Gateway

By Tom Stancliffe, 2002

Cynthia Duff Plaza
(Main Street and Douglas Avenue)

PUBLIC SAFETY - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
Police	477,797	477,797					9
Fire	616,000		536,000		80,000		12
Electric	215,000	215,000					15
Traffic	7,938,875	2,105,875	1,695,000	550,000	1,540,000	2,048,000	17
Total Expenditures	9,247,672	2,798,672	2,231,000	550,000	1,620,000	2,048,000	
REVENUES:							
Bonds:							
G.O. Bonds	3,591,000	350,000	1,006,000		635,000	1,600,000	
City:							
Road Use Tax	1,397,500	452,500	195,000	300,000	225,000	225,000	
Local Option Sales Tax	1,524,066	757,966	227,475	151,625	237,000	150,000	
Sub-Total City Funds	2,921,566	1,210,466	422,475	451,625	462,000	375,000	

PUBLIC SAFETY - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
REVENUES, continued:						
Other:						
E911 Service Fees	219,223	219,223				
FEMA Grant	152,906	152,906				
Story County	31,201	31,201				
Iowa State University	31,201	31,201				
Iowa D.O.T. Grant Funds	200,000		200,000			
Union Pacific Railroad Developer	112,500	112,500				
Developer	850,000	150,000	400,000		300,000	
MPO Planning Funds	400,000	320,000	80,000			
MPO/STP Funds	363,075	71,175	72,525	73,375	73,000	73,000
Recreation Trail Grant	375,000	150,000	50,000	25,000	150,000	
Sub-Total Other Funds	2,735,106	1,238,206	802,525	98,375	523,000	73,000
Total Revenues	9,247,672	2,798,672	2,231,000	550,000	1,620,000	2,048,000

PUBLIC SAFETY - POLICE/FIRE

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Mobile Data Terminals for Police/Fire Vehicles	384,194	384,194					10
2 Police Document Imaging	93,603	93,603					11
Total Expenditures	477,797	477,797					
REVENUES:							
City:							
Local Option Sales Tax	43,266	43,266					
Other:							
E911 Service Fees	219,223	219,223					
FEMA Grant	152,906	152,906					
Story County	31,201	31,201					
Iowa State University	31,201	31,201					
Other Sub-Total	434,531	434,531					
Total Revenues	477,797	477,797					

MOBILE DATA TERMINALS FOR FIRE AND POLICE VEHICLES

PROJECT STATUS: Delayed
Cost Change

Revenue Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will provide field access to police records, state and federal databases, and direct connections to computer aided dispatch information for police, fire, and emergency medical services 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 increasingly important to increase the efficiency of information flow to police, fire, and emergency medical responders. 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 and paramedics can obtain more detailed information about emergencies they are responding to or gain direct access to database information such as known hazards or call history associated with a specific location.

The infrastructure for this system is being requested from the Story County E911 Board. Other jurisdictions within the county will have similar costs if they choose to equip their vehicles to take advantage of the mobile communications infrastructure.

COMMENTS

The project has been delayed to ensure that the project will function effectively on the county-wide shared public safety network.

In addition, since the adoption of the previous CIP, the Fire Department has applied for a FEMA sponsored grant that would help fund mobile data and communications hardware, software and training support. Should the grant be awarded to the Fire Department, the overall cost of the project would increase as the span of emergency response vehicles equipped with mobile data would increase, but the overall cost to the City would decrease with the addition of grant funding.

LOCATION

Police and Fire vehicles

FISCAL YEAR PRIORITY						
	TOTAL	¹ 2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Communications Software/Hardware	112,855	112,855				
Mobile Data Infrastructure	126,400	126,400				
Mobile Data Terminal Software & Support	144,939	144,939				
TOTAL	384,194	384,194				
FINANCING:						
Local Option Sales Tax	12,065	12,065				
E911 Service Fees	219,223	219,223				
FEMA Grant	152,906	152,906				
TOTAL	384,194	384,194				

PROGRAM - ACTIVITY:

Public Safety/Law Enforcement/Fire Administration

DEPARTMENT:

Police/Fire

ACCOUNT NO.

030-2585-429
245-2585-429

DOCUMENT IMAGING FOR POLICE

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Document imaging is a record storage and retrieval enhancement. The goal of a document imaging program is to allow more efficient electronic storage, retrieval, review and transfer of information throughout the criminal justice system. Implementation of such a program would replace microfilming costs and equipment and reduce the extensive file storage, maintenance and retrieval expenses associated with the local criminal records system. Previous activities funded consolidation of emergency communications activities on a common platform for the City of Ames, Story County and Iowa State University through the use of Homeland Security funding. Because of the complexity of the shared records platform, the actual design of the imaging system and selection of software and vendors will require more thorough study.

COMMENTS

Originally proposed in 2006-2007, this project was not included in the 2007-2008 CIP. The project is resubmitted as the E911 agencies in Story County move ahead with the evaluation of imaging technology.

LOCATION

Ames Police Department Communications Center – Map 5, location L-11

FISCAL YEAR PRIORITY						
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Document Imaging System	93,603	93,603				
TOTAL	93,603	93,603				
FINANCING:						
Local Option Sales Tax	31,201	31,201				
Story County	31,201	31,201				
Iowa State University	31,201	31,201				
TOTAL	93,603	93,603				

PROGRAM - ACTIVITY:
Public Safety – Law Enforcement

DEPARTMENT:
Police

ACCOUNT NO.
030-2577-429

PUBLIC SAFETY - FIRE

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Fire Apparatus Replacement	536,000		536,000				13
2 Fire Station #1 Renovation	80,000				80,000		14
Total Expenditures	616,000		536,000		80,000		
REVENUES:							
Bonds:							
G.O. Bonds	536,000		536,000				
City:							
Local Option Sales Tax	80,000				80,000		
Total Revenues	616,000		536,000		80,000		

FIRE APPARATUS REPLACEMENT

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The Fire Apparatus Replacement Program ensures replacement of fire apparatus at the end of the operational life. Fire apparatus serve as frontline vehicles for 15 years, after which they are retained as reserve units for up to an additional 15 years. Before being placed in reserve status, fire apparatus are refurbished. Sometimes parts availability, metal fatigue, and corrosion will take apparatus out of service, making continued use impractical. The City of Ames is able to keep apparatus for a lifecycle longer than most communities due to proper maintenance.

COMMENTS

FY 2009/10

Replace Engine 2 (806) at a cost of \$446,000.

Reserve Engine 3 will be disposed of and Engine 2 will be refurbished to serve as a reserve engine. Estimated cost is \$90,000.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Replace Engine 2		446,000		446,000			
Refurbish Engine 2 for Reserve Status		90,000		90,000			
	TOTAL	536,000		536,000			
FINANCING:							
G. O. Bonds		536,000		536,000			
	TOTAL	536,000		536,000			

PROGRAM - ACTIVITY:

Public Safety – Fire

DEPARTMENT:

Fire

ACCOUNT NO.

FIRE STATION #1 RENOVATION

PROJECT STATUS: No Change

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		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						¹	
Rear Drive Replacement/Structural Repair		80,000				80,000	
	TOTAL	80,000				80,000	
FINANCING:							
Local Option Sales Tax		80,000				80,000	
	TOTAL	80,000				80,000	

PROGRAM - ACTIVITY:

Public Safety – Fire

DEPARTMENT:

Fire

ACCOUNT NO.

030-2249-421

PUBLIC SAFETY - ELECTRIC

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Outdoor Storm Warning System	215,000	215,000					16
Total Expenditures	215,000	215,000					
REVENUES:							
City:							
Local Option Sales Tax	215,000	215,000					
Total Revenues	215,000	215,000					

OUTDOOR STORM WARNING SYSTEM

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The City’s outdoor storm warning system is made up of a central controller in the Police Department dispatch center and nineteen radio controlled individual storm sirens. Most of the sirens currently in use are models that were purchased and installed in the 1970s and 1980s. These older sirens are underpowered and reaching the end of their useful life. This project would allow implementation of a system capable of providing the greatest coverage in a reliable manner.

COMMENTS

Originally proposed as a multi-year program to phase out old and install new sirens, conditions warrant the investment in a more immediate upgrade to the existing system. Iowa State University has recently committed to the purchase and installation of a new outdoor emergency notification system that, if designed properly, would complement and enhance the system used in the City. Coordination with Iowa State University would allow for economic and operational efficiency. The proposed upgrade would also include enhancements in the dispatch centers of both Iowa State University and the City, establishing a redundancy in those operations and providing a higher level of protection in an emergency. An upgraded system would integrate the six sirens purchased by the City in the last few years.

It should be also be noted that the technology of the older sirens is inefficient, generating excess testing and maintenance costs, making them subject to higher failure rates during monthly tests. Repair and replacement parts are becoming obsolete and difficult to purchase.

LOCATION

Emergency notification sirens are located throughout the City.

FISCAL YEAR PRIORITY		1				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Equipment, software, and installation	215,000	215,000				
TOTAL	215,000	215,000				
FINANCING:						
Local Option Sales Tax	215,000	215,000				
TOTAL	215,000	215,000				

PROGRAM - ACTIVITY:
Public Safety – Electric

DEPARTMENT:
Electric

ACCOUNT NO.
030-4802-429

PUBLIC SAFETY - TRAFFIC

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 U.S. 69 Intersection Improvements	2,082,500	197,500		50,000	235,000	1,600,000	19
2 NE Commercial Area Shared Use Path	500,000	500,000					20
3 Shared Use Path System Expansion	1,476,375	373,375	250,000	250,000	380,000	223,000	21
4 Pedestrian Walkway Program	210,000	210,000					22
5 Railroad Crossing Safety Improvements	350,000	250,000	100,000				23
6 Traffic Signal Program	875,000	175,000	175,000	175,000	175,000	175,000	24
7 Traffic Engineering Studies	650,000	400,000	100,000	50,000	50,000	50,000	25
8 West Lincoln Way Intersection Improvements	1,795,000		1,070,000	25,000	700,000		26
Total Expenditures	7,938,875	2,105,875	1,695,000	550,000	1,540,000	2,048,000	
REVENUES:							
Bonds:							
G.O. Bonds	3,055,000	350,000	470,000		635,000	1,600,000	

PUBLIC SAFETY - TRAFFIC, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
REVENUES, continued:						
City:						
Road Use Tax	1,397,500	452,500	195,000	300,000	225,000	225,000
Local Option Sales Tax	1,185,800	499,700	227,475	151,625	157,000	150,000
City Sub-Total	2,583,300	952,200	422,475	451,625	382,000	375,000
Other:						
Iowa D.O.T. Grant Funds	200,000		200,000			
Union Pacific Railroad Developer	112,500	112,500			300,000	
MPO Planning Funds	850,000	150,000	400,000			
MPO/STP Funds	400,000	320,000	80,000			
MPO/STP Funds	363,075	71,175	72,525	73,375	73,000	73,000
Recreation Trail Grant	375,000	150,000	50,000	25,000	150,000	
Other Sub-Total	2,300,575	803,675	802,525	98,375	523,000	73,000
Total Revenues	7,938,875	2,105,875	1,695,000	550,000	1,540,000	2,048,000

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:

- 2008/09 13th Street/Grand Avenue signal replacement (engineering) – Map 5, location L-9
- 2010/11 20th Street/Grand Avenue intersection improvements (planning) – Map 5, location L-8;
- 2011/12 20th Street/Grand Avenue intersection improvements (land acquisition and engineering) – Map 5, location L-8
- 2012/13 20th 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.

Planning for the 13th Street/Grand Avenue intersection improvements began in 2002/03. The update to the Long-Range Transportation Plan beginning in 2008/09 may impact the location and priorities of this program. Planning activities will conclude in 2007/08 with engineering for the traffic signal replacement occurring in 2008/09. This project may include costs for easements on the corner properties of 13th Street and Grand Avenue.

In 2010/11, planning for the 20th Street/Grand Avenue intersection improvements will begin, with construction planned for 2012/13.

Project costs and revenue changes are the result of updated scope of the projects within this program.

FISCAL YEAR PRIORITY		1		1	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Planning	50,000			50,000		
Land Acquisition & Easements	102,500	2,500			100,000	
Engineering	155,000	20,000			135,000	
Construction	1,775,000	175,000				1,600,000
TOTAL	2,082,500	197,500		50,000	235,000	1,600,000
FINANCING:						
G. O. Bonds	1,835,000				235,000	1,600,000
Road Use Tax	247,500	197,500		50,000		
TOTAL	2,082,500	197,500		50,000	235,000	1,600,000

PROGRAM – ACTIVITY:
Public Safety – Traffic

DEPARTMENT:
Public Works

ACCOUNT NO.
060-7513-429

NORTHEAST AREA REGIONAL COMMERCIAL IMPROVEMENT (EAST 13TH STREET SHARED USE PATH)

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is to pave a shared use path along the south side of East 13th Street from Dayton Avenue to the west property line of the Regional Life Style Center (east of Interstate 35). This path will accommodate all non-motorized traffic for the area east of Interstate 35.

COMMENTS

Designing and paving of the shared use path along the south side of East 13th Street is part of the City's obligation for the development of the Regional Life Style Center. This project is to be coordinated with the construction of the public improvements required for the Regional Life Style Center.

LOCATION

East 13th Street – Map 6, location R-9

FISCAL YEAR PRIORITY		2				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	50,000	50,000				
Construction	450,000	450,000				
TOTAL	500,000	500,000				
FINANCING:						
G.O. Bonds	350,000	350,000				
Developer	150,000	150,000				
TOTAL	500,000	500,000				

PROGRAM - ACTIVITY:

Public Safety – Traffic

DEPARTMENT:

Public Works

ACCOUNT NO.

369-7510-429
320-7510-429

SHARED USE PATH SYSTEM EXPANSION

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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 project supports one of the City Council's priorities for the year, connecting our community.

COMMENTS

- 2008/09 Skunk River Trail Extension (Southeast 16th Street to East Lincoln Way) (\$300,000: Local Option Sales Tax, \$78,825; MPO/STP, \$71,175; and Recreational Trail Grant, \$150,000) – Map 6, location O-11; Ontario Street (Idaho Avenue to Kentucky Avenue) (\$73,375: Local Option Sales Tax) – Map 4, location D-9
- 2009/10 Skunk River Trail Extension (Hunziker Youth Sports Complex to Southeast 16th Street) (\$250,000: Local Option Sales Tax, \$127,475; MPO/STP funds, \$72,525; and Recreational Trail Grant, \$50,000) – Map 9, location O-14
- 2010/11 Skunk River Trail Extension (13th Street to Carr Pool) (\$250,000: Local Option Sales Tax, \$151,625; MPO/STP funds, \$73,375; and Recreational Trail Grant, \$25,000) – Map 6, location N-8
- 2011/12 Skunk River Trail Extension (East Lincoln Way to 13th Street) (\$380,000: Local Option Sales Tax, \$230,000; and Recreation Trail Grant, \$150,000) – Map 6, location O-9
- 2012/13 Skunk River Trail Extension (Inis Grove Park to Bloomington Road) (\$223,000: Local Option Sales Tax, \$150,000; and MPO/STP Funds, \$73,000) – Map 2, location M-7

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.

Bicycle path maintenance costs will increase due to new bicycle path construction.

FISCAL YEAR PRIORITY	TOTAL	3	1	2	2	2
		2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	190,000	50,000	50,000	25,000	35,000	30,000
Construction	1,286,375	323,375	200,000	225,000	345,000	193,000
TOTAL	1,476,375	373,375	250,000	250,000	380,000	223,000
FINANCING:						
Local Option Sales Tax	738,300	152,200	127,475	151,625	157,000	150,000
MPO/STP Funds	363,075	71,175	72,525	73,375	73,000	73,000
Recreational Trail Grant	375,000	150,000	50,000	25,000	150,000	
TOTAL	1,476,375	373,375	250,000	250,000	380,000	223,000
PROGRAM – ACTIVITY:		DEPARTMENT:	ACCOUNT NO.			
Public Safety – Traffic		Public Works	030-7502-429			
			320-7502-429			
			030-7503-429			

PEDESTRIAN WALKWAY PROGRAM

PROJECT STATUS: Revenue Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This program provides a system of interconnected and safe pedestrian facilities. The program incorporates arterial street locations that are safe routes to school and supports the City-wide transportation goal of enhancing the quality of life of the Ames community with such facilities.

COMMENTS

This program is a revamp of the Pedestrian Walkway Program that was first introduced in the 2002/03 – 2006/07 Capital Improvements Plan (CIP). Initial work on that program resulted in eliminating the program from the CIP until the program could be better defined through public input. The Pedestrian Walkway Advisory Committee was subsequently formed, and recommendations for the program were derived from this committee.

This program prioritizes the sidewalk locations along arterial routes that coincide with the Safe Routes to School plans. Decisions regarding future phases of the program will be brought back for City Council consideration following completion of this first phase.

LOCATION:

2008/09 West side of North Dakota Avenue (Delaware Avenue to 1103 North Dakota Avenue) – Map 4, location E-10

FISCAL YEAR PRIORITY		4				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	25,000	25,000				
Construction	185,000	185,000				
TOTAL	210,000	210,000				
FINANCING:						
Local Option Sales Tax	210,000	210,000				
TOTAL	210,000	210,000				

PROGRAM – ACTIVITY:
Public Safety – Traffic

DEPARTMENT:
Public Works

ACCOUNT NO.
030-7590-429

PROJECT NO.

RAILROAD CROSSING SAFETY IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This program will provide for safety and surface improvements at railroad crossings along the north-south railroad corridor. Basic safety features desired at each crossing include two-quadrant vehicle gates, mounted flashing lights, and constant warning time detection. Union Pacific Railroad (UPRR) has confirmed that these features are in place at the 13th Street, 20th Street, and 24th Street crossings. The first two years of this program provide for installation of these improvements at 16th Street and 9th Street, respectively (16th Street was completed in 2007/08). Raised barrier medians are also a valuable safety feature. The 2009/10 program includes median installation at 13th Street, 20th Street, and 24th Street. These are the locations where medians may be placed without negatively affecting existing access.

COMMENTS

The primary goal of this program is to enhance safety along the north-south UPRR corridor. It is anticipated that Railroad Safety Grant funds may be available for many of these projects. The base safety features for the Bloomington Road crossing were included in the Bloomington Road widening project (2007/08).

LOCATION

2008/09 9th Street/UPRR crossing – Map 5, location K-10
2009/10 Median installation at 13th Street – Map 5, location K-9; 20th Street – Map 5, location J-8; and 24th Street – Map 5, location J-8

Location and cost change is due to Council direction and updated estimates.

FISCAL YEAR PRIORITY		5	2			
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	60,000	50,000	10,000			
Construction	290,000	200,000	90,000			
	TOTAL	350,000	250,000	100,000		
FINANCING:						
Local Option Sales Tax	237,500	137,500	100,000			
Union Pacific Railroad	112,500	112,500				
	TOTAL	350,000	250,000	100,000		

PROGRAM – ACTIVITY:

Public Safety – Traffic

DEPARTMENT:

Public Works

ACCOUNT NO.

030-7506-429
320-7506-429

TRAFFIC SIGNAL PROGRAM

PROJECT STATUS: No 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:

- 2008/09 Lincoln Way/Sheldon Avenue signal replacement – Map 5, location H-11
- 2009/10 28th Street/Grand Avenue signal replacement – Map 2, location L-6
- 2010/11 Lincoln Way/Ash Avenue signal replacement – Map 5, location I-11
- 2011/12 Lincoln Way/Hayward Avenue signal replacement – Map 5, location H-11
- 2012/13 Lincoln Way/Hyland Avenue signal replacement – Map 5, location H-11

Proposed funding will typically cover one signal upgrade per year. Traffic signals proposed to be modified or added are evaluated and prioritized annually.

FISCAL YEAR PRIORITY		6	3	3	3	3
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	75,000	15,000	15,000	15,000	15,000	15,000
Construction	800,000	160,000	160,000	160,000	160,000	160,000
	TOTAL	875,000	175,000	175,000	175,000	175,000
FINANCING:						
Road Use Tax	875,000	175,000	175,000	175,000	175,000	175,000
	TOTAL	875,000	175,000	175,000	175,000	175,000

PROGRAM – ACTIVITY:
Public Safety – Traffic

DEPARTMENT:
Public Works

ACCOUNT NO.
060-7501-429

DESCRIPTION/JUSTIFICATION

The studies planned for this 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:

2008/09	Transportation Plan Update
2009/10	Multi-Modal Safety Study
2010/11	Accident Study
2011/12	Traffic Calming Study
2012/13	Origin Destination Study

The Transportation Plan, which is required to be updated every five years, meets a schedule in which the update will be done by October 1, 2010. The Multi-Modal Safety Study (2009/10) will look at the interaction of multiple transportation modes as well as update the safe routes to school plans and establish a Master Plan for crosswalks. The accident study (2010/11) will examine high accident locations and propose potential solutions to these accident concerns with future capital improvement projects. The Traffic Calming Study (2011/12) will explore and analyze measures to establish a Traffic Calming Informational Guide and Policy to be implemented in residential neighborhoods. The Origin Destination Study (2012/13) will collect data for enhancement of the Travel Demand Model.

Cost of the Transportation Plan Update (2008/09) includes the Transportation Model Calibration.

The cost change is due to including funding for future traffic engineering studies in 2011/12 and 2012/13.

FISCAL YEAR PRIORITY	TOTAL	7	4	4	4	4
		2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	650,000	400,000	100,000	50,000	50,000	50,000
TOTAL	650,000	400,000	100,000	50,000	50,000	50,000
FINANCING:						
Road Use Tax	250,000	80,000	20,000	50,000	50,000	50,000
MPO/Planning Funds	400,000	320,000	80,000			
TOTAL	650,000	400,000	100,000	50,000	50,000	50,000

PROGRAM – ACTIVITY:

Public Safety – Traffic

DEPARTMENT:

Public Works

ACCOUNT NO.

060-7504-429
320-7504-429

WEST LINCOLN WAY INTERSECTION IMPROVEMENTS

PROJECT STATUS: Delayed

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 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

- 2009/10 Franklin Avenue/Lincoln Way (construction) – Map 4, location G-11
- 2010/11 Dotson Drive/Lincoln Way (planning) – Map 4, location F-11
- 2011/12 Dotson Drive/Lincoln Way (construction) – Map 4, location F-11

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 2009/10.

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

FISCAL YEAR PRIORITY			5	5	5	
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
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	
	TOTAL	1,795,000	1,070,000	25,000	700,000	
FINANCING:						
G. O. Bonds	870,000		470,000		400,000	
Developer	700,000		400,000		300,000	
Iowa D.O.T Safety Grant	200,000		200,000			
Road Use Tax	25,000			25,000		
	TOTAL	1,795,000	1,070,000	25,000	700,000	

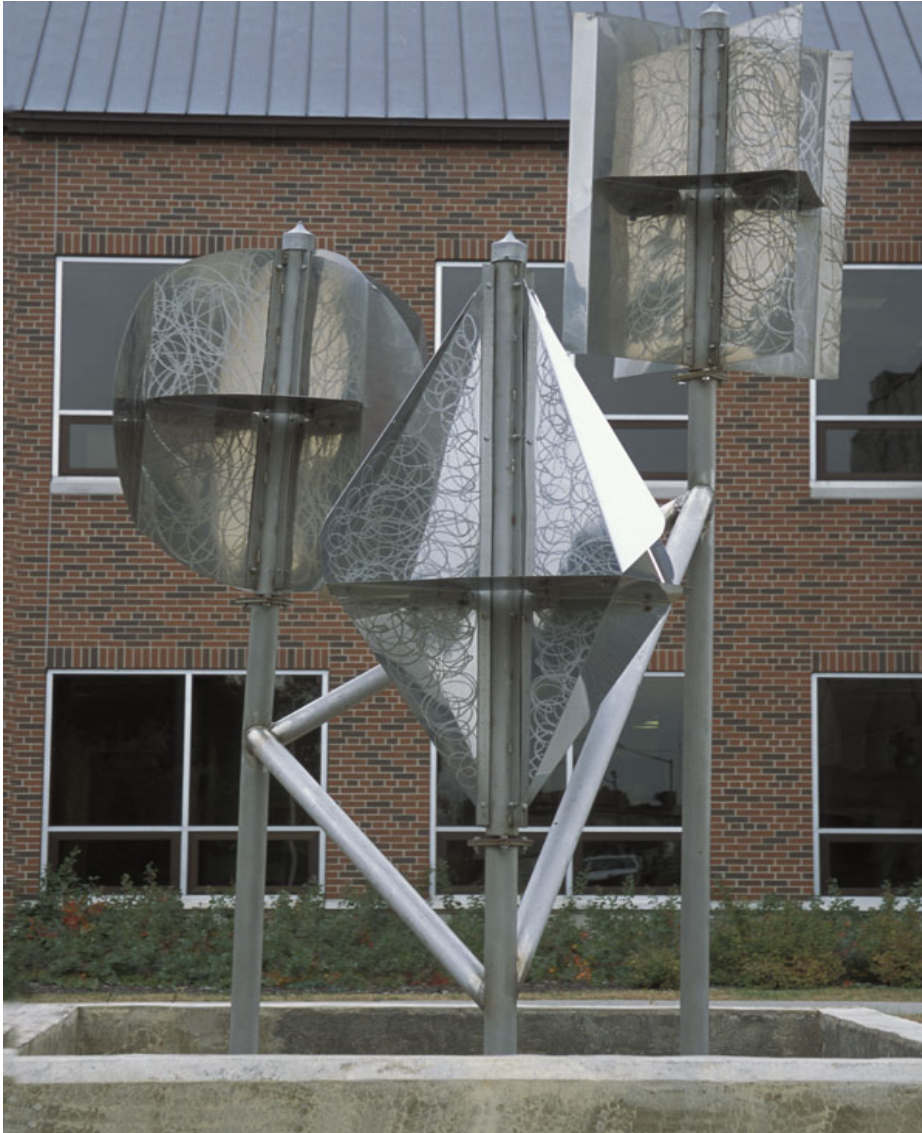
PROGRAM – ACTIVITY:

Public Safety – Traffic

DEPARTMENT:

Public Works

ACCOUNT NO.



Wind Spinners

By Harry Klessen, 1994

Water Treatment Plant
300 E. 5th Street

UTILITIES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
Resource Recovery	1,990,000	1,277,000	185,000	152,000	152,000	224,000	29
Water Treatment	37,840,000	2,050,000	3,825,000	10,640,000	17,650,000	3,675,000	32
Water Distribution	4,500,000	900,000	900,000	900,000	900,000	900,000	39
Storm Sewer	2,574,345	570,695	551,745	551,905	450,000	450,000	41
Sanitary Sewer	2,500,000	500,000	500,000	500,000	500,000	500,000	46
WPC Treatment	8,795,000	565,000	3,435,000	3,010,000	1,605,000	180,000	49
Electric	101,675,000	19,170,000	17,565,000	15,550,000	24,040,000	25,350,000	55
Total Expenditures	159,874,345	25,032,695	26,961,745	31,303,905	45,297,000	31,279,000	
REVENUES:							
Bonds:							
G.O. Bonds	7,675,000	1,500,000	4,250,000	1,100,000	825,000		
Water Revenue Bonds	28,100,000			10,150,000	15,150,000	2,800,000	
Electric Revenue Bonds	69,900,000	10,400,000	6,000,000	10,000,000	20,000,000	23,500,000	
Sub-Total Bonds	105,675,000	11,900,000	10,250,000	21,250,000	35,975,000	26,300,000	

UTILITIES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
REVENUES, continued:						
City:						
Resource Recovery Fund	1,165,000	452,000	185,000	152,000	152,000	224,000
Water Utility Fund	10,740,000	1,450,000	2,725,000	1,390,000	3,400,000	1,775,000
Sewer Utility Fund	6,440,000	1,065,000	1,685,000	1,730,000	1,280,000	680,000
Fleet Replacement Fund	680,000			680,000		
Storm Sewer Utility Fund	2,250,000	450,000	450,000	450,000	450,000	450,000
Electric Utility Fund	29,457,380	7,625,100	10,445,780	5,496,500	4,040,000	1,850,000
Sub-Total City Funds	50,732,380	11,042,100	15,490,780	9,898,500	9,322,000	4,979,000
Other:						
Iowa State University	2,337,620	1,149,900	1,124,220	63,500		
Iowa DNR SWAP Funds	825,000	825,000				
Watershed Improvement Review Board Grant	304,345	115,695	96,745	91,905		
Other Sub-Total	3,466,965	2,090,595	1,220,965	155,405		
Total Revenues	159,874,345	25,032,695	26,961,745	31,303,905	45,297,000	31,279,000

UTILITIES - RESOURCE RECOVERY

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Resource Recovery System Improvements	890,000	177,000	185,000	152,000	152,000	224,000	30
2 Resource Recovery Non-Ferrous System	1,100,000	1,100,000					31
Total Expenditures	1,990,000	1,277,000	185,000	152,000	152,000	224,000	
REVENUES:							
City:							
Resource Recovery Fund	1,165,000	452,000	185,000	152,000	152,000	224,000	
Other:							
Iowa DNR SWAP Funds	825,000	825,000					
Total Revenues	1,990,000	1,277,000	185,000	152,000	152,000	224,000	

RESOURCE RECOVERY SYSTEM IMPROVEMENTS

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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 sideliners #1 and #2 mills every three years. Resource Recovery personnel perform the work to complete the preventive maintenance projects.

COMMENTS

Proposed projects:

- 2008/09 #1 mill rotor rebuild (\$160,000); and a 20% rebuild of the C-1 conveyor (\$17,000)
- 2009/10 Process area sprinkler system replacement (\$40,000); HVAC improvements (\$60,000); #1 mill housing replacement (\$33,000); preventive maintenance materials for replacement of the #2 RDS rollers and chains (\$35,000); and a 20% rebuild of the C-1 conveyor (\$17,000)
- 2010/11 #1 mill sideliners (\$27,000); #1 mill breaker plate liners (\$11,000); shredder rotor (\$60,000); preventive maintenance materials for replacement of the #2 RDS rollers and chains (\$37,000); and a 20% rebuild of the C-1 conveyor (\$17,000)
- 2011/12 Purchase of property adjacent to the plant for facility expansion (\$100,000); preventive maintenance materials for replacement of #2 RDS rollers and chains (\$35,000); and a 20% rebuild of the C-1 conveyor (\$17,000)
- 2012/13 Purchase of property adjacent to the plant for facility expansion (\$150,000); 4160V switch gear back-up batteries (\$20,000); preventive maintenance materials for replacement of the #2 RDS rollers and chains (\$37,000); and a 20% rebuild of the C-1 conveyor (\$17,000)

Cost change is due to updated estimates and the addition of projects for 2012/13.

LOCATION

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

FISCAL YEAR PRIORITY	TOTAL	1	1	1	1	1
		2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	890,000	177,000	185,000	152,000	152,000	224,000
TOTAL	890,000	177,000	185,000	152,000	152,000	224,000
FINANCING:						
Resource Recovery Fund	890,000	177,000	185,000	152,000	152,000	224,000
TOTAL	890,000	177,000	185,000	152,000	152,000	224,000

PROGRAM – ACTIVITY:
Utilities - Resource Recovery

DEPARTMENT:
Public Works

ACCOUNT NO.
590-8903-489

DESCRIPTION/JUSTIFICATION

This program provides for the creation of a system at the Resource Recovery Plant to extract non-ferrous metal. This extraction of non-ferrous metal (aluminum, copper, brass and stainless steel) from the system will reduce the amount of material from the plant being landfilled and create a new revenue stream that can be used to finance the system. Initial testing provided data supporting a potential revenue stream of more than \$215,000 annually from this new system installation.

COMMENTS

Iowa Department of Natural Resources Solid Waste Alternative Program (SWAP) funding will provide a revenue-abated loan for the installation of the non-ferrous system. This loan will be provided with a 3% interest rate and a six-year repayment plan. A maximum of 75% of the project can be financed by this low-interest loan. Thus, the Resource Recovery Fund will provide an initial \$275,000 for the system in addition to the repayment of the project loan.

LOCATION

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

FISCAL YEAR PRIORITY						
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Design, Engineering & Construction	710,000	710,000				
Equipment	390,000	390,000				
TOTAL	1,100,000	1,100,000				
FINANCING:						
Resource Recovery Fund	275,000	275,000				
Iowa DNR SWAP Funds	825,000	825,000				
TOTAL	1,100,000	1,100,000				
PROGRAM – ACTIVITY:		DEPARTMENT:		ACCOUNT NO.		
Utilities - Resource Recovery		Public Works		590-8906-489		

UTILITIES - WATER TREATMENT

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Raw Well Water Loop Line	3,500,000	1,500,000	2,000,000				33
2 Water Plant Expansion	29,250,000	250,000	900,000	10,150,000	15,150,000	2,800,000	34
3 Water Plant Facility Improvements	890,000	300,000	375,000	90,000		125,000	35
4 Well Replacement	300,000		150,000			150,000	36
5 Repaint Bloomington Road Elevated Tank	400,000		400,000				37
6 Water Supply Expansion	3,500,000			400,000	2,500,000	600,000	38
Total Expenditures	37,840,000	2,050,000	3,825,000	10,640,000	17,650,000	3,675,000	
REVENUES:							
Bonds:							
G.O. Bonds	3,500,000	1,500,000	2,000,000				
Water Revenue Bonds	28,100,000			10,150,000	15,150,000	2,800,000	
Sub-Total Bonds	31,600,000	1,500,000	2,000,000			2,800,000	
City:							
Water Utility Fund	6,240,000	550,000	1,825,000	490,000	2,500,000	875,000	
Total Revenues	37,840,000	2,050,000	3,825,000	490,000	2,500,000	3,675,000	

RAW WELL WATER LOOP LINE

PROJECT STATUS: Cost Increase

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will loop the existing raw well water line extending from the Water Plant to the Southeast (SE) Well Field and the Youth Sports Complex (YSC) Well Field to increase carrying capacity and reliability.

COMMENTS

Currently, a single 24-inch water line delivers water from the 10 wells in the SE Well Field and YSC Well Field. This line has one rail crossing, one stream crossing, and three major street/road crossings which present the most likely locations for main breaks or service interruptions. These 10 wells represent approximately 65 percent of the city's current water supply capacity. This well line was designed in the early 1980s before the full amount of the future well capacity was known. It is now undersized for current full production capability of the existing wells and will be further restricted as new wells are constructed. This project covers the final two years of a three-year project with a total project cost of \$4,000,000.

Project schedule:

FY 07/08	Engineering, easements, permits	\$ 500,000
FY 08/09	Engineering, construction	1,500,000
FY 09/10	Construction	2,000,000
	Total	\$ 4,000,000

Looping this raw water line will provide three very important benefits as follows:

1. It will actually increase the productivity of the Southeast and Youth Sports Complex Well Fields by approximately one million gallons per day under peak demand by simply reducing friction losses.
2. It will provide backup redundancy for approximately 65 percent of the total supply capacity.
3. It extends the raw water piping system closer to the identified location of future well fields.

LOCATION

From Hunziker Youth Sports Complex east across the South Skunk River, then north across the Union Pacific Railroad, then west to the Water Treatment Plant. Exact alignment to be determined.

FISCAL YEAR PRIORITY	TOTAL	1 2008/09	1 2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	200,000	100,000	100,000			
Land/Easements	150,000	150,000				
Construction	3,150,000	1,250,000	1,900,000			
TOTAL	3,500,000	1,500,000	2,000,000			
FINANCING:						
G. O. Bonds	3,500,000	1,500,000	2,000,000			
TOTAL	3,500,000	1,500,000	2,000,000			

PROGRAM - ACTIVITY:
Utilities – Water Production

DEPARTMENT:
Water & Pollution Control

ACCOUNT NO.
369-3931-489

WATER PLANT EXPANSION**PROJECT STATUS:** Advanced

Cost Increase

City of Ames, Iowa
Capital Improvements Plan**DESCRIPTION/JUSTIFICATION**

The existing facility has numerous components dating back to the 1920s and 1930s. Many of these components are reaching the end of their useful life. That projected time is less than ten years away.

The timing for this expansion is being driven in large part by growth in seasonal peak water demand. Peak demand has increased steadily over the past five years. During July of 2007, the peak three-day demand reached 9.81 million gallons per day, or 82% of the treatment plant capacity. Design guidelines recommend that plant expansion planning begin when demand reaches 85% of the plant capacity. **At the current rate of growth, plant capacity will be reached in 2012.**

The first step in preparing for a plant expansion is proposed to begin in FY 08/09 with an alternatives analysis which will explore such options as renovating the existing plant, constructing a new plant at the existing plant site, constructing a new plant at a new site, or some combination of these three.

The cost estimates shown below assume the construction of a new 15 MGD plant at the existing plant site. The cost estimates are based on recent actual construction costs at similar sized water facilities in Iowa. **The ultimate construction costs will depend on the actual option determined to be most cost-effective during the alternatives analysis.**

COMMENTS

The anticipated project schedule and budget is as follows:

FY 2008/09	\$ 250,000	Alternative Analysis and Conceptual Design
FY 2009/10	900,000	Final Design and Bidding
FY 2010/11 – 2012/13	28,100,000	Construction
Total	\$ 29,250,000	

The current operating budget request includes marketing funds aimed at encouraging water conservation. **It will be critical to maintain the marketing efforts in order to ensure a sufficient reserve capacity while the new facility is being constructed.**

LOCATION

Water Plant, 300 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY		2	2	1	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	1,500,000	250,000	900,000	150,000	150,000	50,000
Construction	27,750,000			10,000,000	15,000,000	2,750,000
TOTAL	29,250,000	250,000	900,000	10,150,000	15,150,000	2,800,000
FINANCING:						
Water Utility Fund	1,150,000	250,000	900,000			
Water Revenue Bonds	28,100,000			10,150,000	15,150,000	2,800,000
TOTAL	29,250,000	250,000	900,000	10,150,000	15,150,000	2,800,000

PROGRAM - ACTIVITY:
Utilities – Water Treatment

DEPARTMENT:
Water & Pollution Control

ACCOUNT NO.
510-3933-489

WATER PLANT FACILITY IMPROVEMENTS

PROJECT STATUS: Cost Change

Name Change

City of Ames, Iowa
Capital Improvements Plan

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:

- 08/09 Electrical repairs at NADC Pump Station (\$50,000)
- 08/09 SAM Pump Station VFD (\$50,000)
- 08/09 Redundant electrical feed at SAM Pump Station (\$200,000)
- 09/10 Removal of 3/4-MG Reservoir (\$300,000)
- 09/10 Ammonia Feed System Construction (\$75,000)
- 10/11 Extend Security System to Remote Sites (\$90,000)
- 12/13 Extend Security System to Remote Sites (\$125,000)

Additional improvements will be identified for future years. The schedule may change in response to impending failure, regulatory agency requirements, etc. The first-year activities are identical to what was shown for FY 08/09 in last year's CIP. The cost change is due to new activities projected for later years. If the Water Plant expansion does not proceed as envisioned, then a "Fire Protection System at Water Plant and High Service Pump Station" (\$160,000) is recommended for FY 09/10.

LOCATION

Water Plant, 300 East 5th Street, Building 1 - Map 5, location N-11

FISCAL YEAR PRIORITY		3	3	3	3	
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Equipment	890,000	300,000	375,000	90,000		125,000
TOTAL	890,000	300,000	375,000	90,000		125,000
FINANCING:						
Water Utility Fund	890,000	300,000	375,000	90,000		125,000
TOTAL	890,000	300,000	375,000	90,000		125,000

PROGRAM - ACTIVITY:
Utilities - Water Treatment

DEPARTMENT:
Water & Pollution Control

ACCOUNT NO.
Multiple

WELL REPLACEMENT

PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project provides for replacing/redrilling existing water supply wells to maintain the capacity of the current well fields. Presently, 22 potable supply wells are used to meet water demand.

COMMENTS

A rehabilitation program is included in the operating budget (approximately \$90,000 annually) to rejuvenate four or five wells each year. Unfortunately, rejuvenation may only be cost-effective a few times before complete replacement becomes the best option. In addition, there may be other reasons (i.e. well screen/casing failure, contamination, etc.) that an existing well should be replaced. Repair of the raw water pipelines and valves is also covered by this project in order to maintain overall supply capacity/efficiency. None of the existing wells require replacement at this time, but eight wells are more than 30 years old, seven wells have been in service between 15 to 29 years, while only seven wells have less than 10 years of service. All wells are regularly evaluated to determine if replacement is the best option to regain lost capacity.

At this time, no wells are identified for replacement. Funding is shown in case well failures occur so that replacement can be initiated at the earliest opportunity.

LOCATION

FY 09/10 Site to be determined; as needed
FY 12/13 Site to be determined; as needed

FISCAL YEAR PRIORITY	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:			5			4
Engineering/Architects	40,000		20,000			20,000
Construction	260,000		130,000			130,000
TOTAL	300,000		150,000			150,000
FINANCING:						
Water Utility Fund	300,000		150,000			150,000
TOTAL	300,000		150,000			150,000

PROGRAM - ACTIVITY:
Utilities - Water Production

DEPARTMENT:
Water & Pollution Control

ACCOUNT NO.

DESCRIPTION/JUSTIFICATION

This project provides for repainting of the Bloomington Road Elevated Tank (BRET).

COMMENTS

The elevated water tank on Bloomington Road was placed in service in 1989. Internal and external paint systems usually last for 15 to 20 years before repainting is necessary to protect the steel from corrosion and maintain the appearance. The original coating system is beginning to fail, and the tank needs to be repainted. The cost estimate includes approximately \$200,000 to pay for enclosing the sandblasting and painting operation to minimize dust and paint splatter complaints, with the balance covering the sandblasting and painting cost.

The project was accelerated one year from the schedule shown in last year's CIP in order to move both the work load and the expense ahead of the major Water Treatment Plant Expansion Project. The ultimate timing will depend on the completion date for the new elevated tank under construction at State Avenue and Mortensen Road.

LOCATION

2521 Bloomington Road – Map 2, location I-5

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:				6			
Engineering		75,000		75,000			
Construction		325,000		325,000			
	TOTAL	400,000		400,000			
FINANCING:							
Water Utility Fund		400,000		400,000			
	TOTAL	400,000		400,000			

PROGRAM - ACTIVITY:
Utilities – Water Pumping

DEPARTMENT:
Water and Pollution Control

ACCOUNT NO.

WATER SUPPLY EXPANSION

PROJECT STATUS: Delayed

Cost Increase

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will expand the capacity of the source water supply by beginning development of the Interstate 35 Well Field. The final three wells at the Hunziker Youth Sports Complex were completed during the summer of 2007. The currently developed water supply is adequate to meet estimated municipal demands until approximately 2015±. To allow sufficient reserve capacity, development of the next well field is proposed to begin in 2010.

COMMENTS

Three well field areas were previously identified south of Highway 30 in the South Skunk River floodplain. One area is in the Hunziker Youth Sports Complex; one area is south of the Highway 30 & South Dayton Avenue interchange; and one area is east of I-35 just north of the South Skunk River. The Hunziker Youth Sports Complex wells were completed in 2007. Although the South Dayton Well Field (estimated 2 mgd sustainable drought yield) is closer and less expensive to develop, staff recommend bypassing this source at this time due to the existence of an active gravel mining operation. This project begins the development of the I-35 Well Field.

Current estimates are that the I-35 Well Field can provide a 6 mgd sustainable drought capacity (total of four wells). Each well will cost approximately \$250,000, while the design, pipeline, and easements are estimated at \$3,000,000. Only two of the four wells are included at this time. The timing for the additional two wells will be driven by growth in water demand. The Water Plant operating budget request includes funds for marketing activities aimed at managing peak demands. **If the peak demands continue to rise sharply, then the remaining two wells will also be needed much sooner than anticipated.** Each new well increases operation expenses by \$25,000 per year for power, communication, parts and supplies, etc.

- FY 10/11 Design and easements for I-35 Well Field
- FY 11/12 Construct pipeline and design wells
- FY 12/13 Construct two new wells – adds 3 million gallons per day under drought conditions

LOCATION

Future wells will be located east of I-35 and south of Highway 30 on property purchased in 2000.

FISCAL YEAR PRIORITY						
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering/Architects	275,000			75,000	100,000	100,000
Easements	125,000			125,000		
Construction	3,100,000			200,000	2,400,000	500,000
TOTAL	3,500,000			400,000	2,500,000	600,000
FINANCING:						
Water Utility Fund	3,500,000			400,000	2,500,000	600,000
TOTAL	3,500,000			400,000	2,500,000	600,000

PROGRAM - ACTIVITY:
Utilities - Water Production

DEPARTMENT:
Water & Pollution Control

ACCOUNT NO.

UTILITIES - WATER DISTRIBUTION

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Water System Improvements	4,500,000	900,000	900,000	900,000	900,000	900,000	40
Total Expenditures	4,500,000	900,000	900,000	900,000	900,000	900,000	
REVENUES:							
Water Utility Fund	4,500,000	900,000	900,000	900,000	900,000	900,000	
Total Revenues	4,500,000	900,000	900,000	900,000	900,000	900,000	

WATER SYSTEM IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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 2008/09:

- Orchard Drive – Map 5, location K-9
- East Pressure Zone Loop (Billy Sunday Road to Diamond Street) – Map 9, location N-15
- Burnett Avenue (Main Street to 6th Street) – Map 5, location M-11
- Kellogg Avenue (Main Street to 7th Street) – Map 5, location M-11

Water service transfer locations identified for 2008/09:

- 16th Street (Burnett Avenue to Duff Avenue) – Map 5, location M-9
- Ash Avenue (Lincoln Way to Knapp Avenue) – Map 5, location I-11

Planning costs for each yearly project are shown in the year prior to anticipated construction; engineering/inspection costs appear during the year of construction.

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

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Planning	150,000	30,000	30,000	30,000	30,000	30,000
Engineering	150,000	30,000	30,000	30,000	30,000	30,000
Construction	4,200,000	840,000	840,000	840,000	840,000	840,000
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:
Utilities – Water Distribution

DEPARTMENT:
Public Works

ACCOUNT NO.
510-8453-489

UTILITIES - STORM SEWER

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Low Point Drainage Improvements	500,000	100,000	100,000	100,000	100,000	100,000	42
2 Intake Rehabilitation Program	750,000	150,000	150,000	150,000	150,000	150,000	43
3 Storm Sewer Outlet Erosion Control	824,345	220,695	201,745	201,905	100,000	100,000	44
4 Storm Water Facility Rehabilitation Program	500,000	100,000	100,000	100,000	100,000	100,000	45
Total Expenditures	2,574,345	570,695	551,745	551,905	450,000	450,000	
REVENUES:							
City:							
Storm Sewer Utility Fund	2,250,000	450,000	450,000	450,000	450,000	450,000	
Other:							
Iowa State University (in-kind)	20,000	5,000	5,000	10,000			
Watershed Improvement Review Board Grant	304,345	115,695	96,745	91,905			
Other Sub-Total	324,345	120,695	101,745	101,905			
Total Revenues	2,574,345	570,695	551,745	551,905	450,000	450,000	

LOW POINT DRAINAGE IMPROVEMENTS

PROJECT STATUS: Site Change

City of Ames, Iowa
Capital Improvements Plan

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.

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

- 2008/09 Billy Sunday Road – Map 9, location N-14
- 2009/10 Crystal Street (along east corporate limits) – Map 9, location N-15
- 2010/11 Ironwood Court – Map 8, location I-14
- 2011/12 Little Bluestem Court – Map 5, location I-13
- 2012/13 South 2nd Street/Oak Avenue area – Map 5, location L-11

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.

The locations have been reorganized to better coordinate with street rehabilitation schedules.

FISCAL YEAR PRIORITY			1	1	1	1	1
	TOTAL		2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Planning	25,000		5,000	5,000	5,000	5,000	5,000
Engineering	50,000		10,000	10,000	10,000	10,000	10,000
Construction	425,000		85,000	85,000	85,000	85,000	85,000
	TOTAL	500,000	100,000	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
	TOTAL	500,000	100,000	100,000	100,000	100,000	100,000

PROGRAM - ACTIVITY:
Utilities - Storm Sewer

DEPARTMENT:
Public Works

ACCOUNT NO.
560-8685-489

STORM SEWER INTAKE REHABILITATION PROGRAM

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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.

Except for cleaning and inspecting storm sewer intakes on a five-year rotation, the storm sewer system has had little maintenance since its installation 80 to 100 years ago. The 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. It will result in an upgrading of all substandard intakes within twenty years. 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.

COMMENTS

Delay of this program will lead to unsafe drainage structures in the gutter sections of many streets.

FISCAL YEAR PRIORITY		2	2	2	2	2
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Planning	25,000	5,000	5,000	5,000	5,000	5,000
Engineering	25,000	5,000	5,000	5,000	5,000	5,000
Construction	700,000	140,000	140,000	140,000	140,000	140,000
	TOTAL	750,000	150,000	150,000	150,000	150,000
FINANCING:						
Storm Sewer Utility Fund	750,000	150,000	150,000	150,000	150,000	150,000
	TOTAL	750,000	150,000	150,000	150,000	150,000

PROGRAM - ACTIVITY:
Utilities - Storm Sewer

DEPARTMENT:
Public Works

ACCOUNT NO.
560-8686-489

STORM SEWER OUTLET EROSION CONTROL

PROJECT STATUS: Cost Change

Revenue Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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 further be 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 from 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 has been 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.

LOCATION

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

FISCAL YEAR PRIORITY		3		3	3	3	3
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	
COST:							
Public Education/Outreach	21,000	7,000	7,000	7,000			
Engineering	110,000	30,000	30,000	30,000	10,000	10,000	
Construction	667,345	167,695	160,345	159,305	90,000	90,000	
Monitoring and Maintenance	26,000	16,000	4,400	5,600			
	TOTAL	824,345	220,695	201,745	201,905	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)	20,000	5,000	5,000	10,000			
Watershed Improvement Review Board Grant	304,345	115,695	96,745	91,905			
	TOTAL	824,345	220,695	201,745	201,905	100,000	100,000

PROGRAM - ACTIVITY:

Utilities - Storm Sewer

DEPARTMENT:

Public Works

ACCOUNT NO.

560-8687-489

STORM WATER FACILITY REHABILITATION PROGRAM

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

In accordance with the Ames City 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 developer's 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.

COMMENTS

Proposed locations:	2008/09	Eastgate Subdivision – Map 6, location Q-9
	2009/10	Moore Memorial Park – Map 5, location H-8
	2010/11	Gateway Hotel – Map 8, location J-15
	2011/12	Bloomington Heights West Subdivision – Map 2, location I-5
	2012/13	Somerset Subdivision – Map 2, location I-7

FISCAL YEAR PRIORITY		4	4	4	4	4
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
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
	TOTAL	500,000	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
	TOTAL	500,000	100,000	100,000	100,000	100,000

PROGRAM - ACTIVITY:
Utilities – Storm Sewer

DEPARTMENT:
Public Works

ACCOUNT NO.
560-8688-489

UTILITIES - SANITARY SEWER

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Sanitary Sewer Rehabilitation Program	1,500,000	300,000	300,000	300,000	300,000	300,000	47
2 Clear Water Diversion	1,000,000	200,000	200,000	200,000	200,000	200,000	48
Total Expenditures	2,500,000	500,000	500,000	500,000	500,000	500,000	
REVENUES:							
Sewer Utility Fund	2,500,000	500,000	500,000	500,000	500,000	500,000	
Total Revenues	2,500,000	500,000	500,000	500,000	500,000	500,000	

SANITARY SEWER REHABILITATION PROGRAM

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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

A 1995/96 Inflow and Infiltration Study identified work activities in which an increased emphasis (through this program) proved cost effective in reducing peak flows. 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.

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.

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Planning	50,000	10,000	10,000	10,000	10,000	10,000
Engineering	50,000	10,000	10,000	10,000	10,000	10,000
Construction	1,400,000	280,000	280,000	280,000	280,000	280,000
TOTAL	1,500,000	300,000	300,000	300,000	300,000	300,000
FINANCING:						
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:
Utilities - Sanitary Sewer

DEPARTMENT:
Public Works

ACCOUNT NO.
520-8535-489

CLEAR WATER DIVERSION

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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

Clear water from footing drains causes overloading and backups in the sanitary sewer as well as increases in the volume of clean water that is treated at the sewage treatment facility. The Clear Water Diversion program 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 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. 2,155 footing drain grants have been issued to property owners under this program as of October 1, 2007, and over 1,400 property owners are still eligible to participate.

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.

FISCAL YEAR PRIORITY		2	2	2	2	2
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Planning	50,000	10,000	10,000	10,000	10,000	10,000
Engineering	100,000	20,000	20,000	20,000	20,000	20,000
Construction	850,000	170,000	170,000	170,000	170,000	170,000
	TOTAL	1,000,000	200,000	200,000	200,000	200,000
FINANCING:						
Sewer Utility Fund	1,000,000	200,000	200,000	200,000	200,000	200,000
	TOTAL	1,000,000	200,000	200,000	200,000	200,000
PROGRAM - ACTIVITY:	DEPARTMENT:		ACCOUNT NO.			
Utilities - Sanitary Sewer	Public Works		520-8578-489			

UTILITIES - WATER POLLUTION CONTROL

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 WPC Plant Disinfection	3,000,000	30,000	2,250,000	720,000			50
2 WPC Plant Facility Improvements	2,315,000	485,000	360,000	510,000	780,000	180,000	51
3 WPC Plant Residuals Handling Improvements	1,255,000	50,000	525,000	680,000			52
4 WPC Plant Automation Upgrade - Phase II	300,000		300,000				53
5 WPC Plant Alternative Energy	1,925,000			1,100,000	825,000		54
Total Expenditures	8,795,000	565,000	3,435,000	3,010,000	1,605,000	180,000	
REVENUES:							
Bonds:							
G.O. Bonds	4,175,000		2,250,000	1,100,000	825,000		
City:							
Sewer Utility Fund	3,940,000	565,000	1,185,000	1,230,000	780,000	180,000	
Fleet Replacement Fund	680,000			680,000			
City Sub-Total	4,620,000	565,000	1,185,000	1,910,000	780,000	180,000	

WPC PLANT DISINFECTION

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will install a disinfection system at the Water Pollution Control Plant. Disinfection will become a mandatory requirement when a new NPDES permit for the plant is issued by the Iowa Department of Natural Resources. This project was previously shown as part of a larger WPC Plant Expansion Project.

COMMENTS

The Iowa Department of Natural Resources 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.

Because this is a new requirement, staff will ask the IDNR to provide a compliance schedule in the new permit to allow the disinfection system to be properly designed and constructed. This project will start the design process with a conceptual engineering study that will confirm the most appropriate disinfection technology (ultra-violet light, ozone, chlorine, etc.) and a period of pilot testing to allow the new system to be properly sized.

Depending on the type of disinfection system installed, the plant may experience a significant increase in electrical demand. For example, the addition of an ultra-violet system could result in a seasonal increase in electricity needs on the order of 25 percent. While not an immediate operational concern, replacement of components such as UV lamps could cause future increases of \$150,000 annually in parts and labor.

LOCATION

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

FISCAL YEAR PRIORITY			1	1	1		
	TOTAL		2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Engineering	200,000		30,000	150,000	20,000		
Construction	2,800,000			2,100,000	700,000		
	TOTAL	3,000,000	30,000	2,250,000	720,000		
FINANCING:							
G. O. Bonds	2,250,000			2,250,000			
Sewer Utility Fund	750,000		30,000		720,000		
	TOTAL	3,000,000	30,000	2,250,000	720,000		

PROGRAM - ACTIVITY:

Utilities – WPC Plant

DEPARTMENT:

Water & Pollution Control

ACCOUNT NO.

520-3431-489

WPC PLANT FACILITY IMPROVEMENTS

PROJECT STATUS: Cost Change

Name 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:

- 08/09-10/11 Clarifier Painting: Years two through four of a four-year project. Each year includes painting two clarifiers at an estimated cost of \$90,000 per clarifier.
- 08/09-12/13 Vertical Turbine Pump Replacement: Years one through five of a five-year project. Each year includes replacing three of the 14 vertical turbine pumps in the Raw Water and Trickling Filter Pump Stations at an estimated cost of \$60,000 per pump.
- 08/09 Raw Water Pump Station HVAC: Replace deteriorated heat recovery system, \$125,000
- 10/11 Rebuild South Dayton Avenue Lift Station: Includes pumps, motors, and chemical dosing system, \$150,000
- 11/12 Digester Lid Painting: Repaint the covers on two Primary Digesters and one Secondary Digester, \$200,000
- 11/12 Bar Screen/Grinder: Replace the "pilot test" equipment in the center channel, \$400,000

As the WPC Plant continues to mature, the size of this equipment repair, maintenance, and replacement project continues to grow. Additional repairs will be identified in future years. The schedule may change in response to impending failure, regulatory agency requirements, etc.

LOCATION

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

FISCAL YEAR PRIORITY		2	2	2	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Equipment – Pumps	900,000	180,000	180,000	180,000	180,000	180,000
Equipment – Bar Screen	400,000				400,000	
Equipment – Pump Station	150,000			150,000		
Equipment – RWPS Heat Recovery	125,000	125,000				
Construction – Painting	740,000	180,000	180,000	180,000	200,000	
TOTAL	2,315,000	485,000	360,000	510,000	780,000	180,000
FINANCING:						
Sewer Utility Fund	2,315,000	485,000	360,000	510,000	780,000	180,000
TOTAL	2,315,000	485,000	360,000	510,000	780,000	180,000

PROGRAM - ACTIVITY:

Utilities - WPC Plant

DEPARTMENT:

Water & Pollution Control

ACCOUNT NO.

Multiple

DESCRIPTION/JUSTIFICATION

This project provides for improvements to the solids handling component of the WPC Plant operation. This project begins 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. Future regulatory changes will require the facility to achieve a higher level of nutrient removal efficiency from the liquid phase, with a resulting 25 percent increase in the volume of solids generated. It is also anticipated that restrictions in land application rates could lead to the need for as much as five times the number of acres used for land application.

The evaluation phase (2008/09) will study the impact of upcoming nutrient standards, evaluate continued city operation of the land application program versus contracting with a private firm, the benefits of additional farm ground purchase versus long-term lease contracts, the cost-effectiveness of continuing to haul large quantities of wet sludge versus the fuel savings of dewatering and hauling dry sludge, and ultimately the advisability of spending \$680,000 to replace the aging land application equipment.

This project is an expansion of the Biosolids Storage/Thickening Project shown in last year's CIP. The timing is consistent with the schedule shown last year. The cost has increased due to the change in project scope. The initial phase is a feasibility study and will have no impact on the operating budget. The FY 09/10 expense anticipates some form of sludge storage and handling improvements, and FY 10/11 anticipates replacing the AgChem Terragators. **The decision to move forward with any specific future project will depend on the outcome of the evaluation phase.**

LOCATION

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

FISCAL YEAR PRIORITY						
	TOTAL	3 2008/09	3 2009/10	3 2010/11	2011/12	2012/13
COST:						
Engineering	75,000	50,000	25,000			
Construction	500,000		500,000			
Equipment – Terragators	680,000			680,000		
TOTAL	1,255,000	50,000	525,000	680,000		
FINANCING:						
Sewer Utility Fund	575,000	50,000	525,000			
Fleet Replacement Fund – Terragators	680,000			680,000		
TOTAL	1,255,000	50,000	525,000	680,000		

PROGRAM - ACTIVITY:

Utilities – WPC Plant

DEPARTMENT:

Water & Pollution Control

ACCOUNT NO.

520-3434-489

DESCRIPTION/JUSTIFICATION

This project provides for the replacement and upgrade of the WPC Plant supervisory control and data acquisition (SCADA) system originally installed in 1989.

COMMENTS

The original plant monitoring system was a sole-source proprietary system that provided mostly data-logging, with very limited report generation or plant control and operation functionality. Maintenance and support of the old system had become difficult to obtain and increasingly expensive as the controls industry had migrated to substantially newer technology.

A team of plant personnel and an engineering consultant reviewed the original system in 2003-04 and determined that complete replacement and phased transition to a new PLC- (programmable logic controller) based system was the best option offering the most flexibility, greater operational control capability, and the most cost-effective approach to upgrade and enhance the plant's SCADA system. Phase I, replacement of the main control system, was completed in 2007. The focus of this second phase moves out of the operator's control room and into the treatment portions of the plant with new field sensors and controllers.

FY 05/06	Phase I Engineering/Design	\$ 58,858
FY 06/07 to 07/08	Phase I Construction	\$ 343,618
FY 09/10	Phase II Engineering and Construction	\$ 300,000

Operating expenses for SCADA maintenance have been reduced in recent years' operating budgets in anticipation of the complete system replacement. Once the new system is complete, there will be a modest increase in operating expenses as more normal maintenance activities are resumed.

LOCATION

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

FISCAL YEAR PRIORITY	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:			4			
Engineering	40,000		40,000			
Equipment	260,000		260,000			
TOTAL	300,000		300,000			
FINANCING:						
Sewer Utility Fund	300,000		300,000			
TOTAL	300,000		300,000			

PROGRAM - ACTIVITY:
Utilities – WPC Plant

DEPARTMENT:
Water & Pollution Control

ACCOUNT NO.
520-3416-489

DESCRIPTION/JUSTIFICATION

This project provides for an evaluation of alternative energy options for the Water Pollution Control Plant. It includes the WPC Wind Turbine/Generator project which had previously been shown as a stand-alone project and broadens the scope to include evaluating other options to both reduce the current energy needs and/or provide additional renewable energy sources for the facility.

COMMENTS

An engineering evaluation was performed in 1999 to review the energy efficiency of the WPC Plant and to explore options for using alternative energy sources. The study evaluated the feasibility and cost-effectiveness of providing wind, solar, and hydro-electric power, as well as retrofitting lighting and upgrading to premium efficiency motors. At that time, it was determined to not be cost-effective to move forward with any of those alternatives. A couple of changes prompt staff to now revisit this project. First, electrical rates from the rural electric co-op have increased in recent years, possibly improving the cost feasibility of alternative sources. Second, the pending installation of disinfection may result in a substantial increase in the electrical power needs of the facility.

The project schedule has been delayed from the Wind Turbine/Generator project shown in last year's CIP. This was done in order to balance both the overall department CIP budget and the workload for the engineering staff when disinfection moved forward as a higher priority in early years. When this project was originally conceived in the mid-1990s, a 250KW generator was envisioned. The market for this equipment has shifted significantly in recent years, and smaller turbines are no longer readily available. The cost increase now anticipates a 1.5MW unit. **The ultimate recommendation on whether or not to proceed with any specific option will depend on the outcome of the financial feasibility study and on its fiscal priority relative to other projects.**

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Engineering		175,000			100,000	75,000	
Construction		1,750,000			1,000,000	750,000	
	TOTAL	1,925,000			1,100,000	825,000	
FINANCING:							
G. O. Bonds		1,925,000			1,100,000	825,000	
	TOTAL	1,925,000			1,100,000	825,000	

PROGRAM - ACTIVITY:
Utilities - WPC Plant

DEPARTMENT:
Water and Pollution Control

ACCOUNT NO.

UTILITIES - ELECTRIC PRODUCTION

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
Electric Services:							
12 Demand Side Management Programs	3,800,000	600,000	800,000	800,000	800,000	800,000	68
13 SCADA Upgrade	100,000	100,000					69
Transmission:							
4 Mid-American/Alliant Interconnection	9,800,000	4,900,000	4,900,000				60
10 Cyber Security Risk Assessment	200,000	100,000	100,000				66
11 Top-O-Hollow Substation Switch Addition 69 kV Switchyard Relay/Control	350,000	350,000					67
18 Replacement	330,000		80,000	250,000			74
Distribution/Relocates:							
9 Downtown Network 13.8 kV Conversion	450,000	150,000	150,000	150,000			65
14 Street Light and Line Relocations	965,000	85,000	285,000	125,000	420,000	50,000	70
23 Ames Plant Substation Expansion	2,150,000			150,000	2,000,000		79
Power Plant:							
1 Unit #8 Nitrogen Oxide Control Capital	2,800,000	2,800,000					57
2 Unit #8 Mercury Emission Monitoring System	500,000	500,000					58
3 Unit #8 Mercury Capital	1,500,000	1,500,000					59
5 Units #7 & #8 DCS Upgrade	500,000	500,000					61
6 Base Load Generating Capacity	62,500,000	3,000,000	6,000,000	10,000,000	20,000,000	23,500,000	62
7 Unit #7 Nitrogen Oxide Control Capital	1,400,000	1,400,000					63
8 Unit #8 Boiler Tube Repair	9,300,000	3,100,000	3,200,000	3,000,000			64
15 Unit #7 Precipitator Enclosure	85,000	85,000					71

UTILITIES - ELECTRIC PRODUCTION, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES, continued:							
Power Plant (continued):							
16 Unit #7 Mercury Capital	1,000,000		1,000,000				72
17 Gas Turbine #1 Inspection & Overhaul	525,000		400,000	125,000			73
19 Power Plant Fire Protection System	920,000		300,000	300,000	320,000		75
20 Unit #8 Feedwater Heater Tube Replacement	350,000		350,000				76
21 Unit #8 Turbine Generator 5-Year Overhaul	400,000			400,000			77
22 RDF Bin Work	250,000			250,000			78
24 Unit #7 Boiler Tube Repair	1,500,000				500,000	1,000,000	80
Total Expenditures	101,675,000	19,170,000	17,565,000	15,550,000	24,040,000	25,350,000	
REVENUES:							
Bonds:							
Electric Revenue Bonds	69,900,000	10,400,000	6,000,000	10,000,000	20,000,000	23,500,000	
City:							
Electric Utility Fund	29,457,380	7,625,100	10,445,780	5,496,500	4,040,000	1,850,000	
Other:							
Iowa State University	2,317,620	1,144,900	1,119,220	53,500			
Total Revenues	101,675,000	19,170,000	17,565,000	15,550,000	24,040,000	25,350,000	

DESCRIPTION/JUSTIFICATION

New Environmental Protection Agency (EPA) rules require lower nitrogen oxide (NO_x) emissions on boiler #8. Nitrogen oxides form when fuel is burned at high temperatures as in an internal combustion engine or a coal fired power plant. Reducing emissions of NO_x is a component of the EPA's strategy for cleaner air. Plans by the EPA to reduce NO_x emissions by 2009 are being finalized. The NO_x from Unit #8 can be lowered by reducing the combustion temperature by means of modified burners and added fans. Detailed equipment cost estimates and specific design engineering work must be completed before the plan is begun for Ames. Equipment purchases will follow. The preliminary estimate for the total project is \$3,000,000. Even with this capital investment, Electric Services will have to purchase a substantial amount of NO_x allowances each year to comply with EPA guidelines. These allowances are reflected in the Fuel and Purchased Power section of the operating budget.

COMMENTS

Modifications to lower NO_x emissions on boiler #8 = \$3,000,000

FY 07/08	Engineering	\$ 200,000
FY 08/09	Materials and Equipment Installation	2,800,000
		\$ 3,000,000

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY		1				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Materials and Equipment Installation	2,800,000	2,800,000				
TOTAL	2,800,000	2,800,000				
FINANCING:						
Electric Revenue Bonds	2,800,000	2,800,000				
TOTAL	2,800,000	2,800,000				

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
531-4887-489

UNIT #8 MERCURY CONTINUOUS EMISSION MONITORING SYSTEM

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

New Environmental Protection Agency (EPA) rules require monitoring of mercury emissions by December 31, 2008, and reporting of emissions starting January 1, 2009. The Continuous Emission Monitoring System (CEMS) is required if a unit emits more than twenty-nine pounds of mercury per year. It is estimated that Unit #8 emits 35 pounds of mercury per year.

COMMENTS

#8 unit will require a mercury CEMS.

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY		2				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Equipment and Installation	500,000	500,000				
TOTAL	500,000	500,000				
FINANCING:						
Electric Utility Fund	500,000	500,000				
TOTAL	500,000	500,000				

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4896-489

UNIT #8 MERCURY CAPITAL

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

New Environmental Protection Agency rules require mercury reduction by January 1, 2010. If mercury reduction equipment is not in place, more allowances will need to be purchased. It is unclear at this time if this capital investment will totally eliminate the need to purchase allowances. Engineering for this project is budgeted for, and will be included as part of the NO_x Capital CIP.

COMMENTS

Unit #8 will require a mercury control.

LOCATION

Power Plant 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY			3				
	TOTAL		2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Equipment and Installation	1,500,000		1,500,000				
	TOTAL	1,500,000	1,500,000				
FINANCING:							
Electric Revenue Bonds	1,500,000		1,500,000				
	TOTAL	1,500,000	1,500,000				

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
531-4897-489

MID-AMERICAN ENERGY CO. INTERCONNECTION AND UPGRADE ALLIANT UTILITIES INTERCONNECTION

PROJECT STATUS: Cost Increase Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is to construct a 161kV line from Ames to Mid-American Energy Company's (MEC) 161kV switching station northwest of Ankeny, and to construct a 161kV transmission line with 13.8 kV underbuilt distribution from the Stange Road 161/69 kV substation to the Ames Plant 161/69 kV substation. 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 161 kV 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 161 kV 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 \$28,000,000 with \$ 5,992,000 in funding from Iowa State University, and \$22,008,000 from Electric Utility funding.

FY 03/04	Actual	\$ 14,572
FY 04/05	Actual	741,086
FY 05/06	Actual	6,663,462
FY 06/07	Actual	7,064,210
FY 07/08	Budget	<u>3,717,172</u>
	Total	\$18,200,502
FY 08/09	Amended	4,900,000
FY 09/10	Amended	<u>4,900,000</u>
	Total	28,000,000

LOCATION

A route between Ames Plant Substation and MEC 161kV switch station near Ankeny and a route between Stange Road Substation (Map 5, location H-8) and Ames Plant Substation (Map 5, location N-11) substantially following the route of the existing 69kV line between these substations.

FISCAL YEAR PRIORITY		4	1			
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Professional Service	400,000	200,000	200,000			
Construction	9,400,000	4,700,000	4,700,000			
	TOTAL	9,800,000	4,900,000	4,900,000		
FINANCING:						
Electric Utility Fund	7,702,800	3,851,400	3,851,400			
Iowa State University	2,097,200	1,048,600	1,048,600			
	TOTAL	9,800,000	4,900,000	4,900,000		

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4871-489

UNITS #7 & #8 DISTRIBUTIVE CONTROL SYSTEM (DCS) UPGRADE

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The distributive control system software and some hardware on #7 and #8 boilers have become obsolete. These systems are critical to the operation of the units in that they actually transfer vital information from equipment in the field to the operator's control station. The reliability of these boilers can be greatly affected by failure of the system and the lack of available spare parts.

COMMENTS

The current system is a Westinghouse ovation system and the upgrade estimates used are preliminary. The Unit #8 boiler control will be upgraded first, followed by the control for Unit #7 boiler.

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY		5				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Equipment and Installation	500,000	500,000				
TOTAL	500,000	500,000				
FINANCING:						
Electric Utility Fund	500,000	500,000				
TOTAL	500,000	500,000				

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4820-489

BASE LOAD GENERATING CAPACITY

PROJECT STATUS: Cost Change Advanced

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

According to our most recent projections, the Electric Utility will need to increase its current capacity from 150 MW to 175 MW in generation capacity by 2015. The Burns and McDonnell study, which is in its final stages, is completing an in-depth analysis to explore four alternatives: 1) re-powering Units 7 and 8; 2) entering into a partnership or long-term contract with an outside utility; 3) building a new unit(s); or 4) a combination of these options.

Preliminary results in the Burns and McDonnell study indicate that Units #7 and #8 should be retained under any scenario. Capacity decisions in the next several months will involve choices in fuel source(s) for the additional 25 MW which will be needed (coal, natural gas, or other).

COMMENTS

The costs shown for this project have been updated to reflect the Burns and McDonnell study’s estimates. The cost estimates reflect either purchasing 25 MW or capacity from a new coal plant (\$2,500 kW) or constructing a 25 MW natural gas fired unit locally (\$1,500 kW).

Prior to any final decision being made as to the preferred course of action to meet our future electric demand, further analysis of options will take place over the next few months. Specifically, further study of the Power Plant regarding the remaining life of its components, re-powering options for the existing units, decommissioning costs, alternative fuel supply options for those units, and alternative refuse derived fuel (RDF) disposal options needs to be undertaken.

LOCATION

Power Plant 200 East 5th Street –Map 5, location N-11

FISCAL YEAR PRIORITY		6	3	2	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Joint Ownership	62,500,000	3,000,000	6,000,000	10,000,000	20,000,000	23,500,000
TOTAL	62,500,000	3,000,000	6,000,000	10,000,000	20,000,000	23,500,000
FINANCING:						
Electric Revenue Bonds	62,500,000	3,000,000	6,000,000	10,000,000	20,000,000	23,500,000
TOTAL	62,500,000	3,000,000	6,000,000	10,000,000	20,000,000	23,500,000

PROGRAM - ACTIVITY:
Utilities - Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
531-4824-489

DESCRIPTION/JUSTIFICATION

New Environmental Protection Agency (EPA) rules require lower nitrogen oxide (NO_x) emissions on boiler #7. Nitrogen oxides form when fuel is burned at high temperatures as in an internal combustion engine or a coal fired power plant. Reducing emissions of NO_x is a component of the EPA's strategy for cleaner air. Plans by the EPA to reduce NO_x emissions by 2009 are being finalized. The NO_x from Unit #7 will be lowered by reducing the combustion temperature by means of modified burners and added fans. Detailed equipment cost estimates and specific design engineering work must be completed before the plan is begun for Ames. Equipment purchases will follow. The preliminary estimate for the total project is \$1,500,000. Even with this capital investment, Electric Services will have to purchase NO_x allowances each year to comply with EPA guidelines. These allowances are reflected in the Fuel and Purchased Power section of the operating budget.

COMMENTS

Modifications to lower NO_x emissions on boiler #7 = \$1,500,000

FY 07/08	Engineering	\$ 100,000
FY 08/09	Materials and Equipment Installation	1,400,000
		\$ 1,500,000

LOCATION

Power Plant 200, East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY		7				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Materials and Equipment Installation	1,400,000	1,400,000				
TOTAL	1,400,000	1,400,000				
FINANCING:						
Electric Utility Fund	1,400,000	1,400,000				
TOTAL	1,400,000	1,400,000				

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4887-489

UNIT #8 BOILER TUBE REPAIR

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Unit #8 Boiler is over twenty years old and in need of tube repairs. The bottom fifty feet of the boiler needs to be replaced. Staff has devised a two-year plan for engineering and re-tubing sections of the boiler. The cost estimates include labor and materials.

During these repairs, it will be necessary for Electric Services to purchase power.

COMMENTS

Staff has done preliminary engineering with Utility Engineering Company.

FY 2008/09	Tube stock and tube panels	\$ 3,100,000
FY 2009/10	Tube stock, tube panels, and labor	3,200,000
FY 2010/11	Material and labor for installation	<u>3,000,000</u>
	Total	\$ 9,300,000

LOCATION

Power Plant, 200 East 5th Street - Map 5, location N-11

FISCAL YEAR PRIORITY		8	5	3			
		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Materials and Labor		9,200,000	3,000,000	3,200,000	3,000,000		
Engineering		100,000	100,000				
	TOTAL	9,300,000	3,100,000	3,200,000	3,000,000		
FINANCING:							
Electric Utility Fund		6,200,000		3,200,000	3,000,000		
Electric Revenue Bonds		3,100,000	3,100,000				
	TOTAL	9,300,000	3,100,000	3,200,000	3,000,000		

PROGRAM - ACTIVITY:
Utility - Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
531-4898-489

DESCRIPTION/JUSTIFICATION

This is a multi-year project to replace failing 4kV transformers and cable in the downtown 4kV network. The downtown area is within the boundaries of the railroad, 6th Street, Duff Avenue and Grand Avenue. The area is served by an underground 4kV network, a highly specialized system with obsolete components which can no longer be purchased through typical transformer and switchgear suppliers. This is the only area where network system components exist in the Ames electric system. While this system has served the City well, inspections have revealed significant corrosion of the network transformers. In recent years, there have been several cable and transformer failures which have been very difficult to repair.

In 2006, an effort was made to selectively replace failing transformers under normal operating and maintenance budgets. However, it has become apparent that a more comprehensive approach is needed to ensure continuity of service to downtown residents and businesses. Therefore, a multi-year project is proposed to replace all downtown network transformers and 4kV cables with standard 13.8kV cables and padmounted 13.8kV transformers. The first phase of work will replace four 4kV network transformers between 5th Street and 6th Street with conventional 13.8 kV padmounted transformers, and will replace the existing 4kV cables along those sections with standard 1/o aluminum 13.8 kV underground cables. As part of this work, deteriorated vault lids will also be replaced.

LOCATION

The downtown area encompassed by the railroad, 6th Street, Duff Avenue and Grand Avenue - Map 5, location M-11

FISCAL YEAR PRIORITY			9	6	10		
	TOTAL		2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Construction	450,000		150,000	150,000	150,000		
	TOTAL	450,000	150,000	150,000	150,000		
FINANCING:							
Electric Utility Fund	450,000		150,000	150,000	150,000		
	TOTAL	450,000	150,000	150,000	150,000		

PROGRAM - ACTIVITY:
Utilities – Electric Extension/Improvements

DEPARTMENT:
Electric

ACCOUNT NO.
530-4821-489

**CYBER SECURITY RISK ASSESSMENT & MRO
AUDIT PREPAREDNESS STUDY**

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is for outside engineering services to perform a cyber security risk assessment, perform a NERC (North-American Electric Reliability Corporation) compliance gap analysis, and an MRO (Midwest Reliability Organization) audit-preparedness assessment.

These studies are to help the City of Ames Electric Department prepare for an on-site audit by the MRO, currently scheduled for 2010. Outside services will be employed to help identify our readiness for compliance with applicable NERC standards that are approved by FERC (Federal Energy Regulatory Commission) and enforced by the MRO.

It is anticipated that outside help will also be needed to augment staff resources in the performance of certain administrative functions and in the development of new guidelines, procedures and mitigation measures needed to demonstrate compliance with the many new NERC regulations that were approved by FERC in 2007.

COMMENTS

The additional workload that will be placed on staff is not yet known, but it is anticipated that this effort will require assistance from City departments/divisions outside of Electric Administration, including Information Services, Finance Administration/Accounting, and Human Resources. New policies and procedures will need to be created along with new guidelines on how computer and information systems are interfaced and accessed (including aspects of network, Internet, communication and computer systems) as well as human interfaces and aspects of security management that have an impact on Power Plant and substation/transmission operation and control.

FISCAL YEAR PRIORITY			10	12			
	TOTAL		2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Engineering	200,000		100,000	100,000			
	TOTAL	200,000	100,000	100,000			
FINANCING:							
Electric Utility Fund	178,600		89,300	89,300			
Iowa State University	21,400		10,700	10,700			
	TOTAL	200,000	100,000	100,000			

PROGRAM - ACTIVITY:
Utilities – Electric Administration

DEPARTMENT:
Electric

ACCOUNT NO.
530-4822-489

TOP-O-HOLLOW SUBSTATION MOTOR OPERATED SWITCH ADDITION

PROJECT STATUS: Revenue Change Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is to add motor operated switches and related equipment to the Top-O-Hollow substation. The addition of these switches at the Top-O-Hollow substation will improve reliability of 69 kV transmission service to the substation. This will improve service for customers served by this substation.

Use of motor operated switches for 69 kV transmission service to distribution substations is consistent with good engineering practices in the electric utility industry. Expanding the existing substation requires land purchase, substation design, and construction.

COMMENTS

FY 2007/08	Engineering	\$	120,000
FY 2008/09	Construction		350,000
	Total	\$	470,000

LOCATION

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

FISCAL YEAR PRIORITY		11					
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	
COST:							
Construction	350,000	350,000					
	TOTAL	350,000	350,000				
FINANCING:							
Electric Utility Fund	275,100	275,100					
Iowa State University	74,900	74,900					
	TOTAL	350,000	350,000				

PROGRAM – ACTIVITY:
Utilities – Electric Extension/Improvements

DEPARTMENT:
Electric

ACCOUNT NO.
530-4882-489

**DEMAND SIDE MANAGEMENT (DSM)
ENERGY CONSERVATION PROGRAMS**

PROJECT STATUS: Cost Increase

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 weatherization
- Commercial high efficiency lighting rebates

New Demand Side Management programs under consideration are:

- Residential high efficiency lighting rebate program (compact fluorescent bulbs)
- Residential efficient appliance rebates
- Commercial custom rebates

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

New Load Management programs under consideration are:

- Upgrade of digital control unit (DCU) circuit boards
- Commercial power factor correction rebates
- Time-of-day rate design

LOCATION

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

FISCAL YEAR PRIORITY	TOTAL	12	7	6	4	3
COST:		2008/09	2009/10	2010/11	2011/12	2012/13
Program Development and Administration	3,800,000	600,000	800,000	800,000	800,000	800,000
TOTAL	3,800,000	600,000	800,000	800,000	800,000	800,000
FINANCING:						
Electric Utility Fund	3,800,000	600,000	800,000	800,000	800,000	800,000
TOTAL	3,800,000	600,000	800,000	800,000	800,000	800,000

PROGRAM – ACTIVITY:
Utilities – Electric Administration

DEPARTMENT:
Electric

ACCOUNT NO.
530-4815-489

SCADA UPGRADE

PROJECT STATUS: Cost Change

Revenue Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project will upgrade the Supervisory Control and Data Acquisition (SCADA) system at the Electric Power Plant. SCADA is a computer system for gathering and analyzing real time data. Our SCADA system is used to monitor and control the Plant and equipment. It gathers information, transfers the information to a central site, (carrying out necessary analysis and control, such as determining if a “change of state” is critical), and displaying the information in a logical and organized fashion. The cost and schedule for installation of the recommendations is as follows:

FY 2007/08	Hardware & Software pre-programming	\$	150,000
FY 2008/09	Equipment		<u>100,000</u>
		\$	250,000

Current equipment will be at the end of its useful life and will need to be replaced. The 2007/08 year of the project is hardware and software pre-programming and the 2008/09 year is for the balance of SCADA equipment to be replaced.

COMMENTS

SCADA is a critical component of the Power Plant operations in that it’s the operational and informational system for all field remote breaker operations in the distribution system.

The cost has been reduced from the 2007-2012 CIP because the existing SCADA system will be upgraded rather than completely replaced.

LOCATION

Power Plant – 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY		13				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Equipment and Software	100,000	100,000				
TOTAL	100,000	100,000				
FINANCING:						
Electric Utility Fund	89,300	89,300				
Iowa State University	10,700	10,700				
TOTAL	100,000	100,000				

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4885-489

STREET LIGHT AND LINE RELOCATIONS

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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

LOCATION

- 2008/09: Street light relocations – Burnett Avenue (Main Street to 7th Street) (\$35,000) – Map 5, location M-11
CyRide route improvements 13.8 kV line relocations (\$50,000) – various locations
- 2009/10: Street light relocations – Kellogg Avenue (Lincoln Way to 7th Street) (\$35,000) – Map 5, location M-11
CyRide route improvements 13.8 kV line relocations (\$50,000) – various locations
16th Street (Burnett Avenue to Duff Avenue) 13.8 kV line relocation (\$200,000) – Map 5, location M-9
- 2010/11: Street light relocations – Main Street (Allan Drive to Clark Avenue) (\$35,000) – Map 5, location L-11; Duff Avenue (Lincoln Way to 10th Street) (\$40,000) – Map 5, location M-11
CyRide route improvements 13.8 kV line relocations (\$50,000) – various locations
- 2011/12: Street light relocations – Douglas Avenue (Main Street to 7th Street) (\$35,000) – Map 5, location M-11; Lincoln Way (Duff Avenue to the Skunk River) (\$100,000) – Map 5, location N-11; Storm Street (Ash Avenue to Hayward Avenue) (\$40,000) – Map 5, location I-12
CyRide route improvements 13.8 kV line relocations (\$50,000) – various locations
Woodland Street (West Street to Hickory Drive) 13.8 kV line relocation (\$195,000) – Map 4, location G-11
- 2012/13: CyRide route improvements 13.8 kV line relocations (\$50,000) – various locations

FISCAL YEAR PRIORITY	TOTAL	14 2008/09	11 2009/10	11 2010/11	5 2011/12	4 2012/13
COST:						
Construction	965,000	85,000	285,000	125,000	420,000	50,000
TOTAL	965,000	85,000	285,000	125,000	420,000	50,000
FINANCING:						
Electric Utility Fund	922,200	85,000	242,200	125,000	420,000	50,000
Iowa State University	42,800		42,800			
TOTAL	965,000	85,000	285,000	125,000	420,000	50,000

PROGRAM - ACTIVITY:
Utilities – Electric Extension/Improvements

DEPARTMENT:
Electric

ACCOUNT NO.
530-4823-489

UNIT #7 PRECIPITATOR ENCLOSURE

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Efficient winter operation of unit #7 precipitator requires that the ash hoppers be protected from below freezing temperatures. Cold temperatures cause moisture in the ash to begin to harden the ash and plug the ash removal system. This requires an inordinate amount of operation and maintenance time and could potentially lead to reducing load on unit #7. Staff has installed local heating systems and temporary enclosures with reasonable success, and feels that installing a permanent enclosure is the best option to maintain reliability.

COMMENTS

This enclosure will greatly improve winter operation of the #7 precipitator.

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY							
		TOTAL	15 2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Construction		75,000	75,000				
Engineering		10,000	10,000				
	TOTAL	85,000	85,000				
FINANCING:							
Electric Utility Fund		85,000	85,000				
	TOTAL	85,000	85,000				

PROGRAM - ACTIVITY:
Utilities - Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4825-489

UNIT #7 MERCURY CAPITAL

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

New Environmental Protection Agency rules require mercury reduction by January 1, 2010. If mercury reduction equipment is not in place, allowances will need to be purchased. Engineering and design will be part of the NO_x emissions design and can be found in the Unit #7 NO_x CIP. It is unclear at this time if this capital investment will totally eliminate the need to purchase mercury allowances.

COMMENTS

#7 unit may require a mercury control.

LOCATION

Power Plant 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Equipment and Installation		1,000,000		1,000,000			
	TOTAL	1,000,000		1,000,000			
FINANCING:							
Electric Utility Fund		1,000,000		1,000,000			
	TOTAL	1,000,000		1,000,000			

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

GAS TURBINE #1 INSPECTION AND OVERHAUL

PROJECT STATUS: New

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 this type of equipment inspection is 5-year overhauls.

COMMENTS

There are several reasons that these inspections have not been done. The 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 2009/10	Engine and Free Turbine	\$ 400,000
FY 2010/11	Generator	125,000
		<u>525,000</u>
		\$ 525,000

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY			4	8		
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Inspection labor and parts engine/turbine	400,000		400,000			
Inspection labor and parts generator	125,000			125,000		
TOTAL	525,000		400,000	125,000		
FINANCING:						
Electric Utility Fund	525,000		400,000	125,000		
TOTAL	525,000		400,000	125,000		

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.
530-4891-489

AMES PLANT 69KV SWITCHYARD RELAY AND CONTROL REPLACEMENT

PROJECT STATUS: New

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 repair and will need replacement with modern relays, since replacement parts are difficult to obtain. 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 disconnection of the trouble area while operation and service in the rest of the system continue. 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 old, lengthy control circuits that are no longer accessible for repair. This project also eliminates the more maintenance-intensive electro-mechanical devices that are currently used in the protection schemes for the switchyard breakers.

COMMENTS

This work is proposed to be performed in conjunction with the proposed expansion of the Ames Plant Distribution Substation, since there will be some common relaying and control design issues needing to be coordinated between these two projects. Both are located adjacent to the 69 kV switchyard.

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY			8	7		
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	330,000		80,000	250,000		
TOTAL	330,000		80,000	250,000		
FINANCING:						
Electric Utility Fund	259,380		62,880	196,500		
Iowa State University	70,620		17,120	53,500		
TOTAL	330,000		80,000	250,000		

PROGRAM - ACTIVITY:
Utilities – Electric Extension/Improvements

DEPARTMENT:
Electric

ACCOUNT NO.

POWER PLANT FIRE PROTECTION SYSTEM

PROJECT STATUS: Delayed

Cost 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, turbine-generators, coal pulverizers, and cooling towers. The cost and schedule for installation of the recommendations is as follows:

FY 2004/05	Upgrading City Water Service (in plant)	\$ 475,000
FY 2006/07	Coal Handling Sprinkler System (delayed)	
FY 2007/08	Coal Handling Sprinkler System phase 1	400,000
FY 2009/10	Coal Handling Sprinkler System phase 2	300,000
FY 2010/11	Coal Handling Sprinkler System phase 3	300,000
FY 2011/12	Turbine Generator Sprinkler System	320,000
FY 2013/14	Cooling Tower Sprinkler System	350,000
		\$ 2,145,000

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 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY			9	9	6	
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	920,000		300,000	300,000	320,000	
TOTAL	920,000		300,000	300,000	320,000	
FINANCING:						
Electric Utility Fund	920,000		300,000	300,000	320,000	
TOTAL	920,000		300,000	300,000	320,000	

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

UNIT #8 FEEDWATER HEATER TUBE REPLACEMENT

PROJECT STATUS: New

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. These two units were installed in 1982. The need for replacement of these units is expected due to the copper found in deposit weight density (DWD) testing of boiler tubes. Testing programs will be employed to analyze the copper loss and subsequent thinning of feedwater heater tubes.

COMMENTS

Due to copper loss on the units, staff recommends re-tubing. Re-tube estimate is \$350,000 each.

FY 2009/10	Unit # 8	\$ 350,000
FY 2013/14	Unit # 7	350,000
		<u>\$ 700,000</u>

LOCATION

Power Plant 200 East 5th Street- Map 5 location N-11

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Equipment		350,000		350,000			
	TOTAL	350,000		350,000			
FINANCING:							
Electric Utility Fund		350,000		350,000			
	TOTAL	350,000		350,000			

PROGRAM - ACTIVITY:
Utilities – Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.

DESCRIPTION/JUSTIFICATION

Turbine generator five-year overhauls are a maintenance procedure to ensure that reliable electricity can be provided for another five years. During these overhauls, all the steam packing and diaphragm packing is inspected, and repaired if necessary, along with all other clearances. The main objective is to ensure that any potential catastrophic problems are avoided.

COMMENTS

Staff recommends that the turbine generator inspections be done on a five-year cycle. The last inspection was done in 2005.

LOCATION

Power Plant 200 East 5th Street- Map N-11

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Labor and Materials		400,000			400,000		
	TOTAL	400,000			400,000		
FINANCING:							
Electric Utility Fund		400,000			400,000		
	TOTAL	400,000			400,000		
PROGRAM - ACTIVITY:		DEPARTMENT:		ACCOUNT NO.			
Utilities-Electric Production		Electric					

RDF BIN WORK

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is to repair and/or replace some major components such as traverse augers, metering bin outfeeds, and structure steel on the refuse derived fuel (RDF) bin. The bin is twelve years old and requires constant repair. Major upgrades will be required in 2010/11.

COMMENTS

Staff estimates that these repairs will be needed in 2010/11 but acknowledges they may be required sooner. The price estimate is based on 2006 information from the original equipment manufacturer.

LOCATION

Power Plant, 200 East 5th Street – Map 5, location N-11

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
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		530-4875-489			

DESCRIPTION/JUSTIFICATION

This will add a second distribution transformer and metal clad switchgear next to the existing substation. Related work includes the conversion of existing 69 kV bus structures and the addition of 69 kV transformer protection and controls.

This budget item also includes the necessary feeders and provides additional system reliability and service to growing commercial areas near Dayton and 13th Avenue and South Duff Avenue.

Load growth in the commercial areas near Dayton and 13th Avenue and South Duff requires additional substation capacity.

LOCATION

Adjacent to the existing Ames Plant distribution substation within the utility campus - Map 5, location N-11

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:					5	3	
Engineering		150,000			150,000		
Construction		2,000,000				2,000,000	
	TOTAL	2,150,000			150,000	2,000,000	
FINANCING:							
Electric Utility Fund		2,150,000			150,000	2,000,000	
	TOTAL	2,150,000			150,000	2,000,000	

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities – Electric Extension/Improvements	Electric	

UNIT #7 BOILER TUBE REPAIR

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Unit #7 Boiler is forty years old and in need of tube repairs. Staff has devised a six-year plan to maintain the operation through maintenance, engineering and re-tubing of the boiler. The cost estimates include labor and materials.

COMMENTS

FY 2011/12	\$ 500,000
FY 2012/13	1,000,000
FY 2013/14	<u>3,500,000</u>
	\$ 5,000,000

LOCATION

Power Plant, 200 East 5th Street - Map 5, location N-11

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12²	2012/13²
COST:							
Construction		1,500,000				500,000	1,000,000
	TOTAL	1,500,000				500,000	1,000,000
FINANCING:							
Electric Utility Fund		1,500,000				500,000	1,000,000
	TOTAL	1,500,000				500,000	1,000,000

PROGRAM - ACTIVITY:
Utilities - Electric Production

DEPARTMENT:
Electric

ACCOUNT NO.



Untitled (Roundhouse Motif)

Colored concrete pavers in circular pattern

By David Dahlquist, 1999

*Intersection of Main Street
and Kellogg Avenue*

TRANSPORTATION - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
Streets/Engineering	32,010,000	4,860,000	4,800,000	6,935,000	11,315,000	4,100,000	83
Streets/Maintenance	8,725,000	2,150,000	2,350,000	1,350,000	1,350,000	1,525,000	95
Transit	13,416,410	2,770,410	2,971,500	2,246,500	3,206,500	2,221,500	101
Airport	6,205,000	2,120,000	1,125,000	1,345,000	900,000	715,000	109
Total Expenditures	60,356,410	11,900,410	11,246,500	11,876,500	16,771,500	8,561,500	
REVENUES:							
Bonds:							
G.O. Bonds	25,690,633	5,042,573	4,966,060	6,257,000	5,725,000	3,700,000	
City:							
Road Use Tax	5,665,000	1,135,000	1,125,000	1,140,000	1,140,000	1,125,000	
Local Option Sales Tax	1,000,000	200,000	200,000	200,000	200,000	200,000	
Transit Fund	2,088,092	516,642	451,050	378,250	369,800	372,350	
Airport Construction Fund	310,250	106,000	56,250	67,250	45,000	35,750	
Sub-Total City Funds	9,063,342	1,957,642	1,832,300	1,785,500	1,754,800	1,733,100	

TRANSPORTATION - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
REVENUES, continued:						
Other:						
MPO/STP Funds	3,379,367	632,427	858,940	688,000	600,000	600,000
Federal Earmark Funds	5,000,000				5,000,000	
Federal Transit Administration	10,524,175	2,119,625	2,390,450	1,788,250	2,456,700	1,769,150
Federal Grants	454,143	134,143	80,000	80,000	80,000	80,000
Private Contributions	50,000		50,000			
Iowa State University	300,000				300,000	
FAA Grant Funds	5,894,750	2,014,000	1,068,750	1,277,750	855,000	679,250
Sub-Total Other Funds	25,602,435	4,900,195	4,448,140	3,834,000	9,291,700	3,128,400
Total Revenues	60,356,410	11,900,410	11,246,500	11,876,500	16,771,500	8,561,500

TRANSPORTATION - STREET ENGINEERING

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Arterial Street Pavement Improvements	4,850,000	1,100,000	1,500,000	750,000	750,000	750,000	85
2 CyRide Route Pavement Improvements	3,400,000	1,000,000	600,000	600,000	600,000	600,000	86
3 Collector Street Pavement Improvements	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	87
4 Asphalt Resurfacing	2,500,000	500,000	500,000	500,000	500,000	500,000	88
5 Neighborhood Curb Replacement Program	375,000	75,000	75,000	75,000	75,000	75,000	89
6 Downtown Street Pavement Improvements	3,250,000	750,000	500,000	500,000	750,000	750,000	90
7 Retaining Wall Reconstruction	165,000	35,000	25,000	40,000	40,000	25,000	91
8 Asphalt Pavement Improvement Program	2,350,000	400,000	400,000	750,000	400,000	400,000	92
9 South Dakota Widening (L'Way to Mortensen)	2,200,000		200,000	2,000,000			93
10 Grand Avenue Extension	7,920,000			720,000	7,200,000		94
Total Expenditures	32,010,000	4,860,000	4,800,000	6,935,000	11,315,000	4,100,000	

TRANSPORTATION - STREET ENGINEERING, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
REVENUES:						
Bonds:						
G.O. Bonds	20,590,633	3,617,573	3,341,060	5,632,000	5,100,000	2,900,000
City:						
Road Use Tax	2,540,000	510,000	500,000	515,000	515,000	500,000
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000
City Sub-Total	3,040,000	610,000	600,000	615,000	615,000	600,000
Other:						
MPO/STP Funds	3,379,367	632,427	858,940	688,000	600,000	600,000
Federal Earmark Funds	5,000,000				5,000,000	
Other Sub-Total	8,379,367	632,427	858,940	688,000	5,600,000	600,000
Total Revenues	32,010,000	4,860,000	4,800,000	6,935,000	11,315,000	4,100,000

ARTERIAL STREET PAVEMENT IMPROVEMENTS

PROJECT STATUS: Site Change

Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This annual program utilizes current repair 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 by 10 to 15 years.

COMMENTS

- 2008/09 North Dakota Avenue (600 ft. south of Delaware Avenue to Ontario Street) - Map 4, location E-10
- 2009/10 13th Street (Stange Road to the UPRR overpass) - Map 5, location I-9
- 2010/11 Duff Avenue (Lincoln Way to 10th Street) - Map 5, location M-11; and 6th Street (Grand Avenue to Northwestern Avenue), Map 5, location L-10
- 2011/12 Lincoln Way (Squaw Creek to Oak Avenue) - Map 5, location K-11
- 2012/13 Lincoln Way (South Duff Avenue to Skunk River) - Map 5, location M-11

Based on pavement conditions, Lincoln Way (South Duff Avenue to Skunk River) improvements have been delayed one year (until 2012/13) and have been replaced in 2011/12 by the Lincoln Way (Squaw Creek to Oak Avenue) location.

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

FISCAL YEAR PRIORITY		1	1	2	2	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Planning	120,000	30,000	30,000	30,000	15,000	15,000
Engineering	530,000	170,000	170,000	80,000	55,000	55,000
Construction	4,200,000	900,000	1,300,000	640,000	680,000	680,000
TOTAL	4,850,000	1,100,000	1,500,000	750,000	750,000	750,000
FINANCING:						
G. O. Bonds	2,158,633	467,573	641,060	750,000	150,000	150,000
MPO/STP Funds	2,691,367	632,427	858,940		600,000	600,000
TOTAL	4,850,000	1,100,000	1,500,000	750,000	750,000	750,000

PROGRAM – ACTIVITY:
Transportation - Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
369-8159-439
320-8159-439

CYRIDE ROUTE PAVEMENT IMPROVEMENTS

PROJECT STATUS: Site Change

Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This is the annual program for pavement improvements to streets that are 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

- 2008/09 Toronto Street (Florida Avenue to North Dakota Avenue) – Map 4, location D-9; Northwestern Avenue (28th Street to 30th Street) – Map 2, location K-7; and Hutchison Street (Florida Avenue to North Dakota Avenue) – Map 4, location P-9
- 2009/10 Ash Avenue (Lincoln Way to Knapp Street) – Map 5, location I-11 and Knapp Street (Lynn Avenue to Ash Avenue) – Map 5, location I-12
- 2010/11 Emerald Drive (Ken Maril Road to Jewel Drive) – Map 9, location N-17
- 2011/12 Lincoln Way (Franklin Avenue to Hayward Avenue) – Map 5, location G-11
- 2012/13 Todd Drive (South Dakota Avenue to Thackeray Avenue) – Map 4, location E-11

Based on pavement conditions, Emerald Drive (Ken Maril Road to Jewel Drive) has been included in 2010/11. Lincoln Way (Franklin Avenue to Hayward Avenue) and Todd Drive (South Dakota Avenue to Thackeray Avenue) improvements have, therefore, each been delayed one year.

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

FISCAL YEAR PRIORITY		2	2	3	3	2
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Planning	65,000	25,000	10,000	10,000	10,000	10,000
Engineering	275,000	75,000	50,000	50,000	50,000	50,000
Construction	3,060,000	900,000	540,000	540,000	540,000	540,000
	TOTAL	3,400,000	1,000,000	600,000	600,000	600,000
FINANCING:						
G. O. Bonds	3,400,000	1,000,000	600,000	600,000	600,000	600,000
	TOTAL	3,400,000	1,000,000	600,000	600,000	600,000

PROGRAM - ACTIVITY:
Transportation - Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
369-8138-439
369-8176-439

COLLECTOR STREET PAVEMENT IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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

COMMENTS

2008/09	20 th Street (Grand Avenue to Duff Avenue and UPRR to Ames High Drive) – Map 5, location L-8; and Marshall Avenue (Lincoln Way to Story Street) – Map 4, location F-11
2009/10	16 th Street (Burnett Avenue to Duff Avenue) – Map 5, location M-9; and Garfield Avenue (Phoenix Street to Ross Road) – Map 4, location F-10
2010/11	George W. Carver Avenue (Stange Road to Bloomington Road) – Map 2, location H-7
2011/12	Storm Street (Ash Avenue to Hayward Avenue) – Map 5, location I-12; and Woodland Avenue (West Street to Forest Glen) – Map 4, location G-11, and (Westwood Drive to Hickory Drive) – Map 4, location F-11
2012/13	Ash Avenue (South of Country Club Boulevard to Knapp Street) – Map 5, location I-12, and Hayes Avenue (20 th Street to 24 th Street) – Map 5, location K-8

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

FISCAL YEAR PRIORITY	TOTAL	3 2008/09	3 2009/10	4 2010/11	4 2011/12	3 2012/13
COST:						
Planning	120,000	30,000	30,000	20,000	20,000	20,000
Engineering	500,000	70,000	70,000	120,000	120,000	120,000
Construction	4,380,000	900,000	900,000	860,000	860,000	860,000
TOTAL	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
FINANCING:						
G. O. Bonds	4,312,000	1,000,000	1,000,000	312,000	1,000,000	1,000,000
MPO/STP Funds	688,000			688,000		
TOTAL	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000

PROGRAM – ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
369-8126-439

ASPHALT RESURFACING

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This is the annual program for asphalt resurfacing of various streets.

This program restores surface texture, corrects structural deficiencies, 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.

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 asphaltting the street. Typically, curb and gutter repairs are between 20- and 25-percent of the total cost.

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

FISCAL YEAR PRIORITY		4	4	5	5	4
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Planning	50,000	10,000	10,000	10,000	10,000	10,000
Engineering	75,000	15,000	15,000	15,000	15,000	15,000
Construction	2,375,000	475,000	475,000	475,000	475,000	475,000
TOTAL	2,500,000	500,000	500,000	500,000	500,000	500,000
FINANCING:						
Road Use Tax	2,000,000	400,000	400,000	400,000	400,000	400,000
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000
TOTAL	2,500,000	500,000	500,000	500,000	500,000	500,000

PROGRAM – ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
030-8106-439
060-8106-439

NEIGHBORHOOD CURB REPLACEMENT PROGRAM

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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. In keeping with City Council’s goal to strengthen neighborhoods, funding for this program has been increased from \$50,000 to \$75,000 per year.

Curb and gutter replacement enhances neighborhood aesthetics.

LOCATION

- 2008/09 Harding Avenue (15th Street to 16th Street) – Map 5, location L-9
- 2009/10 Marston Avenue (10th Street – 13th Street) – Map 5, location L-10
- 2010/11 Curtiss Avenue (10th Street – 13th Street) – Map 5, location L-10
- 2011/12 N. Hazel Avenue (Lincoln Way to N. 4th Street) – Map 5, location K-11
- 2012/13 Maxwell Avenue (16th Street to George Allen Avenue) – Map 5, location N-8

FISCAL YEAR PRIORITY		5	6	7	6	5
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	25,000	5,000	5,000	5,000	5,000	5,000
Construction	350,000	70,000	70,000	70,000	70,000	70,000
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:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
060-8129-439

DOWNTOWN STREET PAVEMENT IMPROVEMENTS

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This program is for the rehabilitation/reconstruction of streets within the downtown area (Lincoln Way to 7th 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, 5th Street, and 6th 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.

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 Cultural District.

LOCATION

- 2008/09 Burnett Avenue (Main Street to 7th Street) – Map 5, location M-11
- 2009/10 Kellogg Avenue (Lincoln Way to Main Street) – Map 5, location M-11
- 2010/11 Kellogg Avenue (Main Street to 7th Street) – Map 5, location M-11
- 2011/12 Main Street (Allan Drive to Clark Avenue) – Map 5, location L-11
- 2012/13 Douglas Avenue (Main Street to 7th Street) – Map 5, location M-11

The cost change is due to the addition of the 5th Street (Grand Avenue to Duff Avenue) location in 2012/13.

FISCAL YEAR PRIORITY		6	7	8	7	6
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	250,000	50,000	50,000	50,000	50,000	50,000
Construction	3,000,000	700,000	450,000	450,000	700,000	700,000
	TOTAL	750,000	500,000	500,000	750,000	750,000
FINANCING:						
G. O. Bonds	3,250,000	750,000	500,000	500,000	750,000	750,000
	TOTAL	750,000	500,000	500,000	750,000	750,000

PROGRAM - ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
369-8157-439

RETAINING WALL RECONSTRUCTION

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Several existing retaining walls located within the right-of-way are structurally failing. These retaining walls have become priorities to be reconstructed/repared due to safety concerns. Drainage improvements and structural changes to the retaining walls will be included with this program.

COMMENTS

Proposed locations:

- 2008/09 Bloomington Road – Map 2, location L-6
- 2009/10 Northeast quadrant of Grand Avenue/Lincoln Way intersection – Map 5, location L-11
- 2010/11 12th Street/Maxwell Avenue – Map 5, location N-9
- 2011/12 South Dayton Avenue – Map 6, location R-12
- 2012/13 Airport Road – Map 8, location L-15

FISCAL YEAR PRIORITY	TOTAL	7	9	10	9	8
		2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	25,000	5,000	5,000	5,000	5,000	5,000
Construction	140,000	30,000	20,000	35,000	35,000	20,000
TOTAL	165,000	35,000	25,000	40,000	40,000	25,000
FINANCING:						
Road Use Tax	165,000	35,000	25,000	40,000	40,000	25,000
TOTAL	165,000	35,000	25,000	40,000	40,000	25,000

PROGRAM - ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
060-8127-439

DESCRIPTION/JUSTIFICATION

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

- 2008/09 Arizona Avenue (Phoenix Street to Ross Road) – Map 4, location E-10
- 2009/10 Northwood Drive (Grand Avenue to Duff Avenue) – Map 5, location L-6
- 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 Southdale Drive (Garnet Drive to Jewel Drive) – Map 9, location N-16
- 2012/13 Jewel Drive (Garnet Drive south to end) – Map 9, location O-16

Reconstructing these streets will reduce maintenance costs.

FISCAL YEAR PRIORITY		8	8	9	8	7
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	275,000	50,000	50,000	75,000	50,000	50,000
Construction	2,075,000	350,000	350,000	675,000	350,000	350,000
	TOTAL	2,350,000	400,000	400,000	750,000	400,000
FINANCING:						
G.O. Bonds	2,350,000	400,000	400,000	750,000	400,000	400,000
	TOTAL	2,350,000	400,000	400,000	750,000	400,000

PROGRAM - ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
369-8112-439

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

PROJECT STATUS: No Change

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 has resulted 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 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			5	1		
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	200,000		200,000			
Construction	2,000,000			2,000,000		
TOTAL	2,200,000		200,000	2,000,000		
FINANCING:						
G. O. Bonds	2,200,000		200,000	2,000,000		
TOTAL	2,200,000		200,000	2,000,000		

PROGRAM – ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.

GRAND AVENUE EXTENSION

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project is for the extension of Grand Avenue from Lincoln Way to South 16th Street. Included is a segment of South 5th Street (Grand Avenue to South Duff Avenue).

Extending Grand Avenue to South 16th 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. In addition, through-traffic on the Grand Avenue extension will also encounter less traffic congestion.

COMMENTS

Design and land acquisition will occur in 2010/11 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. Construction of those segments is projected to occur in 2011/12. This four-lane roadway will include turn lanes at South 16th 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.

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

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

LOCATION

- 2010/11 Grand Avenue (Squaw Creek Drive to South 16th Street) and South 5th Street (Grand Avenue to South Duff Avenue) (engineering and land acquisition) – Map 5, location L-12
- 2011/12 Grand Avenue (Squaw Creek Drive to South 16th Street) and South 5th Street (Grand Avenue to South Duff Avenue) (construction) – Map 5, location L-12

FISCAL YEAR PRIORITY				6	1	
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	400,000			300,000	100,000	
Land Acquisition	420,000			420,000		
Construction	7,100,000				7,100,000	
TOTAL	7,920,000			720,000	7,200,000	
FINANCING:						
G. O. Bonds	2,920,000			720,000	2,200,000	
Federal Earmark Funds	5,000,000				5,000,000	
TOTAL	7,920,000			720,000	7,200,000	

PROGRAM – ACTIVITY:
Transportation – Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.

TRANSPORTATION - STREET MAINTENANCE

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Concrete Pavement Improvements	5,850,000	1,425,000	1,625,000	1,000,000	1,000,000	800,000	96
2 Seal Coat Removal/Asphalt Reconstruction	1,975,000	625,000	525,000	150,000	150,000	525,000	97
3 Sidewalk Safety Program	250,000	50,000	50,000	50,000	50,000	50,000	98
4 Shared Use Path Pavement Improvements	250,000	50,000	50,000	50,000	50,000	50,000	99
5 Slurry Seal Program	400,000		100,000	100,000	100,000	100,000	100
Total Expenditures	8,725,000	2,150,000	2,350,000	1,350,000	1,350,000	1,525,000	
REVENUES:							
Bonds:							
G.O. Bonds	5,100,000	1,425,000	1,625,000	625,000	625,000	800,000	
City:							
Road Use Tax	3,125,000	625,000	625,000	625,000	625,000	625,000	
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000	
City Sub-Total	3,625,000	725,000	725,000	725,000	725,000	725,000	
Total Revenues	8,725,000	2,150,000	2,350,000	1,350,000	1,350,000	1,525,000	

CONCRETE PAVEMENT IMPROVEMENTS

PROJECT STATUS: Cost Change

Site Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This annual program is to remove and replace concrete street sections that have deteriorated. Removal and replacement of concrete street sections provide enhanced rideability to residents and visitors.

COMMENTS

This program includes both arterial and non-arterial concrete streets. Increased funding for this program in 2008/09 and 2009/10 will allow for addressing priority needs in the repair of concrete streets; funding will decrease by 2010/11 as priority needs in this program are met. Road use tax funds for 2008/09, 2009/10, and 2012/13 will be used to meet priority project needs in the Seal Coat Reconstruction Program.

LOCATION

2008/09:

Northwestern Avenue (6th Street to Allan Drive) – Map 5, location L-10; Orchard Drive – Map 5, location K-9; South High Avenue south of Southeast 16th Street – Map 9, location N-13; Allan Drive (Northwestern Avenue to Grand Avenue) – Map 5, location L-11

2009/10:

South Hyland Avenue (Arbor Street to Lincoln Way) – Map 5, location H-11; Edison Street (Whitney Avenue to Dayton Avenue) – Map 6, location Q-10; Alexander Avenue (Lincoln Way to 350' south) – Map 6, location R-11; and Stanton Avenue (Chamberlain Street to Storm Street) – Map 5, location I-11

2010/11:

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

2011/12:

Southeast 16th Street (Duff Avenue to 600' east) – Map 8, location M-14; and South Kellogg Avenue (South 16th Street to South 17th Street) – Map 8, location M-14

2012/13:

Des Moines Avenue (Lincoln Way to East 3rd Street) – Map 5, location M-11; Center Avenue (Lincoln Way to East 2nd Street) – Map 5, location N-11; East 3rd Street (Duff Avenue to East Avenue) – Map 5, location N-11; East 2nd Street (Duff Avenue to Center Avenue) – Map 5, location N-11; East Avenue (Lincoln Way to East 3rd Street) – Map 5, location N-11

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

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	700,000	200,000	200,000	100,000	100,000	100,000
Construction	5,150,000	1,225,000	1,425,000	900,000	900,000	700,000
TOTAL	5,850,000	1,425,000	1,625,000	1,000,000	1,000,000	800,000
FINANCING:						
G.O. Bonds	5,100,000	1,425,000	1,625,000	625,000	625,000	800,000
Road Use Tax	750,000			375,000	375,000	
TOTAL	5,850,000	1,425,000	1,625,000	1,000,000	1,000,000	800,000

PROGRAM – ACTIVITY:
Transportation - Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.
369-7764-439

**SEAL COAT REMOVAL/ASPHALT
RECONSTRUCTION PROGRAM**

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This annual program provides for removal of built-up seal coat from streets and replacement with asphalt surface.

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 will allow repairs to curb and gutter, and placement of 3" of asphalt surface.

COMMENTS

Road Use Tax funds generally obligated for the Slurry Seal Program (\$100,000) (page 100) and Concrete Pavement Improvements Program (\$375,000) (page 96) have been shifted to this program in 2008/09, 2009/10, and 2012/13 due to the high number of seal coat streets requiring reconstruction based on current pavement conditions. This project supports the City Council's goal of strengthening our neighborhoods.

The operating budget will need to be increased for materials to repair streets to serviceable condition if this project is delayed.

FISCAL YEAR PRIORITY	TOTAL	2	2	2	2	2
		2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	1,975,000	625,000	525,000	150,000	150,000	525,000
TOTAL	1,975,000	625,000	525,000	150,000	150,000	525,000
FINANCING:						
Road Use Tax	1,975,000	625,000	525,000	150,000	150,000	525,000
TOTAL	1,975,000	625,000	525,000	150,000	150,000	525,000

PROGRAM – ACTIVITY:
Transportation – Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.
060-7754-439

SIDEWALK SAFETY PROGRAM

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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.

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

An Americans with Disability Act (ADA) requirement to install truncated dome warning panels at crosswalks has increased the cost of these crosswalks. This reduces the number of locations that will be improved under this program each year.

This project has no direct impact on the operating budget.

FISCAL YEAR PRIORITY		3	3	3	3	3
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	250,000	50,000	50,000	50,000	50,000	50,000
FINANCING:						
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	250,000	50,000	50,000	50,000	50,000	50,000

PROGRAM - ACTIVITY:
Transportation - Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.
030-7742-439

SHARED USE PATH PAVEMENT IMPROVEMENTS

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The shared use path transportation system has continued to expand throughout the community. The shared use paths have typically been constructed with 5 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.

System analysis will be completed over the next year for determination of a 5-year program.

COMMENTS

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

FISCAL YEAR PRIORITY		4	5	5	5	5
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	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	50,000	50,000	50,000	50,000	50,000

PROGRAM - ACTIVITY:
Transportation – Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.
030-7720-439

SLURRY SEAL PROGRAM

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The annual Slurry Seal Program is to slurry seal cracks in asphalt streets at various locations.

Application of slurry as a preventive maintenance program for cracks in asphalt streets seals against moisture intrusion and improves rideability. Selected locations will have full-width slurry applied to seal coat streets.

COMMENTS

This program continues to provide for repair of street surfaces until a more permanent surface is installed. Funding from this program has been shifted (in 2008/09) to the Seal Coat Removal/Asphalt Reconstruction Program (page 97) to address needs in that area.

FISCAL YEAR PRIORITY			4	4	4	4
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	400,000		100,000	100,000	100,000	100,000
TOTAL	400,000		100,000	100,000	100,000	100,000
FINANCING:						
Road Use Tax	400,000		100,000	100,000	100,000	100,000
TOTAL	400,000		100,000	100,000	100,000	100,000

PROGRAM - ACTIVITY:
Transportation – Streets Maintenance

DEPARTMENT:
Public Works

ACCOUNT NO.

TRANSPORTATION - TRANSIT

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Vehicle Replacement	6,173,000	1,248,000	1,775,000	1,035,000	1,050,000	1,065,000	102
2 Building Expansion and Modernization	4,309,410	1,214,410	540,000	555,000	1,000,000	1,000,000	103
3 Alternative Analysis	200,000	200,000					104
4 CyRide Shop/Office Equipment	484,000	58,000	106,500	106,500	106,500	106,500	105
5 Bus Stop Improvements	250,000	50,000	50,000	50,000	50,000	50,000	106
6 AVL Technology	1,000,000		500,000	500,000			107
7 Resurfacing Iowa State Center Commuter Lot	1,000,000				1,000,000		108
Total Expenditures	13,416,410	2,770,410	2,971,500	2,246,500	3,206,500	2,221,500	
REVENUES:							
City:							
Transit Fund	2,088,092	516,642	451,050	378,250	369,800	372,350	
Other:							
Federal Transit Administration	10,524,175	2,119,625	2,390,450	1,788,250	2,456,700	1,769,150	
Federal Grants	454,143	134,143	80,000	80,000	80,000	80,000	
Private Contributions	50,000		50,000				
Iowa State University	300,000				300,000		
Other Sub-Total	11,328,318	2,253,768	2,520,450	1,868,250	2,836,700	1,849,150	
Total Revenues	13,416,410	2,770,410	2,971,500	2,246,500	3,206,500	2,221,500	

VEHICLE REPLACEMENT

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The CyRide fleet has an average age of 12 years. Replacement buses are subject to federal funding levels and statewide distribution of federal funds, but should be more predictable than in previous years. Therefore, CyRide has scheduled the replacement of three large vehicles per year in an effort to reduce the average fleet age closer to the national level of seven years. Two expansion buses are planned for purchase in 2009/10 for operation to the proposed new Life Style Center.

- 2008/09 – Replace large buses 869, 984, 966, minibuses 859, 939, 938
- 2009/10 – Replace large buses 980, 990, 983, minibuses 949
- 2010/11 – Replace large buses 981, 991, 982, minibuses 960, 961
- 2011/12 – Replace large buses 962, 964, 926
- 2012/13 – Replace large buses 927, 967, 985

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Large Buses	5,700,000	1,005,000	1,625,000	995,000	1,050,000	1,025,000
Minibuses	473,000	243,000	150,000	40,000		40,000
TOTAL	6,173,000	1,248,000	1,775,000	1,035,000	1,050,000	1,065,000
FINANCING:						
Transit Fund	839,410	212,160	211,750	135,950	138,500	141,050
Federal Transit Administration	5,029,447	941,697	1,473,250	859,050	871,500	883,950
Federal Grants	254,143	94,143	40,000	40,000	40,000	40,000
Private Contributions	50,000		50,000			
TOTAL	6,173,000	1,248,000	1,775,000	1,035,000	1,050,000	1,065,000
PROGRAM - ACTIVITY:						
Transportation – Transit						
DEPARTMENT:						
CyRide						
ACCOUNT NO.						
552-1159-439						
552-1182-439						

DESCRIPTION/JUSTIFICATION

The current CyRide building was constructed in 1983 and was originally designed to accommodate 25 vehicles. The building was expanded in 1990, 2002, and 2004 and can now accommodate 77 vehicles.

CyRide has identified more than \$2.5 million dollars in building repairs and modernization which include major projects such as rehabilitation of the old wash bay, upgrading of the bus storage ventilation system, steam cleaning and repainting of walls, replacing the shop air-conditioning system, replacing the shop exhaust removal system, replacing lights with energy efficient T8 fluorescent lights, rehabilitating the maintenance office, relocating the parts room, replacing shop hoists, replacing overhead doors with energy efficient doors, replacing or repairing exterior walls, installing an independent backup power supply, relocating the fluids room, and adding a building security system. A majority of these projects will be scheduled for completion from FY09/10 through FY12/13 after a Facilities Study is completed by the Fall of 2008.

LOCATION

CyRide – Map 5, location J-10

FISCAL YEAR PRIORITY		2	2	2	2	2
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Architect/Engineering	1,271,528	971,528	50,000	50,000	100,000	100,000
Repairs/Modifications	3,037,882	242,882	490,000	505,000	900,000	900,000
TOTAL	4,309,410	1,214,410	540,000	555,000	1,000,000	1,000,000
FINANCING:						
Transit Fund	861,882	242,882	108,000	111,000	200,000	200,000
Federal Transit Administration	3,447,528	971,528	432,000	444,000	800,000	800,000
TOTAL	4,309,410	1,214,410	540,000	555,000	1,000,000	1,000,000

PROGRAM - ACTIVITY:
Transportation – Transit

DEPARTMENT:
CyRide

ACCOUNT NO.
552-1167-439

DESCRIPTION/JUSTIFICATION

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 Iowa 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		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Analysis		200,000	200,000				
	TOTAL	200,000	200,000				
FINANCING:							
Transit Fund		40,000	40,000				
Federal Transit Administration		160,000	160,000				
	TOTAL	200,000	200,000				

PROGRAM - ACTIVITY:
Transportation – Transit

DEPARTMENT:
CyRide

ACCOUNT NO.
552-1180-439

CYRIDE SHOP AND OFFICE EQUIPMENT

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

CyRide receives approximately \$620,000 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 Iowa Department of Transportation (IDOT) grant process.

Three to four replacement computers will be funded each year, and approximately \$100,000 per year will fund other shop and office items (\$50,000 each for fiscal years 2009/10 – 2012/13). 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.

LOCATION

CyRide – Map 5, location J-10

FISCAL YEAR PRIORITY		4	3	3	3	3
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Computers	34,000	8,000	6,500	6,500	6,500	6,500
Other Shop Equipment	200,000		50,000	50,000	50,000	50,000
Other Office Equipment	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	484,000	58,000	106,500	106,500	106,500	106,500
FINANCING:						
Transit Fund	96,800	11,600	21,300	21,300	21,300	21,300
Federal Transit Administration	387,200	46,400	85,200	85,200	85,200	85,200
TOTAL	484,000	58,000	106,500	106,500	106,500	106,500
PROGRAM - ACTIVITY:						
Transportation – Transit						
DEPARTMENT:						
CyRide						
ACCOUNT NO.						
552-1159-439						

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 regards the condition or lack of amenities at its more than 400 bus stop locations throughout the city. In FY07/08, CyRide began to systematically identify needs at each stop, and beginning in FY08/09, shelters, benches, concrete pads and lights will be placed at stops with higher customer activity. It is anticipated that five to ten bus stop locations will receive improvements each year.

FISCAL YEAR PRIORITY		5	4	4	4	4
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Technical Study	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
Federal Grants	200,000	40,000	40,000	40,000	40,000	40,000
TOTAL	250,000	50,000	50,000	50,000	50,000	50,000

PROGRAM - ACTIVITY:
Transportation – Transit

DEPARTMENT:
CyRide

ACCOUNT NO.
552-1174-439

AVL TECHNOLOGY

PROJECT STATUS: No 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.

This AVL technology is the first step toward enabling customer-friendly bus information to be relayed through CyRide's website, at kiosks, and at shelters through the transit system. This second step in technology advancement will be scheduled beyond FY12/13.

FISCAL YEAR PRIORITY			5	5		
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Global Positioning/Design Installation	1,000,000		500,000	500,000		
TOTAL	1,000,000		500,000	500,000		
FINANCING:						
Transit Fund	200,000		100,000	100,000		
Federal Transit Administration	800,000		400,000	400,000		
TOTAL	1,000,000		500,000	500,000		

PROGRAM - ACTIVITY:
Transportation – Transit

DEPARTMENT:
CyRide

ACCOUNT NO.

RESURFACE COMMUTER LOTS AT IOWA STATE CENTER

PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

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.

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 Iowa State University will provide the remainder.

LOCATION

Iowa State Center – Map 5, location J-12

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Engineering		100,000				100,000	
Construction		900,000				900,000	
	TOTAL	1,000,000				1,000,000	
FINANCING:							
Federal Transit Administration		700,000				700,000	
Iowa State University		300,000				300,000	
	TOTAL	1,000,000				1,000,000	

PROGRAM - ACTIVITY:
Transportation – Transit

DEPARTMENT:
CyRide

ACCOUNT NO.

TRANSPORTATION - AIRPORT

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Airport Improvements	6,205,000	2,120,000	1,125,000	1,345,000	900,000	715,000	110
Total Expenditures	6,205,000	2,120,000	1,125,000	1,345,000	900,000	715,000	
REVENUES:							
City:							
Airport Construction Fund	310,250	106,000	56,250	67,250	45,000	35,750	
Other:							
FAA Grant Funds	5,894,750	2,014,000	1,068,750	1,277,750	855,000	679,250	
Total Revenues	6,205,000	2,120,000	1,125,000	1,345,000	900,000	715,000	

AIRPORT IMPROVEMENTS

PROJECT STATUS: Cost Change

Revenue Change

City of Ames, Iowa
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 2008 – 2013 Capital Improvements Plan:

2008/09	Rehabilitate Runway 13/31
2009/10	Rehabilitate Taxiway A-1, PAPI, and Taxiway A-1 Flood Control
2010/11	West apron rehabilitation
2011/12	Reconstruct internal vehicle circulation and parking lot
2012/13	Replace Terminal Building

LOCATION

Ames Municipal Airport - Map 8, location L-16

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering	1,031,743	353,490	187,793	221,415	149,795	119,250
Construction	5,173,257	1,766,510	937,207	1,123,585	750,205	595,750
	TOTAL	6,205,000	2,120,000	1,125,000	1,345,000	900,000
FINANCING:						
Airport Construction Fund	310,250	106,000	56,250	67,250	45,000	35,750
FAA Grant (AIP) Funds	5,894,750	2,014,000	1,068,750	1,277,750	855,000	679,250
	TOTAL	6,205,000	2,120,000	1,125,000	1,345,000	900,000

PROGRAM – ACTIVITY:

Transportation – Airport

DEPARTMENT:

Public Works

ACCOUNT NO.

330-7072-439



A World To Teach

By Jane Dedecker, 1999

Outside Ames Public Library
Main Entrance, Douglas Avenue

COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
Parks and Recreation	8,771,500	6,782,500	254,000	685,000	470,000	580,000	113
Library	491,700	180,800	82,900	48,000	180,000		124
Public Works	250,000	50,000	50,000	50,000	50,000	50,000	129
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	131
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	133
Fleet Services	406,500	97,500	53,000	23,000	225,000	8,000	135
Total Expenditures	10,419,700	7,210,800	539,900	906,000	1,025,000	738,000	
REVENUES:							
Bonds:							
G.O. Bonds	5,278,000	5,278,000					
City:							
Local Option Sales Tax	2,745,200	617,800	359,400	680,500	707,500	380,000	
Hotel/Motel Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Road Use Tax	101,625	24,375	13,250	5,750	56,250	2,000	
Water Utility Fund	101,625	24,375	13,250	5,750	56,250	2,000	
Sewer Utility Fund	101,625	24,375	13,250	5,750	56,250	2,000	
Fleet Services Fund	101,625	24,375	13,250	5,750	56,250	2,000	
Sub-Total City Funds	3,401,700	765,300	462,400	753,500	982,500	438,000	

COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
REVENUES, continued:						
Other:						
Ames Community School District	340,000	87,500	77,500	107,500	42,500	25,000
Iowa DNR Grant	80,000	80,000				
Private Contributions	1,145,000	1,000,000		45,000		100,000
State Grants	175,000					175,000
Sub-Total Other Funds	1,740,000	1,167,500	77,500	152,500	42,500	300,000
Total Revenues	10,419,700	7,210,800	539,900	906,000	1,025,000	738,000

COMMUNITY ENRICHMENT - PARKS AND RECREATION

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Donald and Ruth Furman Aquatic Center	6,278,000	6,278,000					115
2 Municipal Pool Maintenance	680,000	175,000	155,000	215,000	85,000	50,000	116
3 Ada Hayden Park	130,000	130,000					117
4 Parks and Recreation Facility Improvements	386,000	132,000	64,000	90,000	50,000	50,000	118
5 Playground/Park Equipment Improvements	192,500	27,500	30,000	75,000	30,000	30,000	119
6 Tennis Court Improvements	320,000	5,000	5,000	5,000	305,000		120
7 Facility Assessment Study	35,000	35,000					121
8 Interactive Fountain	300,000			300,000			122
9 Bike Park	450,000					450,000	123
Total Expenditures	8,771,500	6,782,500	254,000	685,000	470,000	580,000	

COMMUNITY ENRICHMENT - PARKS AND RECREATION, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
REVENUES:						
Bonds:						
G.O. Bonds	5,278,000	5,278,000				
City:						
Local Option Sales Tax	1,753,500	337,000	176,500	532,500	427,500	280,000
Other:						
Ames Community School District	340,000	87,500	77,500	107,500	42,500	25,000
Iowa DNR Grant	80,000	80,000				
Private Contributions	1,145,000	1,000,000		45,000		100,000
State Grants	175,000					175,000
Other Sub-Total	1,740,000	1,167,500	77,500	152,500	42,500	300,000
Total Revenues	8,771,500	6,782,500	254,000	685,000	470,000	580,000

DESCRIPTION/JUSTIFICATION

In July 2007, residents approved \$8,488,000 in funding to develop an outdoor aquatic center. To further enhance this project, Donald and Ruth Furman donated \$1 million for facility development and \$1 million for future aquatic facility components and to offset any operational expenses not covered by user fees and charges. In appreciation and recognition of their generous gift, the City named the facility the Donald and Ruth Furman Aquatic Center. The aquatic center will be located in central Ames on a 40-acre parcel owned by Iowa State University. The City and University entered into a long-term lease agreement for the site. The aquatic center will occupy approximately 11 acres of the overall site; the balance of land will be established into a riparian buffer along Squaw Creek. It is anticipated that the facility will open the summer of 2009.

COMMENTS

2007/08: Approximately \$3,210,000

- Site survey and soil testing (\$17,000)
- Design/construction documents and provide construction management services
- Earthwork completed during the fall of 2007 (\$452,000)
- Retain Iowa State University’s Department of Planning and Facility Management to provide Construction Observation (total \$100,000 paid over two years)
- Facility construction

2008/09: Approximately \$6,278,000

- Site development and facility construction
- Construction observation fees

LOCATION

North side of 13th Street; south of Ames High School and east of Squaw Creek – Map 5, location K-9

FISCAL YEAR PRIORITY	TOTAL	1 2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	6,228,000	6,228,000				
ISU Facilities Planning & Management	50,000	50,000				
TOTAL	6,278,000	6,278,000				
FINANCING:						
G.O. Bonds	5,278,000	5,278,000				
Private Contribution: Donald and Ruth Furman	1,000,000	1,000,000				
TOTAL	6,278,000	6,278,000				

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.
369-4907-459

MUNICIPAL POOL MAINTENANCE

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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 2010/11 will require the pool to be **closed for approximately 8 weeks during the summer of 2010.**

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 District's joint use agreement expires on April 30, 2015. Therefore, it appears that the City and School District will have to address the need for a new indoor aquatics facility no later than 2015.

COMMENTS

2008/09: **Total \$175,000**

Encase corroded surge tank legs, patch the exterior roof, replace a pair of corridor doors from men/women locker rooms to pool, paint exterior steel channels at roof edge, additional tuck pointing on exterior, and other miscellaneous projects.

2009/10: **Total \$155,000**

Replace balance of steel pipe, install a dehumidifier in the equipment room, interconnect Desert Air with roof exhaust, place acoustical panels in the pool area, and other miscellaneous and unknown projects.

2010/11: **Total \$215,000**

Replace boiler / pumps (\$150,000), replace electrical panels (**closed summer of 2010**), roof patching allowance (\$10,000), replace plywood veneer and flashing at arch bases, and other miscellaneous and unknown projects.

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.

2012/13: **Total \$50,000**

To be determined

Over an 18-year period (FY95/96 and continuing through FY12/13), the City and School District will have invested approximately \$2,072,589 (\$115,000 per year average) in capital improvements at this facility.

LOCATION

Ames High School – Map 5, location J-8

FISCAL YEAR PRIORITY	TOTAL	2	1	1	1	1
		2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	612,000	157,500	139,500	193,500	76,500	45,000
Architects/Engineering	68,000	17,500	15,500	21,500	8,500	5,000
TOTAL	680,000	175,000	155,000	215,000	85,000	50,000
FINANCING:						
Local Option Sales Tax	340,000	87,500	77,500	107,500	42,500	25,000
Ames School District	340,000	87,500	77,500	107,500	42,500	25,000
TOTAL	680,000	175,000	155,000	215,000	85,000	50,000

PROGRAM – ACTIVITY:

Community Enrichment

DEPARTMENT:

Parks and Recreation

ACCOUNT NO.

030-4920-459

ADA HAYDEN HERITAGE PARK

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

Since the park opened, it has been observed that the existing fishing pier is not adequate to accommodate the quantity of casual park users and anglers who would like to utilize the pier. The new structure would be located immediately south of the shelter/restroom. The pier will be approximately 110' x 15' and cantilever over the water by 8'.

COMMENTS

2008/09: Construction of Lakeside Overlook / Fishing Pier (\$130,000)

LOCATION

Ada Hayden Heritage Park – Map 2, location K-3

FISCAL YEAR PRIORITY		3				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	115,000	115,000				
Engineering / Design	15,000	15,000				
TOTAL	130,000	130,000				
FINANCING:						
Local Option Sales Tax	50,000	50,000				
Iowa DNR Grant	80,000	80,000				
TOTAL	130,000	130,000				

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.
030-4926-459

DESCRIPTION/JUSTIFICATION

To maintain City facilities in a quality manner, the FY2008 to 2013 projects listed below address maintenance issues at various facilities within the Parks and Recreation Department.

COMMENTS

2008/09: Total = \$107,000

- Auditorium: Replace the sound system (\$30,000) – Map 5, location L-10
- Bandshell: Replace lighting (\$9,000) – Map 5, location M-10
- Homewood Golf Course: Construct a practice green (\$40,000)
- Community Center: Fitness Room - replace the support structure, pad, and carpet (\$28,000)
- Sand Volleyball Courts – renovation of existing courts at \$5,000/each (McCarthy Lee, Inis Grove, Brookside, Carr)
- Basketball Standards Replacement – Inis Grove Park (\$5,000)

2009/10: Total = \$139,000

- Franklin Park: Asphalt overlay on existing crushed rock pathway through the park (\$15,000) – Map 4, location F-12
- Gateway Park: Demolition of the garage/storage facility (\$22,000) – Map 8, location I-14
- Auditorium: Replace stage curtains (\$27,000)

2010/11: Total = \$90,000

- Homewood Golf Course: Replace green #1 (\$60,000) and tee renovations (\$30,000) – Map 5, location M-8

2011/12: Total = \$50,000

- Inis Grove: Sanitary sewer installation (\$50,000) – Map 2, location M-7

2012/13: Total = \$50,000

- Bandshell: Weatherproof the domed roof (\$50,000) – Map 5, location M-10

FISCAL YEAR PRIORITY		4	2	2	2	2
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	349,900	121,300	57,600	81,000	45,000	45,000
Engineering	36,100	10,700	6,400	9,000	5,000	5,000
TOTAL	386,000	132,000	64,000	90,000	50,000	50,000
FINANCING:						
Local Option Sales Tax	386,000	132,000	64,000	90,000	50,000	50,000
TOTAL	386,000	132,000	64,000	90,000	50,000	50,000

PROGRAM – ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.
030-4902-459

PLAYGROUND/PARK EQUIPMENT IMPROVEMENTS

PROJECT STATUS: Site Change

Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

With the emergence of the U.S. Consumer Products Safety Commission 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 FY97/98 and was completed in FY07/08. 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

2008-2013: Replace independent pieces with all-inclusive play structures

2008/09: **Parkview Park** (\$17,500), **Moore Park** – off Beach Avenue (\$10,000)

2009/10: **Inis Grove** (\$30,000: Rope Climber)

2010/11: **Brookside Park** (\$75,000: 30' Mega tower with dual tube slides) – Map 5, location K-10

2011/12: **Ada Hayden Heritage Park** (\$30,000 rock climber)

2012/13: **Brookside Park** (\$30,000: Replace tot piece)

FISCAL YEAR PRIORITY		5	3	3	3	3
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	192,500	27,500	30,000	75,000	30,000	30,000
TOTAL	192,500	27,500	30,000	75,000	30,000	30,000
FINANCING:						
Local Option Sales Tax	147,500	27,500	30,000	30,000	30,000	30,000
Private Contributions	45,000			45,000		
TOTAL	192,500	27,500	30,000	75,000	30,000	30,000

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.
030-4967-459

TENNIS COURT IMPROVEMENTS

PROJECT STATUS: Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION:

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 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 FY07/08) 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 ten years (1997 – 2007). Staff anticipates that they will continue to serve the public a minimum of five more years (2012) at the recreational level. During 2011, staff will analyze the condition of these courts and determine if reconstruction is needed or if the project can be delayed.

COMMENTS

2008–2013: Total = \$5,000 each year
City will contribute \$5,000/year for tennis court maintenance for Ames High/Brookside/Inis Grove/McCarthy Lee.

2011/12: The Brookside courts will be reconstructed (\$300,000) if an analysis at the time indicates the project is warranted.

LOCATION

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

FISCAL YEAR PRIORITY		6	4	5	4	
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Engineering / Design	30,000				30,000	
Maintenance	20,000	5,000	5,000	5,000	5,000	
Reconstruction	270,000				270,000	
	TOTAL	320,000	5,000	5,000	5,000	305,000
FINANCING:						
Local Options Sales Tax	320,000	5,000	5,000	5,000	305,000	
	TOTAL	320,000	5,000	5,000	5,000	305,000

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.:
030-4902-459

DESCRIPTION/JUSTIFICATION

This study will assess two facilities within the Parks and Recreation Department.

Carr Pool will close in 2009. The bathhouse and concession facility was constructed in 1982 and appears to be structurally sound and could potentially serve the need for public meeting space within the community. To evaluate the feasibility of remodeling the facility and to determine the cost to modify this building, a structural assessment needs to be completed.

The Parks and Recreation Gateway office was originally utilized as the clubhouse for the Ames Golf and Country Club. The structure was built in 1940, and in 1982, the City purchased the property and renovated the interior space to accommodate the Department of Parks and Recreation. Currently, six full-time employees and one youth activity program utilize the first floor of this space. The square footage of the first floor, when combined with the unoccupied walk-in lower level square footage, could make this facility functional to accommodate additional City offices and/or public meeting space. A shelter at Gateway Park has been removed from the 2007/08 budget pending the outcome of this study.

Considering the age of these two facilities, it would be timely to assess their long-term structural viability and to determine the cost benefit to remodel these spaces.

LOCATION

Carr Pool bathhouse/concession building – Map 6, location N-8
Gateway office building – Map 8, location I-14

FISCAL YEAR PRIORITY		7				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Architect / Engineering	35,000	35,000				
TOTAL	35,000	35,000				
FINANCING:						
Local Option Sales Tax	35,000	35,000				
TOTAL	35,000	35,000				

PROGRAM – ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.
030-4927-489

INTERACTIVE FOUNTAIN

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. In consideration of this new interactive fountain and the construction of the Furman Aquatic Center, staff recommends that the Brookside Park wading pool be closed in the summer of 2011. It should be noted, the Brookside wading pool is located in the floodplain, is approximately 20 years old, and is located within one-half mile of the Furman Aquatic Center (which contains a 5,000 square foot leisure / wading pool).

During the next few years, staff will assess possible business district locations.

COMMENTS

2010/11: Interactive fountain construction (\$300,000)

LOCATION

To be determined

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:							
Construction		270,000			270,000		
Engineering / Design		30,000			30,000		
	TOTAL	300,000			300,000		
FINANCING:							
Local Option Sales Tax		300,000			300,000		
	TOTAL	300,000			300,000		

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Parks and Recreation

ACCOUNT NO.

BIKE PARK

PROJECT STATUS: Delayed

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The Skate Park has been a successful facility for a specific population within our community – males between the ages of 10 and 25. State regulations, related to liability issues, do not allow bikes to utilize this facility. Staff believes that if a comparable Bike Park were constructed, significant usage would occur within this same age group. A Bike Park, also constructed with concrete, would be approximately 15,000 square feet versus 10,200 for the City’s Skate Park.

The State of Iowa passed legislation in early 2000 providing exceptions to municipal tort liability for Bike Parks if they are built with “generally recognized engineering or safety standards”.

During the next few years, staff will research engineering firms to determine who has significant experience in designing bike parks and evaluate potential locations where such a facility could be located.

Due to the anticipated popularity of this activity with young adults, staff would recommend that State of Iowa grant options be researched to determine if additional fiscal resources can be obtained to assist with this project.

COMMENTS

2012/13: Bike Park construction (\$450,000)

LOCATION

To be determined

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:							4
Construction		410,000					410,000
Engineering/Design		40,000					40,000
	TOTAL	450,000					450,000
FINANCING:							
Local Option Sales Tax		175,000					175,000
State Grants		175,000					175,000
Private Contributions (Bike Park Users)		100,000					100,000
	TOTAL	450,000					450,000

PROGRAM - ACTIVITY:

Community Enrichment

DEPARTMENT:

Parks and Recreation

ACCOUNT NO.

COMMUNITY ENRICHMENT - LIBRARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Library Air Conditioning System Replacement	180,800	180,800					125
2 Exterior Building Repair	82,900		82,900				126
3 Skylight Replacement	48,000			48,000			127
4 Library Floor Covering Replacement	180,000				180,000		128
Total Expenditures	491,700	180,800	82,900	48,000	180,000		
REVENUES:							
CITY:							
Local Option Sales Tax	491,700	180,800	82,900	48,000	180,000		
Total Revenues	491,700	180,800	82,900	48,000	180,000		

AIR-CONDITIONING SYSTEM REPLACEMENT

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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, and 2007. This past year, two of the four compressors had to be replaced. Fan blades, replaced in 2006, had to be fabricated as this model is no longer in production and some replacement parts are no longer available.

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 is 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.

LOCATION

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

FISCAL YEAR PRIORITY		1				
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
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:
Community Enrichment

DEPARTMENT:
Library

ACCOUNT NO.
030-2684-459

EXTERIOR BUILDING REPAIR

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This project makes maintenance repairs to the roof and windows. The roof will be twenty-five years old by the end of this fiscal year. It is a ballasted rubber membrane flat roof, requiring 10 lbs. per square foot to hold it in place. Over the past twenty-five years, weathering has affected the rubber membrane by seasonal shrinking. The membrane, upon inspection by a qualified engineer, is showing signs of such shrinking that will lead to cracks that cause leakage into the building. This project calls for slicing and patching the membrane, the recommended repair for such roofs.

The project also calls for re-caulking masonry work, particularly on the EIFS (external insulation finished system) joints on the walls that rise above the roof, especially on the west wall of the addition built in 1985. The EIFS sills at 38 of the upper windows will be removed and reworked. Fifty-six windows will be re-caulked, 150 stone joints re-caulked and 100 masonry control joints re-caulked. This is to repair deterioration due to seasonal conditions.

Finally, the project will spot re-glaze and repaint five metal windows.

Roof repairs	\$ 6,000
Masonry restoration	71,700
Window re-glaze, paint	<u>5,200</u>
Project Total	\$ 82,900

LOCATION

Ames Public Library - Map 5, location M-10

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:				1			
Construction		82,900		82,900			
	TOTAL	82,900		82,900			
FINANCING:							
Local Option Sales Tax		82,900		82,900			
	TOTAL	82,900		82,900			

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Library

ACCOUNT NO.

SKYLIGHT REPLACEMENT

PROJECT STATUS: New

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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

COMMENTS

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

LOCATION

Ames Public Library – Map 5, location M-10

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
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:							
Community Enrichment							
	DEPARTMENT:						
	Library						
	ACCOUNT NO.						

FLOOR COVERING REPLACEMENT

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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.

LOCATION

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

FISCAL YEAR PRIORITY		TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						¹	
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 - PUBLIC WORKS

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 City Hall Improvements	250,000	50,000	50,000	50,000	50,000	50,000	130
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	

CITY HALL IMPROVEMENTS

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

The City Hall Improvements program is for the replacement or repair of equipment, materials, and mechanical system components at City Hall.

As the City Hall facility begins to show signs of wear and tear, the atmosphere citizens have been proud of will deteriorate. This program provides for replacement of equipment and materials such as portions of the roof, the boiler and chiller parts, and major air conditioning units. In addition, vital mechanical system components will also be replaced under this program.

COMMENTS

Proposed schedule:

- 2008/09 Replace the exterior doors; mechanical maintenance and repairs
- 2009/10 Mechanical maintenance and repairs; carryover funds will be used for roof replacement in 2010/11
- 2010/11 Replace roof on City Hall
- 2011/12 Replace 25% of the heat pumps in the building; mechanical maintenance and repairs
- 2012/13 Replace 25% of the heat pumps in the building; mechanical maintenance and repairs

Future year projects will involve continued replacement of heat pumps and boiler replacement.

A project to replace the City Hall exterior doors was identified in 2006/07. The historical significance of the City Hall building allows for (historical) grant eligibility for certain repairs/replacements done to the building. Grant funding for the replacement of the exterior doors is pending approval.

The roof on City Hall will be replaced in 2010/11 with funding made available from a 2009/10 carryover plus the new funds identified in 2010/11.

LOCATION

City Hall (515 Clark Avenue) – Map 5, location L-10

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	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	50,000	50,000	50,000	50,000	50,000

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Public Works

ACCOUNT NO.
030-7164-419

COMMUNITY ENRICHMENT - CITY MANAGER

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Neighborhood Improvement Program	250,000	50,000	50,000	50,000	50,000	50,000	132
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	

DESCRIPTION/JUSTIFICATION

This program was originally designed to enhance the appearance of our 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 according to the following criteria approved by the City Council: public impact, neighborhood participation, safety, environment, housing, and public space. Residents were 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, 101 neighborhood projects have been funded by the City, totaling \$287,251. Projects have included cul-de-sac, right-of-way and median landscaping; playground restoration and/or purchase; alleyway beautification; street trees; pond renovation; historic house plaques and house medallions; prairie restoration; construction of a neighborhood message center; construction of a shelter house in a neighborhood City park, park sidewalks and basketball courts; landscaping of neighborhood entryways; installation of neighborhood barbecue grills; and a neighborhood clean-up day.

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 or other support programs for neighborhood associations that are identified to bolster the development of strong, vibrant neighborhoods.

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	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	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	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 Downtown Facade Program	250,000	50,000	50,000	50,000	50,000	50,000	134
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	

DOWNTOWN FAÇADE IMPROVEMENT PROGRAM

PROJECT STATUS: No Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

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 made available to subsidize the cost of an architect. To date, the program has awarded ten grants for a total amount of \$85,681.

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	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Incentives (Loans or Grants)	250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	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	50,000	50,000	50,000	50,000	50,000

PROGRAM - ACTIVITY:
Community Enrichment

DEPARTMENT:
Planning & Housing

ACCOUNT NO.
040-1030-459

INTERNAL SERVICES - FLEET SERVICES

PROJECT/REVENUE DESCRIPTION	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13	PAGE
EXPENDITURES:							
1 City Maintenance Facility Improvements	406,500	97,500	53,000	23,000	225,000	8,000	136
Total Expenditures	406,500	97,500	53,000	23,000	225,000	8,000	
REVENUES:							
Road Use Tax	101,625	24,375	13,250	5,750	56,250	2,000	
Water Utility Fund	101,625	24,375	13,250	5,750	56,250	2,000	
Sewer Utility Fund	101,625	24,375	13,250	5,750	56,250	2,000	
Fleet Services Fund	101,625	24,375	13,250	5,750	56,250	2,000	
Total Revenues	406,500	97,500	53,000	23,000	225,000	8,000	

BUILDING MAINTENANCE & IMPROVEMENTS

PROJECT STATUS: 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 40,000 square foot building (built in four phases from 1967 to 1997) provides the shop and office space for several City departments. Fleet Services uses 50% of the space and Public Works divisions of Street Maintenance, Traffic Sign & Signal, Parking Meter, Utility Maintenance, and Engineering Construction Inspection use the other 50%.

2008/09	Roof replacement – Phase I (\$45,000); replace interior and exterior door locks (\$32,000); seal coat exterior block walls (\$10,000); repaint shop interiors (\$8,000); replace plumbing/fixtures in locker room (\$2,500)
2009/10	Roof replacement – Phase II (\$45,000); repaint shop interiors (\$8,000)
2010/11	Replace shop floor grates (\$15,000); repaint shop interiors (\$8,000)
2011/12	Shared shop building addition (\$205,000); sprinkler system upgrade (\$8,000); repaint shop interiors (\$8,000); install backflow valve on sprinkler system (\$4,000)
2012/13	Repaint shop interiors (\$8,000)

COMMENTS

The shared shop addition proposed in 2011/12 will allow the combination of the three separate shop areas, that currently exist in each division, into an isolated shop where welding, grinding, cutting, and other activities that create extreme noise and hazardous fumes can be confined and controlled. This will also reduce or prevent tool and equipment redundancies between City divisions.

LOCATION

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

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	2008/09	2009/10	2010/11	2011/12	2012/13
COST:						
Construction	406,500	97,500	53,000	23,000	225,000	8,000
TOTAL	406,500	97,500	53,000	23,000	225,000	8,000
FINANCING:						
Road Use Tax	101,625	24,375	13,250	5,750	56,250	2,000
Water Utility Fund	101,625	24,375		5,750	56,250	2,000
			13,250			
Sewer Utility Fund	101,625	24,375	13,250	5,750	56,250	2,000
Fleet Services Fund	101,625	24,375	13,250	5,750	56,250	2,000
TOTAL	406,500	97,500	53,000	23,000	225,000	8,000

PROGRAM - ACTIVITY:

Internal Services

DEPARTMENT:

Fleet Services

ACCOUNT NO.

810-2770-529

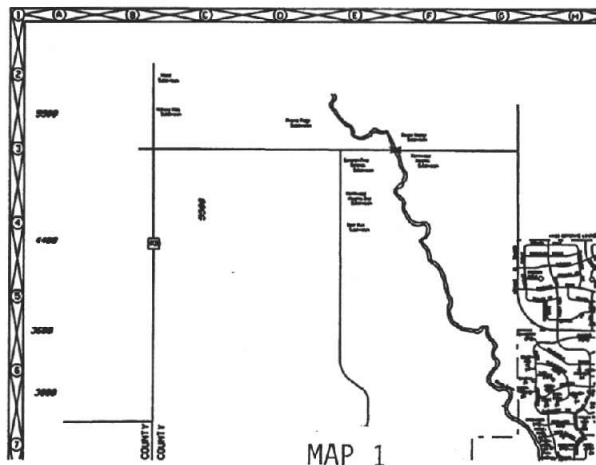


Cyclone Twister

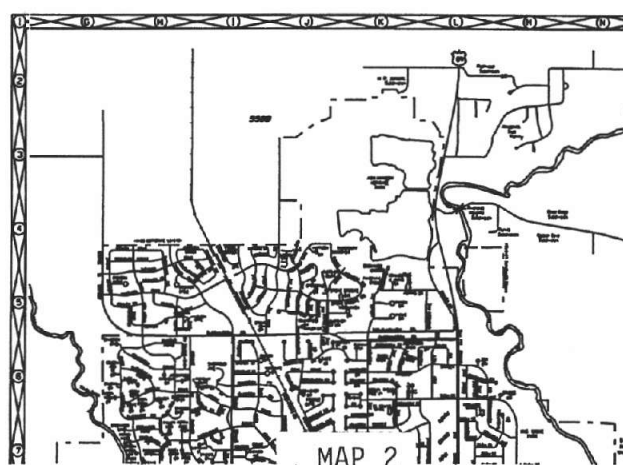
32 Bronze Dance Steps
In Three Concrete Slabs

By Steve Maxon, 1995

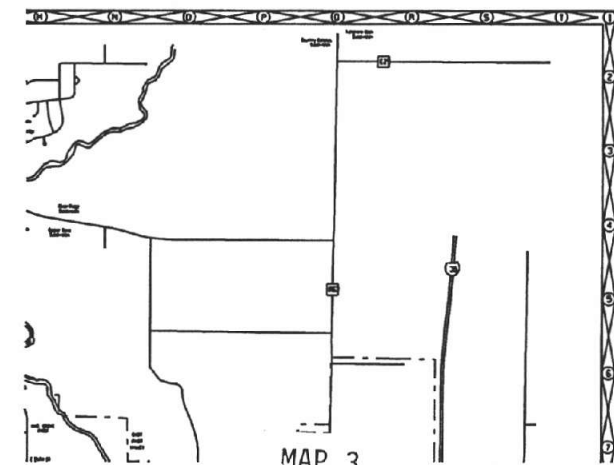
Southeast corner of Welch Avenue
and Chamberlain Street



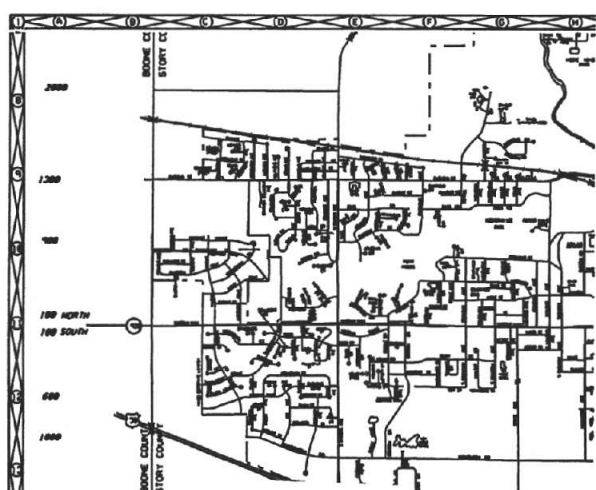
MAP 1



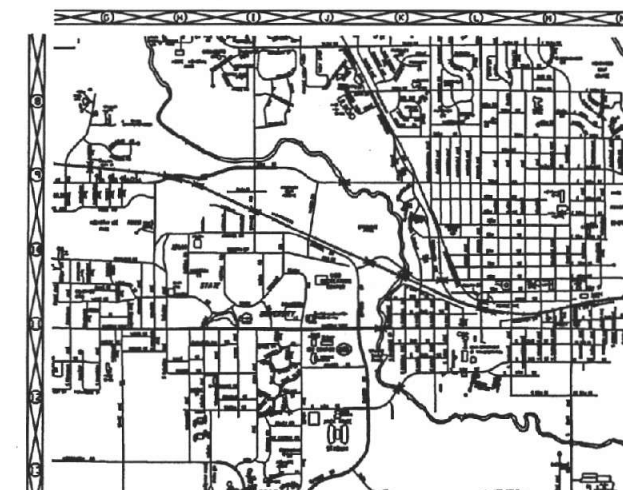
MAP 2



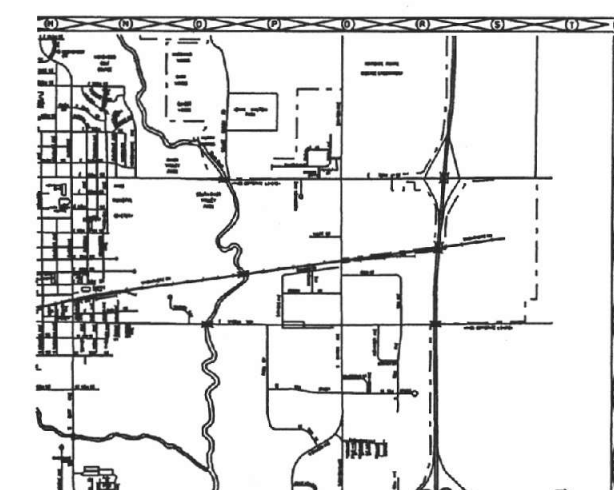
MAP 3



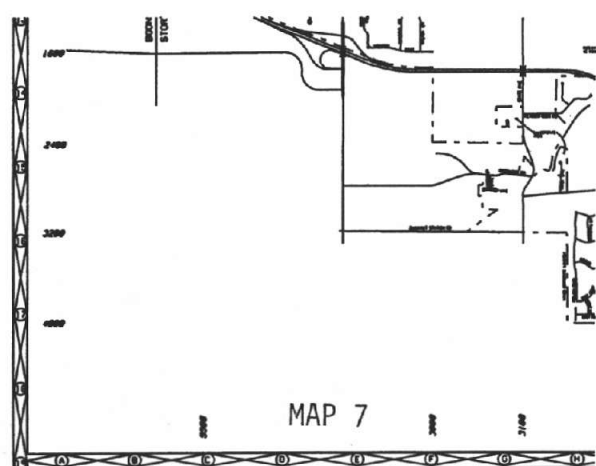
MAP 4



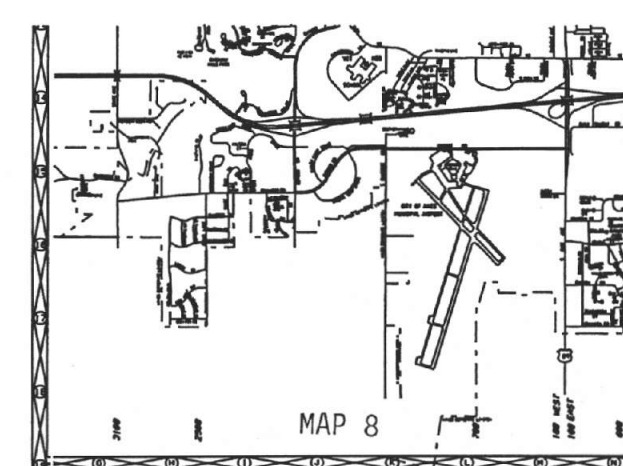
MAP 5



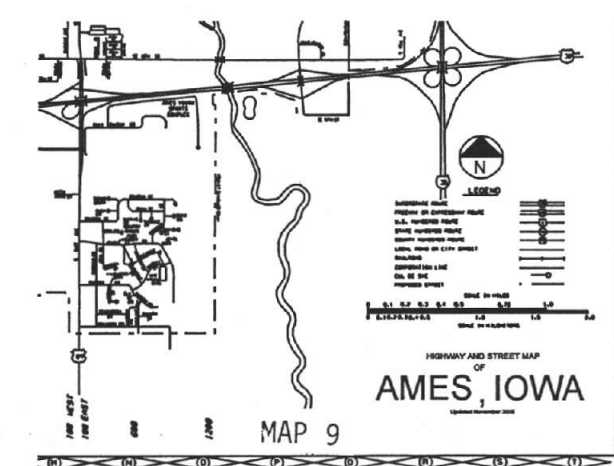
MAP 6



MAP 7



MAP 8



MAP 9

1 (A) (B) (C) (D) (E) (F) (G)

MAP 1

2
3
4
5
6
7

5500

4400

3600

3000

Wood
Subdivision

Hickory Hills
Subdivision

Prairie Ridge
Subdivision

Squaw Valley
Subdivision

Northwood
Heights
Subdivision

Cameron Pine
Estates
Subdivision

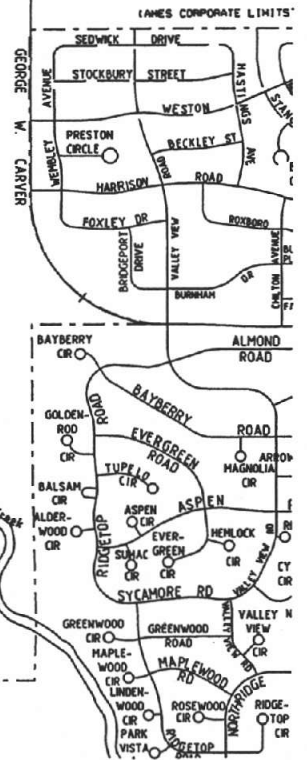
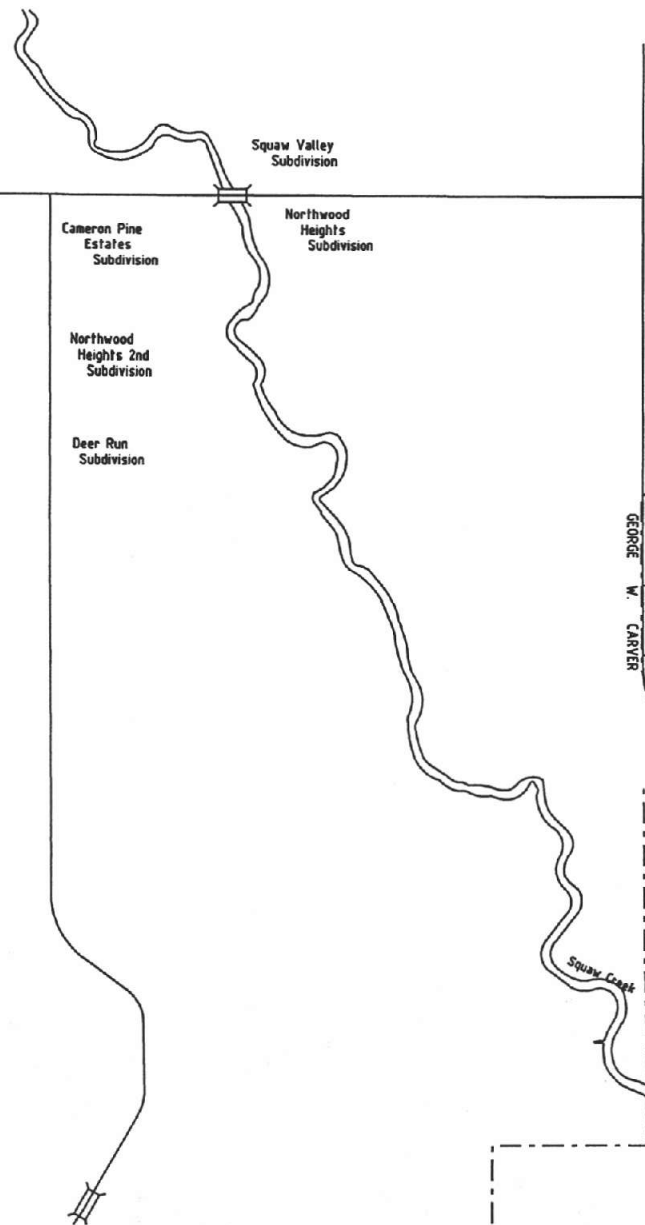
Northwood
Heights 2nd
Subdivision

Deer Run
Subdivision

R38

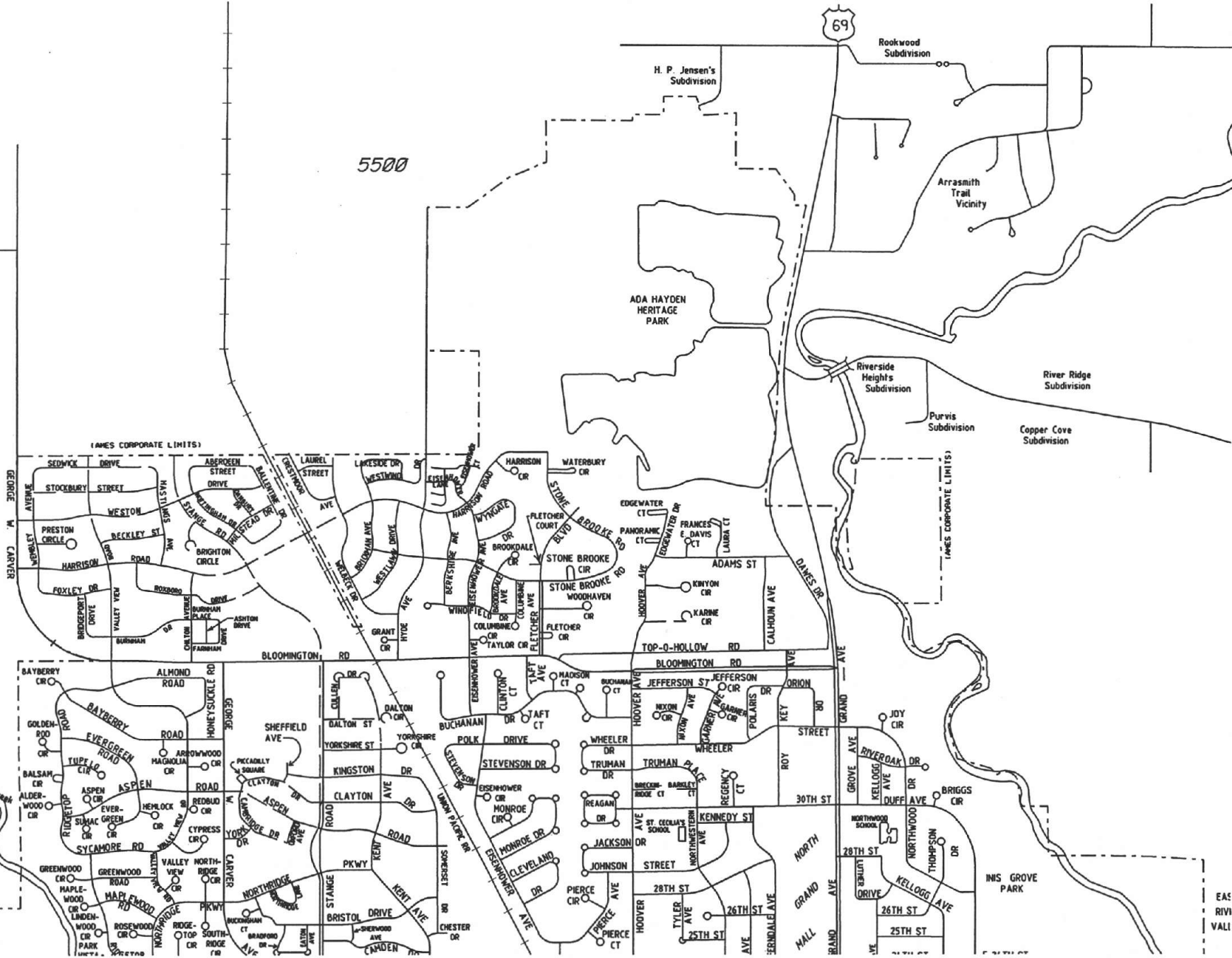
5500

COUNTY
COUNTY

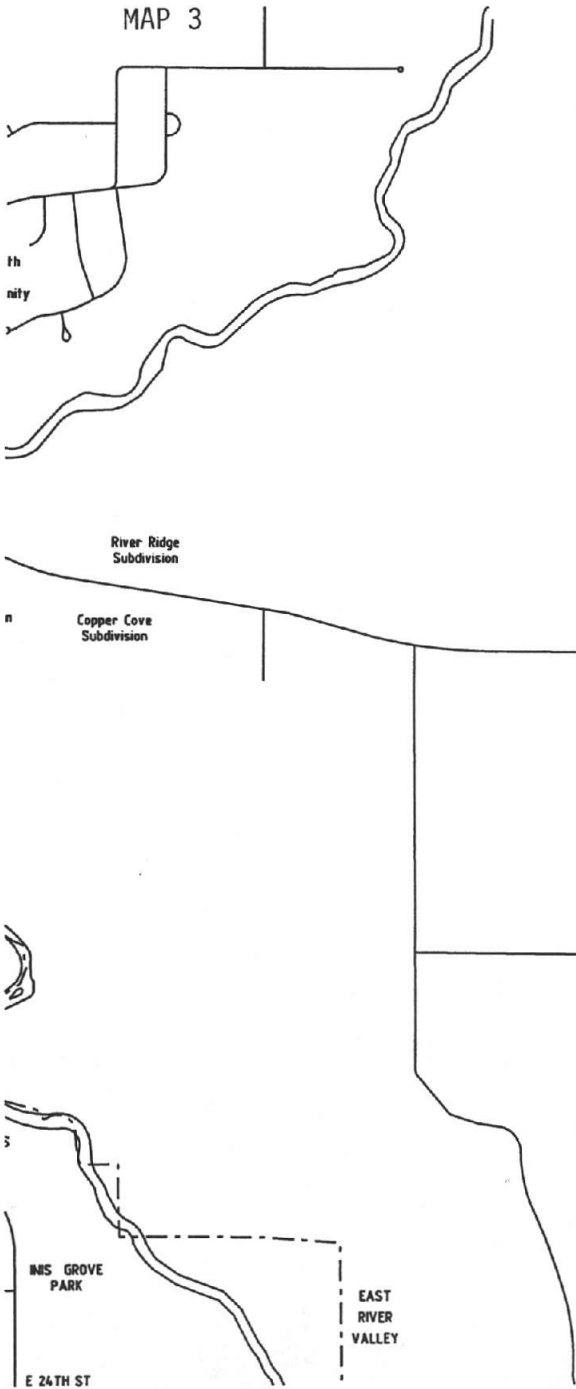


MAP 2

5500



MAP 3



Country Estates Subdivision

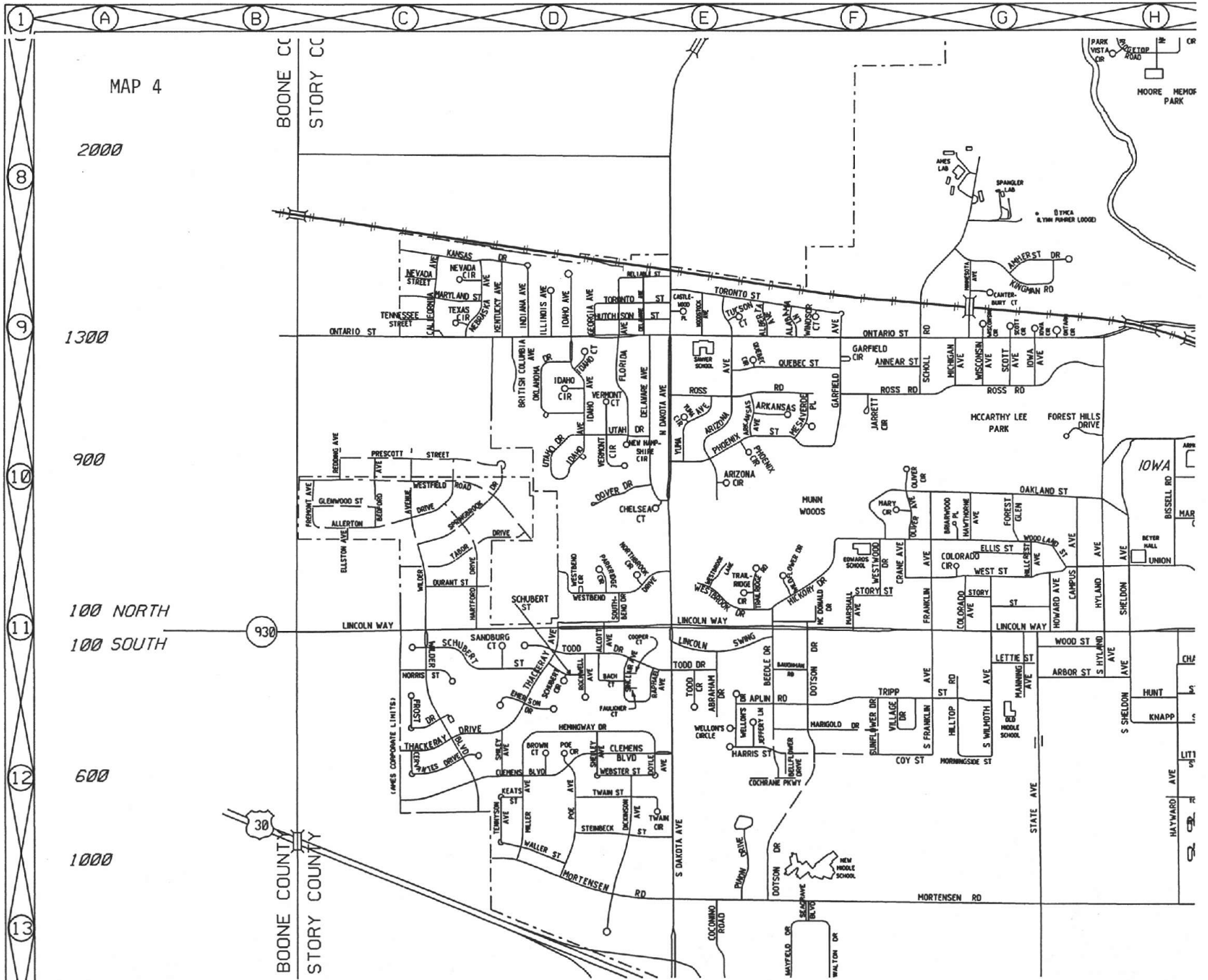
Tullamore Glen Subdivision

E29

R63

35

EAST RIVER VALLEY



MAP 4

2000

1300

900

100 NORTH

100 SOUTH

600

1000

BOONE CC

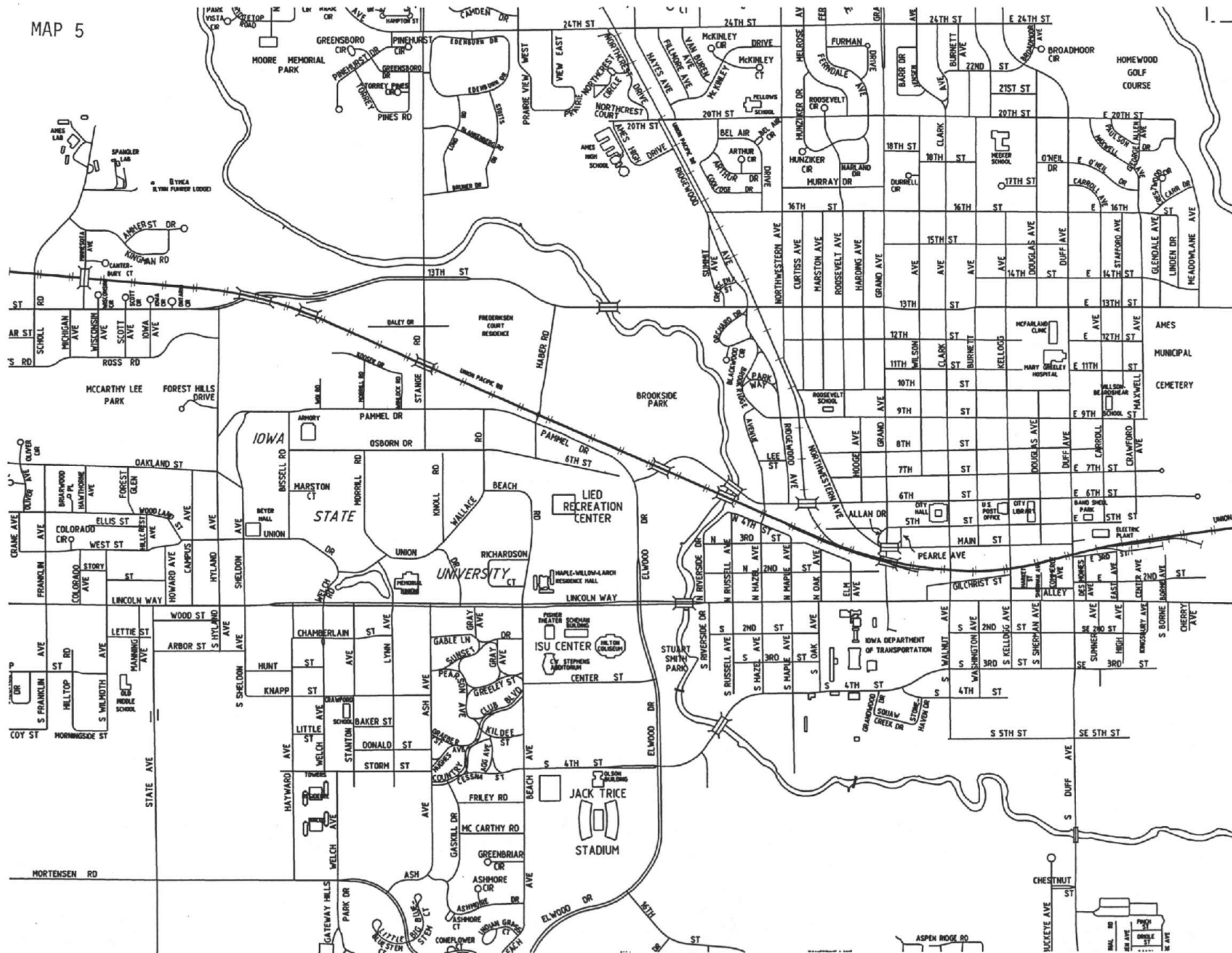
STORY CC

BOONE COUNTY

STORY COUNTY

930

MAP 5



8

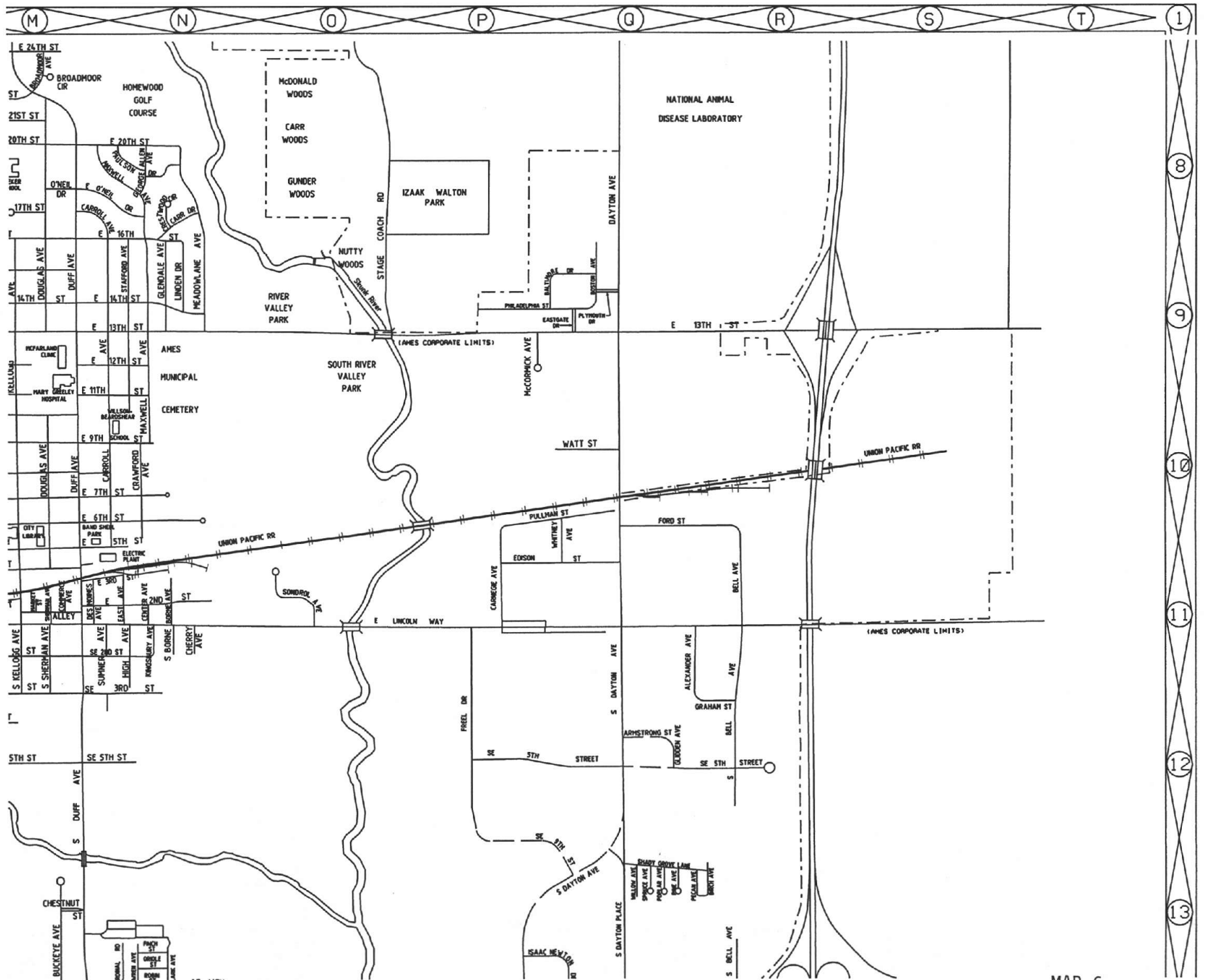
9

10

11

12

13



MAP 7

BOON
STOR

142

AMES / E
KE AREA

1600

2400

3200

4000

5500

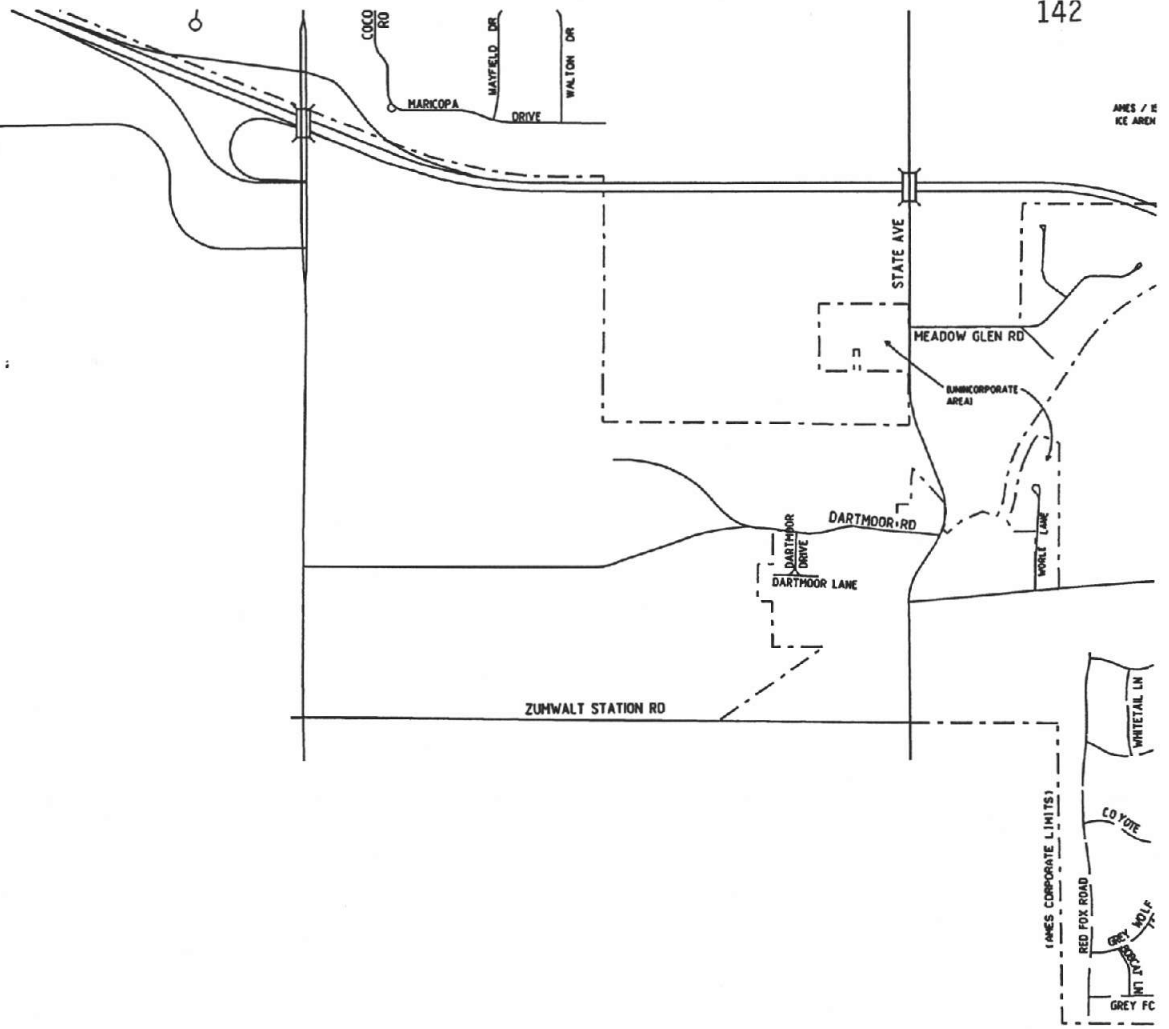
4500

3800

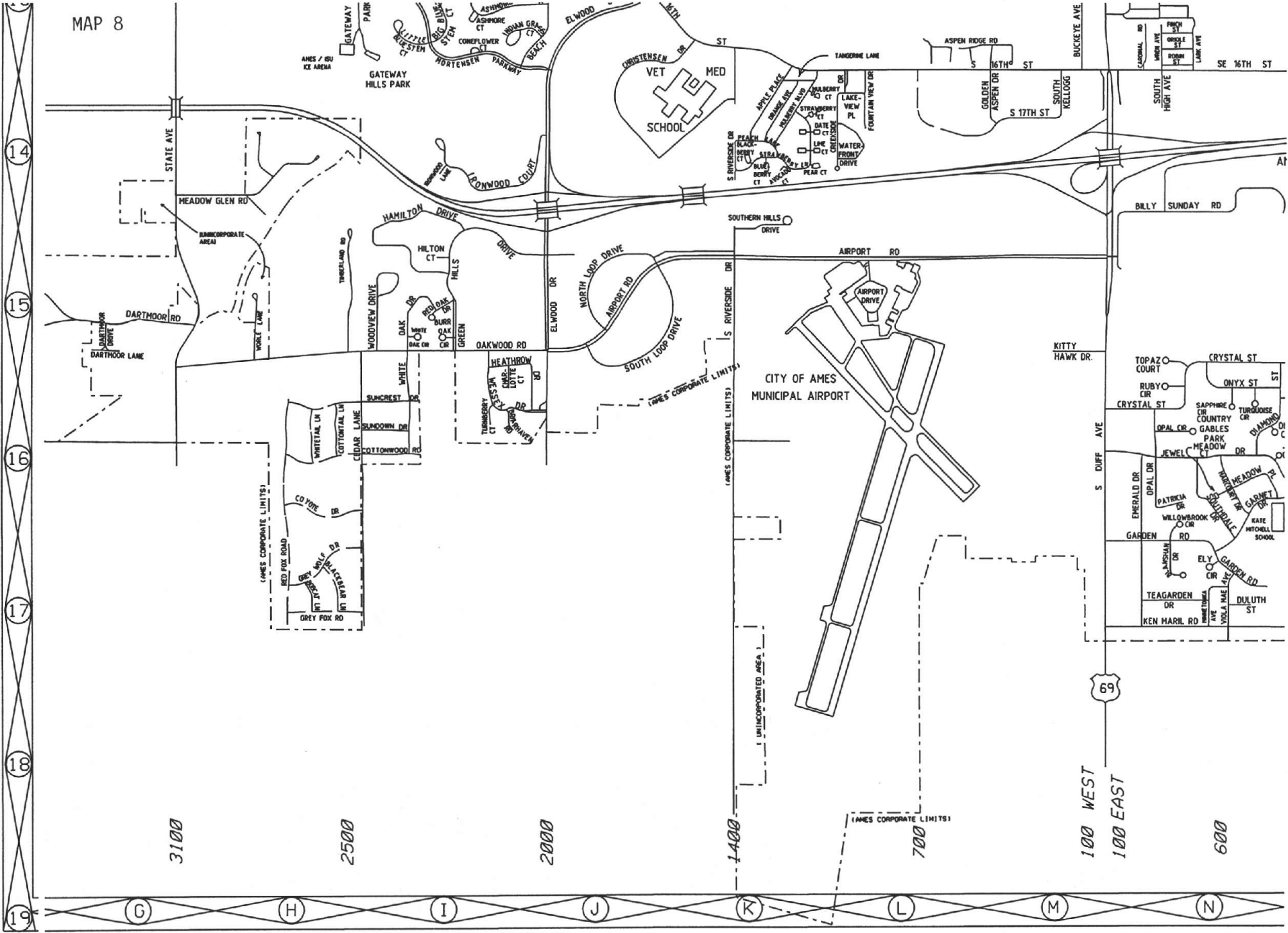
3100

13
14
15
16
17
18
19

A B C D E F G H



MAP 8



3100

2500

2000

1400

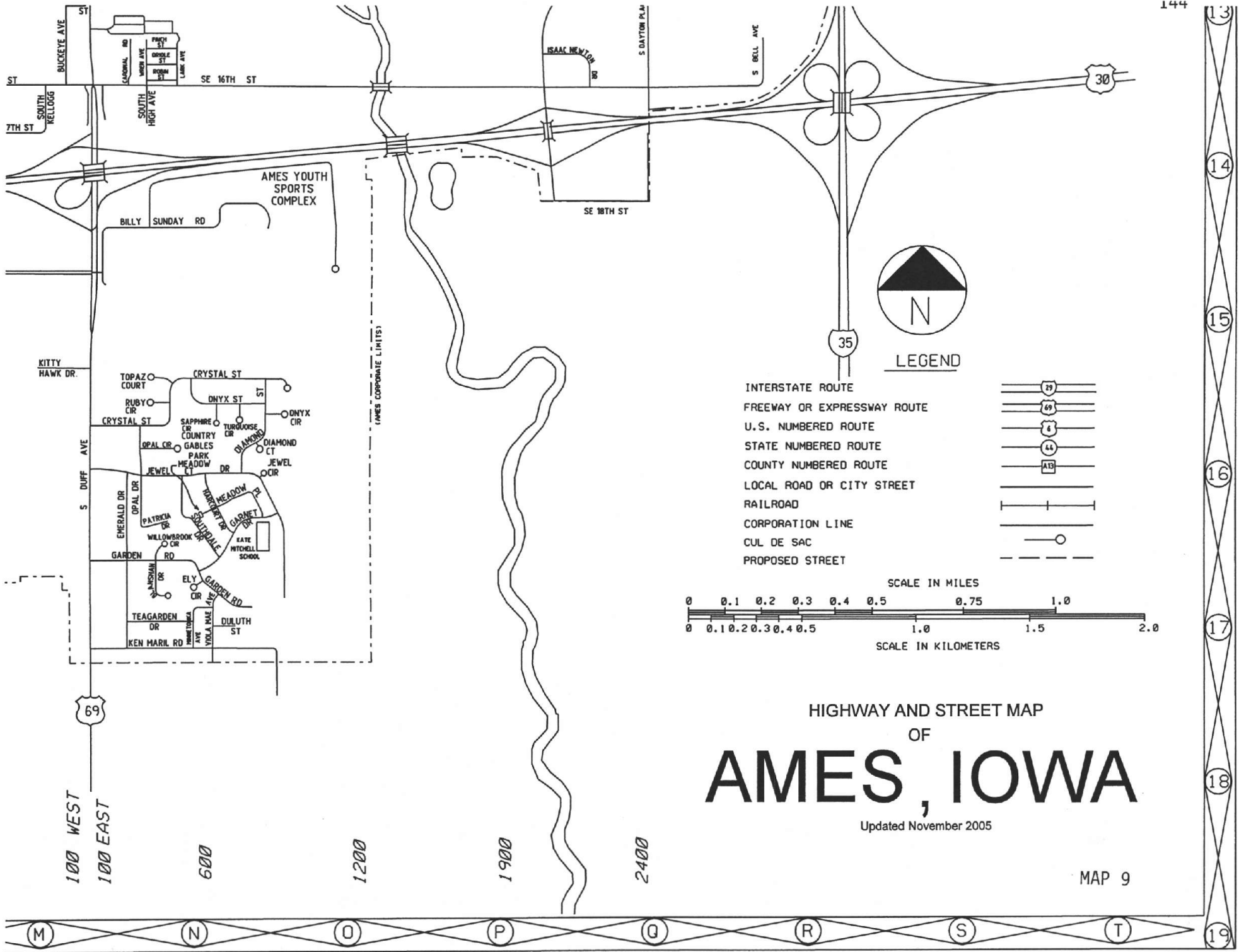
700

100 WEST











100 EAST

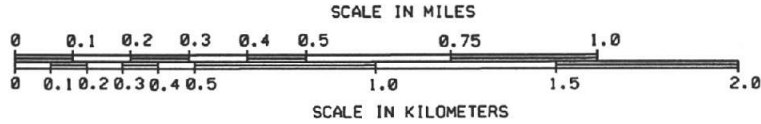
600





LEGEND

- INTERSTATE ROUTE 
- FREEWAY OR EXPRESSWAY ROUTE 
- U.S. NUMBERED ROUTE 
- STATE NUMBERED ROUTE 
- COUNTY NUMBERED ROUTE 
- LOCAL ROAD OR CITY STREET 
- RAILROAD 
- CORPORATION LINE 
- CUL DE SAC 
- PROPOSED STREET 



HIGHWAY AND STREET MAP OF AMES, IOWA

Updated November 2005

MAP 9

100 WEST
100 EAST

600

1200

1900

2400

M N O P Q R S T

13
14
15
16
17
18
19



Dance On The Prairie Dawn

By Maureen A. Seamonds, 2000

Westbend Circle



Flo

By David Johnson, 2001

At Ames Animal Shelter and
Control Building