Eastern Ames Annexation

-Industrial Land Need-

September 2012

Ames Economic Development Commission
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Background

Competition for meaningful employment opportunities and the attraction of capital investment to a community is as strong as it has ever been. Communities are competing for fewer projects and the communities that successfully land projects are those that have prepared themselves with the necessary infrastructure to facilitate development.

It is often estimated by site selection consultants that between 1,200 and 1,500 projects are sited on an annual basis in the United States. Of those projects 2/3 are seeking a "greenfield site," one that is properly zoned and has the necessary infrastructure to develop the required corporate facilities. When companies evaluate locations for such projects they work very hard to eliminate sites to narrow their search to the most viable locations. Today most, if not all, site information is readily accessible via the Internet. The Ames Economic Development Commission website receives an average of 90 daily visits and the City of Ames receives an average of 2,846 daily visits. Site selectors eliminate dozens of sites long before they alert the community of the project.

Ames has a long history of competing for economic development projects. In the last six years the Ames Economic Development Commission, in partnership with the City of Ames, has landed 17 projects resulting in 1,185 jobs and over $217,900,000 in capital investment. Take the timeframe back to 2001 and Ames has been host to 1,829 jobs and $771,035,000 in capital investment that has been driven by the efforts of the AEDC and its partners; a very healthy track record. Many of these projects have utilized existing vacant buildings, while others have required greenfield sites:

- Colorbiotics
- WebFilings
- United Suppliers
- Barilla
- Ball Corporation – now named Amcor
- Ag Leader Technology
- Powerfilm

If Ames had not had the necessary sites for these companies they likely would have located elsewhere. Take for example the impact of the Colorbiotics facility, which was built at 1725 North Dayton Avenue in 2007.

Project Example:	Colorbiotics, Inc./Becker Underwood
Facility size:	140,000 square feet
Capital Investment:	$12 million
Jobs:	75
Annual Property Tax Payments:	$174,874 (2011Net Taxes)

Today, Ames is in a much different position as the community lacks the necessary sites to handle larger scale projects. Companies seeking a 20 acre site or larger would be hard pressed to find something suitable, with the needed infrastructure, to meet their needs in the corporate limits of Ames. Neighboring communities in Story County are better prepared for such requests as are numerous other communities around the Midwest that we frequently compete with for projects.

Take a look at the available sites in the cities that are immediate neighbors to Ames:

Community	Park Name	Total Acres	Largest Site
Boone	Multiple sites	160	80
Huxley	Multiple sites	200	75
Nevada	Multiple sites	340	220
Story City	I-35 Business Park	115	60

The proposed annexation east of Interstate 35 will give Ames a competitive advantage long into the future for large scale projects similar to Colorbiotics. One very exciting feature of the proposed annexation is the fact that Phase I (see attached map) of the proposed annexation would provide the community with sites that could facilitate companies that need railroad access. This would set Ames apart according to Gerald Norton, Site Consultant with Binswanger Real Estate in Minneapolis, Minnesota. Norton is one of the leading site consultants in the upper Midwest, and knows the Ames market very well having recently leased the former Pella facility in Story City.

Norton notes that there are multiple attributes that make Ames an attractive place for locating a project. A few of the items he points to are:

- Ames is home to Iowa State University where the opportunity to collaborate with the University and its faculty are key attributes.

- Ames has a reputation of being able to provide an educated and competent workforce.

- Ames is a community with high quality of life amenities making it very attractive to company decision-makers.

- Ames is strategically located in the upper Midwest.

- Ames has a reputation of being able to close the deal based upon a successful history of putting many complex economic development projects together.

And the list goes on…

The Need

Ames is all of the aforementioned and more. However, while the community continues to enjoy the results of economic development success, it is the role of the AEDC to ensure that the necessary infrastructure is created and protected to compete for large scale projects. We need the flexibility in Ames to propose a 20, 40, 50, or 100 acres or more to site one project. Currently the largest site we can offer is less than 11 acres.

A recent example is a project that was delivered to the AEDC via email on July 18, 2012 from the Iowa Economic Development Authority (IEDA) by project manager Victoria Nwasike. Below is a portion of the text from her email sent to Dan Culhane.

Dear Developer:

RE: IEDA "Project E"

We have been contacted by a site location consulting firm who is representing a large global manufacturing company. This is an extremely competitive project as they are looking at a number of states in the Midwest and Southeast. ***If you do not have a site that can clearly meet all their needs, please do not bother to submit.*** *Any response is due by 12 noon on Thursday July 26.*

The project would bring a total of ***455 new jobs*** *to a community with 265 being hourly; 65 salaried and 140 new jobs coming from contractors in support industries. There would be a* ***capital investment of about $375 million*** *and the potential for future expansions. Initial site visits are scheduled to occur in mid-August.*

As such, the ***project requires either a "shovel-ready site"*** *or a site that can provide similar detailed confirmation that they will meet these parameters:*

Site Requirements:

1. *200-500 acre site with relatively flat, suitable building conditions. The site should be able to accommodate a building that is approximately 600,000 square feet in size initially, and expandable up to 2,000,000 square feet.*
2. *Evidence exists that site ownership can be readily transferred.*
3. *A location in an air attainment area.*
4. *Heavy industrial zoning with adequate buffer from current or future housing and commercial activities.*
5. *A site with no significant wetlands, floodplain or endangered species issues. Certified site or sites with data supporting satisfactory confirmation of the above parameters is necessary.*

Logistical Requirements:

1. *Within 15 miles of any of the following interstates:*
    A. *Interstate 80, from the eastern border of the state to the western border*
    B. *Interstate 35, from the northern border of the state to the southern border*
    C. *Interstate 29, from the northern border of the state to the southern border*
2. *Ingress and egress from the site able to safely and efficiently accommodate employee and truck traffic.*
3. *Rail is required.*
4. *Bridge heights/weights en route to interstates that will support containers that are 93,000 pounds, 40 feet long, 8 feet wide and 9 feet high.*

The information also provided utility and workforce requirements. I have omitted that part of the RFP to save space. The key point of sharing this highly relevant example is the third sentence of the opening paragraph of the RFP, which states, ***"If you do not have a site that can clearly meet all their needs, please do not bother to submit."***

We did not submit a reply. We passed on an opportunity to compete for 455 jobs and $375 million in capital investment. Not because we were too busy. Rather, we passed because we did not have a site that would meet all of their needs. There is available property east of Ames that could likely be purchased that has rail access, but our challenge was that we did not have the utilities in place to respond. As a community we were simply not prepared.

This is just one very recent example of a project where Ames could not be competitive. There have been others in recent years that we know about. There are likely many others that have never contacted us because site selectors and company decision-makers know Ames does not have large scale industrial sites with the necessary infrastructure that are ready to go. If we are presented with a 50-acre user, we are in no position to respond.

Please understand that the City of Ames has been responsive to private developers seeking to develop commercial/industrial sites. The Ames Community Development Park and the more recent extension of Bell Avenue have provided sites where companies could and have developed facilities.

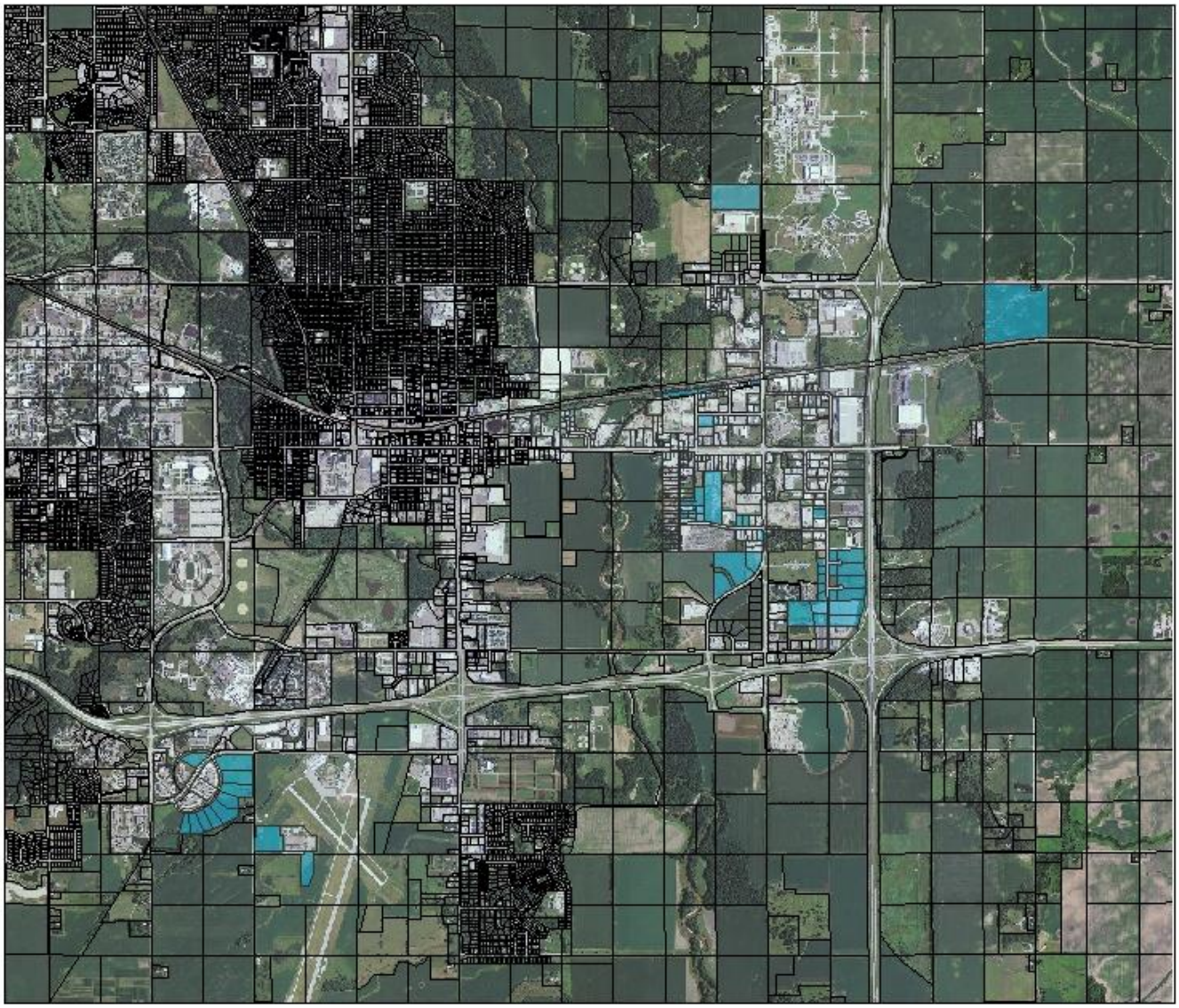
The soon to open, Solum Technology, is a product of this partnership between the City of Ames and a private developer. The South Bell expansion where Solum will open their operation this fall, located north of the DMACC Hunziker Career Academy, was ready to go. Had Ames and Hunziker Land Development not partnered on the roadway improvements and Dean Hunziker not invested in a speculative building, we know this project would have located in Urbandale.

The City of Ames has a history of clearing the way for companies to locate and invest here. This is why the AEDC has respectfully asked the City of Ames to move forward

with annexation east of Interstate 35, which would allow for meaningful employment opportunities to develop here along with sizable capital investment. City investment in infrastructure has worked before and it can work again.

Available Industrial Properties:

The properties indicated on the following map identify industrially zoned properties that are currently vacant. It has been determined that there are 53 vacant properties remaining, totaling 254.66 acres. The properties range in size from 0.36 acres to 55 acres. The mean acreage is 4.80 acres. The AEDC has reviewed the available vacant properties identified on the following map and have found that out of the 254 acres, only 58.15 acres are available for development with the largest property at 10.62 acres in size. The map does not account for infrastructure availability, or lack thereof, or of existing plans for industrial expansion.



Why This Location?

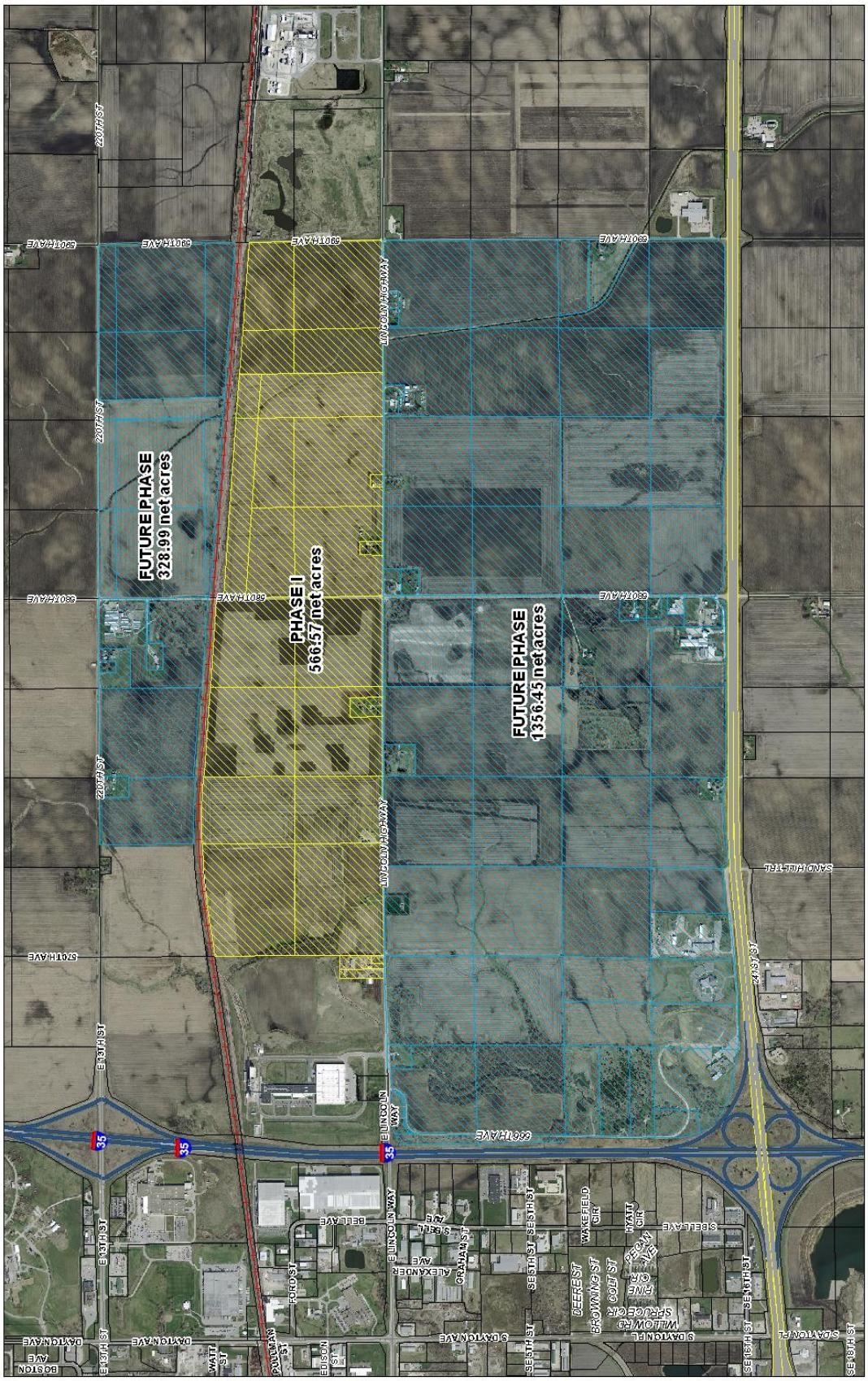
Take a drive around the Ames community and it would appear that there are a number of likely locations for further expansion for industrial uses. The AEDC proposed a similar industrial expansion in 2009 along the 13th Street corridor. The primary driver of that location was the potential for private mall developer Bucky Wolford to deploy the necessary infrastructure east under I-35 as this was part of his agreement with the City. The AEDC saw this as a cost efficient way to "piggyback" on his investment and develop the needed industrial parcels to the east of the proposed retail sites.

When the mall development fell by the wayside, so did our opportunity to connect to the agreed upon infrastructure east of I-35. While this opportunity was lost, we refer back to the 2002 Industrial Study, which clearly pointed to the area east of I-35 as the most viable location for industrial expansion.

The benefit of pursuing annexation along the Lincoln Way corridor is that it allows for incremental growth (see following map - phasing of long-range annexation) from the Union Pacific Railroad south to U.S. Highway 30. The focus of this initial request is Phase I only.

The AEDC has already met with landowners in Phase I and the majority of land owners have committed to voluntary annexation. While negotiations for land options are ongoing and nothing has been finalized we know that the owners of the major parcels are willing sellers. This is why we believe this is a logical place to start the process of annexation.

If you combine voluntary annexation with willing sellers, railroad access, proximity to two I-35 interchanges, the pieces of a successful development come together very well. The other very visible benefit to this corridor is that there are anchor industrial tenants in this area, Barilla is located to the west and DuPont's new cellulosic ethanol plant and Lincoln Way Energy are located on the eastern end of the corridor. This clearly indicates that this area is poised for further industrial growth and development.


FUTURE PHASE
328.99 net acres
PHASE I
566.57 net acres
FUTURE PHASE
1356.45 net acres
220TH ST
580TH AVE
LINCOLN HIGHWAY
E 13TH ST
E LINCOLN WAY
DAYTON AVE
SE 16TH ST
SE 18TH ST
S DAYTON AVE
S BELL AVE
SAND HILL TRL
24ST ST
35

Summary

The AEDC has proposed this annexation based upon the 2002 Industrial Study, the possibility for adjacent infrastructure connectivity and the fact that there is potential for great synergy with other major industrial users in the immediate area.

This is a major undertaking and considerable thought has been put forth as this process has unfolded. There are numerous benefits that will be leveraged by investing in the Lincoln Way corridor – the obvious being rail, ability to assemble large parcels, and rapid access to existing interchanges to I-35/US Hwy 30.

This is a large step for any community and the Ames community has a positive track record of setting the table for successful economic development. The AEDC stands ready to partner with the City of Ames, the Union Pacific Railroad, Iowa Department of Transportation, private developers, landowners and others, to make this a viable location for companies of the future to create meaningful employment opportunities and deploy large sums of capital investment in facilities that will generate significant tax base.

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Staff Report

FINANCIAL ANALYSIS OF INDUSTRIAL GROWTH

September 11, 2012

THE ASSIGNMENT

On May 15, Council directed staff to perform a financial analysis of the potential extension of water and sewer utilities for eastern industrial growth. The analysis includes water and sewer revenues, property tax revenues (with 5-year industrial tax abatement), jobs, and sales tax estimations. The estimated costs to deliver service to this 590-acre area are $800,000 (water) and $3.5 million (sewer). The adopted FY 2012/13 budget includes increases to water and sewer rates to pay debt service for these utility extensions.

CURRENT INDUSTRIAL VALUATIONS

There are currently 40 parcels of land in Ames totaling 496 acres that are in industrial use. From 2003-2010, Ames' industrial valuation rose an average of 6.4% annually (from $85,990,630 to $129,708,000). Industrial valuation overall in Iowa rose an average of 2.6% per year over the same period of time. The industrial valuation changes among neighboring suburban communities of a similar size and larger Iowa cities with rates of increase similar to Ames are as follows:

Total Industrial Valuation (TIF plus Non-TIF)

City	2002	2010	Avg. Annual Change
Ames	**$85,990,630**	**$129,708,000**	**6.4%**
Ankeny	$65,377,160	$68,211,200	0.5%
Clinton	$100,578,787	$193,984,740	11.6%
Council Bluffs	$46,833,391	$78,977,579	8.6%
Dubuque	$82,169,780	$132,664,050	5.8%
Iowa City	$53,651,380	$78,440,990	5.8%
Waterloo	$104,884,170	$140,787,360	4.3%
West Des Moines	$30,063,830	$33,656,870	1.5%

The change in industrial valuation is comprised of changes in development, improvements to existing developments, inflation, and challenged assessments.

DEVELOPMENT ASSUMPTIONS

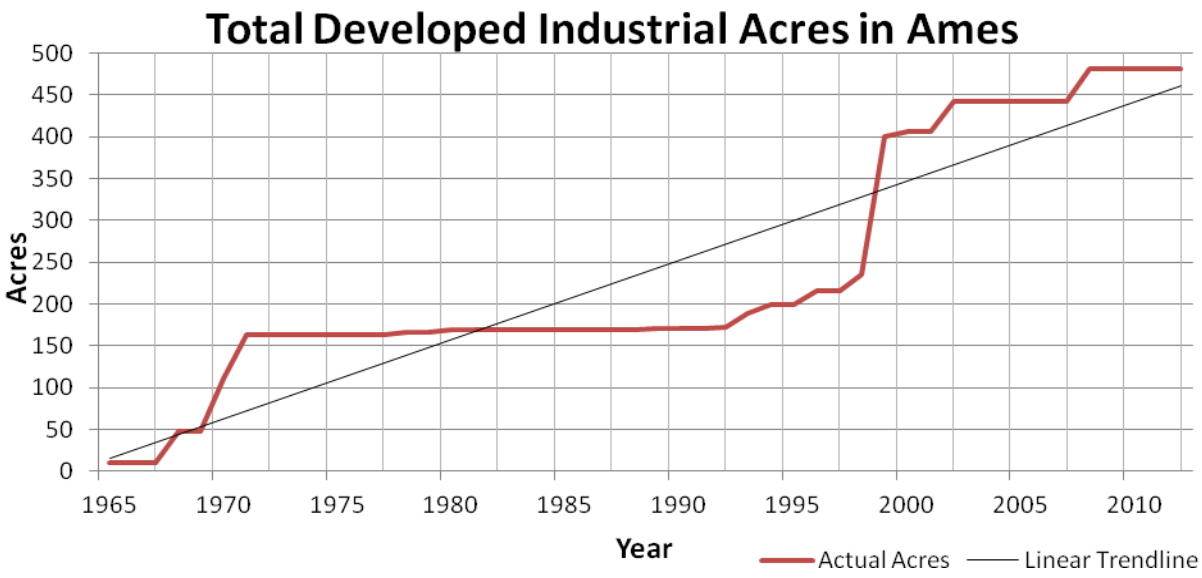
- This analysis focuses on the 40 parcels that are currently in industrial use. (An additional 258 parcels are zoned industrial, but are not in industrial use.)

- It is assumed that the industrial property tax structure will remain unchanged into the future and that the City's tax levy ($10.72/$1,000) and water and sewer use charges will remain stable.

- It is assumed that the level of water consumption, sewer use, and land area historically used by industrial properties equal their 2012 totals.

- When considering a property with several structures, the year that the largest structure was built is used as the year the property was absorbed.

ABSORPTION SCENARIOS



Scenario A – 10.25 Acres Per Year

Most existing industrial development in Ames dates from the mid-1960s to present. There are 27 parcels smaller than 10 acres in area, and three larger than 25 acres. The mean parcel size is 12.03 acres, while the median is 3.32 acres. At present there remain nine industrial parcels that are either undeveloped or are vacant land, totaling 35.4 acres. **Between 1965 and 2012, an average of 10.25 acres was developed per year. Continued growth at this rate has been designated as Scenario A.**

Scenario B – 16.03 Acres Per Year

Staff analyzed the history of Ames' existing developments in 5-year periods. The period between 1996 and 2000 saw the most intense industrial growth, with eight parcels developed totaling 206.86 acres (41.37 acres per year). If it is the assumption that opening new area for industrial development will allow growth at a rate equivalent to Ames' best period of growth, this period of time may be a good indicator for future absorption potential. However, this period included the development of Barilla, which was a uniquely large and high value development. It can be expected that perhaps only one Barilla-size development might be possible in a new industrial area. Excluding Barilla's development during that period, but adding in a development of average size in its place, **Ames' best**

period of growth would have added an average of 16.03 acres per year. Growth at this rate has been designated as Scenario B.

Scenario C – 20.04 Acres Per Year

It can suggested that the limited availability of vacant industrial land is an inhibitor to growth, and that with more large lots available, growth rates would increase. **Scenario C considers a growth rate 25% faster than that of the best period of growth, or 20.04 acres per year.**

Growth Scenario	Annual Absorption	Estimated Time to Develop 590 Acres
A	10.25 Acres	58 Years
B	16.03 Acres	37 Years
C	20.04 Acres	29 Years

COST TO EXTEND UTILITIES

If the City Council approves extension of water and sewer utilities, the City will issue General Obligation bonds. Repayment of the debt will be made from water and sewer revenues. The debt for proposed water and sewer lines will most likely be placed on a 20-year repayment schedule. At an annual interest rate of 3%, it is anticipated that total principal and interest payments over the life of the debt will total $1,080,000 for the water line and $4,700,000 for the sewer line. Annual estimated debt service payments are $54,000 for the water line and $235,000 for the sewer line, for a total of $289,000 per year.

WATER AND SEWER PAYBACK ESTIMATES

The water and sewer lines identified in the proposed $4.3 million capital improvement have capacity of 2.96 million gallons (395,694 feet^3) per day, or 144,428,310 feet^3 per year. The most water that could be supplied once 100% of the land has been developed is 395,694 feet^3 per day. However, it is unlikely that actual usage will ever approach 100% capacity.

The existing industrial users consume a total of 14,799,146 feet^3 of water per year. However, they vary widely in terms of their water and sewer use. The mean existing industrial user consumes 435,269 feet^3 of water per year, although this is skewed because there are a handful of very heavy water users; the median industrial water user consumes 19,930 feet^3 per year. In terms of mean water usage per acre, this existing usage equates to approximately 29,821 feet^3 of water per acre per year. If it is assumed that the new industrial area will use water with the same intensity over a larger area, it can be expected that the new industrial area would use least 17,594,000 feet^3 of water per year.

Calculations in this analysis provide three scenarios for water and sewer use; (1) that the new industrial area will be populated entirely by industries similar to the existing blend of industrial users, (2) a typical large water user (such as Sauer Danfoss), and (3) similar to a typical large sewer user (such as Hach Company).

The analysis included estimated average net revenue of $3.78 per 100 feet^3 of water sold and $3.25 per 100 feet^3 of sewer discharge. These figures are generated by subtracting the total costs of production from the total revenues of sales for the water and sewer utilities and averaging over the total quantity of water sold in recent years.

It should be cautioned that characteristics of individual industries (peak flow month versus typical flow month, high strength discharge, wastewater metering, etc.) may drastically change the revenue realized from new customers.

The debt repayment period is set at 20 years, since the water and sewer lines may require additional investment after this period of time. Any break-even point longer than 20 years increases the chances that the City may need to issue new debt or invest other capital for the new water and sewer lines while the initial debt is still outstanding.

Industry Model	Avg. Water Consumption per Acre	Absorption Rate (Acres/Year)	Net New Water Revenue Each Year (2012 Dollars)	Water Revenue Break-Even Year	Net New Sewer Revenue Each Year* (2012 Dollars)	Sewer Revenue Break-Even Year
Existing Blend of Ames Industries	29,821 feet^3/year	A: 10.25	$11,554	9	$9,934	31
		B: 16.03	$18,070	5	$15,536	25
		C: 20.04	$22,590	4	$19,422	22
Sauer Danfoss	30,243 feet^3/year	A: 10.25	$11,718	9		
		B: 16.03	$18,325	5		
		C: 20.04	$22,909	4		
Hach Company	46,678 feet^3/year	A: 10.25			$15,550	25
		B: 16.03			$24,318	19
		C: 20.04			$30,401	15

* Excludes surcharges for high-strength discharge, which are assessed on some industrial customers
See Appendices A-D for more detail.

This analysis indicates that the anticipated new water revenues are likely to be sufficient to pay back the capital investment for a new water line in a reasonable time period, provided that new development occurs at or above Ames' historical absorption rates. However, if elevated water storage is required for fire protection early on in the development of this area, the payback could lengthen considerably. Previous staff reports have estimated the cost for elevated storage at up to $3 million.

Due to the higher cost of sewer infrastructure, sewer revenues are less likely to be sufficient to cover the debt service in less than 20 years. Only if development includes heavier sewer users at the more rapid absorptions rates, does the break-even point occur before 20 years.

PROPERTY TAX ANALYSIS

The most intense users of water and sewer are not necessarily larger and higher-valuation industrial properties. This analysis of property tax absorption is therefore independent of the water and sewer analysis.

Average Value Per Acre

The 2012 total assessed valuation of the City's 40 parcels now in industrial use is $144,221,900 (land and improvements). **This is an average value of $290,612 per acre.** Because there are few existing industrial parcels, there is a wide variation in size of parcels, size of structures, and use of water and sewer.

The *Municipal Code* provides that eligible new industrial development can receive property tax abatement based on the following schedule:

	Year				
	1	2	3	4	5
% of Abatement	75%	60%	45%	30%	15%

Assuming that all new industrial properties are tax-abated, calculations were made to determine the new industrial area's contribution to property tax revenues. These figures were compared to the cost of providing new water and sewer service. **In practice, the cost for water and sewer lines will be repaid from revenues in the water and sewer funds, not property taxes. However, this exercise provides some insight into the overall value added to the community by the industrial growth. The following property tax revenues (in 2012 dollars) might be seen based on absorption Scenarios A, B, and C:**

Absorption Rate (Acres/Year)	**1** Incremental Property Tax Break Even Year (Cash Basis)	**2** Incremental Property Tax Break Even Year (Present Value Basis)
A: 10.25	20	23
B: 16.03	15	16
C: 20.04	13	14

See Appendices E-G for more detail.

The chart above compares the total incremental property tax revenue generated from newly developed property at the current property tax levy rate against the debt service required to extend the utility lines. Column (1) provides a cash basis analysis of debt repayment for water and sewer lines from incremental property tax revenue. Column (2) provides the same analysis on a present value basis which takes into account the difference in timing of cash flow, with expense for debt repayment coming immediately and revenues starting low and growing over time as land develops. The tax abatement is included in the analysis and the discount rate used for the present value analysis is 3%.

SALES TAX

While taxable sales are allowed in industrial zones, materials used in production are not taxable. Purchases of materials that are not used in production would be taxable and 1% will return to the City through the Local Option Sales Tax. Due to a lack of individual-level data on Local Option Sales Tax, it is difficult to determine how large a contribution this might be to City revenues.

JOBS

Due to the varied industries that might be present in a 590-acre tract, the number of jobs associated with industrial expansion cannot be precisely estimated. Some industrial jobs calculators estimate jobs per gross square footage (G.S.F.) of building space.

The National Association of Industrial and Office Properties, a commercial development trade association, estimates a national average of 1.11 jobs for every 1,000 G.S.F. of industrial or warehouse use. The Urban Land Institute, a nonprofit research organization, has suggested that light industrial, warehousing, and manufacturing uses average 1.80 employees per 1,000 G.S.F. The cities of Wausau and Brillion, Wisconsin, in conducting their analyses of industrial land use, modified the Urban Land Institute's figures to be a more conservative 1.50 employees per 1,000 G.S.F.

Cedar Falls has recently developed a 1,200 acre industrial and technology park with rail access. The guidelines for locating within this park require a minimum of 1.00 job per 1,000 G.S.F., and a total of 12,000 new jobs.

The existing Ames industrial land has a 6.5:1 average lot-building coverage ratio. Using the range of job metrics above (1.00-1.80 jobs per 1,000 G.S.F.), it can be calculated that 590 acres of development with a similar lot-building coverage ratio would produce between 3,900 and 7,100 direct jobs.

	Job Density per 1,000 G.S.F.			
	1.00	1.11	1.50	1.80
Total Direct Jobs Anticipated in 590 Acres	3,941	4,375	5,912	7,094

Another alternative might be to use existing businesses as models. The following job estimates might be seen if the new industrial area was developed with similar industries:

Industry Type	Existing Employees	Existing Jobs per 1,000 G.S.F.	No. of Industries that Could Fit in 590 Acres	Anticipated Employees in New 590 Acres
3M	350	1.02	9.4	3,290
AMCOR	150	0.18	36.8	5,520
Barilla	154	0.30	4.3	662
Lincolnway Energy	45	0.48	9.2	414
Sauer Danfoss	1,088	3.23	11.4	12,403

APPENDIX A: Water Payback Scenarios using Blend of Existing Industries

Growth Option A

		Net Water Revenues		Annual	Cumulative
	Cumulative	$ 3.78		Surplus	Surplus
Year	Consump. Added	per 100 ft^3	D/S	(Deficit)	(Deficit)
1	305,665	$ 11,554	$ 54,000	$ (42,446)	$ (42,446)
2	611,330	$ 23,108	$ 54,000	$ (30,892)	$ (73,338)
3	916,995	$ 34,662	$ 54,000	$ (19,338)	$ (92,675)
4	1,222,660	$ 46,217	$ 54,000	$ (7,783)	$ (100,459)
5	1,528,325	$ 57,771	$ 54,000	$ 3,771	$ (96,688)
6	1,833,990	$ 69,325	$ 54,000	$ 15,325	$ (81,363)
7	2,139,655	$ 80,879	$ 54,000	$ 26,879	$ (54,484)
8	2,445,320	$ 92,433	$ 54,000	$ 38,433	$ (16,051)
9	2,750,985	$ 103,987	$ 54,000	$ 49,987	$ 33,936
10	3,056,650	$ 115,541	$ 54,000	$ 61,541	$ 95,478
11	3,362,315	$ 127,096	$ 54,000	$ 73,096	$ 168,573
12	3,667,980	$ 138,650	$ 54,000	$ 84,650	$ 253,223
13	3,973,645	$ 150,204	$ 54,000	$ 96,204	$ 349,426
14	4,279,310	$ 161,758	$ 54,000	$ 107,758	$ 457,184
15	4,584,975	$ 173,312	$ 54,000	$ 119,312	$ 576,496
16	4,890,640	$ 184,866	$ 54,000	$ 130,866	$ 707,363
17	5,196,305	$ 196,420	$ 54,000	$ 142,420	$ 849,783
18	5,501,970	$ 207,974	$ 54,000	$ 153,974	$ 1,003,757
19	5,807,635	$ 219,529	$ 54,000	$ 165,529	$ 1,169,286
20	6,113,300	$ 231,083	$ 54,000	$ 177,083	$ 1,346,369

Growth Option B

		Net Water Revenues		Annual	Cumulative
	Cumulative	$ 3.78		Surplus	Surplus
Year	Consump. Added	per 100 ft^3	D/S	(Deficit)	(Deficit)
1	478,030	$ 18,070	$ 54,000	$ (35,930)	$ (35,930)
2	956,060	$ 36,139	$ 54,000	$ (17,861)	$ (53,791)
3	1,434,090	$ 54,209	$ 54,000	$ 209	$ (53,583)
4	1,912,120	$ 72,278	$ 54,000	$ 18,278	$ (35,305)
5	2,390,150	$ 90,348	$ 54,000	$ 36,348	$ 1,043
6	2,868,180	$ 108,417	$ 54,000	$ 54,417	$ 55,460
7	3,346,210	$ 126,487	$ 54,000	$ 72,487	$ 127,947
8	3,824,240	$ 144,556	$ 54,000	$ 90,556	$ 218,503
9	4,302,270	$ 162,626	$ 54,000	$ 108,626	$ 327,129
10	4,780,300	$ 180,695	$ 54,000	$ 126,695	$ 453,824
11	5,258,330	$ 198,765	$ 54,000	$ 144,765	$ 598,589
12	5,736,360	$ 216,834	$ 54,000	$ 162,834	$ 761,424
13	6,214,390	$ 234,904	$ 54,000	$ 180,904	$ 942,328
14	6,692,420	$ 252,973	$ 54,000	$ 198,973	$ 1,141,301
15	7,170,450	$ 271,043	$ 54,000	$ 217,043	$ 1,358,344
16	7,648,480	$ 289,113	$ 54,000	$ 235,113	$ 1,593,457
17	8,126,510	$ 307,182	$ 54,000	$ 253,182	$ 1,846,639
18	8,604,540	$ 325,252	$ 54,000	$ 271,252	$ 2,117,890
19	9,082,570	$ 343,321	$ 54,000	$ 289,321	$ 2,407,211
20	9,560,600	$ 361,391	$ 54,000	$ 307,391	$ 2,714,602

Growth Option C

Year	Cumulative Consump. Added	Net Water Revenues $ 3.78 per 100 ft^3	D/S	Annual Surplus (Deficit)	Cumulative Surplus (Deficit)
1	597,613	$ 22,590	$ 54,000	$ (31,410)	$ (31,410)
2	1,195,226	$ 45,180	$ 54,000	$ (8,820)	$ (40,231)
3	1,792,839	$ 67,769	$ 54,000	$ 13,769	$ (26,461)
4	2,390,452	$ 90,359	$ 54,000	$ 36,359	$ 9,898
5	2,988,065	$ 112,949	$ 54,000	$ 58,949	$ 68,847
6	3,585,678	$ 135,539	$ 54,000	$ 81,539	$ 150,385
7	4,183,291	$ 158,128	$ 54,000	$ 104,128	$ 254,514
8	4,780,904	$ 180,718	$ 54,000	$ 126,718	$ 381,232
9	5,378,517	$ 203,308	$ 54,000	$ 149,308	$ 530,540
10	5,976,130	$ 225,898	$ 54,000	$ 171,898	$ 702,437
11	6,573,743	$ 248,487	$ 54,000	$ 194,487	$ 896,925
12	7,171,356	$ 271,077	$ 54,000	$ 217,077	$ 1,114,002
13	7,768,969	$ 293,667	$ 54,000	$ 239,667	$ 1,353,669
14	8,366,582	$ 316,257	$ 54,000	$ 262,257	$ 1,615,926
15	8,964,195	$ 338,847	$ 54,000	$ 284,847	$ 1,900,773
16	9,561,808	$ 361,436	$ 54,000	$ 307,436	$ 2,208,209
17	10,159,421	$ 384,026	$ 54,000	$ 330,026	$ 2,538,235
18	10,757,034	$ 406,616	$ 54,000	$ 352,616	$ 2,890,851
19	11,354,647	$ 429,206	$ 54,000	$ 375,206	$ 3,266,057
20	11,952,260	$ 451,795	$ 54,000	$ 397,795	$ 3,663,852

APPENDIX B: Water Payback Scenarios using Sauer Danfoss-type Industries

Growth Option A

Year	Cumulative Consump. Added	Net Water Revenues $ 3.78 per 100 ft^3	D/S	Annual Surplus (Deficit)	Cumulative Surplus (Deficit)
1	309,991	$ 11,718	$ 54,000	$ (42,282)	$ (42,282)
2	619,982	$ 23,435	$ 54,000	$ (30,565)	$ (72,847)
3	929,973	$ 35,153	$ 54,000	$ (18,847)	$ (91,694)
4	1,239,964	$ 46,871	$ 54,000	$ (7,129)	$ (98,823)
5	1,549,955	$ 58,588	$ 54,000	$ 4,588	$ (94,235)
6	1,859,946	$ 70,306	$ 54,000	$ 16,306	$ (77,929)
7	2,169,937	$ 82,024	$ 54,000	$ 28,024	$ (49,906)
8	2,479,928	$ 93,741	$ 54,000	$ 39,741	$ (10,164)
9	2,789,919	$ 105,459	$ 54,000	$ 51,459	$ 41,295
10	3,099,910	$ 117,177	$ 54,000	$ 63,177	$ 104,471
11	3,409,901	$ 128,894	$ 54,000	$ 74,894	$ 179,366
12	3,719,892	$ 140,612	$ 54,000	$ 86,612	$ 265,977
13	4,029,883	$ 152,330	$ 54,000	$ 98,330	$ 364,307
14	4,339,874	$ 164,047	$ 54,000	$ 110,047	$ 474,354
15	4,649,865	$ 175,765	$ 54,000	$ 121,765	$ 596,119
16	4,959,856	$ 187,483	$ 54,000	$ 133,483	$ 729,602
17	5,269,847	$ 199,200	$ 54,000	$ 145,200	$ 874,802
18	5,579,838	$ 210,918	$ 54,000	$ 156,918	$ 1,031,720
19	5,889,829	$ 222,636	$ 54,000	$ 168,636	$ 1,200,355
20	6,199,820	$ 234,353	$ 54,000	$ 180,353	$ 1,380,709

Growth Option B

Year	Cumulative Consump. Added	Net Water Revenues $ 3.78 per 100 ft^3	D/S	Annual Surplus (Deficit)	Cumulative Surplus (Deficit)
1	484,795	$ 18,325	$ 54,000	$ (35,675)	$ (35,675)
2	969,590	$ 36,651	$ 54,000	$ (17,349)	$ (53,024)
3	1,454,385	$ 54,976	$ 54,000	$ 976	$ (52,048)
4	1,939,180	$ 73,301	$ 54,000	$ 19,301	$ (32,747)
5	2,423,975	$ 91,626	$ 54,000	$ 37,626	$ 4,879
6	2,908,770	$ 109,952	$ 54,000	$ 55,952	$ 60,830
7	3,393,565	$ 128,277	$ 54,000	$ 74,277	$ 135,107
8	3,878,360	$ 146,602	$ 54,000	$ 92,602	$ 227,709
9	4,363,155	$ 164,927	$ 54,000	$ 110,927	$ 338,636
10	4,847,950	$ 183,253	$ 54,000	$ 129,253	$ 467,889
11	5,332,745	$ 201,578	$ 54,000	$ 147,578	$ 615,467
12	5,817,540	$ 219,903	$ 54,000	$ 165,903	$ 781,370
13	6,302,335	$ 238,228	$ 54,000	$ 184,228	$ 965,598
14	6,787,130	$ 256,554	$ 54,000	$ 202,554	$ 1,168,151
15	7,271,925	$ 274,879	$ 54,000	$ 220,879	$ 1,389,030
16	7,756,720	$ 293,204	$ 54,000	$ 239,204	$ 1,628,234
17	8,241,515	$ 311,529	$ 54,000	$ 257,529	$ 1,885,763
18	8,726,310	$ 329,855	$ 54,000	$ 275,855	$ 2,161,618
19	9,211,105	$ 348,180	$ 54,000	$ 294,180	$ 2,455,798
20	9,695,900	$ 366,505	$ 54,000	$ 312,505	$ 2,768,303

Growth Option C

Year	Cumulative Consump. Added	Net Water Revenues $ 3.78 per 100 ft^3	D/S	Annual Surplus (Deficit)	Cumulative Surplus (Deficit)
1	606,070	$ 22,909	$ 54,000	$ (31,091)	$ (31,091)
2	1,212,140	$ 45,819	$ 54,000	$ (8,181)	$ (39,272)
3	1,818,210	$ 68,728	$ 54,000	$ 14,728	$ (24,543)
4	2,424,280	$ 91,638	$ 54,000	$ 37,638	$ 13,094
5	3,030,350	$ 114,547	$ 54,000	$ 60,547	$ 73,642
6	3,636,420	$ 137,457	$ 54,000	$ 83,457	$ 157,098
7	4,242,490	$ 160,366	$ 54,000	$ 106,366	$ 263,464
8	4,848,560	$ 183,276	$ 54,000	$ 129,276	$ 392,740
9	5,454,630	$ 206,185	$ 54,000	$ 152,185	$ 544,925
10	6,060,700	$ 229,094	$ 54,000	$ 175,094	$ 720,020
11	6,666,770	$ 252,004	$ 54,000	$ 198,004	$ 918,023
12	7,272,840	$ 274,913	$ 54,000	$ 220,913	$ 1,138,937
13	7,878,910	$ 297,823	$ 54,000	$ 243,823	$ 1,382,760
14	8,484,980	$ 320,732	$ 54,000	$ 266,732	$ 1,649,492
15	9,091,050	$ 343,642	$ 54,000	$ 289,642	$ 1,939,134
16	9,697,120	$ 366,551	$ 54,000	$ 312,551	$ 2,251,685
17	10,303,190	$ 389,461	$ 54,000	$ 335,461	$ 2,587,145
18	10,909,260	$ 412,370	$ 54,000	$ 358,370	$ 2,945,515
19	11,515,330	$ 435,279	$ 54,000	$ 381,279	$ 3,326,795
20	12,121,400	$ 458,189	$ 54,000	$ 404,189	$ 3,730,984

APPENDIX C: Sewer Payback Scenarios using Blend of Existing Industries

Growth Option A

Year	Cumulative Consump. Added	Net Sewer Revenues $ 3.25 per 100 ft^3	D/S	Annual Surplus (Deficit)	Cumulative Surplus (Deficit)
1	305,665	$ 9,934	$ 235,000	$ (225,066)	$ (225,066)
2	611,330	$ 19,868	$ 235,000	$ (215,132)	$ (440,198)
3	916,995	$ 29,802	$ 235,000	$ (205,198)	$ (645,395)
4	1,222,660	$ 39,736	$ 235,000	$ (195,264)	$ (840,659)
5	1,528,325	$ 49,671	$ 235,000	$ (185,329)	$ (1,025,988)
6	1,833,990	$ 59,605	$ 235,000	$ (175,395)	$ (1,201,384)
7	2,139,655	$ 69,539	$ 235,000	$ (165,461)	$ (1,366,845)
8	2,445,320	$ 79,473	$ 235,000	$ (155,527)	$ (1,522,372)
9	2,750,985	$ 89,407	$ 235,000	$ (145,593)	$ (1,667,965)
10	3,056,650	$ 99,341	$ 235,000	$ (135,659)	$ (1,803,624)
11	3,362,315	$ 109,275	$ 235,000	$ (125,725)	$ (1,929,349)
12	3,667,980	$ 119,209	$ 235,000	$ (115,791)	$ (2,045,139)
13	3,973,645	$ 129,143	$ 235,000	$ (105,857)	$ (2,150,996)
14	4,279,310	$ 139,078	$ 235,000	$ (95,922)	$ (2,246,918)
15	4,584,975	$ 149,012	$ 235,000	$ (85,988)	$ (2,332,907)
16	4,890,640	$ 158,946	$ 235,000	$ (76,054)	$ (2,408,961)
17	5,196,305	$ 168,880	$ 235,000	$ (66,120)	$ (2,475,081)
18	5,501,970	$ 178,814	$ 235,000	$ (56,186)	$ (2,531,267)
19	5,807,635	$ 188,748	$ 235,000	$ (46,252)	$ (2,577,519)
20	6,113,300	$ 198,682	$ 235,000	$ (36,318)	$ (2,613,836)
21	6,418,965	$ 208,616	$ -	$ 208,616	$ (2,405,220)
22	6,724,630	$ 218,550	$ -	$ 218,550	$ (2,186,670)
23	7,030,295	$ 228,485	$ -	$ 228,485	$ (1,958,185)
24	7,335,960	$ 238,419	$ -	$ 238,419	$ (1,719,766)
25	7,641,625	$ 248,353	$ -	$ 248,353	$ (1,471,413)
26	7,947,290	$ 258,287	$ -	$ 258,287	$ (1,213,127)
27	8,252,955	$ 268,221	$ -	$ 268,221	$ (944,905)
28	8,558,620	$ 278,155	$ -	$ 278,155	$ (666,750)
29	8,864,285	$ 288,089	$ -	$ 288,089	$ (378,661)
30	9,169,950	$ 298,023	$ -	$ 298,023	$ (80,638)
31	9,475,615	$ 307,957	$ -	$ 307,957	$ 227,320
32	9,781,280	$ 317,892	$ -	$ 317,892	$ 545,211

Growth Option B

Year	Cumulative Consump. Added	Net Sewer Revenues $ 3.25 per 100 ft^3	D/S	Annual Surplus (Deficit)	Cumulative Surplus (Deficit)
1	478,030	$ 15,536	$ 235,000	$ (219,464)	$ (219,464)
2	956,060	$ 31,072	$ 235,000	$ (203,928)	$ (423,392)
3	1,434,090	$ 46,608	$ 235,000	$ (188,392)	$ (611,784)
4	1,912,120	$ 62,144	$ 235,000	$ (172,856)	$ (784,640)
5	2,390,150	$ 77,680	$ 235,000	$ (157,320)	$ (941,960)
6	2,868,180	$ 93,216	$ 235,000	$ (141,784)	$ (1,083,745)
7	3,346,210	$ 108,752	$ 235,000	$ (126,248)	$ (1,209,993)
8	3,824,240	$ 124,288	$ 235,000	$ (110,712)	$ (1,320,705)
9	4,302,270	$ 139,824	$ 235,000	$ (95,176)	$ (1,415,881)
10	4,780,300	$ 155,360	$ 235,000	$ (79,640)	$ (1,495,521)
11	5,258,330	$ 170,896	$ 235,000	$ (64,104)	$ (1,559,626)
12	5,736,360	$ 186,432	$ 235,000	$ (48,568)	$ (1,608,194)
13	6,214,390	$ 201,968	$ 235,000	$ (33,032)	$ (1,641,226)
14	6,692,420	$ 217,504	$ 235,000	$ (17,496)	$ (1,658,723)
15	7,170,450	$ 233,040	$ 235,000	$ (1,960)	$ (1,660,683)
16	7,648,480	$ 248,576	$ 235,000	$ 13,576	$ (1,647,107)
17	8,126,510	$ 264,112	$ 235,000	$ 29,112	$ (1,617,996)
18	8,604,540	$ 279,648	$ 235,000	$ 44,648	$ (1,573,348)
19	9,082,570	$ 295,184	$ 235,000	$ 60,184	$ (1,513,165)
20	9,560,600	$ 310,720	$ 235,000	$ 75,720	$ (1,437,445)
21	10,038,630	$ 326,255	$ -	$ 326,255	$ (1,111,190)
22	10,516,660	$ 341,791	$ -	$ 341,791	$ (769,398)
23	10,994,690	$ 357,327	$ -	$ 357,327	$ (412,071)
24	11,472,720	$ 372,863	$ -	$ 372,863	$ (39,208)
25	11,950,750	$ 388,399	$ -	$ 388,399	$ 349,192

Growth Option C

Year	Cumulative Consump. Added	Net Sewer Revenues $ 3.25 per 100 ft^3	D/S	Annual Surplus (Deficit)	Cumulative Surplus (Deficit)
1	597,613	$ 19,422	$ 235,000	$ (215,578)	$ (215,578)
2	1,195,226	$ 38,845	$ 235,000	$ (196,155)	$ (411,733)
3	1,792,839	$ 58,267	$ 235,000	$ (176,733)	$ (588,465)
4	2,390,452	$ 77,690	$ 235,000	$ (157,310)	$ (745,776)
5	2,988,065	$ 97,112	$ 235,000	$ (137,888)	$ (883,664)
6	3,585,678	$ 116,535	$ 235,000	$ (118,465)	$ (1,002,129)
7	4,183,291	$ 135,957	$ 235,000	$ (99,043)	$ (1,101,172)
8	4,780,904	$ 155,379	$ 235,000	$ (79,621)	$ (1,180,793)
9	5,378,517	$ 174,802	$ 235,000	$ (60,198)	$ (1,240,991)
10	5,976,130	$ 194,224	$ 235,000	$ (40,776)	$ (1,281,767)
11	6,573,743	$ 213,647	$ 235,000	$ (21,353)	$ (1,303,120)
12	7,171,356	$ 233,069	$ 235,000	$ (1,931)	$ (1,305,051)
13	7,768,969	$ 252,491	$ 235,000	$ 17,491	$ (1,287,560)
14	8,366,582	$ 271,914	$ 235,000	$ 36,914	$ (1,250,646)
15	8,964,195	$ 291,336	$ 235,000	$ 56,336	$ (1,194,309)
16	9,561,808	$ 310,759	$ 235,000	$ 75,759	$ (1,118,551)
17	10,159,421	$ 330,181	$ 235,000	$ 95,181	$ (1,023,369)
18	10,757,034	$ 349,604	$ 235,000	$ 114,604	$ (908,766)
19	11,354,647	$ 369,026	$ 235,000	$ 134,026	$ (774,740)
20	11,952,260	$ 388,448	$ 235,000	$ 153,448	$ (621,291)
21	12,549,873	$ 407,871	$ -	$ 407,871	$ (213,420)
22	13,147,486	$ 427,293	$ -	$ 427,293	$ 213,873

APPENDIX D: Sewer Payback Scenarios using Hach Company-type Industries

Growth Option A

Year	Cumulative Consump. Added	Net Sewer Revenues $ 3.25 per 100 ft^3	D/S	Annual Surplus (Deficit)	Cumulative Surplus (Deficit)
1	478,450	$ 15,550	$ 235,000	$ (219,450)	$ (219,450)
2	956,900	$ 31,099	$ 235,000	$ (203,901)	$ (423,351)
3	1,435,350	$ 46,649	$ 235,000	$ (188,351)	$ (611,702)
4	1,913,800	$ 62,199	$ 235,000	$ (172,802)	$ (784,504)
5	2,392,250	$ 77,748	$ 235,000	$ (157,252)	$ (941,756)
6	2,870,700	$ 93,298	$ 235,000	$ (141,702)	$ (1,083,458)
7	3,349,150	$ 108,847	$ 235,000	$ (126,153)	$ (1,209,611)
8	3,827,600	$ 124,397	$ 235,000	$ (110,603)	$ (1,320,214)
9	4,306,050	$ 139,947	$ 235,000	$ (95,053)	$ (1,415,267)
10	4,784,500	$ 155,496	$ 235,000	$ (79,504)	$ (1,494,771)
11	5,262,950	$ 171,046	$ 235,000	$ (63,954)	$ (1,558,725)
12	5,741,400	$ 186,596	$ 235,000	$ (48,405)	$ (1,607,129)
13	6,219,850	$ 202,145	$ 235,000	$ (32,855)	$ (1,639,984)
14	6,698,300	$ 217,695	$ 235,000	$ (17,305)	$ (1,657,289)
15	7,176,750	$ 233,244	$ 235,000	$ (1,756)	$ (1,659,045)
16	7,655,200	$ 248,794	$ 235,000	$ 13,794	$ (1,645,251)
17	8,133,650	$ 264,344	$ 235,000	$ 29,344	$ (1,615,907)
18	8,612,100	$ 279,893	$ 235,000	$ 44,893	$ (1,571,014)
19	9,090,550	$ 295,443	$ 235,000	$ 60,443	$ (1,510,571)
20	9,569,000	$ 310,993	$ 235,000	$ 75,993	$ (1,434,579)
21	10,047,450	$ 326,542	$ -	$ 326,542	$ (1,108,037)
22	10,525,900	$ 342,092	$ -	$ 342,092	$ (765,945)
23	11,004,350	$ 357,641	$ -	$ 357,641	$ (408,304)
24	11,482,800	$ 373,191	$ -	$ 373,191	$ (35,113)
25	11,961,250	$ 388,741	$ -	$ 388,741	$ 353,628

Growth Option B

Year	Cumulative Consump. Added	Net Sewer Revenues $ 3.25 per 100 ft^3	D/S	Annual Surplus (Deficit)	Cumulative Surplus (Deficit)
1	748,248	$ 24,318	$ 235,000	$ (210,682)	$ (210,682)
2	1,496,496	$ 48,636	$ 235,000	$ (186,364)	$ (397,046)
3	2,244,744	$ 72,954	$ 235,000	$ (162,046)	$ (559,092)
4	2,992,992	$ 97,272	$ 235,000	$ (137,728)	$ (696,819)
5	3,741,240	$ 121,590	$ 235,000	$ (113,410)	$ (810,229)
6	4,489,488	$ 145,908	$ 235,000	$ (89,092)	$ (899,321)
7	5,237,736	$ 170,226	$ 235,000	$ (64,774)	$ (964,094)
8	5,985,984	$ 194,544	$ 235,000	$ (40,456)	$ (1,004,550)
9	6,734,232	$ 218,863	$ 235,000	$ (16,137)	$ (1,020,687)
10	7,482,480	$ 243,181	$ 235,000	$ 8,181	$ (1,012,507)
11	8,230,728	$ 267,499	$ 235,000	$ 32,499	$ (980,008)
12	8,978,976	$ 291,817	$ 235,000	$ 56,817	$ (923,191)
13	9,727,224	$ 316,135	$ 235,000	$ 81,135	$ (842,057)
14	10,475,472	$ 340,453	$ 235,000	$ 105,453	$ (736,604)
15	11,223,720	$ 364,771	$ 235,000	$ 129,771	$ (606,833)
16	11,971,968	$ 389,089	$ 235,000	$ 154,089	$ (452,744)
17	12,720,216	$ 413,407	$ 235,000	$ 178,407	$ (274,337)
18	13,468,464	$ 437,725	$ 235,000	$ 202,725	$ (71,612)
19	14,216,712	$ 462,043	$ 235,000	$ 227,043	$ 155,431
20	14,964,960	$ 486,361	$ 235,000	$ 251,361	$ 406,793

Growth Option C

Year	Cumulative Consump. Added	Net Sewer Revenues $ 3.25 per 100 ft^3	D/S	Annual Surplus (Deficit)	Cumulative Surplus (Deficit)
1	935,427	$ 30,401	$ 235,000	$ (204,599)	$ (204,599)
2	1,870,854	$ 60,803	$ 235,000	$ (174,197)	$ (378,796)
3	2,806,281	$ 91,204	$ 235,000	$ (143,796)	$ (522,592)
4	3,741,708	$ 121,606	$ 235,000	$ (113,394)	$ (635,986)
5	4,677,135	$ 152,007	$ 235,000	$ (82,993)	$ (718,979)
6	5,612,562	$ 182,408	$ 235,000	$ (52,592)	$ (771,571)
7	6,547,989	$ 212,810	$ 235,000	$ (22,190)	$ (793,761)
8	7,483,416	$ 243,211	$ 235,000	$ 8,211	$ (785,550)
9	8,418,843	$ 273,612	$ 235,000	$ 38,612	$ (746,938)
10	9,354,270	$ 304,014	$ 235,000	$ 69,014	$ (677,924)
11	10,289,697	$ 334,415	$ 235,000	$ 99,415	$ (578,509)
12	11,225,124	$ 364,817	$ 235,000	$ 129,817	$ (448,693)
13	12,160,551	$ 395,218	$ 235,000	$ 160,218	$ (288,475)
14	13,095,978	$ 425,619	$ 235,000	$ 190,619	$ (97,855)
15	14,031,405	$ 456,021	$ 235,000	$ 221,021	$ 123,165
16	14,966,832	$ 486,422	$ 235,000	$ 251,422	$ 374,587
17	15,902,259	$ 516,823	$ 235,000	$ 281,823	$ 656,411
18	16,837,686	$ 547,225	$ 235,000	$ 312,225	$ 968,636
19	17,773,113	$ 577,626	$ 235,000	$ 342,626	$ 1,311,262
20	18,708,540	$ 608,028	$ 235,000	$ 373,028	$ 1,684,289

APPENDIX E: Property Tax Revenue with Growth Option A

Growth Option A

Year	Cumulative Valuation Added	Taxable Valuation	Property Taxes General 5.83418	Emp Bene 0.70627	Transit 0.65737	Debt Svc 3.52343	Total 10.72125	D/S	Total Levy Annual Surplus (Deficit)	Total Levy Cumulative Surplus (Deficit)
1	2,978,773	744,693	4,345	526	490	2,624	7,984	289,000	(281,016)	(281,016)
2	5,957,546	1,936,202	11,296	1,367	1,273	6,822	20,759	289,000	(268,241)	(549,257)
3	8,936,319	3,574,528	20,854	2,525	2,350	12,595	38,323	289,000	(250,677)	(799,934)
4	11,915,092	5,659,669	33,020	3,997	3,720	19,941	60,679	289,000	(228,321)	(1,028,255)
5	14,893,865	8,191,626	47,791	5,785	5,385	28,863	87,824	289,000	(201,176)	(1,229,431)
6	17,872,638	11,170,399	65,170	7,889	7,343	39,358	119,761	289,000	(169,239)	(1,398,670)
7	20,851,411	14,149,172	82,549	9,993	9,301	49,854	151,697	289,000	(137,303)	(1,535,973)
8	23,830,184	17,127,945	99,928	12,097	11,259	60,349	183,633	289,000	(105,367)	(1,641,340)
9	26,808,957	20,106,718	117,306	14,201	13,218	70,845	215,569	289,000	(73,431)	(1,714,771)
10	29,787,730	23,085,491	134,685	16,305	15,176	81,340	247,505	289,000	(41,495)	(1,756,266)
11	32,766,503	26,064,264	152,064	18,408	17,134	91,836	279,441	289,000	(9,559)	(1,765,824)
12	35,745,276	29,043,037	169,442	20,512	19,092	102,331	311,378	289,000	22,378	(1,743,447)
13	38,724,049	32,021,810	186,821	22,616	21,050	112,827	343,314	289,000	54,314	(1,689,133)
14	41,702,822	35,000,583	204,200	24,720	23,008	123,322	375,250	289,000	86,250	(1,602,883)
15	44,681,595	37,979,356	221,578	26,824	24,966	133,818	407,186	289,000	118,186	(1,484,697)
16	47,660,368	40,958,129	238,957	28,927	26,925	144,313	439,122	289,000	150,122	(1,334,574)
17	50,639,141	43,936,902	256,336	31,031	28,883	154,809	471,059	289,000	182,059	(1,152,516)
18	53,617,914	46,915,675	273,714	33,135	30,841	165,304	502,995	289,000	213,995	(938,521)
19	56,596,687	49,894,448	291,093	35,239	32,799	175,800	534,931	289,000	245,931	(692,590)
20	59,575,460	52,873,221	308,472	37,343	34,757	186,295	566,867	289,000	277,867	(414,723)
21	62,554,233	55,851,994	325,851	39,447	36,715	196,791	598,803	-	598,803	184,080
22	65,533,006	58,830,767	343,229	41,550	38,674	207,286	630,739	-	630,739	814,819
23	68,511,779	61,809,540	360,608	43,654	40,632	217,782	662,676	-	662,676	1,477,495
24	71,490,552	64,788,313	377,987	45,758	42,590	228,277	694,612	-	694,612	2,172,106
25	74,469,325	67,767,086	395,365	47,862	44,548	238,773	726,548	-	726,548	2,898,654
26	77,448,098	70,745,859	412,744	49,966	46,506	249,268	758,484	-	758,484	3,657,138
27	80,426,871	73,724,632	430,123	52,069	48,464	259,764	790,420	-	790,420	4,447,558
28	83,405,644	76,703,405	447,501	54,173	50,423	270,259	822,356	-	822,356	5,269,915
29	86,384,417	79,682,178	464,880	56,277	52,381	280,755	854,293	-	854,293	6,124,207
30	89,363,190	82,660,951	482,259	58,381	54,339	291,250	886,229	-	886,229	7,010,436
31	92,341,963	85,639,724	499,638	60,485	56,297	301,746	918,165	-	918,165	7,928,601
32	95,320,736	88,618,497	517,016	62,589	58,255	312,241	950,101	-	950,101	8,878,702
33	98,299,509	91,597,270	534,395	64,692	60,213	322,737	982,037	-	982,037	9,860,739
34	101,278,282	94,576,043	551,774	66,796	62,171	333,232	1,013,973	-	1,013,973	10,874,713
35	104,257,055	97,554,816	569,152	68,900	64,130	343,728	1,045,910	-	1,045,910	11,920,622
36	107,235,828	100,533,589	586,531	71,004	66,088	354,223	1,077,846	-	1,077,846	12,998,468
37	110,214,601	103,512,362	603,910	73,108	68,046	364,719	1,109,782	-	1,109,782	14,108,250
38	113,193,374	106,491,135	621,288	75,211	70,004	375,214	1,141,718	-	1,141,718	15,249,968
39	116,172,147	109,469,908	638,667	77,315	71,962	385,710	1,173,654	-	1,173,654	16,423,622
40	119,150,920	112,448,681	656,046	79,419	73,920	396,205	1,205,590	-	1,205,590	17,629,213
41	122,129,693	115,427,454	673,425	81,523	75,879	406,701	1,237,527	-	1,237,527	18,866,739
42	125,108,466	118,406,227	690,803	83,627	77,837	417,196	1,269,463	-	1,269,463	20,136,202
43	128,087,239	121,385,000	708,182	85,731	79,795	427,692	1,301,399	-	1,301,399	21,437,601
44	131,066,012	124,363,773	725,561	87,834	81,753	438,187	1,333,335	-	1,333,335	22,770,936
45	134,044,785	127,342,546	742,939	89,938	83,711	448,683	1,365,271	-	1,365,271	24,136,207
46	137,023,558	130,321,319	760,318	92,042	85,669	459,178	1,397,207	-	1,397,207	25,533,415
47	140,002,331	133,300,092	777,697	94,146	87,627	469,674	1,429,144	-	1,429,144	26,962,558
48	142,981,104	136,278,865	795,075	96,250	89,586	480,169	1,461,080	-	1,461,080	28,423,638
49	145,959,877	139,257,638	812,454	98,353	91,544	490,665	1,493,016	-	1,493,016	29,916,654
50	148,938,650	142,236,411	829,833	100,457	93,502	501,160	1,524,952	-	1,524,952	31,441,606
51	151,917,423	145,215,184	847,212	102,561	95,460	511,656	1,556,888	-	1,556,888	32,998,494
52	154,896,196	148,193,957	864,590	104,665	97,418	522,151	1,588,824	-	1,588,824	34,587,319
53	157,874,969	151,172,730	881,969	106,769	99,376	532,647	1,620,761	-	1,620,761	36,208,080
54	160,853,742	154,151,503	899,348	108,873	101,335	543,142	1,652,697	-	1,652,697	37,860,776
55	163,832,515	157,130,276	916,726	110,976	103,293	553,638	1,684,633	-	1,684,633	39,545,409
56	166,811,288	160,109,049	934,105	113,080	105,251	564,133	1,716,569	-	1,716,569	41,261,978
57	169,790,061	163,087,822	951,484	115,184	107,209	574,629	1,748,505	-	1,748,505	43,010,484
58	172,768,834	166,066,595	968,862	117,288	109,167	585,124	1,780,441	-	1,780,441	44,790,925
59	172,768,834	168,300,675	981,896	118,866	110,636	592,996	1,804,394	-	1,804,394	46,595,319
60	172,768,834	170,087,938	992,324	120,128	111,811	599,293	1,823,555	-	1,823,555	48,418,874
61	172,768,834	171,428,386	1,000,144	121,075	112,692	604,016	1,837,927	-	1,837,927	50,256,801
62	172,768,834	172,322,018	1,005,358	121,706	113,279	607,165	1,847,507	-	1,847,507	52,104,308
63	172,768,834	172,768,834	1,007,964	122,021	113,573	608,739	1,852,298	-	1,852,298	53,956,606

APPENDIX F: Property Tax Revenue with Growth Option B

Growth Option B

Year	Cumulative Valuation Added	Taxable Valuation	Property Taxes *General* 5.83418	*Emp Bene* 0.70627	*Transit* 0.65737	*Debt Svc* 3.52343	*Total* 10.72125	D/S	Total Levy Annual Surplus (Deficit)	Total Levy Cumulative Surplus (Deficit)
1	4,658,510	1,164,628	6,795	823	766	4,103	12,486	289,000	(276,514)	(276,514)
2	9,317,020	3,028,032	17,666	2,139	1,991	10,669	32,464	289,000	(256,536)	(533,049)
3	13,975,530	5,590,212	32,614	3,948	3,675	19,697	59,934	289,000	(229,066)	(762,115)
4	18,634,040	8,851,169	51,639	6,251	5,818	31,186	94,896	289,000	(194,104)	(956,220)
5	23,292,550	12,810,903	74,741	9,048	8,422	45,138	137,349	289,000	(151,651)	(1,107,871)
6	27,951,060	17,469,413	101,920	12,338	11,484	61,552	187,294	289,000	(101,706)	(1,209,577)
7	32,609,570	22,127,923	129,098	15,628	14,546	77,966	237,239	289,000	(51,761)	(1,261,338)
8	37,268,080	26,786,433	156,277	18,918	17,609	94,380	287,184	289,000	(1,816)	(1,263,154)
9	41,926,590	31,444,943	183,455	22,209	20,671	110,794	337,129	289,000	48,129	(1,215,025)
10	46,585,100	36,103,453	210,634	25,499	23,733	127,208	387,074	289,000	98,074	(1,116,951)
11	51,243,610	40,761,963	237,813	28,789	26,796	143,622	437,019	289,000	148,019	(968,932)
12	55,902,120	45,420,473	264,991	32,079	29,858	160,036	486,964	289,000	197,964	(770,967)
13	60,560,630	50,078,983	292,170	35,369	32,920	176,450	536,909	289,000	247,909	(523,058)
14	65,219,140	54,737,493	319,348	38,659	35,983	192,864	586,854	289,000	297,854	(225,204)
15	69,877,650	59,396,003	346,527	41,950	39,045	209,278	636,799	289,000	347,799	122,596
16	74,536,160	64,054,513	373,706	45,240	42,108	225,692	686,744	289,000	397,744	520,340
17	79,194,670	68,713,023	400,884	48,530	45,170	242,106	736,689	289,000	447,689	968,030
18	83,853,180	73,371,533	428,063	51,820	48,232	258,519	786,635	289,000	497,635	1,465,664
19	88,511,690	78,030,043	455,241	55,110	51,295	274,933	836,580	289,000	547,580	2,013,244
20	93,170,200	82,688,553	482,420	58,400	54,357	291,347	886,525	289,000	597,525	2,610,768
21	97,828,710	87,347,063	509,598	61,691	57,419	307,761	936,470	-	936,470	3,547,238
22	102,487,220	92,005,573	536,777	64,981	60,482	324,175	986,415	-	986,415	4,533,653
23	107,145,730	96,664,083	563,956	68,271	63,544	340,589	1,036,360	-	1,036,360	5,570,013
24	111,804,240	101,322,593	591,134	71,561	66,606	357,003	1,086,305	-	1,086,305	6,656,318
25	116,462,750	105,981,103	618,313	74,851	69,669	373,417	1,136,250	-	1,136,250	7,792,567
26	121,121,260	110,639,613	645,491	78,141	72,731	389,831	1,186,195	-	1,186,195	8,978,762
27	125,779,770	115,298,123	672,670	81,432	75,794	406,245	1,236,140	-	1,236,140	10,214,902
28	130,438,280	119,956,633	699,849	84,722	78,856	422,659	1,286,085	-	1,286,085	11,500,987
29	135,096,790	124,615,143	727,027	88,012	81,918	439,073	1,336,030	-	1,336,030	12,837,018
30	139,755,300	129,273,653	754,206	91,302	84,981	455,487	1,385,975	-	1,385,975	14,222,993
31	144,413,810	133,932,163	781,384	94,592	88,043	471,901	1,435,920	-	1,435,920	15,658,913
32	149,072,320	138,590,673	808,563	97,882	91,105	488,315	1,485,865	-	1,485,865	17,144,778
33	153,730,830	143,249,183	835,742	101,173	94,168	504,728	1,535,810	-	1,535,810	18,680,588
34	158,389,340	147,907,693	862,920	104,463	97,230	521,142	1,585,755	-	1,585,755	20,266,344
35	163,047,850	152,566,203	890,099	107,753	100,292	537,556	1,635,700	-	1,635,700	21,902,044
36	167,706,360	157,224,713	917,277	111,043	103,355	553,970	1,685,645	-	1,685,645	23,587,690
37	172,364,870	161,883,223	944,456	114,333	106,417	570,384	1,735,590	-	1,735,590	25,323,280
38	172,364,870	165,377,105	964,840	116,801	108,714	582,695	1,773,049	-	1,773,049	27,096,329
39	172,364,870	168,172,211	981,147	118,775	110,551	592,543	1,803,016	-	1,803,016	28,899,346
40	172,364,870	170,268,541	993,377	120,256	111,929	599,929	1,825,492	-	1,825,492	30,724,837
41	172,364,870	171,666,094	1,001,531	121,243	112,848	604,853	1,840,475	-	1,840,475	32,565,312
42	172,364,870	172,364,870	1,005,608	121,736	113,307	607,316	1,847,967	-	1,847,967	34,413,279

APPENDIX G: Property Tax Revenue with Growth Option C

Growth Option C

Year	Cumulative Valuation Added	Taxable Valuation	Property Taxes General 5.83418	Emp Bene 0.70627	Transit 0.65737	Debt Svc 3.52343	Total 10.72125	D/S	Total Levy Annual Surplus (Deficit)	Total Levy Cumulative Surplus (Deficit)
1	5,823,864	1,455,966	8,494	1,028	957	5,130	15,610	289,000	(273,390)	(273,390)
2	11,647,728	3,785,512	22,085	2,674	2,488	13,338	40,585	289,000	(248,415)	(521,805)
3	17,471,592	6,988,637	40,773	4,936	4,594	24,624	74,927	289,000	(214,073)	(735,878)
4	23,295,456	11,065,342	64,557	7,815	7,274	38,988	118,634	289,000	(170,366)	(906,244)
5	29,119,320	16,015,626	93,438	11,311	10,528	56,430	171,708	289,000	(117,292)	(1,023,536)
6	34,943,184	21,839,490	127,416	15,425	14,357	76,950	234,147	289,000	(54,853)	(1,078,389)
7	40,767,048	27,663,354	161,393	19,538	18,185	97,470	296,586	289,000	7,586	(1,070,804)
8	46,590,912	33,487,218	195,370	23,651	22,013	117,990	359,025	289,000	70,025	(1,000,779)
9	52,414,776	39,311,082	229,348	27,764	25,842	138,510	421,464	289,000	132,464	(868,315)
10	58,238,640	45,134,946	263,325	31,877	29,670	159,030	483,903	289,000	194,903	(673,412)
11	64,062,504	50,958,810	297,303	35,991	33,499	179,550	546,342	289,000	257,342	(416,070)
12	69,886,368	56,782,674	331,280	40,104	37,327	200,070	608,781	289,000	319,781	(96,288)
13	75,710,232	62,606,538	365,258	44,217	41,156	220,590	671,220	289,000	382,220	285,932
14	81,534,096	68,430,402	399,235	48,330	44,984	241,110	733,659	289,000	444,659	730,591
15	87,357,960	74,254,266	433,213	52,444	48,813	261,630	796,099	289,000	507,099	1,237,690
16	93,181,824	80,078,130	467,190	56,557	52,641	282,150	858,538	289,000	569,538	1,807,227
17	99,005,688	85,901,994	501,168	60,670	56,469	302,670	920,977	289,000	631,977	2,439,204
18	104,829,552	91,725,858	535,145	64,783	60,298	323,190	983,416	289,000	694,416	3,133,620
19	110,653,416	97,549,722	569,123	68,896	64,126	343,710	1,045,855	289,000	756,855	3,890,475
20	116,477,280	103,373,586	603,100	73,010	67,955	364,230	1,108,294	289,000	819,294	4,709,769
21	122,301,144	109,197,450	637,078	77,123	71,783	384,750	1,170,733	-	1,170,733	5,880,502
22	128,125,008	115,021,314	671,055	81,236	75,612	405,270	1,233,172	-	1,233,172	7,113,675
23	133,948,872	120,845,178	705,033	85,349	79,440	425,790	1,295,611	-	1,295,611	8,409,286
24	139,772,736	126,669,042	739,010	89,463	83,268	446,310	1,358,050	-	1,358,050	9,767,336
25	145,596,600	132,492,906	772,987	93,576	87,097	466,829	1,420,490	-	1,420,490	11,187,826
26	151,420,464	138,316,770	806,965	97,689	90,925	487,349	1,482,929	-	1,482,929	12,670,755
27	157,244,328	144,140,634	840,942	101,802	94,754	507,869	1,545,368	-	1,545,368	14,216,122
28	163,068,192	149,964,498	874,920	105,915	98,582	528,389	1,607,807	-	1,607,807	15,823,929
29	168,892,056	155,788,362	908,897	110,029	102,411	548,909	1,670,246	-	1,670,246	17,494,175
30	168,892,056	160,156,260	934,380	113,114	105,282	564,299	1,717,075	-	1,717,075	19,211,251
31	168,892,056	163,650,578	954,767	115,581	107,579	576,611	1,754,539	-	1,754,539	20,965,789
32	168,892,056	166,271,317	970,057	117,432	109,302	585,845	1,782,636	-	1,782,636	22,748,426
33	168,892,056	168,018,476	980,250	118,666	110,450	592,001	1,801,368	-	1,801,368	24,549,794
34	168,892,056	168,892,056	985,347	119,283	111,025	595,079	1,810,734	-	1,810,734	26,360,528

Eastern Ames Annexation

-Next Steps-

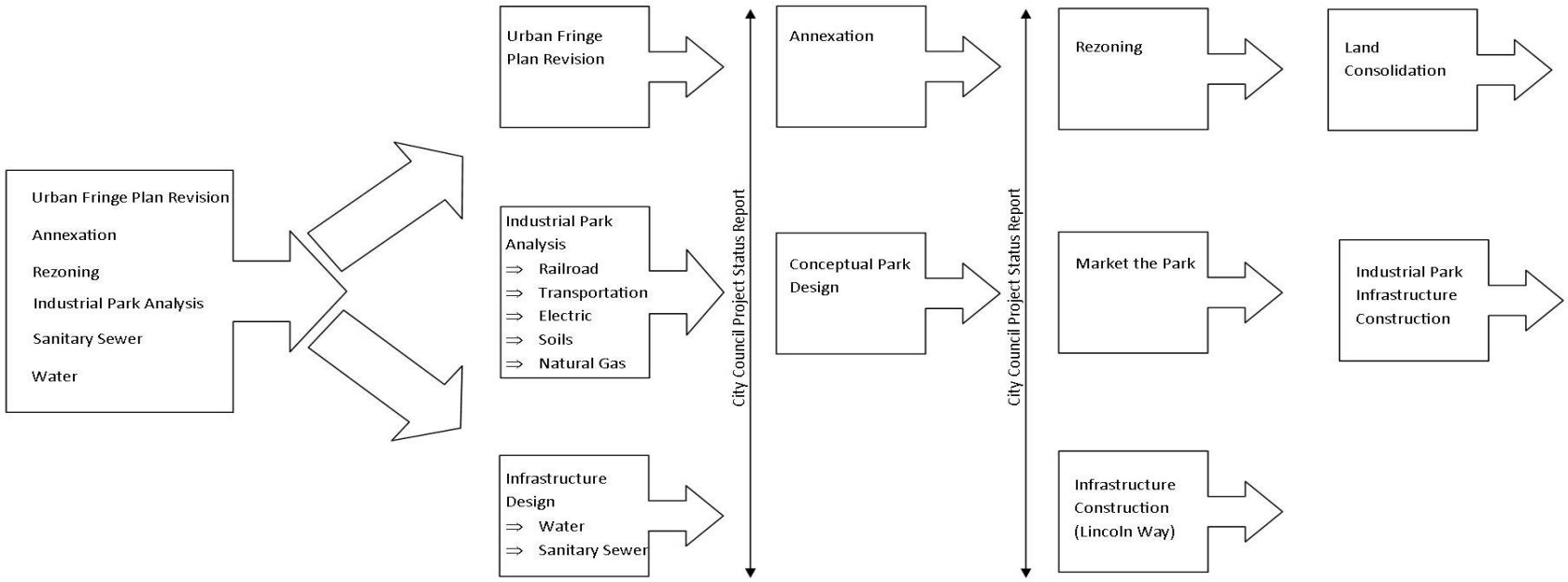
September 11, 2012

Ames Economic Development Commission
1601 Golden Aspen Drive, Suite 110
Ames IA 50010
515.232.2310
www.amesedc.com

City of Ames
515 Clark Avenue, P.O. Box 811
Ames IA 50010
515.232.2310
www.CityOfAmes.org

NEXT STEPS

Process:
This project is complex with many moving parts. Some need to occur simultaneously, and some cannot overlap. To clarify expectations of the timeframe for development of this area, the project flowchart on the next page has been created.


Urban Fringe Plan Revision
Annexation
Rezoning
Industrial Park Analysis
Sanitary Sewer
Water
Urban Fringe Plan Revision
Industrial Park Analysis
⇒ Railroad
⇒ Transportation
⇒ Electric
⇒ Soils
⇒ Natural Gas
Infrastructure Design
⇒ Water
⇒ Sanitary Sewer
City Council Project Status Report
Annexation
Conceptual Park Design
City Council Project Status Report
Rezoning
Market the Park
Infrastructure Construction (Lincoln Way)
Land Consolidation
Industrial Park Infrastructure Construction

LAND USE STEPS

Urban Fringe Plan Revision:
The Urban Fringe Plan Revision will need to occur prior to the annexation of land. The properties that are within the Phase I annexation area, located east of the current City limits and on either side of 580th Avenue, are currently designated as Agricultural/Long-term Industrial Reserve. Properties that are located further to the east are designated as Agriculture and Farm Service with the waterway designated as a Natural Area.

To prepare for annexation and for future industrial development, the proposed designation for the annexation area must be changed to Planned Industrial. While the Urban Fringe Plan Revision process may be initiated by a property owner, it is expected that this step will be initiated by the City itself, due to the need for other revisions within this general area. The Urban Fringe Plan revision will involve consultation with Story County and Gilbert; and is expected to take three months to complete.

Annexation:
At the City Council's meeting on March 27, 2012, the Ames Economic Development Commission was directed to contact property owners within the annexation area who have been reluctant to annex their properties with an offer of the following incentives:

1. Partial tax exemption;
2. Waiver of water connection fees; and
3. Waiver of sanitary sewer connection fees.

Prior to contacting the property owners, the proposed incentives were discussed with the City's Legal Department. It was determined that annexation contracts can be prepared with incentives included so that the property owners are not obligated to annex their property if the City of Ames does not extend the infrastructure, and the City of Ames can move forward with the infrastructure with the promise of annexation. The Legal Department was able to clarify the proposed incentives:

Partial Tax Exemption:
The AEDC was originally prepared to offer this incentive to only the property owners who may not be interested in annexation without the partial tax exemption. However, the City Attorney clarified that this partial tax exemption would need to be offered to the entire annexation area at the following schedule:

1. For the first and second years, 75%.
2. For the third and fourth years, 60%.
3. For the fifth and sixth years, 45%.
4. For the seventh and eighth years, 30%.
5. For the ninth and tenth years, 15%.

Understanding that all property owners could potentially receive this exemption, the AEDC requested that the City Assessor review the properties in the

annexation area to determine the effect of the partial tax exemption. With the assistance of the City Assessor and the City's Finance Director, it has determined that with the 75% partial tax exemption, the City tax revenue would be reduced by a total of approximately $7,036 during the first and then again in the second year.

The City Attorney has also clarified that the partial tax exemption is tied to the property, so that if a property receiving the partial tax exemption were to develop during the 10-year period, the property owner would receive the tax exemption for a developed site, which would be a significantly higher amount than the residential or agricultural taxes paid previously.

Waiver of water connection fees:
The annexation area is located within the Central Iowa Water Association's (CIWA) service territory, and a final determination on provision of water service in this area has not yet been reached. Therefore, the City Attorney has indicated that this incentive cannot be provided due to this unresolved issue.

Waiver of sanitary sewer connection fees:
The annexation area will clearly be served with sanitary sewer by the City of Ames. This incentive was offered to the three property owners who have not been interested in the annexation.

The AEDC has contacted the three residential property owners with the opportunity of offering partial tax exemption and waiving sanitary sewer connection fees, and has received a response from one property owner. The response received unfortunately continues to be non-consenting. The remaining two property owners have been sent an e-mail correspondence as well as a certified letter asking for their response to these incentives. AEDC staff has received documentation that the certified letters have been received by the two remaining residential property owners; however, responses to the offered incentives have not been forthcoming. Therefore, continued non-consent to the annexation is assumed.

The AEDC is now ready to work directly with the City Attorney to create the annexation contracts and prepare the annexation petitions for the remaining, consenting property owners within the annexation area, so that the City Council may have those agreements and petitions in place prior to construction of the sanitary sewer line.

Rezoning:
Upon annexation to the City, each property will be zoned Agricultural. Prior to development of the property, each site would then need to be rezoned to an Industrial zoning designation. The Rezoning could occur as the individual properties develop. The Rezoning process takes approximately two months.

Land Consolidation:
To respond to inquiries for property in an industrial park, it is necessary to consolidate the property for development by purchasing the property outright or by acquiring

options on the property. The purchase or option on the property provides a consistent and reliable purchase price.

INDUSTRIAL PARK DEVELOPMENT STEPS

Industrial Park Analysis:

At the same time the Urban Fringe Plan is being revised, the AEDC is prepared to move forward with an Industrial Park Analysis. This Industrial Park Analysis will consist of a preliminary review of infrastructure items such as the railroad, surface transportation, electric service, natural gas, and soils; thereby clarifying expectations for this project as it moves forward and minimizing the risk of later surprises. It is anticipated that the Ames Economic Development Commission (AEDC) will receive a scope of services soon for the Industrial Park Analysis and will approach the City Council to explore the opportunities of cost sharing this analysis in the future. Upon authorization from Council, the design of sanitary sewer (and potentially water) will also occur during this first phase.

Conceptual Park Design:

The Industrial Park Analysis will likely contain scenarios for conceptual park designs which are flexible to accommodate the myriad of development types that could occur within the industrial park. The conceptual park design will identify any constraints that are found within the Industrial Park Analysis and will further detail items such as railroad access and needed internal public infrastructure such as water, sewer, electric and roadways.

Marketing Park:

Once the Industrial Park Analysis and conceptual park design are complete, the AEDC can move forward with marketing the Eastern Ames Industrial Park to investors through coordination with the Iowa Economic Development Authority, Iowa State University and the numerous marketing trips that the AEDC participates in.

Industrial Park Infrastructure Construction:

Construction of the infrastructure that is internal to the park is highly dependent upon the type and size of development that is proposed. A determination will have to be made regarding the financing of these improvements at a later time.

UTILITY EXTENSION STEPS

Extension of Sanitary Sewer:

The 2012/13 Capital Improvements Plan includes $3,500,000 for extension of the City's sanitary sewer system to serve this area. The City Council has also adopted a sewer rate increase to finance these improvements.

As soon as Council is comfortable moving forward with these sanitary sewer improvements, staff will initiate a design contract for this work.

Provision of Water Service:

As was noted above, the Central Iowa Water Association provides potable water service in this area. Due to the fact that CIWA has outstanding loans from the USDA's Rural Utilities Programs, CIWA – rather than the City – has a protected right to provide

service to these annexed lands. Unfortunately, federal law also excuses CIWA from the responsibility to provide fire flow protection to the area.

Staff has endeavored to work with CIWA staff to determine if that association is prepared to provide needed quantities of water and fire protection to serve this industrial expansion. In the attached letter just received from CIWA CEO Jim LaPlant, three scenarios are suggested for providing water service to the area. It is clear that further discussions with CIWA are needed to determine the most cost-effective and appropriate approach.

PROJECT STATUS REPORTS

Project status reports for the City Council have also been integrated within this flowchart. Two status updates occur at strategic periods to not only update the City Council, but to also allow for review prior to allocating additional funding or making other official commitments toward the Eastern Ames Annexation project.

RECOMMENDED NEXT STEPS

In order for the eastern Ames industrial annexation to move forward, it is recommended that Council give direction in the following areas:

1. Urban Fringe Plan revision – Direct staff to initiate an amendment to the Urban Fringe Plan to reflect the new industrial uses planned for this area.
2. Annexation contracts – Authorize AEDC staff to secure signed annexation agreements with consenting property owners, to include only the sanitary sewer hook-up fee waiver, for future Council consideration.
3. Sanitary sewer design – Direct staff to solicit engineering proposals for design of this infrastructure.
4. Water Service – Direct staff to continue discussions with CIWA and to bring back viable options for providing potable water and fire flow protection to this area.

Central Iowa Water Association

1351 Iowa Speedway Drive
Newton, IA 50208
Phone (641) 792-7011
Toll Free (800) 400-6066
Fax (641) 792-6982
Web Site: www.ciawa.com

Equal Opportunity Employer and Provider

September 6, 2012

Mr. Bob Kindred
City of Ames

Dear Bob:

Thank you for the calculations and analysis regarding the projected water demands for the Ames East Industrial Area when it is fully developed. If the assumptions in the analysis are correct, it appears the peak daily demand may well approach 3.0 MGD.

Albeit presently there is no demand for water in this area, as development occurs CIWA will address any increase in demand in accordance with its usual and customary business practices - - assuring that the needs of its new customers are met cost effectively but in a manner that does not jeopardize the financial integrity of CIWA or overburden its other customers. This business philosophy has sustained CIWA well for many years and put it on very solid financial footing.

CIWA has infrastructure and capacity in place to meet current and reasonably foreseeable water supply demands for the Ames East Industrial Area. Furthermore, CIWA stands ready, willing, and able to be innovative and collaborate with Ames regarding water supply services whenever appropriate to enhance and facilitate development of the Ames East Industrial Area. This would include consideration of all options such as:

[a] CIWA exclusively developing infrastructure, water supply, and treatment and distribution systems for the Ames East Industrial Area; or

[b] CWA constructing a large diameter water main through the Ames East Industrial Area that would serve this area and also link Ames and Nevada for emergency purposes with arrangements to fund and construct elevation storage for fire protection as well; or

[c] CIWA relinquishing certain parts of the Ames East Industrial Area territory to Ames in return for compensation to CIWA in the form of purchased water supply capacity or cash buyout or both.

In summary, CIWA appreciates being kept apprised of Ames' development plans for the Ames East Industrial Area and looks forward to working with Ames to assure that the water supply demands of this area are met as development occurs.

Sincerely,
Central Iowa Water Association

James R. LaPlant, P.E.
CEO/Engineer

ITEM # ___34__
DATE: 09-11-12

COUNCIL ACTION FORM

SUBJECT: AUTHORIZATION TO ENTER INTO LEASE AGREEMENT WITH MIDWEST CENTERS FOR SPACE LOCATED AT 620 LINCOLN WAY DURING RENOVATION OF EXISTING LIBRARY BUILDING

BACKGROUND:

The Ames Public Library is in the process of implementing a major renovation and expansion project approved by a voter referendum on November 8, 2011. **Due to the complexity of the project, the Library must relocate its public operations and business offices during the construction. Space has been identified in Lincoln Center, 620 Lincoln Way, formerly occupied by Hastings and Harrison Sports.**

The space was chosen by the Library Board of Trustees after consideration of other locations in the community. The Lincoln Center location is easily accessible by public transportation, and provides free parking, and adjacent space for library business offices. In addition, this location will allow the Library to remain close to the heart of the community.

When Hastings vacated its premises in late 2009, a portion of the space was leased to Hobby Lobby. In conjunction with Hobby Lobby's expansion, the restrooms were removed and the space was left unfinished. **The rent for the first month will be $14,300 plus the costs of on-site improvements ($114,000) necessary for compliance with the operational needs of the Library and to meet Code requirements for a public facility. The remaining lease payments will be $14,300 per month. The lease agreement begins November 1, 2012, and ends July 31, 2014; but may be extended on a month-to-month basis by mutual agreement, with a required six-month notice per extension.**

Staff recognizes that entering into this lease agreement prior to the receipt of bids for the major construction project presents a certain amount of risk. However, the most recent estimates from the professional consultants (based on 90% complete construction documents) provide alternatives that keep the project within the available revenues for the project, currently estimated to be $20,085,000.

Based on the timeline shown below, the building at 515 Douglas Avenue must be vacated prior to December 3.

October 2012	Landlord makes improvements required by lease at 620 Lincoln Way prior to Library taking possession
	First $4.5 million of General Obligation revenues becomes available for the project
October 11, 2012	Anticipated bid due date for abatement project
November 1 – 15, 2012	Library prepares space at 620 Lincoln Way for public use (installation of shelving; counters; book drop; check-out stations; phone; security and data infrastructure)
November 15, 2012	Anticipated date of bid opening for renovation and expansion project
November 16 – 30	Library relocates collection, staff offices, and records to 620 Lincoln Way space.
November 27, 2012	Anticipated date for Council award of abatement project and construction project
December 3, 2012	Abatement of asbestos and lead-based paint begins at 515 Douglas
December 2012	Library begins operations from leased locations
January 2013 – June 2014	Renovation and expansion construction takes place
July 2014	Anticipated date for Library opening on Douglas Avenue in spectacular new surroundings

ALTERNATIVES:

1. Establish September 25, 2012, as the date to hold a public hearing on the proposal to enter into an agreement with Midwest Centers to lease two spaces located at 620 Lincoln Way during the renovation and expansion of the existing library building.

2. Delay the hearing and action on the lease.

MANAGER'S RECOMMENDED ACTION:

The City issued debt in August 2012 to commence the library renovation and expansion project, as approved by the voters in 2011, based on the project schedule noted above. In order for the facility to be available for both abatement and construction work, it is necessary for the Library to vacate the premises prior to December 3. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as described above.

Memo

City Manager's Office

35

TO: Mayor and Ames City Council

FROM: Lynne Carey, Interim Library Director, and Steven L. Schainker, City Manager

DATE: September 7, 2012

SUBJECT: Library Renovation Project Update

The Library Board of Trustees has been moving forward on the steps necessary to begin the renovation and expansion of the existing building. Because of the complexity of the project, staff would like to provide an overview of the current status and upcoming activities.

Temporary Locations

- On September 1, the Library took possession of auxiliary space at 809 East Lincoln Way. The space will be leased for 24 months for bookmobile parking, graphics office, storage, and book sales.
- On September 11, the City Council will consider setting September 25 as the date for the public hearing and approval of the lease for spaces at 620 Lincoln Way. This lease will be for the former Hastings and Harrison Sports spaces and will be used for the temporary public library and staff offices.

Delegation of Authority

- On September 20, the Library Board of Trustees will consider delegating authority for the public bidding process to the Office of the City Clerk and the Purchasing Division for the project. To date, City and Library staff have worked closely together to coordinate the legally-required steps for this complex capital improvement project. At this point in time, the Library Board feels that it is the best interest of the Library to formally avail itself of the expertise being provided by the City.

Budget and Cash Flow

- Construction documents completed to the 90% level have been received from the Library's architect and are in the process of being reviewed. Finalization of the review and the determination of bid alternates for the project are now taking place.
- Library staff will present an update of the budget and anticipated cash flow on September 25.

Anticipated Upcoming Contracts

- Printing and distribution of construction documents (for Library Board consideration)
- Asbestos and Lead-based Paint Abatement (for City Council consideration)
- Renovation and Expansion Project (for City Council consideration)

Proposed Project Timeline

Date	Action
9/11/2012	City Council considers plans and specs, sets bid due date and date of hearing for the Abatement Project
9/20/2012	Library Board considers designating the Office of City Clerk and Purchasing Division to act as its agents for management of bids
9/25/2012	City Council considers approval of lease for 620 Lincoln Way
10/9/2012	City Council considers approval of preliminary plans and specs, sets bid due date and date of hearing for the Renovation and Expansion Project
10/11/2012	Abatement Project bids due
10/18/2012	Library Board considers bids for Abatement Project, recommends award of contract to the City Council, contingent upon receipt of responsive bids (on Nov. 15) within budget for Renovation and Expansion Project
10/23/2012	City Council holds public hearing and considers award of the Abatement Project, contingent upon receipt of responsive bids (on Nov. 15) within budget for Renovation and Expansion Project
11/15/2012	Renovation and Expansion Project bids due
11/27/2012	City Council considers approval of contract and bond for Abatement Project; holds public hearing and considers award of the Renovation and Expansion Construction Project
12/11/2012	City Council considers approval of contract and bond for Renovation and Expansion Project

interior views

literary grounds


storytime room


youth services


new materials & magazines

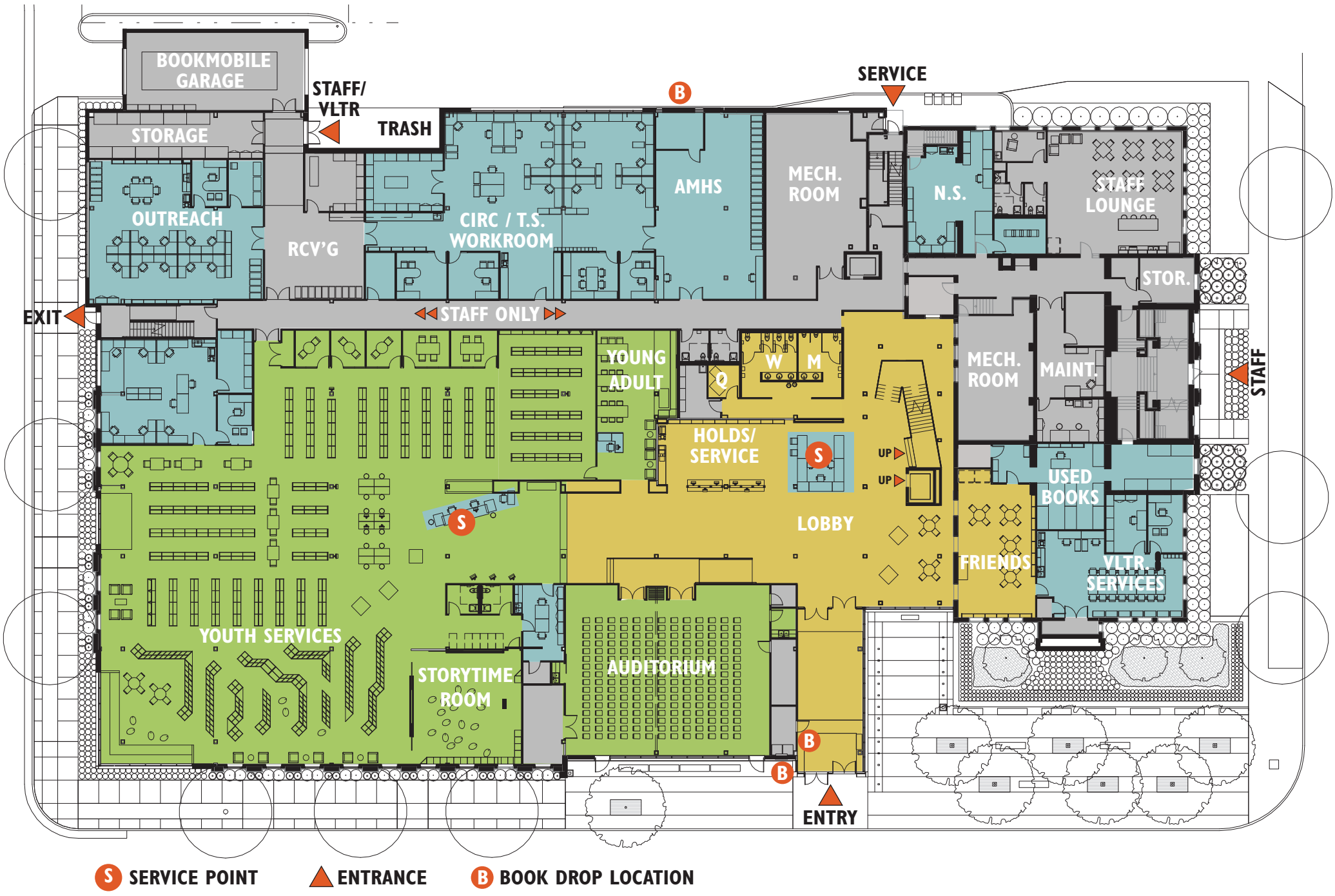
MS&R

Ames Public Library
June 21, 2012

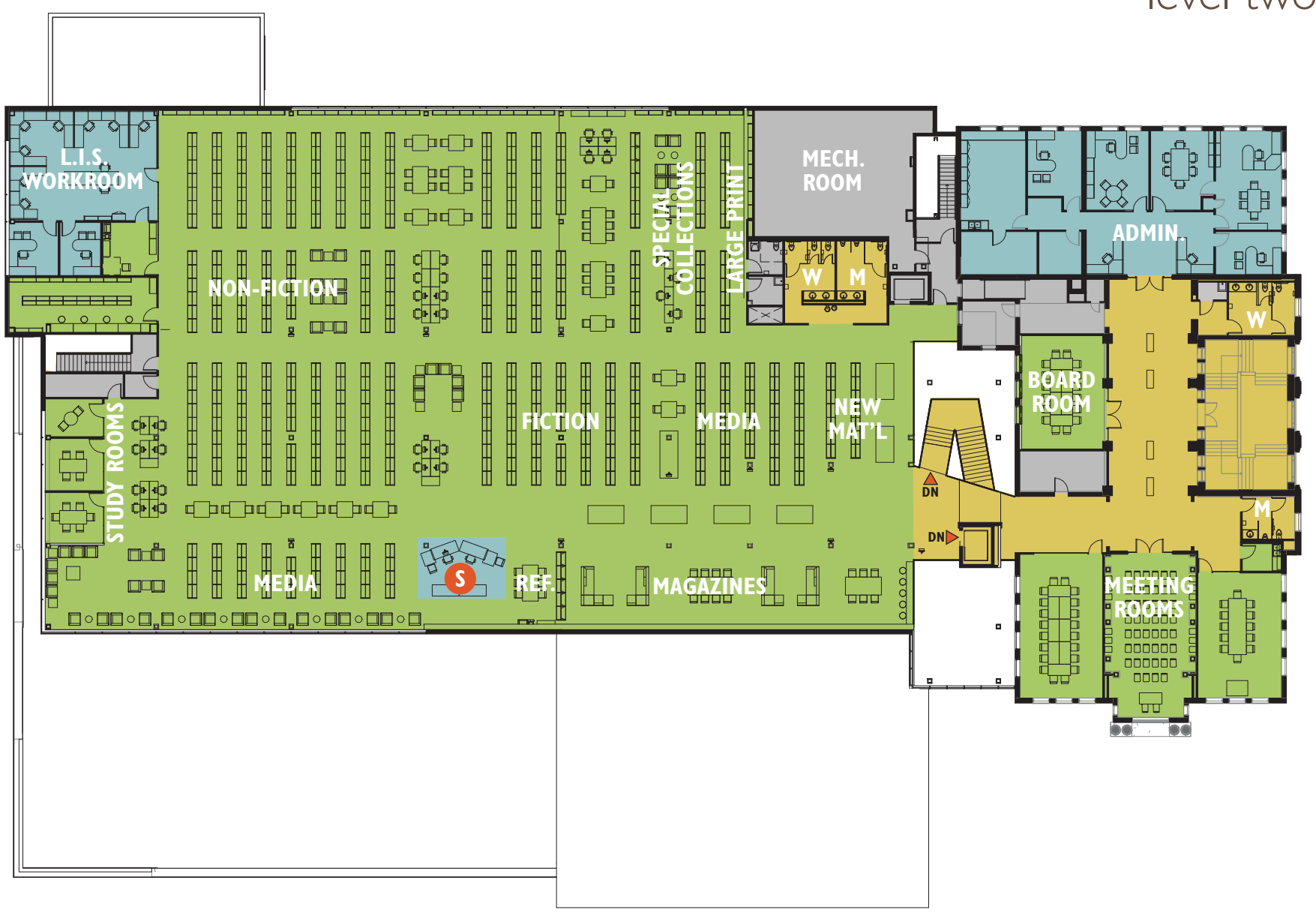
Ames Public Library
Design Development Presentation

June 21, 2012

level one plan



level two plan



MS&R

0 32 64

N

Ames Public Library
June 21, 2012

ITEM # 36
DATE: 09-11-12

COUNCIL ACTION FORM

SUBJECT: ALLEY VACATION – AMES PUBLIC LIBRARY

BACKGROUND:

As part of the Ames Public Library expansion project, it was determined that the project needs an area at the south end of the north/south alley between Kellogg Avenue and Douglas Avenue on the west side of the library in order to construct a new Bookmobile facility.

Public Works staff has contacted all registered right-of-way users to determine the extent of the utilities in the immediate area and has received responses back from all users. There are three known utilities in the area that will need to be relocated as a part of the project.

The southern portion of the public alley must be vacated in order to accommodate the Bookmobile garage. With the vacation of this portion of the alley, there will be a need to maintain the flow of traffic, which entails creating a new portion of right-of-way. This need was anticipated as part of the Development Agreement with the First United Methodist Church, and the church has agreed to provide an access easement for public traffic to flow over a portion of their lot. Traffic will then continue south over a new parcel created from the existing lot that contains City Parking Lot S.

The attached maps provide more information on the affected areas.

ALTERNATIVES:

1. Approve the proposal to vacate the south end of the north/south alley between Kellogg Avenue and Douglas Avenue and set the date of public hearing for September 25, 2012.

2. Direct staff to pursue other options.

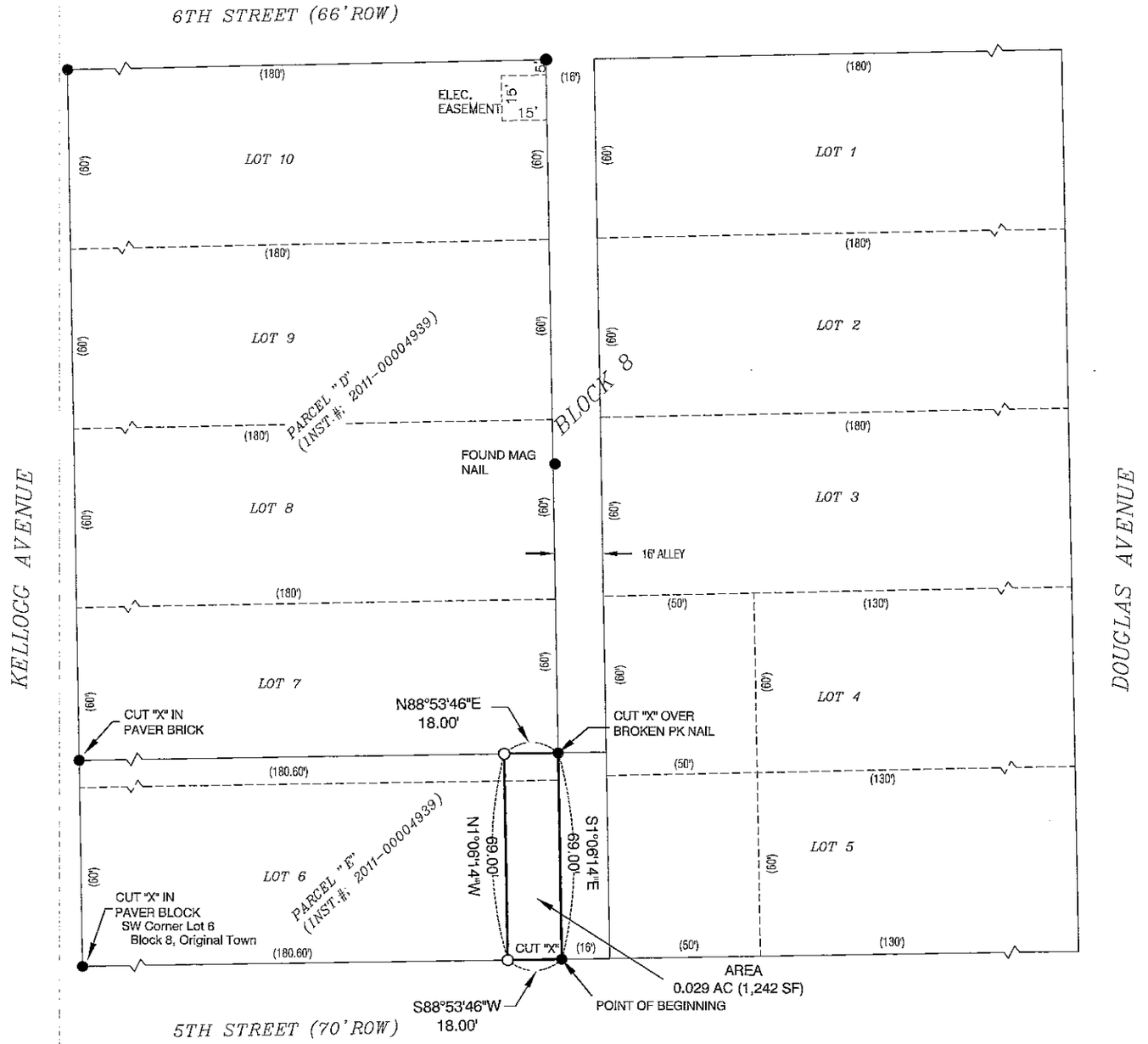
MANAGER'S RECOMMENDED ACTION:

By approving this alley vacation, the Library Expansion project will be allowed to remain on schedule for anticipated construction in 2013. Council will be asked to take action in the future on the additional right-of-way and the easement on the church property.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving the alley vacation and setting the date of public hearing for September 25, 2012.

PREPARED BY - CLAPSADDLE-GARBER ASSOCIATES, INC, 16 EAST MAIN STREET, P.O. BOX 754, MARSHALLTOWN, IOWA 50158 - PHONE 641-752-6701

ALLEY PLAT OF SURVEY



LEGEND:

- ▲ GOVERNMENT CORNER MONUMENT FOUND
- △ GOVERNMENT CORNER MONUMENT SET 1/2" x 30" REBAR w/ORANGE PLASTIC ID CAP #17162
- ● PARCEL OR LOT CORNER MONUMENT FOUND
- ○ SET 1/2" x 30" REBAR w/ORANGE PLASTIC ID CAP #17162
- ( ) RECORDED AS

DESCRIPTION SEE ATTACHED

OWNERS OF RECORD: CITY OF AMES

SURVEY REQUESTED BY: AMES PUBLIC LIBRARY
FIELD WORK COMPLETED: 5/2/2012

N

SCALE 1"=50
0 50'

ALLEY PLAT OF SURVEY
IN BLOCK 8, ORIGINAL TOWN OF AMES
CITY OF AMES, STORY COUNTY, IOWA

TRAVIS R. STEWART LICENSED 17162 IOWA PROFESSIONAL LAND SURVEYOR

I hereby certify that this land surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly Licensed Professional Land Surveyor under the laws of the State of Iowa.

8/22/2012
Travis R. Stewart, PLS date
Iowa License Number 17162
My License Renewal Date is December 31, 2013.
Pages or sheets covered by this seal: THIS SHEET AND IT'S DESCRIPTION

CGA
Clapsaddle-Garber Associates, Inc
16 East Main Street
Marshalltown, Iowa 50158
Ph 641-752-6701
www.cgaconsultants.com

DRAWN	SHEET NO.
RWA	1 OF 1
DATE	PROJECT NO.
8-22-2012	5454

C:\Users\rwa286\Documents\Vault\5454 - Ames Public Library Addition & Renovation\SURVEY\Alley Plat of Survey.dwg - Plat LEGL - 08-22-12 - 12:24pm - rwa286

DESCRIPTION

ALLEY PLAT OF SURVEY

The East 18 feet of Parcel 'E', Block Eight (8), City of Ames, Iowa; more particularly described as follows:

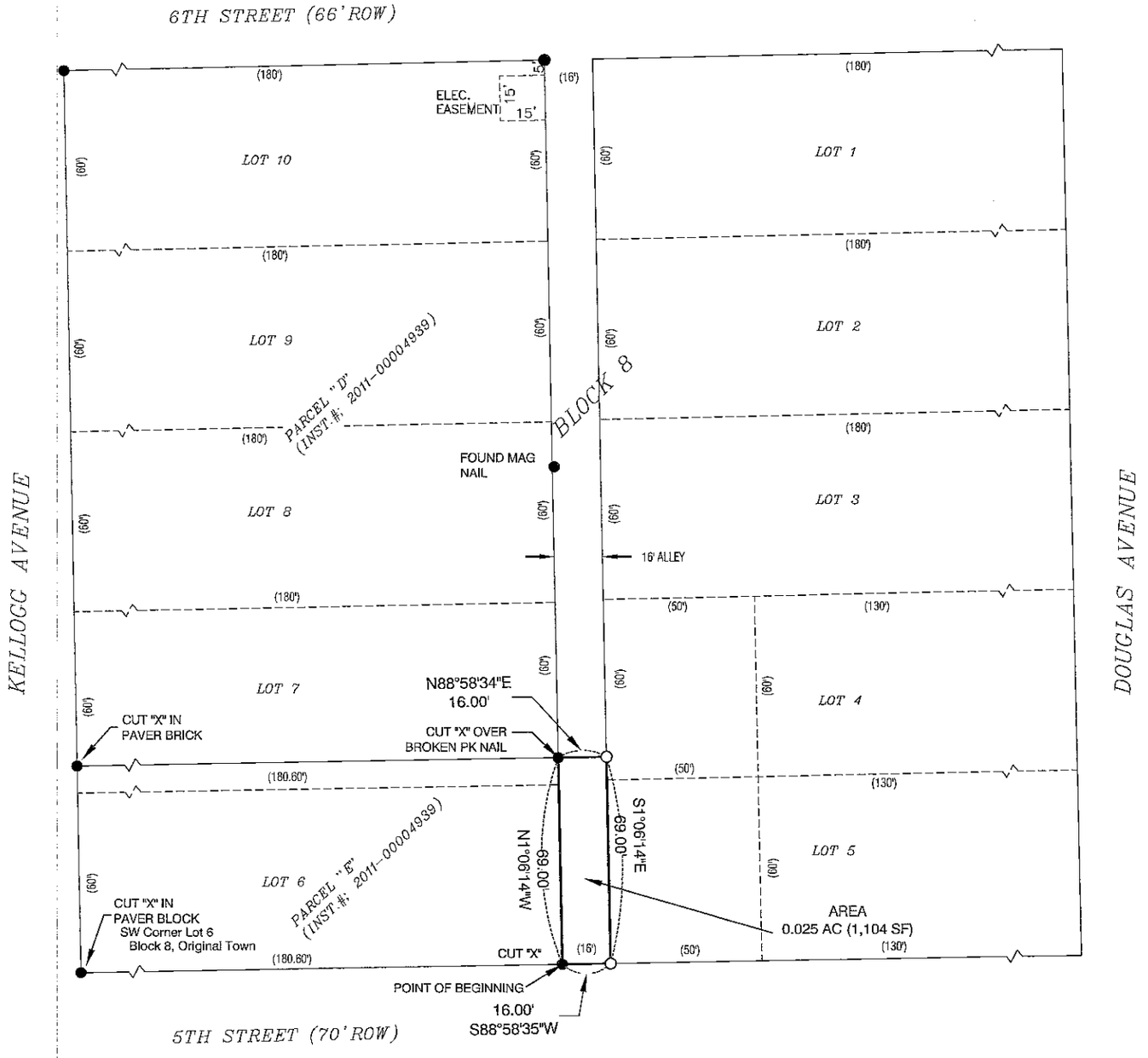
"Beginning at the Southeast (SE) corner of Parcel 'E', as described in instrument number 2011-00004939, Block Eight (8), Original Town of Ames, in the City of Ames, Story County, Iowa; thence, S88°53'46"W 18.00 feet along the south line of said Parcel 'E'; thence, N01°06'14"W 69.00 feet to the North line of Parcel 'D', said Block Eight (8); thence, N88°53'46"E 18.00 feet to the Northeast (NE) corner of Parcel 'E', said Block Eight (8); thence, S01°06'14"E 69.00 feet, to the Point of Beginning."

Parcel contains: 0.029 Acres (1,242 square feet)

Travis R. Stewart, PLS
License Renewal: 12-31-2013

PREPARED BY - CLAPSADDLE-GARBER ASSOCIATES, INC, 16 EAST MAIN STREET, P.O. BOX 754, MARSHALLTOWN, IOWA 50158 - PHONE 641-752-6701

VACATION PLAT



LEGEND:

- ▲ GOVERNMENT CORNER MONUMENT FOUND
- △ GOVERNMENT CORNER MONUMENT SET 1/2" x 30" REBAR w/ORANGE PLASTIC ID CAP #17162
- ● PARCEL OR LOT CORNER MONUMENT FOUND
- ○ SET 1/2" x 30" REBAR w/ORANGE PLASTIC ID CAP #17162
- ( ) RECORDED AS

DESCRIPTION SEE ATTACHED

OWNERS OF RECORD: CITY OF AMES

SURVEY REQUESTED BY: AMES PUBLIC LIBRARY
FIELD WORK COMPLETED: 5/2/2012

N

SCALE 1"=50
0 50'

ALLEY VACATION
IN BLOCK 8, ORIGINAL TOWN OF AMES
CITY OF AMES, STORY COUNTY, IOWA

TRAVIS R. STEWART LICENSED 17162 IOWA PROFESSIONAL LAND SURVEYOR

I hereby certify that this land surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly Licensed Professional Land Surveyor under the laws of the State of Iowa.

8/22/2012
Travis R. Stewart, PLS date
Iowa License Number 17162
My License Renewal Date is December 31, 2013.
Pages or sheets covered by this seal: THIS SHEET AND IT'S DESCRIPTION

CGA
Clapsaddle-Garber Associates, Inc
16 East Main Street
Marshalltown, Iowa 50158
Ph 641-752-6701
www.cgaconsultants.com

DRAWN	SHEET NO.
RWA	1 OF 1
DATE	PROJECT NO.
8-15-2012	5454

C:\Users\rwa286\Documents\Vault\5454 - Ames Public Library Addition & Renovation\SURVEY\Alley Vacation Plat.dwg - Plat LEGL - 08-22-12 - 10:34am - rwa286

DESCRIPTION

VACATION PLAT

The South 69 feet of the North - South Alley between 5th Street and 6th Street, Block Eight (8), City of Ames, Iowa; more particularly described as follows:

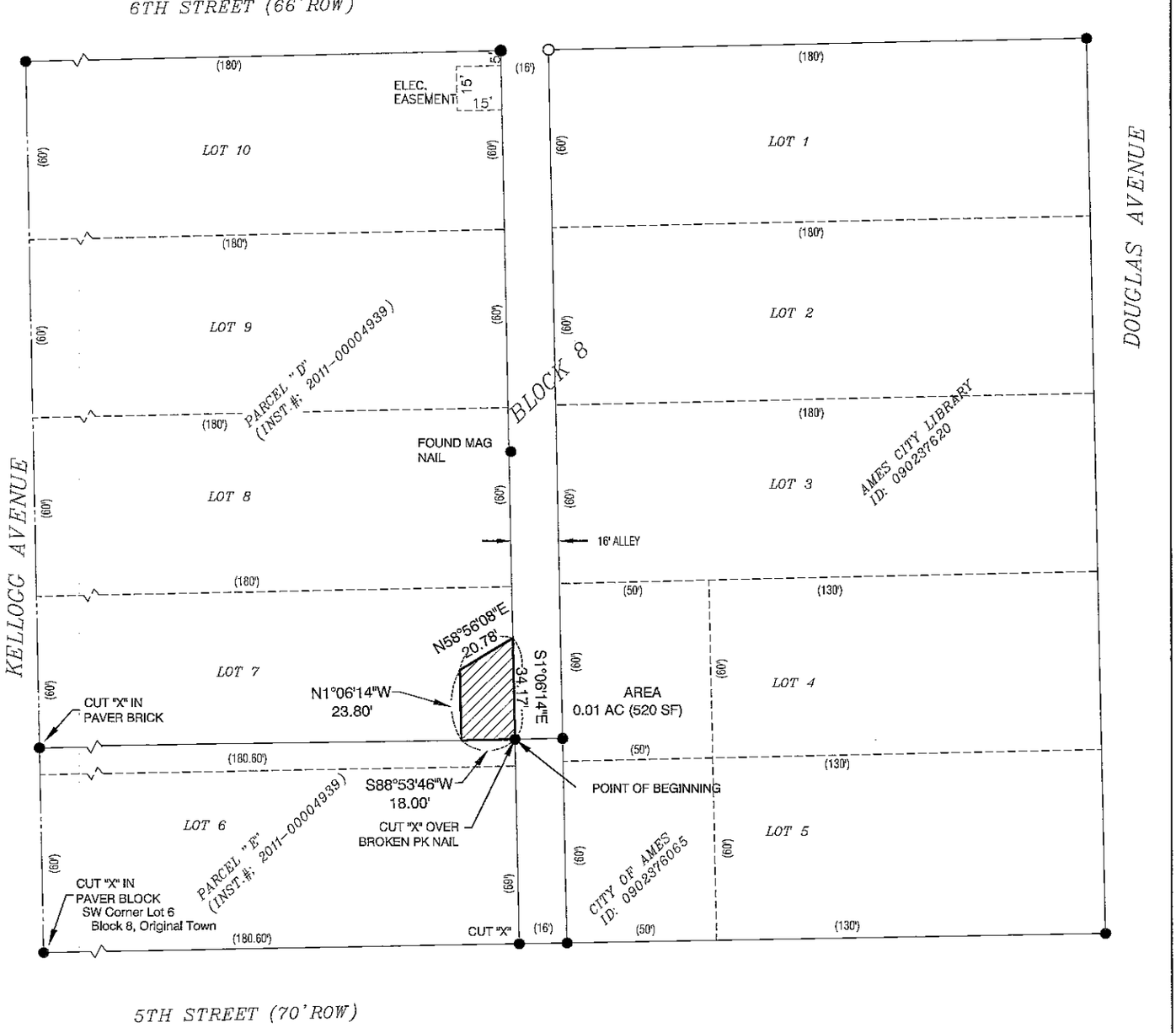
"Beginning at the Southeast (SE) corner of Parcel 'E', as described in instrument number 2011-00004939, Block Eight (8), Original Town of Ames, in the City of Ames, Story County, Iowa; thence, N01°06'14"W 69.00 feet along the east line of said Parcel 'E'; thence, N88°58'34"E 16.00 feet to the west line of Lot 4, said Block Eight (8); thence, S01°06'14"E 69.00 feet to the Southwest (SW) corner of Lot 5, said Block Eight (8); thence, S88°58'35"W 16.00 feet, to the Point of Beginning."

Parcel contains: 0.025 Acres (1,104 square feet)

Travis R. Stewart, PLS
License Renewal: 12-31-2013

PREPARED BY - CLAPSADDLE-GARBER ASSOCIATES, INC, 16 EAST MAIN STREET, P.O. BOX 754, MARSHALLTOWN, IOWA 50158 - PHONE 641-752-6701

ACCESS EASEMENT



LEGEND:

- ▲ GOVERNMENT CORNER MONUMENT FOUND
- △ GOVERNMENT CORNER MONUMENT SET 1/2" x 30" REBAR w/ORANGE PLASTIC ID CAP #17162
- ● PARCEL OR LOT CORNER MONUMENT FOUND
- ○ SET 1/2" x 30" REBAR w/ORANGE PLASTIC ID CAP #17162
- ( ) RECORDED AS

DESCRIPTION SEE ATTACHED

OWNERS OF RECORD: CITY OF AMES

SURVEY REQUESTED BY: AMES PUBLIC LIBRARY
FIELD WORK COMPLETED: 5/2/2012

N

SCALE 1"=50
0 50'

ACCESS EASEMENT
IN BLOCK 8, ORIGINAL TOWN OF AMES
CITY OF AMES, STORY COUNTY, IOWA

TRAVIS R. STEWART LICENSED 17162 IOWA PROFESSIONAL LAND SURVEYOR

I hereby certify that this land surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly Licensed Professional Land Surveyor under the laws of the State of Iowa.

Travis R. Stewart, PLS — 8/22/2012 date

Iowa License Number 17162

My License Renewal Date is December 31, 2013.

Pages or sheets covered by this seal: THIS SHEET AND IT'S DESCRIPTION

CGA
Clapsaddle-Garber Associates, Inc
16 East Main Street
Marshalltown, Iowa 50158
Ph 641-752-6701
www.cgaconsultants.com

DRAWN	SHEET NO.
RWA	1 OF 1
DATE	PROJECT NO.
8-22-2012	5454

C:\Users\rwa286\Documents\Vault\5454 - Ames Public Library Addition & Renovation\SURVEY\Ally Access Easement Plat.dwg - Plat LEGL - 08-22-12 - 12:39pm - rwa286

DESCRIPTION

Access Easement

A Portion of Parcel 'D', Block Eight (8), City of Ames, Iowa; more particularly described as follows:

"Beginning at the Southeast (SE) corner of Parcel 'D', as described in instrument number 2011-00004939, Block Eight (8), Original Town of Ames, in the City of Ames, Story County, Iowa; thence, S88°53'46"W 18.0 feet along the south line of said Parcel 'D'; thence, N01°06'14"W 23.80 feet; thence, N58°56'08"E 20.78 feet to the east line of said Parcel 'D', said Block Eight (8); thence, S01°06'14"E 34.17 feet, to the Point of Beginning."

Parcel contains: 0.01 Acres (520 square feet)

Travis R. Stewart, PLS
License Renewal: 12-31-2013

ITEM # ___37__
DATE: 09-11-12

COUNCIL ACTION FORM

SUBJECT: ASBESTOS AND LEAD-BASED PAINT ABATEMENT PROJECT FOR AMES PUBLIC LIBRARY

BACKGROUND:

As part of the Library's renovation and expansion project, environmental hazards will be abated under a separate contract from Meyer Scherer & Rockcastle Ltd. (the architect) and the General Contractor. On April 26, 2012, Terracon Consultants, Inc, was hired to conduct an initial survey for identification of asbestos-containing materials (ACM) and lead-based paints (LBP) in the Library building. During the survey, both ACMs and LBPs were identified in the interior and the exterior of the north part of the building. The survey also confirmed the presence of asbestos in samples collected from the 1985 part of the Library. These findings (shown in attached Tables 1 and 2) were reported to the Library Board in reports dated June 8 and July 12, 2012.

Terracon recommended preparation of an asbestos abatement design, abatement observation, and abatement clearance by a qualified consultant in order to confirm that ACMs are removed and disposed of properly. Terracon also recommended abatement of all LBP in the renovation areas.

Because Terracon completed the survey, and in order to maintain a single line of responsibility, the Library consulted with Purchasing staff and the City Attorney, and then requested that Terracon Consulting, Inc. develop plans and specifications for the abatement project that would be competitively bid. Terracon was also contracted with at that time to conduct abatement monitoring and clearance testing on behalf of the Library. The Library Board of Trustees approved an agreement with Terracon for these professional services on August 16, 2012.

On August 31, 2012, Terracon submitted final specifications and information required by the Purchasing Division to solicit bids for the Abatement Project. The Library requests that the City Council approve the preliminary plans and specifications for the abatement work for the for Ames Public Library Remodel and Addition Project and set October 11, 2012, as the bid due date and October 23, 2012, as the date of hearing and award of contract.

ALTERNATIVES:

1. Approve preliminary plans and specifications for the Asbestos and Lead-based Paint Abatement Project for Ames Public Library and set October 11, 2012, as the bid due date and October 23, 2012, as the date of hearing and award of contract.

2. Do not proceed with this project.

MANAGER'S RECOMMENDED ACTION:

Under the Iowa Administrative Code, which adopts the Environmental Protection Agency's asbestos National Emission Standard for Hazardous Air Pollutants regulation by reference, regulated asbestos-containing material must be removed before renovation or demolition activities take place that will disturb the materials.

Lead-based waste from renovation or demolition activities (such as paint debris, paint chips, dust, and sludges) that exhibits the toxicity characteristic must be managed and disposed of as a hazardous waste under the Resource Conservation and Recovery Act.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving the preliminary plans and specifications for the abatement work for Ames Public Library Remodel and Addition Project and setting October 11, 2012, as the bid due date and October 23, 2012, as the date of hearing and award of contract for the abatement work.

Table 1. Asbestos-Containing Materials

HA#[1]	General Location	Description[2]	Estimated Quantity[3]	Percent Asbestos
5	Outreach room and Collections room	12″ x 12″ off-white with gray streaks floor tile	1,100 SF	1.1
16	Collections room, Volunteer Services, Staff break room, Community Relations Specialist's office	White over black sink insulation	4 each	2.5
22	Hallway ceiling between Outreach room and Mail room	1' x 1' brown ceiling tile brown mastic	25 SF	2.1
32	On roof and exterior wall	Light gray caulk	500 LF	1.3
34	Roof	Black weathered to gray roofing tar	300 LF	15
37	Former window west of the roof access ladder in the 1940 addition	Light gray caulk	8 LF	10
38	Basement stairway walls	Beige caulk	20 LF	1.9
47	Second floor of 1940 addition ceilings and walls	Tan plaster	32,000 SF	3.1
47	Second floor of 1940 addition ceilings and walls	Gray plaster	32,000 SF	4.8
67	In auditorium closets and kitchenette off the auditorium	Black mastic under 9" x 9" off white with grey/ beige speckled floor tile	400 SF	3.5
72	On wall of clerestory above metal flashing near its base	Gray caulk	200 LF	1.3

[1] HA# = homogeneous area number
[2] ″ = inches and ' = foot or feet
[3] SF = square feet

Table 2. Lead-Based Paint

Location	Paint Color	Percent Lead
Basement door frames	Brown	5.8
Basement door in southwest corner of southwest room	Brown	7.3
Outreach room basement stairs door frame	Brown	1.7
Outreach room top of east window	Dark beige	7.8
Outreach office south door frame	Blue	2.0
Collections room header above door	White	9.7
Interior and exterior window frames	Blue	5.1 to >9.9[4]
Men's room window frame	Blue	6.7
North entry 1940 addition first floor hall door frame header boards	Pink	>9.9, 6.0, 6.3
Literary room in 1907 building south plaster wall behind wallboard wall	Yellow	1.4
Sprinkler room walls	Beige	2.9, 1.6, 9.5
Second closet east of Founder's Suite ceiling above ceiling tiles	White	7.5, 6.1
East hallway ceiling above ceiling tiles	White	6.8
Staff break room east wall	Beige	4.2, 5.3
Information offices east wall	White	4.3, 3.7
Roof access ladder to roof	Orange	5.8
'Attic' (inside roof) area near southwest corner of 1940 addition dentil, decorative molding above the dentil, soffit, eaves, and crown molding under dentil	White	>9.9
Roof access drip edge	White	7.3
Roof access door frame header	Orange	3.3
Roof door and frame	Brown	2.0, 2.1
1904 building east roof vent	Beige	6.0
Roof skirt at northeast corner on north side of 1940 addition	Beige	1.9

[4] > = greater than