

February 6, 2008

Donna J. Crawford
Governmental Assistance Services
905 Joseph Drive
Lawrence, Kansas 66049

Re: Environmental Review - Phase II Water System Upgrades
Burlingame, KS

Dear Ms. Crawford:

The Kansas Geological Survey (KGS) has received Governmental Assistance Services January 16, 2008, request for comments on behalf of the City of Burlingame. Burlingame has received a \$400,000 CDBG grant from Rural Development to upgrade the city's public water distribution system. The grant will finance, in part, the installation of 1,800 and 1,200 linear ft of 6 in and 4 in, respectively, PVC water pipe. Project work also includes miscellaneous fire hydrants, service pipe, crossings, and meter upgrades. The project is located within Sections 10, 11, 14, & 15, T15, R14 in Burlingame, KS.

A review of regional geologic information along with the project summary and site maps provided by Governmental Assistance Services indicates that there are no unduly adverse geologic conditions that should affect this project. However, WWC-5 water well records indicate that there are numerous environmental-related sites with monitoring wells near proposed water line routes along E Lincoln Ave, Freemont Ave, and E Hall Ave. Depending on the proximity of the environmental sites to the water lines, trenching activity sometimes may either encounter off-site contaminant migration or monitoring wells. Monitoring wells are usually installed in road right-of-way easements or on private property, but exact locations cannot be verified from WWC-5 records.

An agency review form was not included with the environmental request, so the recommended action with regard to the above comments is that clearance of the project should not be delayed. However, the applicant should be aware that several environmental sites and associated monitoring wells are near some of the proposed water line locations and may need to be addressed if encountered during water line installation.

This letter is an assessment based on the regional geologic conditions available at the KGS at the time of writing and cannot be used in substitute of a detailed site characterization. Other geologic conditions, not discussed herein, or for which the KGS has no knowledge, may affect the viability or safe operation of this facility or property. It is the responsibility of the applicant to provide any necessary

Donna J. Crawford

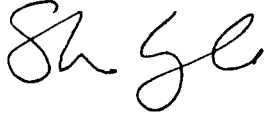
February 6, 2008

Re: Environmental Review - Phase II Water System Upgrades Burlingame, KS

Page 2 of 2

characterization, geotechnical or environmental testing, or design by a licensed professional geologist or engineer to complete the project.

Sincerely,

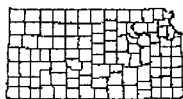
A handwritten signature in black ink, appearing to read "Sh Lyle", written in a cursive style.

Shane Lyle, RG

Geology Extension Coordinator

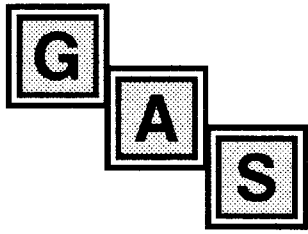
Enclosures

cc: Dan Suchy, KGS Data Resources Library



Legend

- Legend**
-  Single well
 -  Multiple wells
 - Yield (in gpm)**
 -  between 0.00 and 5.00
 -  between 5.00 and 10.00
 -  unknown Yield
 -  Township Boundary
 -  PLSS
 -  Roads
 -  City Boundary
 -  County Boundary



Governmental Assistance Services

905 Joseph Drive

Lawrence, Kansas 66049

785-832-2141 • Fax 785-832-1111

Toll Free 888-832-3335

e-mail: gasdonnaa@sunflower.com

January 16, 2008

Lyle
Dr. William Harrison
KS Geological Survey
University of Kansas
1930 Constant Ave. – Campus West
Lawrence, KS 66047

RE: Environmental Review - Burlingame, KS – Phase II Water System Upgrades

Dear Dr. Harrison:

The City of Burlingame, Kansas has received a 2008 CDBG grant for \$400,000 and funds obligated from Rural Development to complete \$1,247,500 of upgrades. The project is located within Sections 10, 11, 14 & 15, Township 15, Range 14 East.

Upgrades will consist of 1800 LF of distribution lines to 6" pipe and 1200 LF to 4" lines of C900 CL 150 PVC. Miscellaneous upgrades will be on fire hydrants, service pipe, crossings and meter settings. Improvements will occur on the west side of town.

Project alternatives, scope of work, maps and estimates are attached to assist you in your review. Please submit all comments either negative or positive to: Governmental Assistance Services, 905 Joseph Dr., Lawrence, KS 66049.

If you should have additional project questions please contact the City Engineer, LaVene Brenden at 785-272-2252.

Sincerely,

Donna J. Crawford
Donna J. Crawford
Grant Administrator

Enc/ Alternatives, Scope of Work
Estimates
Map

2. Project Alternatives

A. Alternatives

The city has taken an aggressive approach to replacing the lines in the west part of town due to the new elevated tower being installed, replacement of lines on the other side of the city, and the connection to Osage City for their entire water supply.

The first phase improvements effect the pipeline flows, pressure and water level fluctuations on the west side of town. KDHE design requirements for public water supplies require that a minimum pressure of 20 psi be maintained throughout the system under all demand conditions.

The normal working pressure in the system should be approximately 60 psi. It has been proven that in the west side of town the maximum static pressure ranges from 30 psi in higher elevations to nearly 75 psi in lower elevations. Although pressures were improved somewhat with the Phase 1 water improvements, the long term ability of the undersized lines in the west side of the city to maintain the improved pressures are more than questionable.

Since the Phase 1 improvements began, the west side of town has had even more line breaks from the pressure changes in the undersized lines. As stated before, since lines were installed long ago, corroded lines are moving distasteful particles to the clean drinking water from Osage City to all the homes on the west side of town. Lack of looped lines on the west side is also causing water supply contamination due to water setting in the lines for long periods of time.

Therefore, the city will replace the lines with 4" and 6" PVC pipe to supply clean, safe water and to meet KDHE requirements. Two to four inch pipe was considered as an alternative, but did not allow for at least 20 years planning life. Therefore 4"- 6" pipe will replace existing 2"- 4" lines depending on which lines are to be looped.

Financial alternatives were investigated during the Phase 1 project. Rural Development could assure the water bills for the city would not be as excessive as financing with KDHE or GO Bonds. Rural Development financed Phase 1 stipulating that the city must complete the west side with a Phase 2 project. As your department is aware, once Rural Development has agreed to fund a project the city must be prepared to follow their directives. Rural Development has held their funding in reserve for two years to assure once your grant is awarded the project could proceed immediately.

This project needs your funding to complete the project and meet Rural Development plans and procedures. If this project has to be completed with KDHE or General Obligation Bonds the average water bill will cost each household on the average over \$80 monthly for 5,000 gallons of water. Also, Rural Development will not be pleased if we fund the project in this manner, their loan to grant ratio will be damaged.

B. Scope of Work

The city is requesting your financing to install approximately 18,000 LF of 6" and 1200 LF of 4" PVC. Your funds of \$382,000 will install lines and \$18,000 will be utilized for administrative services. The local side of funding will be the balance of line replacement, engineering design & inspection, legal expense, and for the environmental assessment.

Upon awarding of the project and release of funds the city will be prepared to bid the project. The planned schedule is as follows: Final plan approval – 3/08, bid project by 5/08, award contract by 6/30/08 and complete all construction by 8/30/09.

C. Force Account Labor

The city will not be using force account labor, a general contractor will be procured.

3. Past Efforts

The City of Burlingame's water rates are one of the highest in comparison to other cities their size and larger.

In 1997 the city raised rates to \$22 because more money was needed to saturate expensive operation & maintenance costs. As the plant and the lines become more antiquated the city raised rates to \$26.62 for the first 5,000 gallons. In 2001 a small increase from \$26.62 to an average bill of \$28 went into effect prior to the first phase grant submission. You can see the City Council has not attempted to rely only on grant funds to keep their water system viable.

However, due to the excessive construction costs relating to making massive upgrades, the city has had no alternative but to request grant funds, not only for the first phase upgrades but Phase 2 improvements as well.

Consequently, the city again raised rates in June 2007 to pay debt retirement on the first phase: \$15.75 for the first 2,000 gallons of water and \$7.65 for each additional 1,000 gallons, resulting in an average water bill per household of \$38.70 per month.

At the finalization of Phase 2 construction the city, once again, will be enacting an ordinance to increase the monthly water bill by \$7.68 creating an average water bill of \$46.38.

At this time the city owes Rural Development approximately \$920,000 for the first phase project.

The city has hired an engineer to complete a full study on the sanitary sewer system. The estimated cost is \$1.2 million. Burlingame is studying alternatives to financially support the project. The average household sewer bill is \$19.17.

The city needed to monitor their gas, water and electrical systems closer for breaks, outages and brownouts. The city purchased an electrical read system for the gas, water & electric in 2005 for \$553,506.

**Phase II - Preliminary Project Cost Estimates
Water System Improvements
for**

City of Burlingame, KS

June 14, 2007

Item No.	Description	Quantity	Unit	Unit Price	Extension
1	6" C-900 Cl. 150 PVC	18,000	L.F.	\$ 25.00	\$ 450,000.00
2	4" C-900 Cl. 150 PVC	1,200	L.F.	\$ 20.00	\$ 24,000.00
3	1" Polyethylene Service Pipe	10,000	L.F.	\$ 12.00	\$ 120,000.00
4	Valves	50	Ea.	\$ 800.00	\$ 40,000.00
5	Road Crossings	20	Ea.	\$ 2,000.00	\$ 40,000.00
6	Highway Crossings	2	Ea.	\$ 20,000.00	\$ 40,000.00
7	Service Line Crossings	85	Ea.	\$ 600.00	\$ 51,000.00
8	Hydrants	15	Ea.	\$ 3,500.00	\$ 52,500.00
9	Connections	20	Ea.	\$ 1,200.00	\$ 24,000.00
10	New Meter Settings	170	Ea.	\$ 1,000.00	\$ 170,000.00

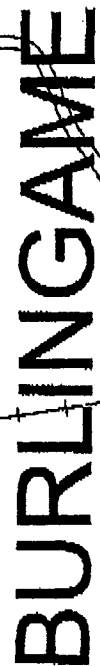
Total Estimated Construction Cost \$ 1,011,500.00

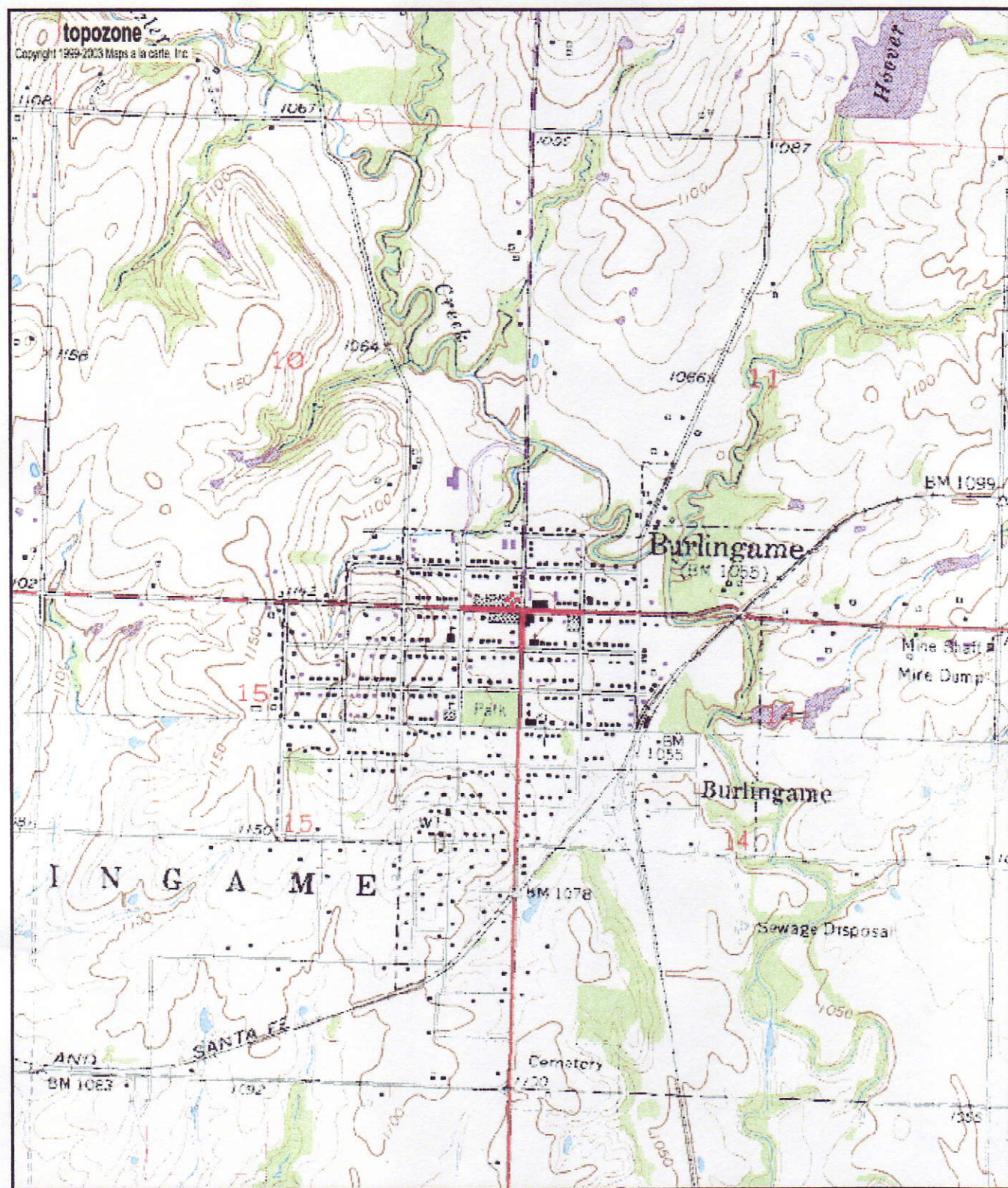
Engineering Design	\$ 75,900.00
Construction Observation	\$ 35,400.00
Grant Administration Services	\$ 18,000.00
Environmental Assessment	\$ 4,000.00
Legal	\$ 1,500.00
Contingencies (10%)	\$ 101,200.00

Total Estimated Project Cost \$ 1,247,500.00

PROJECT FINANCING SUMMARY

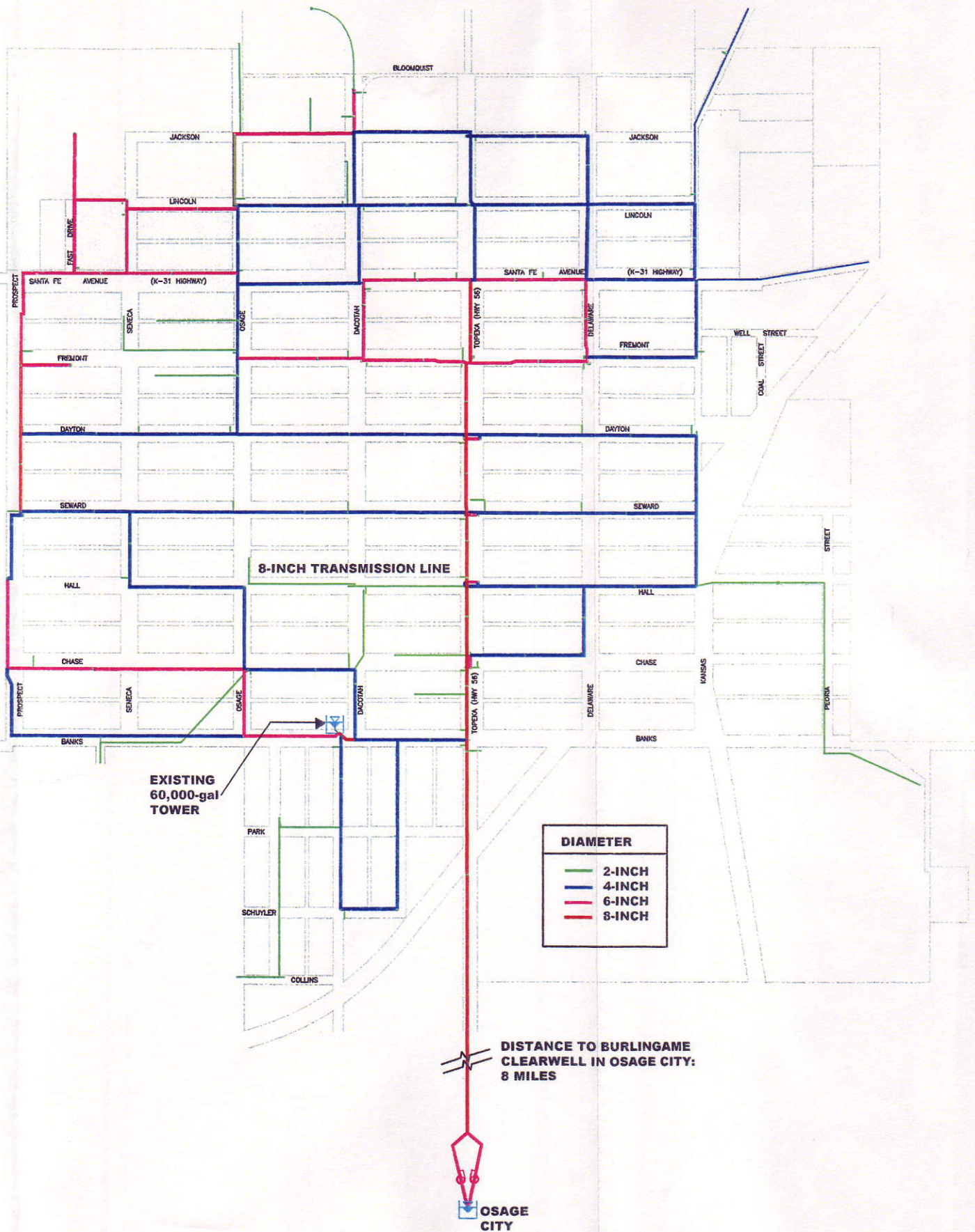
<i>Total Estimated Project Cost</i>	\$ 1,247,500.00
CDBG Grant	\$ 400,000.00
Cash Contribution	\$ -
Total Amount to be Financed	\$ 847,500.00
Rural Development Annual Loan Payment @ 4.5% Interest	\$ 46,055.82
Annual Debt Reserve	\$ 4,605.58
Total Annual Payment	\$ 50,661.40
Monthly Debt Service Charge per Customer (550)	\$ 7.68





0 0.3 0.6 0.9 1.2 1.5 km
0 0.2 0.4 0.6 0.8 1 mi
UTM 15 253660E 4293075N (NAD27)
Burlingame, USGS Burlingame (KS) Quadrangle
Projection is UTM Zone 15 NAD83 Datum

M=4.077
G=-1.776



Bartlett & West
Engineers, Inc.

1200 S.W. Executive Drive, Topeka, KS 66614-3859 (785) 272-2252

FIGURE 3-2. DISTRIBUTION SYSTEM
CITY OF BURLINGAME, KANSAS

DATE
W O
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