

August 7, 2009

Merrill D. Peterson, CMC
P.O Box 187
Buhler, KS 67522

RE: Plan for proposed water supply treatment and distribution system improvements

Dear Mr. Peterson,

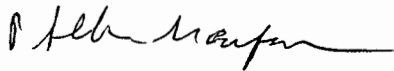
The Kansas Geological Survey (KGS) has received your letter dated July 24, 2009, requesting environmental review comments for the above referenced project.

A review of regional geologic information and project information provided with the request indicates that there are no unduly adverse geologic conditions that should affect this project. Site-specific conditions may need to be considered prior to commencement of the project. A completed request-for-comments form is enclosed.

This assessment was based on regional geologic and project information available to the KGS at the time of the review and should not be used for a detailed site characterization. Other geologic conditions, not discussed herein, or for which the KGS has no knowledge, may affect the feasibility of this project. It is the responsibility of the applicant to provide any necessary site characterizations, geotechnical or environmental testing, or design by a licensed professional geologist or engineer to complete the project.

If you have questions please do not hesitate to contact me at my office (785 864-2068).

Sincerely yours,



P. Allen Macfarlane

The following form may be used by the Review Agency/Commission for comments in response to the request for clearance from the proposed Public Water Supply Loan Fund Project.

☐	Army Corps of Engineers
☐	Kansas Biological Survey
☐	State Conservation Commission
☐	Kansas Corporation Commission
☐	Division of Water Resources/Kansas Department of Agriculture
☒	Kansas Geological Survey
☐	Kansas State Historical Society, State Historic Preservation Office
☐	Kansas Water Office
☐	Kansas Department of Wildlife & Parks
☐	US Dept of Agriculture - Natural Resources Conservation Service
☐	Kansas Department of Health and Environment
☐	US Dept of the Interior - Fish and Wildlife Service

Agency Review Comments: (to be completed by reviewing agency and returned to applicant contact person at name and address shown below)

Comments: See attached letter

Recommended Action: (to be completed by the reviewing agency and returned to applicant contact person at name and address shown below.)

☒	Clearance of project should be granted
☐	Clearance of project should not be granted
☐	Clearance of project should be delayed until the issues or questions have been clarified.
☐	Clearance of project should not be delayed, but the applicant (in the application) should address or clarify the questions or concerns indicated above.)

P. Allen Macfarlane
Reviewer's Name

KGS
Division/Agency/Commission

8/07/05
Date

Project Title: Public Water Supply Loan Fund Application

Applicant: City of Buhler, Kansas #2701

Contact Person: Merrill D. Peterson, CMC, City Clerk

Address: 219 N. Main, PO Box 187

City, State: Buhler, KS Zip: 67522 Phone: (620)-543-2253



THE CITY OF
BUHLER

Office of City Clerk / 219 N. Main / P.O. Box 187 / Buhler, KS 67522 / (620) 543-2253 / (620) 543-6417 FAX

July 24, 2009

Kansas Geological Survey

University of Kansas

1930 Constant Ave., Campus Mail

Lawrence, KS 66047

Re: City of Buhler

Kansas Public Water Supply Loan Fund

Project No. 2701

The City of Buhler is preparing an application to the Kansas Department of Health and Environment for a loan from the Kansas Public Water Supply Loan Fund for the referenced project. The City of Buhler has two water supply wells which exceed the Arsenic Maximum Contaminate Level (MCL) of the Safe Drinking Act. The City has evaluated their options and the selected alternative is to construct a new water treatment facility adjacent to the existing water treatment facility for the removal of Arsenic. The City as part of the treatment process will also be adding a process to remove the manganese and iron in the existing water supply. With the new treatment process the existing treatment building and water system needs some upgrades. A sewer line is needed as part of the treatment process. The City will also be installing a new electrical supply, replacing windows and doors in the existing facility, and evaluating the in ground storage tank. Depending on the condition, the ground storage tank will be renovated or removed from service. The elevated storage tank will also be inspected during the water system improvements and may receive a new coating of the interior and exterior of the facility.

Attached are two maps depicting the areas of improvements. The larger scale map shows the wells and treatment plant locations. The smaller detailed map identifies the location of the sewer line for the treatment plant.

The location of the proposed Project is: Section 09, TWP 22, Range 04 W

Section 16, TWP 22, Range 04 W

We would appreciate your review of the project description and location, and any comments you may have, within 30 days. A project review form is enclosed for your use.

Please call Merrill D. Peterson, CMC, at 620-543-2253 if you have any questions.

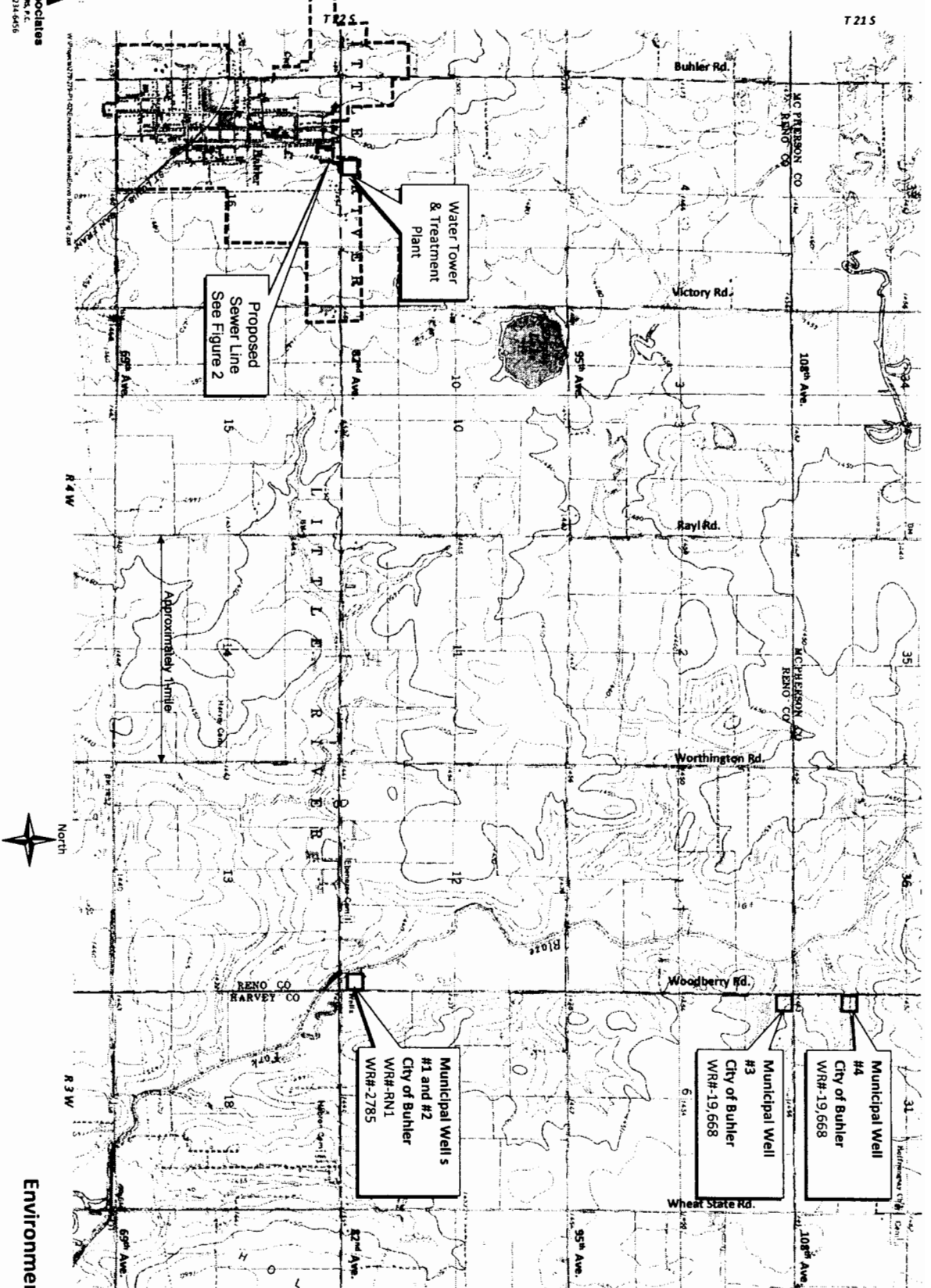
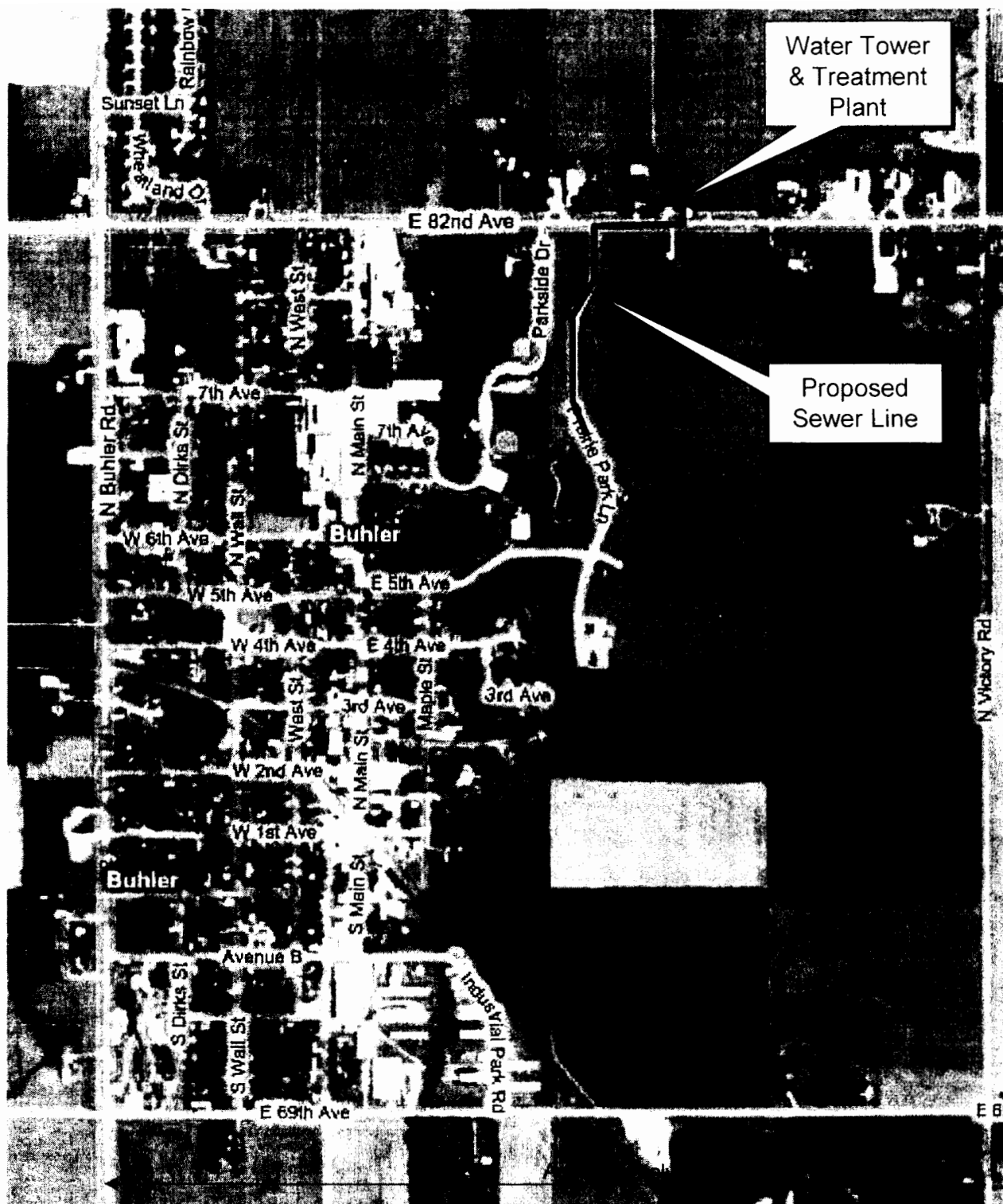


Figure 1
 Environmental Review
 Buhler, Kansas



W:\Projects\279\279-P1-02\Environmental Review\Enviro Review Fig 2.ppt

Prepared By:

MA
Miller & Associates
CONSULTING ENGINEERS, P.C.
Kearney, NE - (308) 234-6456



Figure 2
Environmental Review
Buhler, Kansas

Item No.	Description	Unit	Estimated Quantity	Unit Price	Capital Cost	Annual Cost
<i>Initial Capital Expenditures</i>						
1	Bonds, Mobilization & Insurance	% of const	6%	\$84,000	\$84,000	
2	Provide & Install Pretreatment & Treatment Equipment, Instruments, Controls & Media	LS	1	\$650,000	\$650,000	
3	Relocate Chlorine/Disinfection Equipment	LS	1	\$3,000	\$3,000	
4	Addition to Existing Building with booster pump, Chlorine & Chemical Storage Rooms. Upgrade existing building	LS	1	\$230,000	\$230,000	
5	Install New Pumping System for Existing Underground Storage	LS	1	\$48,000	\$48,000	
6	Installation of Piping, bypass piping, motor control Valve, Etc. in Building	LS	1	\$40,000	\$40,000	
7	Chemical Pumps, Piping & Acc.	LS	1	\$7,000	\$7,000	
8	Chemical Storage Tanks	LS	1	\$8,000	\$8,000	
9	Site Work, Fencing, Electrical, Supply & Yard Piping	LS	1	\$50,000	\$50,000	
10	Tower Inspections	LS	1	\$10,000	\$10,000	
11	Elevated Tower Painting	LS	1	\$160,000	\$160,000	
12	Control System Upgrades (by Owner)	LS	1	\$50,000	\$50,000	
13	Backup Power Generator at treatment facility	LS	1	\$80,000	\$80,000	
14	Sanitary Sewer Line w/MH and Appert.	LS	1	\$70,000	\$70,000	
15	Demolition of Piping/Pumps	LS	1	\$5,000	\$5,000	
				Construction Subtotal	\$1,495,000	
16	Engineering & Construction Observation	% of Const	15%		\$224,000	
17	Contingencies	% of Const	20%		\$299,000	
18	Legal/Fiscal/Administrative				\$10,000	
19	Geotechnical Investigation				\$5,000	
				Total Capital Cost	\$2,033,000	
				Interest Rate on 20 Year Loan	4.000%	
				Annualized Cost of Capital Improvements		\$150,000
<i>Yearly Increased Operation and Maintenance</i>						
20	Media Replacement					\$9,500
21	Chemicals					\$5,000
22	Labor (1/4 of \$40,000)					\$10,000
				Annual O&M Subtotal		\$25,000
				Total Estimated Costs	\$2,033,000	\$175,000