

1930 Constant Avenue
Lawrence, KS 66047-3724
April 3, 2008

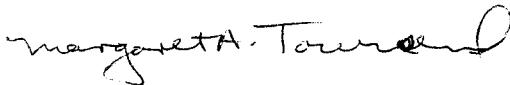
Jaime D. Goering
Design Engineer
Professional Engineering Consultants, P. A.
303 S. Topeka
Wichita, KS 67202

Dear Ms. Goering:

I was asked to review the City of Great Bends's plans for replacement of sewer lines. Consideration of the materials provided to me indicates that there should be little to no impact on water quality in the area.

The above comments are based on regional geologic conditions and limited information available to the KGS at the time of writing and cannot be used in substitute for a detailed site characterization. Other geologic conditions, not discussed here, or for which the KGS has no knowledge, may affect the viability or safe operation of this facility or property. Geotechnical engineering and design are outside the purview of the KGS. It is the responsibility of the applicant to produce any detailed site characterizations, geotechnical or environmental testing, or design by a licensed professional geologist or engineer to complete the project.

Sincerely,



Margaret A. Townsend
Geohydrology Section

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 and Parks
☐ US Dept. of Agriculture - Natural Resources Conservation Service
☐ Kansas Department of Health and Environment
☐ US Department 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: _____

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.

Margaret Townsend KGS 4-3-08
Reviewer's Name Division/Agency/Commission Date

Project Title: Public Water Supply Loan Fund Application

Applicant: City of Great Bend
Contact Person: Howard Parkington
Address: P.O. Box 1168
City, State: Great Bend Zip: KS Phone: (620) 793-4111



Professional Engineering Consultants, P.A.

January 23, 2008

Kansas Geological Survey
University of Kansas
1930 Constant Ave. - Campus West
Lawrence, KS 66047

Reference: City of Great Bend, Kansas
Frey Street Sanitary Sewer Replacement
PEC Project No. 35-07729-3182

To Whom it May Concern:

The City Great Bend is preparing an application to the Kansas Department of Health and Environment for a loan from the Kansas Revolving Loan Fund for the referenced project. These improvements include the replacement of the existing sanitary sewer pipes along Frey Street (Section 27, Township 19S, Range 13W). These improvements will also eliminate the problem of the sanitary sewer line being located under the Harper Camperland building. All improvements will be made within existing easements and/or right-of-way.

The total combined project estimate for these improvements is \$741,195.00.

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 contact the undersigned at 316.262.2691 if you have any questions.

Very truly yours,

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Jaime D. Goering
Design Engineer

JDG/tac

Encl: As noted

cc: Mr. Howard Partington, City of Great Bend (w/o encl.)

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Environmental Assessment
For the
Frey Street Sanitary Sewer Replacement
PEC Project No. 35-07729-3182

1.0 Purpose and Need for Project

1.1 Project Description:

This project includes the replacement of the existing sanitary sewer along Frey Street from 16th Street to 10th Street and the sanitary sewer located from Frey Street to the Old Highway 281 Bypass (Section 27, Township 19S, Range 13W).

The sanitary sewer replacement consists of 35 feet of 15" sanitary sewer pipe, 1,150 feet of 20" sanitary sewer pipe, 1,400 feet of 24" sanitary sewer pipe and 100 feet of 27" sanitary sewer pipe. The sanitary sewer lines must be constructed along with the necessary manholes and reconstruction/restoration.

1.2 Purpose and Need of the Project:

The purpose and need for the above referenced project is to replace the existing sanitary sewer system, a portion of which is under the Harper Camperland building, and to improve the condition of the concrete sanitary sewer pipes which are reaching the end of their useful design life. This will ensure adequate capacity for the sanitary sewer for the City of Great Bend and its community. The sanitary sewer system has severely deteriorated over the last few years. Several areas of inflow and infiltration have developed along with areas of corrosion. The city has made several repairs but more repairs or replacement is needed to ensure a reliable sanitary sewer system.

2.0 Alternatives to the Project:

After careful inspection by Professional Engineering Consultants, P.A. to review the condition and feasibility of necessary repairs, the replacement of the sanitary sewer pipes is the only feasible, cost effective alternative for the City of Great Bend.

3.0 Affected Environment / Environmental Consequences:

3.1 Land Use / Important Farmland / Formally Classified Lands:

No prime farmland, land use or classified lands would be altered or removed from production of the recommended project.

3.2 Floodplains:

No floodplains would be altered or removed because of the recommended project.

3.3 Wetlands:

No known wetlands would be affected by the recommended project.

3.4 Cultural Resources:

No known cultural resources would be affected by the recommended project.

3.5 Biological Resources:

No known biological resources would be affected by the recommended project.

3.6 Water Quality Issues:

No known water quality issues would be affected by the recommended project.

3.7 Endangered or Threatened Species:

No known endangered or threatened species would be affected by the recommended project.

3.8 Air Quality:

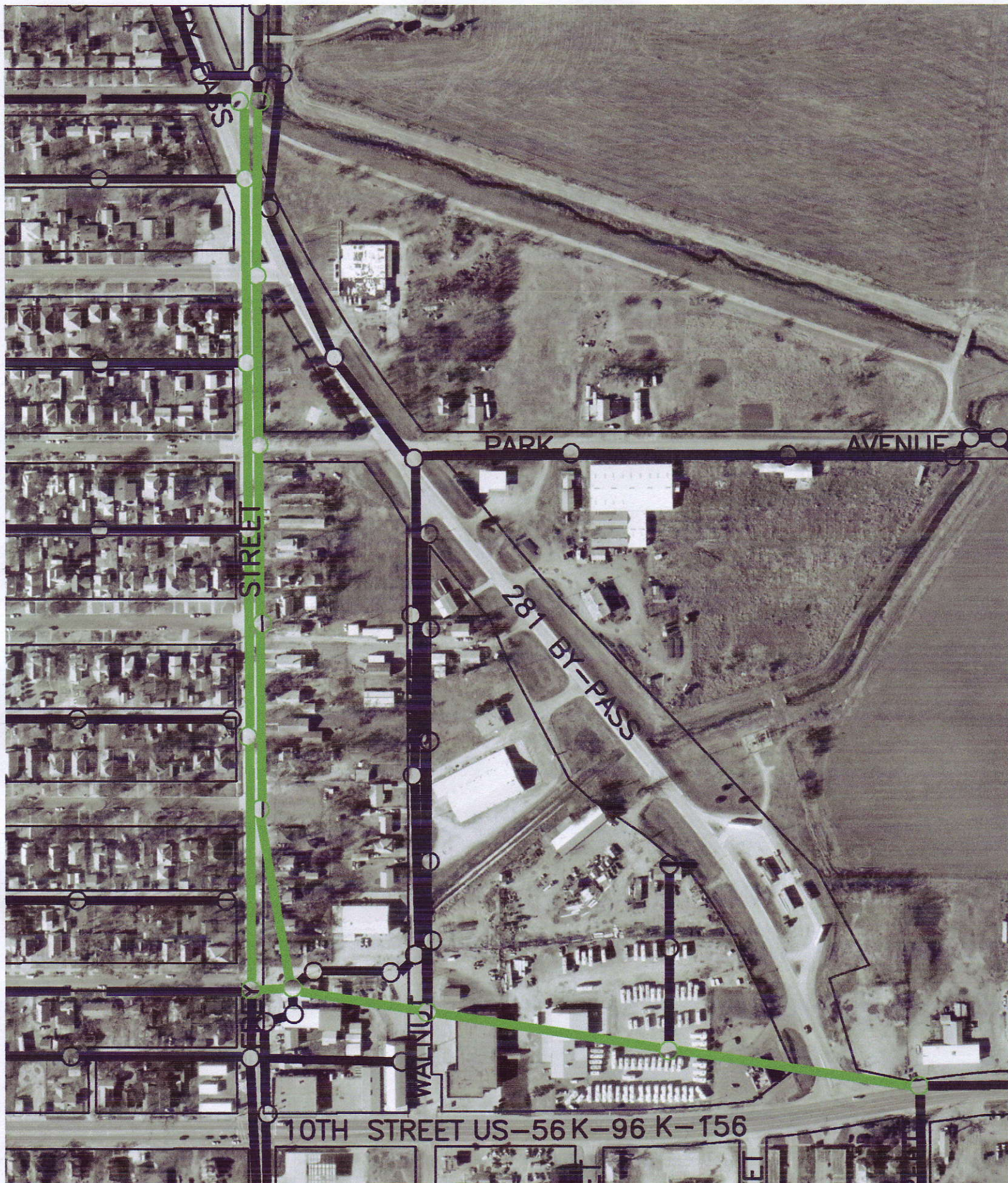
The recommended project would have minimal air quality impacts to the Great Bend community. Short-term impacts would occur during the construction phase of the project and include an increase in emissions by heavy construction equipment and dust emissions during trenching operations. The prompt re-vegetation of bare soils would reduce air quality concerns and the loss of surface soils.

3.9 Summary:

The recommended procedures to improve the reliability, as well as ensure adequate capacity of the sanitary sewer system for the City of Great Bend and its community, include the replacement of portions of the existing sanitary sewer pipes and manholes.

4.0 Exhibits / Maps

Attached is a map showing the location of the proposed improvements, as well as a cost estimate for the proposed improvements.



**Professional Engineering
Consultants, P.A.**

303 S. Topeka
Wichita, Kansas 67202
Phone (316) 262-2691

**City of Great Bend
Sanitary Sewer Replacement
Cost Estimate
PEC PROJECT NO.: 35-07485-3182
Estimate Date: October 2007**

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ENGINEER'S ESTIMATE	
				UNIT PRICE	COST
Sanitary Sewer Improvements					
1	15" Pipe by Open Cut (Point Repair)	35	LF	90.00	\$3,150.00
2	20" Pipe by Open Cut	1,150	LF	115.00	\$132,250.00
3	24" Pipe by Open Cut	1,400	LF	130.00	\$182,000.00
4	27" Pipe by Open Cut	100	LF	150.00	\$15,000.00
5	Remove and Replace Gravel	1,350	LF	30.00	\$40,500.00
6	Bore under roadways	150	LF	375.00	\$56,250.00
7	Remove and Replace Pavement	1,300	LF	60.00	\$78,000.00
8	New Manholes	2	EA	4,000.00	\$8,000.00
9	Manhole Rehabilitation	12	EA	2,500.00	\$30,000.00
10	Site Clearing and Restoration	1	LS	25,000.00	\$25,000.00
PROBABLE CONSTRUCTION COSTS					\$570,150.00
PROJECT COSTS @ 30%					\$171,045.00
TOTAL PROJECT COSTS					\$741,195.00