

May 17, 2007

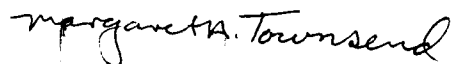
Brett L. Roper, E. I.
Project Engineer
Professional Engineering Consultants, P. A.
7912 E. 31st Court, suite 155
Tulsa, Oklahoma 74145

Dear Mr. Roper,

I was asked to review the City of Harper industrial park sanitary sewer and waterline extensions project. After reviewing the information made available to me I do not find any likely geologic or hydrologic issues with the project.

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: see 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.

Margaret A. Townsend KGS 5-17-07
Reviewer's Name Division/Agency/Commission Date

Project Title: Public Water Supply Loan Fund Application

Applicant:

Contact Person:

Address:

City, State:

Zip:

Phone:



Professional Engineering Consultants, P.A.

April 30, 2007

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

Reference: Industrial Park Sanitary Sewer and Waterline Extensions
EPA Grant No. XP987586 01
PEC Project No. 35-06495-6138

Dear Sir or Madam:

The City of Harper is preparing an application to the Environmental Protection Agency for a grant for the referenced project. We would appreciate your review of the attached Environmental Assessment and Location Map, and any comments you may have, within 30 days. A project review form is enclosed for your use.

If you should have any questions or concerns related to this information or the referenced project, please feel free to contact me.

Very truly yours,

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Brett L. Roper, E.I.
Project Engineer

Encl: As noted

DIRECTORS:

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WICHITA
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Environmental Assessment
for
Industrial Park Sanitary Sewer and Waterline Extensions
EPA Grant No. XP987586 01
PEC Project No. 35-06495-6138

1.0 Purpose and Need for Project

1.1 Project Description:

The Project includes design and construction of approximately 3,500 linear feet of sanitary sewer improvements; 2,350 linear feet of waterline improvements; one (1) sanitary sewer lift station; and approximately 250 linear feet of force main improvements. Sanitary sewer lines range in size from eight (8) to fifteen (15) inches in diameter and transmit flow to the proposed sanitary sewer lift station. The proposed lift station incorporates a duplex design with submersible pumps and conveys wastewater to an existing manhole through the proposed four-inch force main. The waterline improvements consist of an eight-inch waterline extension from the City's existing supply line to the distribution system. All improvements all located within the Northeast Quarter of Section 11 and the Northwest Quarter of Section 12, Township 32 South, Range 7 West.

1.2 Purpose and Need of the Project:

The purpose and need for the project is to provide sewer and water service to both previously developed and potentially developable areas of the City. Additionally, the proposed waterline extension will provide a redundant water supply line for the community which currently has only a single supply line and will also provide increased distribution pressures for the community, especially during high demand periods.

2.0 Affected Environment / Environmental Consequences:

2.1 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.

2.2 Floodplains:

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

3.1 Wetlands:

No known wetlands would be affected by the recommended project.

3.2 Cultural Resources:

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

3.3 Biological Resources:

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

3.4 Water Quality Issues:

No long-term adverse impacts to local water supply, surface waters, groundwater or aquatic environment are anticipated from implementing the recommended project. All sediment/erosion during construction control will comply with NPDES requirements.

3.5 Endangered or Threatened Species:

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

3.6 Air Quality:

The recommended project would have minimal air quality impacts to the Harper 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.

4.0 Summary:

In summary, the objective of the project is to provide sewer and water service to both previously developed and potentially developable areas within the City of Harper and allow for future expansion of the community.

5.0 Exhibits / Maps

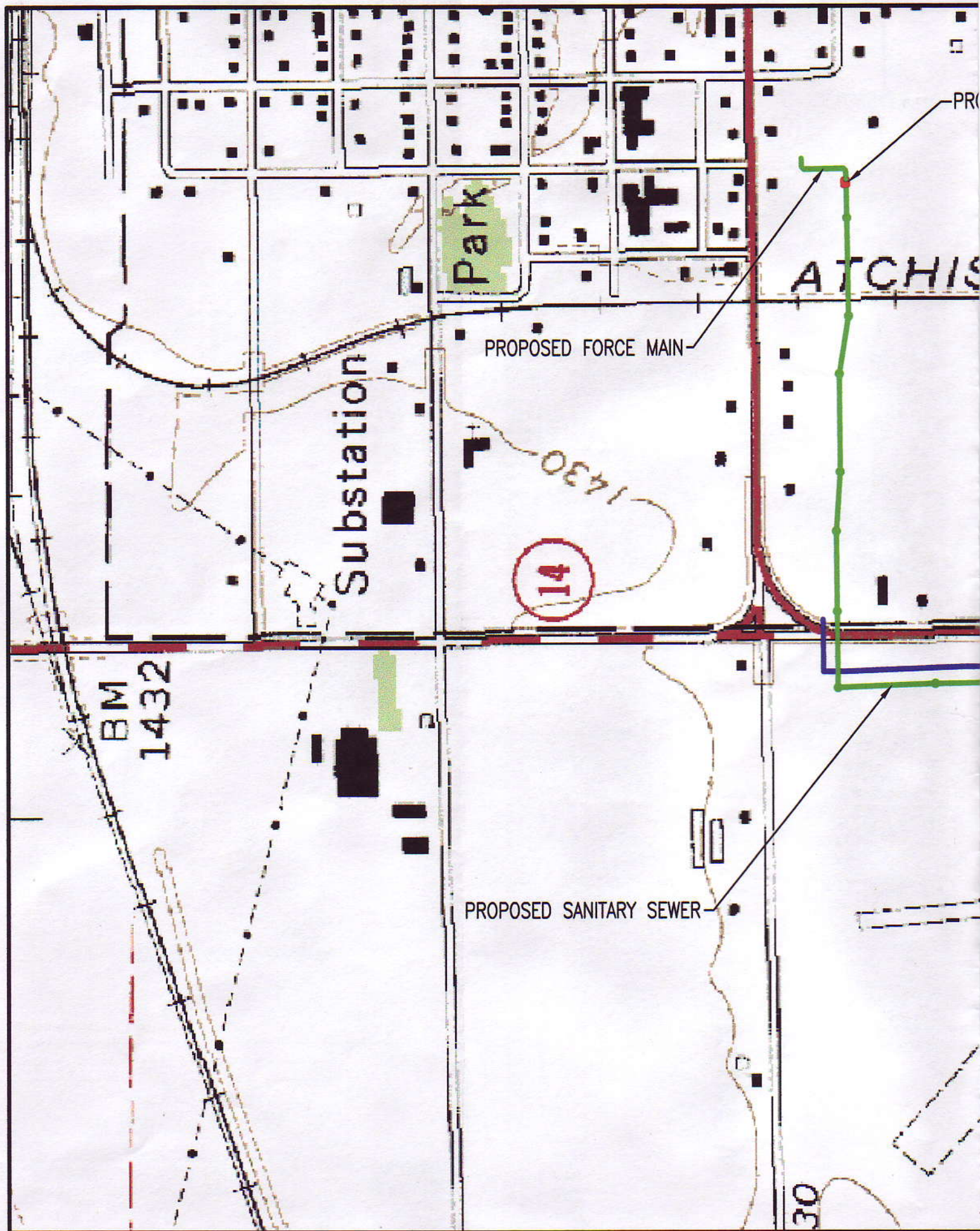
Attached is a map showing the location and alignments of the proposed improvements.

Professional Engineering Consultants, P.A. 7912 E. 31 st Court, Suite 155 Tulsa, Oklahoma 74145 Phone: (918) 664-5400	City of Harper Industrial Park Sanitary Sewer and Waterline Extensions PEC PROJECT NO.: 35-06495-6138 Estimate Date: Tuesday, May 01, 2007
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PRELIMINARY ESTIMATE

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ENGINEER'S ESTIMATE	
				UNIT PRICE	COST
Part A: Sanitary Sewer Improvements					
1	15" Sanitary Sewer	562	L.F.	40.00	\$22,480.00
2	12" Sanitary Sewer	1,470	L.F.	32.00	\$47,040.00
3	8" Sanitary Sewer	1,404	L.F.	24.00	\$33,696.00
4	4' Dia. Manhole	11	Ea.	3,000.00	\$33,000.00
5	12" Stub and Plug	1	Ea.	300.00	\$300.00
6	8" Stub and Plug	2	Ea.	250.00	\$500.00
7	Steel Casing by Boring (Min. ID 22")	149	L.F.	300.00	\$44,700.00
8	Sanitary Sewer Lift Station	1	L.S.	205,000.00	\$205,000.00
9	Remove and Replace Gravel Drive	128	L.F.	16.00	\$2,048.00
10	4" Force Main	259	L.F.	18.00	\$4,662.00
11	Erosion Protection	1	L.S.	4,000.00	\$4,000.00
12	Site Clearing and Restoration	1	L.S.	12,000.00	\$12,000.00
OPINION OF PROBABLE CONSTRUCTION COST					\$409,426.00

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ENGINEER'S ESTIMATE	
				UNIT PRICE	COST
Part B: Waterline Improvements					
1	8" Waterline	2,326	L.F.	20.00	\$46,520.00
2	8" Ductile Iron Waterline	23	L.F.	28.00	\$644.00
3	Fire Hydrant Assembly	5	Ea.	2,500.00	\$12,500.00
4	8" Anchored Valve Assembly	1	Ea.	1,150.00	\$1,150.00
5	8" Valve Assembly	2	Ea.	950.00	\$1,900.00
6	8" x 8" Tapping Sleeve w/ Valve	2	Ea.	2,800.00	\$5,600.00
7	Steel Casing by Boring (Min. ID 18")	145	L.F.	260.00	\$37,700.00
8	8" MJ Cap	1	Ea.	250.00	\$250.00
9	Remove and Replace Asphalt Drive	62	L.F.	26.00	\$1,612.00
10	Remove and Replace Gravel Drive	50	L.F.	16.00	\$800.00
11	Erosion Protection	1	L.S.	2,600.00	\$2,600.00
12	Site Clearing and Restoration	1	L.S.	9,500.00	\$9,500.00
OPINION OF PROBABLE CONSTRUCTION COST					\$120,776.00



PROPOSED LIFT STATION

SON

PROPOSED WATERLINE

Roadside
Park

BM 1427

Well

1429

Harper
Municipal Airport

Well

1

TOPEKA

1425



1" = 500'



No.	Revision	By	Date
CITY OF HARPER HARPER COUNTY, KANSAS			
PROJECT LOCATION MAP			
INDUSTRIAL PARK SANITARY SEWER AND WATERLINE EXTENSIONS			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	MDK, BLR	Job No.	434-06495-6138
Drawn by	JGA	Date	April 2007
			Sht. 1 of 1