

Geohydrology Section
1930 Constant Avenue
Lawrence, KS 66047-3724
March 27, 2009

Derek N. Hake, I. E.
Design Engineer
Professional Engineering Consultants, P. A.
303 South Topeka
Wichita, KS 67202

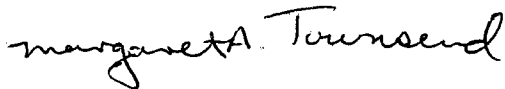
Dear Mr. Hake:

I have reviewed the plans for the Garden Plain wastewater treatment facility. Overall the project looks reasonable and will help the city expand their wastewater treatment capabilities. I was provided with limited information regarding the project so my concerns may already have been addressed.

Water records in the area indicate a shallow water level of approximately 6 to 25 ft depth. Some of the soils in the area of the proposed project are Farnum loams. These soils are permeable and may cause issues if the new polishing ponds are not lined. If the dominant soils in the area of the proposed construction are Farnum loams I would suggest that the ponds be lined to prevent any potential contamination of the underlying ground water.

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
Hydrogeologist

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:

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
Reviewer's Name

KGS
Division/Agency/Commission

3-30-09
Date

Project Title: Public Water Supply Loan Fund Application

Applicant: _____

Contact Person: _____

Address: _____

City, State: _____ Zip: _____ Phone: (____)-____-_____



Professional Engineering Consultants, P.A.

February 23, 2009

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

Reference: Garden Plain Wastewater Facility
Kansas Public Water Supply Loan Fund
PEC Project No. 34-07519-4996

To Whom It May Concern:

The City of Garden Plain 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 proposed project will construct a new wastewater treatment facility to comply with current and future regulatory requirements. The project is located in the SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of SE $\frac{1}{4}$ Section 31, Township 27 South, and Range 3 West. The facility design aims for future treated average daily flow of 110,000 gallons per day. This project cost estimates to \$1.2 million, and will consist of the following modifications:

1. Construction of a new main wastewater pump station
2. Construction of mechanical treatment basins
3. New effluent polishing ponds
4. New outfall line to Polecat Creek

We would appreciate your review of the project description and location, and any comments you may have within 30 days. Please find enclosed a project review form for your comments along with a project site map for reference.

If you have any questions, please call Derek Hake, Design Engineer at (316) 262-3003. He will be the primary contact for this project.

Sincerely,

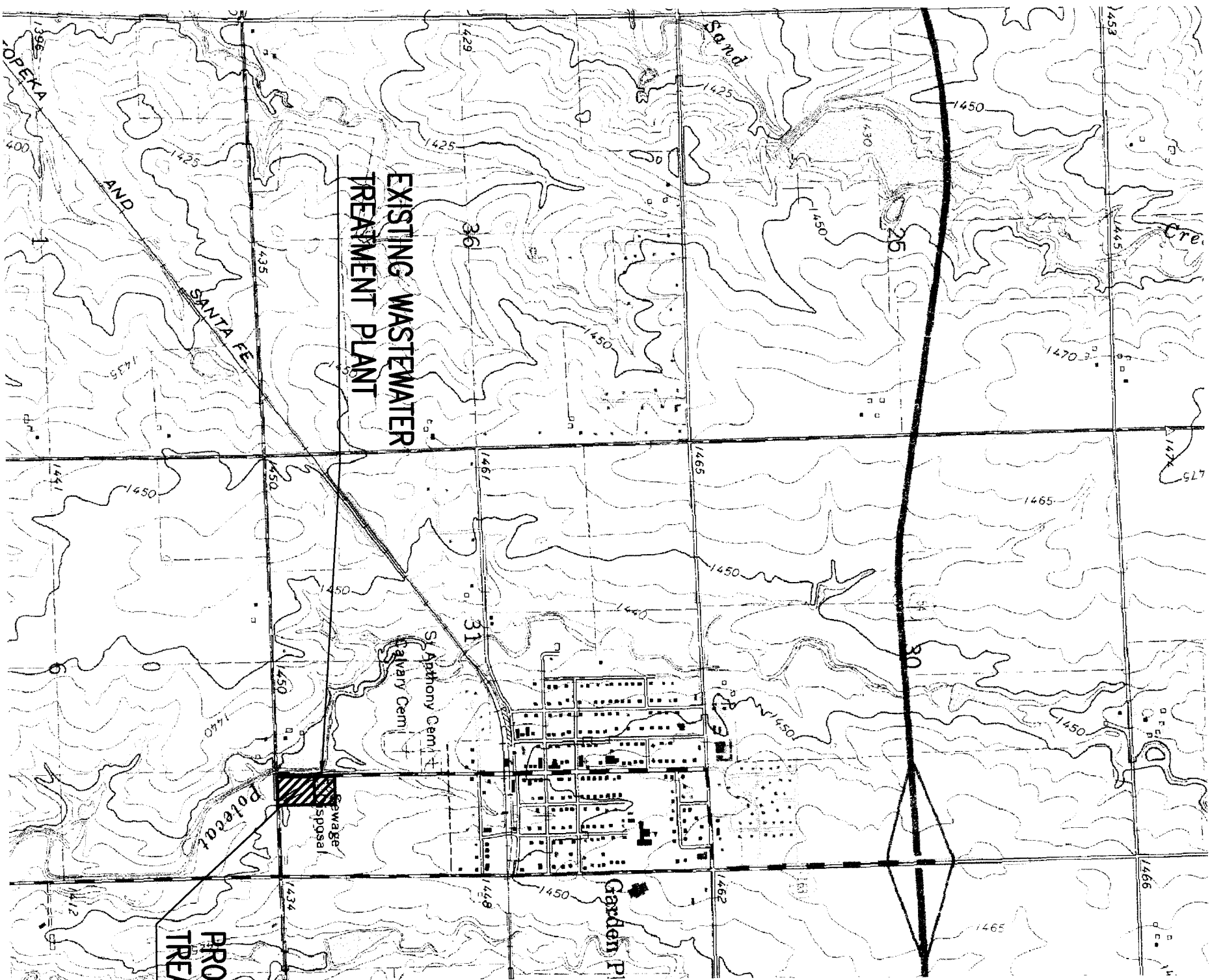
PROFESSIONAL ENGINEERING CONSULTANTS, INC.

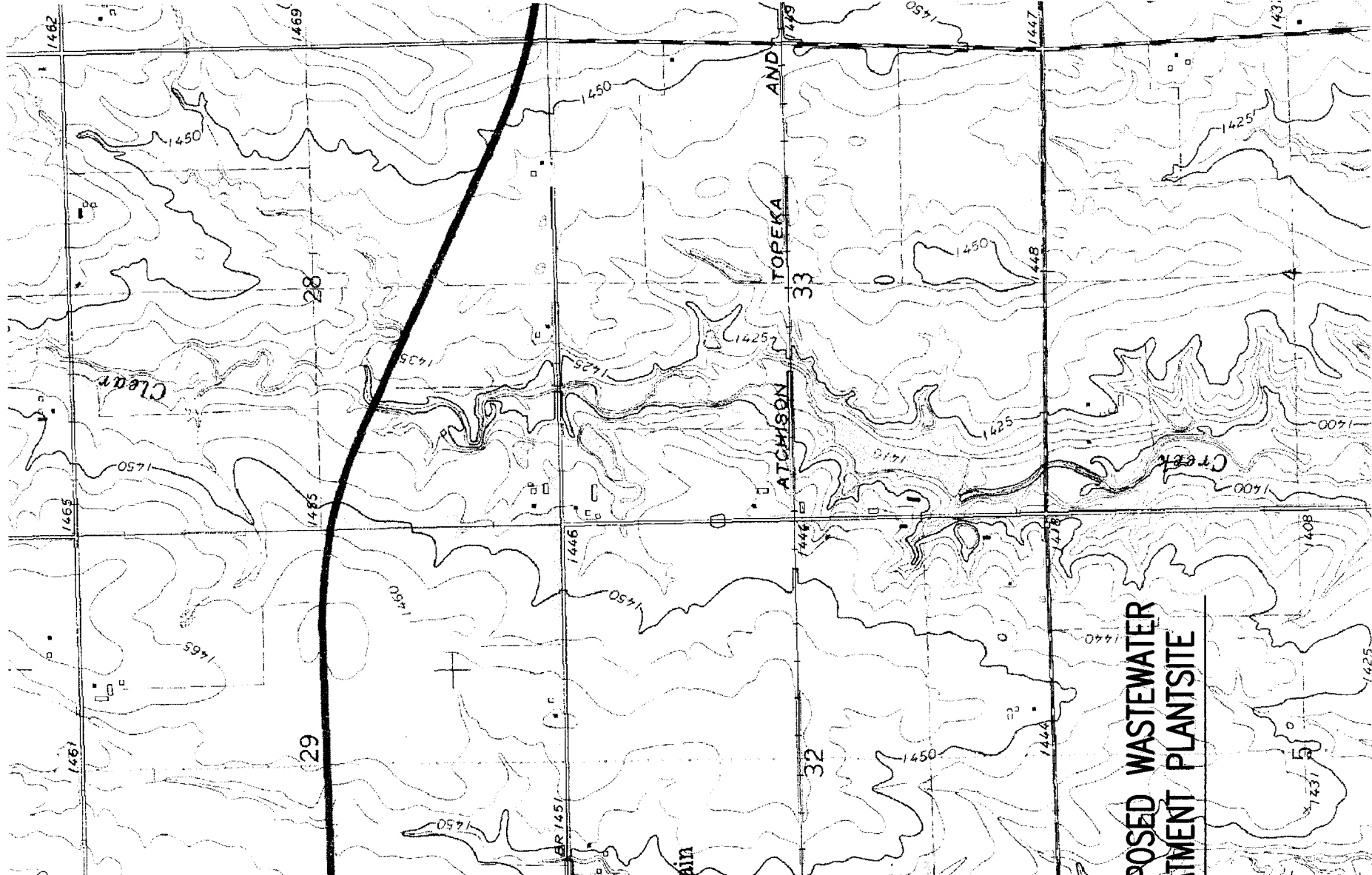
A handwritten signature in black ink, appearing to read "Derek Hake".

Derek N. Hake, I.E.
Design Engineer

DNH/tac

Encl: As noted





NO SCALE