

KANSAS GEOLOGICAL SURVEY

1930 Constant Ave., Campus West
The University of Kansas
Lawrence, Kansas 66047-3726
phone 785-864-3965
fax 785-864-5317

Proposed PEC Project No. 34-05778-5948

Applicant: City of Towanda
Wastewater Treatment Facility Improvements

Contact Person: Derek N. Hake, I.E.
Address: Professional Engineering Consultants, P.A.
303 S. Topeka
Wichita, KS 67202

Sent to the Kansas Geological Survey for environmental review.

Agency Review Comments:

The location of the proposed new wastewater lagoons is on part of the floodplain of the Whitewater River. There is no information in the material sent for review that addresses construction of the lagoons to protect from potential large floods from the Whitewater River that could cover part of the proposed lagoon location. The lagoons should be constructed to protect against this possibility. The northern part of the area proposed for the wastewater lagoons is immediately adjacent to what appears to be either a housing development or a trailer park. It is assumed that construction of the wastewater lagoon immediately adjacent to this development will take into account concerns that could arise that are related to the close proximity of the development. If the development has its own water supply from wells (rather than being connected to the public water supply of Towanda), then it will be especially important that the seepage rate from the lagoons to the underlying ground water is kept very low to prevent potential ground water contamination from being pulled in by drawdown cones of the supply wells. In general, the long-term benefits of the new wastewater treatment, assuming that it will improve the quality of the effluent released by the City of Towanda to the tributary to the Whitewater River, effluent which will then flow into the Whitewater River, should offset any short-term adverse environmental impacts during construction.

Recommended Action:

- ☒ 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

Donald Whittemore
Reviewer's Name

Geohydrology Section, Kansas Geological Survey
Division/Agency

1/05/07
Date


Reviewer's Signature

The above discussion represents our best assessment based on the information that the Kansas Geological Survey has about this locality and/or proposed project at the time of this writing. Other geologic conditions, not discussed herein, or for which the Kansas Geological Survey has no knowledge, may affect the viability or safe operation of this facility or property. The information provided in this letter is from regional or county-wide studies and should not be used as a substitute for detailed site characterization by a licensed geologist or engineer. It is the responsibility of the applicant to provide any required site characterizations.



Professional Engineering Consultants, P.A.

December 21, 2006

Kansas Geological Survey
KU-1930 Constant Avenue
Campus West
Lawrence, KS 66047

Attention: Mr. Donald Whittemore

Reference: Towanda Wastewater Treatment Facility Improvements
PEC Project No. 34-05778-5948

Dear Mr. Whittemore:

The City of Towanda is planning to construct new Wastewater Lagoons to replace their existing wastewater treatment. The new lagoons would be constructed in the West ½ of the Southwest ¼ of Section 16, Township 26 South, Range 4 East in Butler County, Kansas. The new lagoons for the City of Towanda are proposed to be an average daily flow of 0.295 million gallons per day at a detention time of 120 days. In addition to the lagoons, a new lift station and outfall line will be built.

The effluent from the new lagoons will be discharged into an unnamed tributary of the Whitewater River. The effluent is discharged through an outfall line to a discharge structure. The locations of the proposed lift station, lagoons, and outfall are shown in the attached documents.

Please review the attached documents and provide comments. We request that a response letter be returned and notification of any additional requirements which you deem necessary. The following drawings are attached for your reference:

- Aerial photograph of project site
- USGS quadrangle map
- Lagoon layout concept

All responses may be sent to:

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

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TULSA
LAWRENCE
PITTSBURG

Mr. Donald Whittemore
December 21, 2006
Page 2

If you have any questions or comments, please notify.

Very Truly Yours,

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

A handwritten signature in black ink, reading "Derek N. Hake". The signature is written in a cursive, flowing style.

Derek N. Hake, I.E.
Design Engineer

DNH:amha

Encl: As noted

cc: Mr. Rod Geisler, KDHE (w/o encl.)

Towanda Wastewater Treatment Facility Improvements Project Review Form

☐ US Department of the Interior, Fish & Wildlife Service, Kansas State Office
☐ US Army Corps of Engineers, Kansas State Regulatory Office
☐ Kansas Dept. of Wildlife and Parks, Environmental Services Section
☐ Kansas Water Office
☐ Kansas State Historical Society, State Historical Preservation Office
☐ U.S. Department of Agriculture, Natural Resources Conservation Services
☐ Kansas Department of Agriculture, Division of Water Resources
☐ State Conservation Commission
☐ Kansas Biological Survey
☐ Kansas Corporation Commission, Conservation Division
☐ Kansas Geological Survey

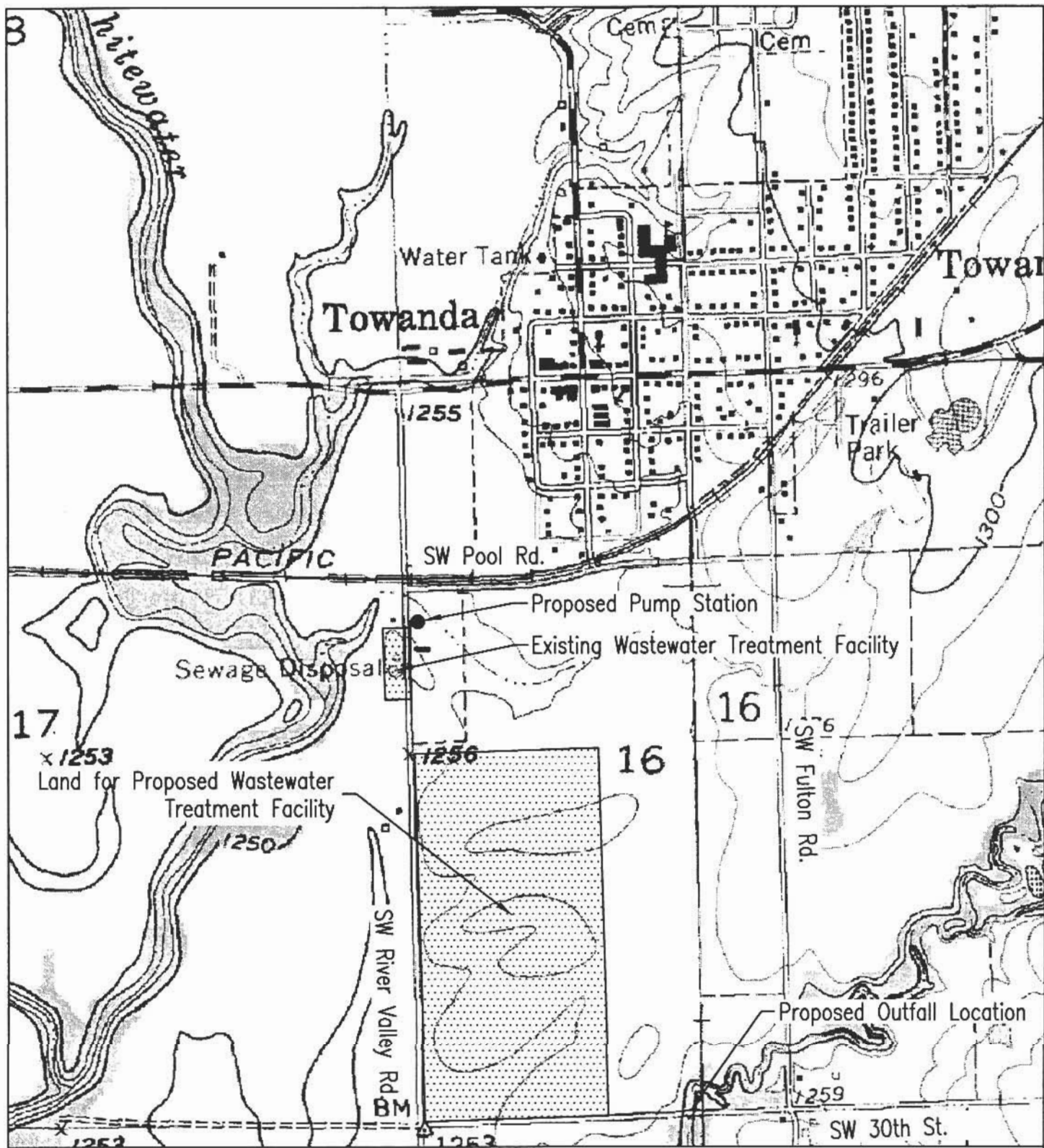
Agency Review Comments: (To be completed by reviewing agency and returned to applicant contact person at name and address shown below.)

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
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Reviewer's Name	Division/Agency/Commission	Date
Applicant:	City of Towanda, Kansas	
Contact Person:	Derek Hake	
Address:	Professional Engineering Consultants, P.A., 303 S. Topeka	
City, State:	Wichita	Zip: 67202 Phone: 316-262-2691



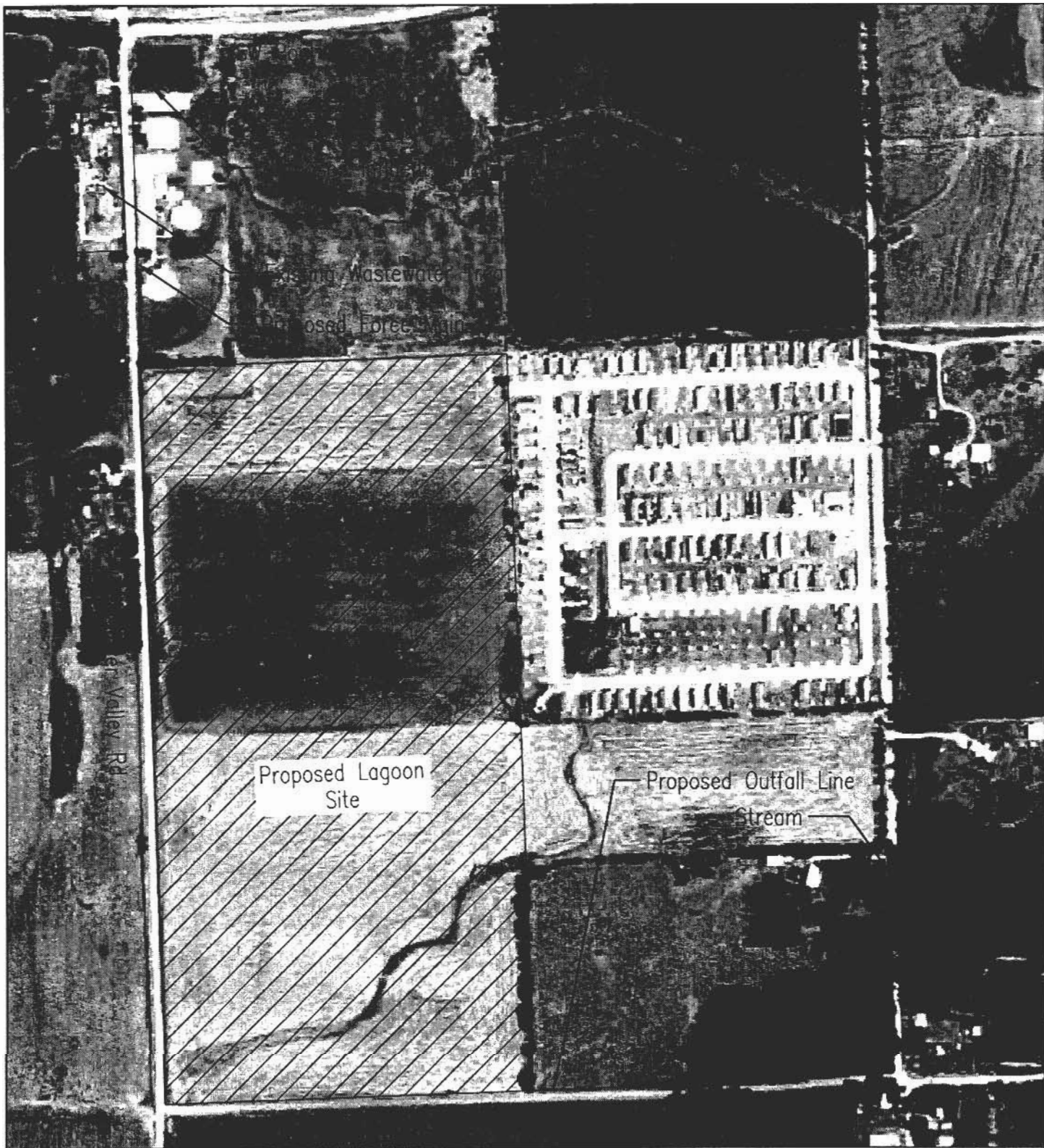
SCALE: 1" = 1000'



Professional Engineering Consultants, P.A.

303 S. TOPEKA • WICHITA, KANSAS 67202
316-262-2691 • FAX 316-262-3003

**Existing and Proposed Facility Location
City of Towanda, Kansas**



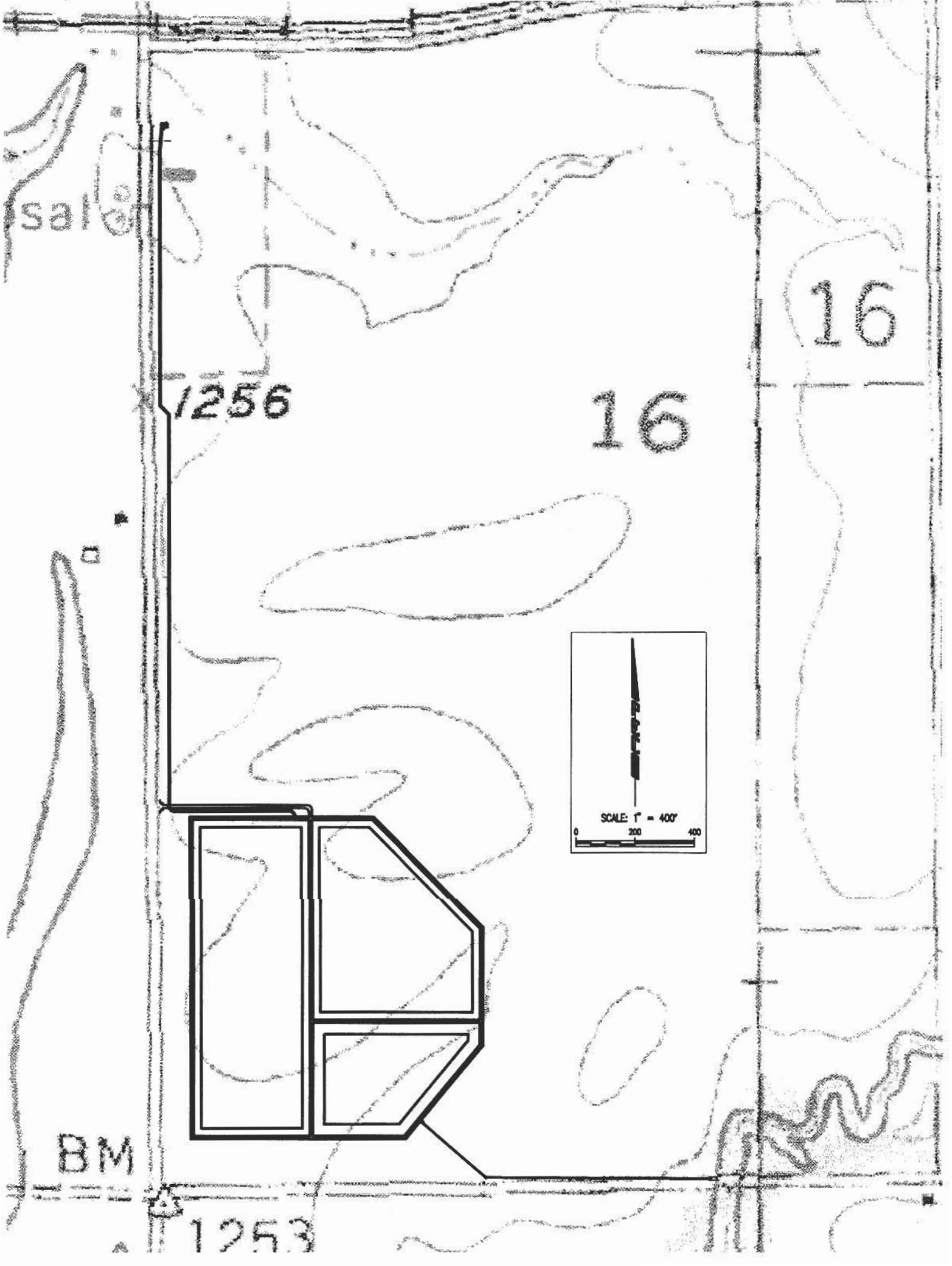
SCALE: 1" = 500'



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**Proposed Wastewater Lagoon Location
City of Towanda, Kansas**



sal

1256

16

16

SCALE: 1" = 400'

BM

1253