Phase I Environmental Site Assessment

Project Bluestem - Reisig
16408 222nd Street
Tonganoxie, Kansas 66086



Prepared for:

Kimley-Horn
4727 Gaillardia Parkway, Suite 250
Oklahoma City, Oklahoma 73142

Prepared by:

Professional Service Industries, Inc.
2828 S. 44th Street
Kansas City, Kansas 66106
913 310 1600

August 3, 2026

PSI Project Number: 06032872-9

Kylee Siegrist
Staff Scientist

Scott J. Dahlgren
Environmental Professional

Scott J. Dahlgren
Principal Consultant

Phase I ESA Summary Table

Professional Service Industries, Inc. (PSI), an Intertek company, performed a Phase I Environmental Site Assessment of the Project Bluestem - Reisig property located at 16408 222nd Street in Tonganoxie, Kansas 66086. The property identification number or numbers associated with the subject property include 1952100000004010. PSI performed the assessment to comply with the contract between Kimley-Horn (the client) and PSI.

Our assessment included evaluation of certain Business Environmental Risks that are beyond the scope of ASTM E1527 (ASTM non-scope considerations), as noted in the table below.

Recommendations are included in Section 1.4 of this report.

Please note that Section 1.2.1 of this report should be consulted to determine if there are any significant data gaps that limited our ability to make a REC conclusion.

Report Section		No Issues Identified	REC	CREC	HREC	VEC	De-minimis	BER Issue	Notes
3.0	USER-PROVIDED INFORMATION	✔							
5.2	SUBJECT PROPERTY OBSERVATIONS	✔							
5.3	OFF-SITE OBSERVATIONS	✔							
6.0	HISTORICAL USES						✔		Previous propane tank reported by the owner; the tank has since been replaced
7.0	ENVIRONMENTAL REGULATORY RECORDS REVIEW	✔							
8.0	VAPOR ENCROACHMENT SCREENING	✔							

Report Section		No Issues Identified	REC	CREC	HREC	VEC	De-minimis	BER Issue	Notes
9.1	DESKTOP PROTECTED SPECIES RECORDS REVIEW							✔	Potential presence of threatened or endangered species
9.2	DESKTOP HISTORICAL PLACES AND ARCHEOLOGICAL SITES RECORDS REVIEW	✔							

TABLE OF CONTENTS

LIST OF ACRONYMS AND ABBREVIATIONS . . . . . **v**

CERTIFICATION . . . . . **vii**

1.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS **1**

1.1 FINDINGS 1

1.2 CONCLUSIONS 2

1.3 NON-SCOPE CONSIDERATIONS & OTHER BUSINESS ENVIRONMENTAL RISKS 3

1.4 RECOMMENDATIONS 4

2.0 PHASE I ESA SCOPE AND METHODOLOGY **5**

2.1 PURPOSE OF SERVICES 5

2.2 PHASE I ESA METHODOLOGY 5

2.3 LIMITATIONS, EXCEPTIONS, DEVIATIONS AND DATA GAP 6

2.4 SIGNIFICANT ASSUMPTIONS 6

3.0 USER-PROVIDED INFORMATION **7**

3.1 USER QUESTIONNAIRE 7

3.2 TITLE RECORDS 8

3.3 SUGGESTED INFORMATION 9

3.4 HELPFUL DOCUMENTS AND PRIOR INVESTIGATIONS 9

4.0 PHYSICAL SETTING **10**

5.0 SITE RECONNAISSANCE **12**

5.1 SUBJECT PROPERTY DESCRIPTION AND CURRENT USES 12

5.2 SUBJECT PROPERTY OBSERVATIONS 14

5.3 OFF-SITE OBSERVATIONS 16

6.0 HISTORICAL USES **19**

6.1 CURRENT AND PRIOR USE INTERVIEWS 19

6.2 SUMMARY OF HISTORICAL SOURCES & RESOURCES 20

6.3 SUMMARY HISTORY OF THE SUBJECT PROPERTY AND ADJOINING PROPERTIES 20

7.0 ENVIRONMENTAL REGULATORY RECORDS REVIEW **24**

7.1 DATABASE FINDINGS 24

7.2 REGULATORY AGENCY INQUIRIES (FOIA OR EQUIVALENT REQUESTS) 24

8.0 VAPOR ENCROACHMENT SCREENING 26
8.1 METHODOLOGY 26
8.2 VES RESULTS 26
8.3 VES LIMITATIONS 26
9.0 ASTM NON-SCOPE CONSIDERATIONS 27
9.1 DESKTOP PROTECTED SPECIES RECORDS REVIEW 27
9.2 DESKTOP HISTORICAL PLACES AND ARCHEOLOGICAL SITES RECORDS REVIEW 28
10.0 WARRANTY AND RELIANCE 29
10.1 STANDARD OF CARE AND WARRANTIES 29
10.2 RELIANCE 29
10.3 THIRD PARTY RELIANCE 30

LIST OF APPENDICES

FIGURES
PHOTOGRAPHS
USER QUESTIONNAIRE RESPONSES
LIEN/AUL DOCUMENTATION
PHYSICAL SETTING DOCUMENTATION
HISTORICAL DOCUMENTATION: TOPOGRAPHIC MAPS
HISTORICAL DOCUMENTATION: AERIAL PHOTOGRAPHS
HISTORICAL DOCUMENTATION: CITY DIRECTORIES
HISTORICAL DOCUMENTATION: FIRE INSURANCE MAPS
ENVIRONMENTAL DATABASE REPORT
DATA GAP WORKSHEET
PERSONNEL QUALIFICATIONS

LIST OF ACRONYMS AND ABBREVIATIONS

ACM	Asbestos-Containing Material
AHERA	Asbestos Hazard Emergency Response Act
AMSD	Approximate Minimum Search Distance
AMSL	Above Mean Sea Level
APN	Assessor's Parcel Number (also referred to as a PIN)
AST	Above-Ground Storage Tank
ASTM	American Society for Testing and Materials
AUL	Activity & Use Limitation
BER	Business Environmental Risk
BER	Kansas Bureau of Environmental Remediation
Bgs	Below the ground surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation & Liability Information System (now called SEMS)
CESQG	Conditionally Exempt Small Quantity Generator of Hazardous Waste (now called VSQG)
CFR	Code of Federal Regulations
COC	Chemical(s) of Concern
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
EDR	Environmental Data Resources, Inc.
EP	Environmental Professional
EPA	U.S. Environmental Protection Agency
ERIS	Environmental Risk Information Services, Inc.
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FOIA	Freedom of Information Act
HREC	Historical Recognized Environmental Condition
HUD	U.S. Department of Housing & Urban Development
HVAC	Heating, Ventilation & Air Conditioning System
ISL	Identified Sites List
KDHE	Kansas Department of Health and Environment
KEIF	KDHE Environmental Interest Finder
KORA	Kansas Open Records Act
LAST	Leaking Above-Ground Storage Tank
LBP	Lead-Based Paint
LLP	Landowner Liability Protection
LQG	Large Quantity Generator of Hazardous Waste
LUST/LST	Leaking Underground Storage Tank
MCL	Maximum Concentration Level
mg/kg	Milligrams per Kilogram
mg/L	Micrograms per liter
mg/L	Milligrams per Liter

MSDS	Material Safety Data Sheet (now called Safety Data Sheet (SDS))
MTBE	Methyl Tert-Butyl Ether
ND	Not Detected
NFA	No Further Action (also called No Further Remediation (NFR))
NOV	Notice of Violation
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List (a.k.a. Superfund)
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OSHA	U.S. Occupational Safety & Health Administration
PAH	Polynuclear (Polycyclic) Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PCE	Perchloroethylene (also called Tetrachloroethylene)
pCi/L	Picocuries per Liter
PFAS	Per & Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
ppb	Parts per Billion
ppm	Parts per Million
RBCA	Risk-Based Corrective Action
RCRA	Resource Conservation & Recovery Act
REC	Recognized Environmental Condition
RFI	Request for Information
SF	Square Feet
SQG	Small Quantity Generator of Hazardous Waste
SSURGO	Soil Survey Geographic Database
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish & Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
VEC	Vapor Encroachment Condition
VES	Vapor Encroachment Screening
VIC	Vapor Intrusion Condition
VOC	Volatile Organic Compound

CERTIFICATION

We have completed a Phase I ESA of the Project Bluestem - Reisig property located at 16408 222nd Street in Tonganoxie, Kansas ("the subject property"). The Phase I ESA was performed in conformance with ASTM E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (the Practice). The assessment was completed at the request of Kimley-Horn ("the client") in accordance with the scope of work outlined in Proposal Number 0603-481566, which was authorized by the client on July 8, 2026.

The conclusions developed herein represent our professional judgment based on information and data available to us at the time of the assessment, and observations made at the time of our site reconnaissance. In accordance with the Practice, certain items must be updated 180 days after research is initiated if the transaction is not completed within that time.

Field Assessor: 

Kylee Siegrist
Staff Scientist

Report Author: 

Kylee Siegrist
Staff Scientist

Reviewed by:

Scott J. Dahlgren
Principal Consultant

Environmental Professional Certification

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 312.10 of this part. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Environmental
Professional:

Scott J. Dahlgren
Environmental Professional

TABLE OF DATES

Component	Date
Date of Earliest Interview with Owner, Operator, or Occupant	July 22, 2026
Date of ERIS Regulatory Database Report	July 15, 2026
Date of Environmental Lien/AUL Documentation	Not Obtained[1]
Date of Site Reconnaissance	July 22, 2025
Report Date	August 3, 2026
[1]An Environmental Liens/AUL search was not provided for review or requested to be obtained.	

1.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

1.1 FINDINGS

A summary of findings is provided below. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made or actions taken based on this information.

1.1.1 SUBJECT PROPERTY DESCRIPTION AND CURRENT USE

The subject property, known as Project Bluestem - Reisig, consists of a two-story, single-family residence. The subject property is an rectangular-shaped 9.69-acre parcel of land located at 16408 222nd Street in Tonganoxie, Leavenworth County, Kansas. The subject building has a reported total of 1,950 gross square feet and was reportedly developed in 1900 which is occupied. The subject property is generally developed with the multiple outbuildings associated with the farm homesite.

The location of the subject property is shown on Figure 1.

1.1.2 ADJOINING PROPERTY DESCRIPTION AND USE

Usage of adjoining properties is discussed in the following table.

The vicinity of the subject property is shown on Figure 2

Direction	Description of Adjoining Property Use
North	Vacant/Ranch land owned by Tailgate Ranch Company.
East	Vacant/Ranch land owned by Tailgate Ranch Company.
South	Vacant/Ranch land owned by Tailgate Ranch Company.
West	222nd Street, followed by vacant grass-covered land to the north/northwest and a single-family residence (16399 222nd Street) to the southwest.

1.1.3 SUMMARY OF THE HISTORICAL USE OF THE SUBJECT PROPERTY AND ADJOINING AREAS

Historical sources indicate that the subject property has historically been utilized as a rural residential property with associated agricultural support structures. Aerial photographs dating back to 1937 depict the current single-family residence with several associated outbuildings. By 1985, five outbuildings were present on the property, decreasing to four by approximately 2003 and three by 2017, while the residence remained unchanged through 2025. Topographic maps from 1951 through 1970 depict four structures on the property, although specific land use was not identified. By 2009, the structures were no longer depicted on topographic maps. City directory records consistently indicate residential occupancy through the period reviewed.

Historical sources indicate the surrounding area has remained predominately agricultural and rural throughout the period of historical review. To the north, adjoining properties initially consisted of agricultural and vacant, grass-covered land with creeks, scattered trees, and later a pond. By approximately 1967, the area became part of the Tailgate Ranch Company and has remained primarily vacant, grass-covered ranch land through 2025, with a pond and scattered trees remaining. To the east, adjoining properties transitioned from agricultural/vacant grass-covered

land to ranch land associated with Tailgate Ranch Company by approximately 1967, with a tree line remaining along the southeastern boundary through 2025. To the south, agricultural and grass-covered land with a creek transitioned to ranch land associated with Tailgate Ranch Company by approximately 1967, while a pond established by the late 1950s remained present through 2025. To the west, 222nd Street has bordered agricultural and vacant grass-covered land since the earliest historical sources reviewed. A creek and tree line were present during the early historical period before transitioning to ponds and vacant, grass-covered land by the 1950s. An unpaved access road appeared by approximately 2006, and a structure was constructed to the southwest by 2025.

The detailed discussions of the historical uses can be found in Section 6 of this report.

1.1.4 GOVERNMENTAL RECORDS REVIEW SUMMARY

PSI subcontracted with a regulatory database report provider, ERIS, and reviewed governmental database records that included spill sites, tanks, hazardous waste handlers, and other facilities of potential concern within proximity to the subject property.

No listings for the subject property were identified in the database search.

Adjoining and surrounding properties were not identified as a spill site or regulated facility on the regulatory databases that were searched within the appropriate AMSD relative to the subject property.

1.2 CONCLUSIONS

PSI performed a Phase I ESA of the subject property in conformance with the scope and limitations of ASTM Practice E1527-21. Any exceptions to or deletions from this practice are described in Section 2.3 of this report. The following conclusions have been made with regard to evidence of RECs, HRECs, CRECs, VECs, and de minimis conditions in connection with the subject property, as defined in ASTM Practice E1527-21.

1.2.1 SIGNIFICANT DATA GAPS

The ASTM E1527-21 Standard Practice defines a significant data gap as a lack of or inability to obtain information required by the practice that would limit our ability to draw conclusions with regard to RECs in connection with the subject property.

Based on our experience, the information that we gathered and evaluated did not present significant data gaps that affected our ability to identify RECs in connection with the subject property.

1.2.2 RECOGNIZED ENVIRONMENTAL CONDITIONS

A REC, as defined in the ASTM E1527-21 Standard, means (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

This assessment has revealed no evidence of RECs in connection with the subject property.

1.2.3 CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E1527-21 Standard Practice defines a CREC as a REC that has been addressed to the satisfaction of the applicable regulatory agency with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (i.e., institutional and/or engineering controls to prevent future exposure).

This assessment has revealed no evidence of CRECs in connection with the subject property.

1.2.4 HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E1527-21 Standard Practice defines a HREC as a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls.

This assessment has revealed no evidence of HRECs in connection with the subject property.

1.2.5 VAPOR ENCROACHMENT CONDITIONS

The ASTM E1527-21 Standard Practice requires that the environmental professional evaluate the potential for VECs on the subject property. A VEC is defined in ASTM E2600-22 as the presence or likely presence of volatile chemicals in the subsurface that are caused by the release of vapors from contaminated soil or groundwater either on or near the subject property.

This assessment has revealed no VECs in connection with the subject property.

1.2.6 DE MINIMIS CONDITIONS

A de minimis condition is a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A de minimis condition, by definition, is not a REC.

The following issue was identified in connection with the subject property, which was considered to be de minimis in nature, but, by definition, is not a REC in connection with the subject property:

- The owner reported replacement of a propane tank approximately two years ago following a leak from the previous tank.

1.3 NON-SCOPE CONSIDERATIONS & OTHER BUSINESS ENVIRONMENTAL RISKS

PSI conducted additional assessment to address potential environmental concerns, also known as BER or ASTM Non-Scope Considerations, or other client concerns, which are beyond the scope of the ASTM E1527-21 Standard Practice. The results of these additional assessments are described in Section 9 of this report.

1.3.1 POTENTIAL ISSUES

Potential issues are discussed below.

- Due to the undeveloped nature of the subject property, one or more species, or their potential habitat, may be present. Further evaluation by a qualified biologist may rule out some or all of the species from consideration. A site reconnaissance by a qualified wildlife biologist may be necessary to confirm the absence of suitable habitat or species presence.

1.4 RECOMMENDATIONS

Based on the information that PSI gathered and our experience, PSI recommends the following:

- Completion of a biological survey to determine/verify the potential presence of threatened or endangered species or their habitats at the subject property.

2.0 PHASE I ESA SCOPE AND METHODOLOGY

2.1 PURPOSE OF SERVICES

PSI performed the Phase I ESA in conformance with ASTM E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (the Practice). The purpose of the Practice was to define good commercial practice for conducting a Phase I ESA and as such, the Practice is intended to permit the user to satisfy one of the requirements to qualify for the LLPs. The goal of the processes established by the Practice is to identify RECs in connection with the subject property.

Based on the information provided, we understand that your purpose for having the Phase I ESA performed is to satisfy one of the requirements to qualify for one of the LLPs.

Our services included effort beyond the scope of the Practice. The purpose of these services was to evaluate business environmental risk from certain conditions that can have a material environmental or environmentally-driven impact on the subject property.

2.2 PHASE I ESA METHODOLOGY

PSI performed a Phase I ESA of the subject property. The scope of our services and general methodology is presented below.

Documents and other information referenced during this assessment, including published materials and material obtained from commercial or other sources, are cited in the section where the information was first used. The information or excerpts thereof, if practical, is appended.

This assessment included the following components:

- Records review;
- Reconnaissance;
- Interviews;
- VES in accordance with ASTM E2600-22, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* [VES Standard Guide]; and
- Preparation of this report, including our evaluation.

Our assessment included a Phase I ESA, and evaluation of certain business environmental risks that are beyond the scope of ASTM E1527, as follows:

- Desktop protected species records review;
- Desktop historical places and archeological sites records review;

2.3 LIMITATIONS, EXCEPTIONS, DEVIATIONS AND DATA GAP

PSI considers that limitations, exceptions, and deviations from the Practice manifest as a lack of or inability to obtain information required by the Practice. This represents the definition of the 'data gap' contained in the Practice. PSI listed the component objectives of the Practice on the appended Data Gap Worksheet and tracked the information obtained against the objectives. Therefore, the limitations, exceptions and deviations are identified in the Worksheet.

In general, when required information was incomplete, not provided, otherwise not obtained, or indicated a need for additional information, PSI attempted to use information from other sources to meet the Practice's performance objectives. When the data gaps affected the Environmental Professional's ability to identify RECs, PSI considered the data gap(s) to be significant. PSI identified significant data gaps (if any) on the Data Gap Worksheet and reported them in Section 1.2.1.

2.4 SIGNIFICANT ASSUMPTIONS

PSI made the following significant assumptions in developing our Phase I ESA findings and conclusions:

- Regulatory Agency Information - PSI considers all information provided by our environmental database subcontractor regarding the regulatory status of facilities to be complete, accurate and current.
- Other Regulatory Information - PSI considers all information obtained from regulatory or other governmental agencies to be complete, accurate and current.
- Title, Lien and AUL Information - PSI considers all information provided by real estate title record review firms regarding property use or ownership, encumbrances or other limitations, if provided, to be complete, accurate and current.
- Interviews - PSI considers all information provided through interviews to be accurate, complete, unbiased, current, and provided in good faith.
- Groundwater - PSI interpreted and inferred the direction of the shallow groundwater movement based on the information we obtained during this assessment and our experience. Actual groundwater flow may be locally influenced by many factors beyond the scope of this assessment. Subsurface investigation is typically necessary to determine site-specific groundwater flow direction and depth.

3.0 USER-PROVIDED INFORMATION

PSI considers the client to be the 'User' of our assessment, defined in ASTM Practice E1527-21 as "the party seeking to use Practice E1527 to complete an environmental site assessment of the subject property". A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager. The User has specific obligations for completing a successful application of this practice.

3.1 USER QUESTIONNAIRE

The EPA All Appropriate Inquiry Rule (40 CFR Part 312) and ASTM E1527-21 § 6 requires the User to answer certain questions related to the subject property in order to obtain certain LLPs from CERCLA liability. To facilitate this process, PSI provided the client with a User Questionnaire, which is appended if it has been returned. A summary of the required questions and client responses is provided below.

Question	No	Yes	Unknown	N/A	Client did not respond
Did a review of recorded land title records or other sources identify any environmental liens filed or recorded against the subject property under federal, tribal, state or local law?	✔				
Did a review of land title records or other sources identify any activity use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place on the subject property?	✔				
Do you have specialized knowledge or experience related to the subject property or nearby properties?	✔				
Does the purchase price being paid reasonably reflect the fair market value of the subject property?		✔			
If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the subject property?				✔	

Question	No	Yes	Unknown	N/A	Client did not respond
Are you aware of commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:					
Do you know of the past uses of the subject property?	✔				
Do you know of specific chemicals that are present or were once present at the subject property?	✔				
Do you know of spills or other chemical releases that have taken place at the subject property?	✔				
Do you know of any environmental cleanups that have taken place at the subject property?	✔				
Based on your knowledge and experience related to the subject property are there any obvious indicators that point to the presence or likely presence of contamination at the subject property?	✔				
Do you know of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property?	✔				
Do you know of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?	✔				

NOTES

The client returned the User Questionnaire indicating 'NO' to the questions: "Did a review of land title records (or judicial records where appropriate) identify any environmental cleanup liens filed or recorded against the subject property under federal, tribal, state or local law?" or "Did a review of land title records (or judicial records where appropriate) identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law?" The completed questionnaire is appended.

3.2 TITLE RECORDS

Based on a review of the local tax assessor's records, the subject property is currently owned by REISIG HEATHER NICOLE; TRUST.

3.3 SUGGESTED INFORMATION

The client provided PSI with the following suggested information described by the Practice.

- The reason for performing the Phase I ESA.
- The type of property and type of property transaction.
- The complete and correct address of the subject property or other documentation identifying the location and extents of the subject property.
- The scope of services desired for the Phase I ESA, including any evaluation for BERs or other items that are beyond the scope of ASTM E1527-21.
- Identification of the parties who will rely upon the report.
- Identification of the key site contact and contact information.

3.4 HELPFUL DOCUMENTS AND PRIOR INVESTIGATIONS

The Practice requires that the environmental professional ask the subject property owner, the key site manager (if any is identified), and the User for certain helpful documents about the property and certain legal proceedings involving hazardous substances and the subject property. PSI mailed or e-mailed questions or performed interviews requesting this information.

The client did not provide prior environmental reports or other similar documents within the performance period of this assessment.

4.0 PHYSICAL SETTING

PSI reviewed USGS topographic (topo) maps and other information regarding the physical setting of the subject property to assist with the interpretation of subsurface water movement near the subject property. Physical setting information is summarized in the table below.

SUMMARY OF PHYSICAL SETTING INFORMATION

Physical Setting Attribute	Source	Description
Subject property elevation:	USGS Topo Map "Tonganoxie, Kansas" 7.5 minute Quadrangle, 2022	Elevation is estimated to be approximately 925 feet AMSL.
Topographic gradient:		The subject property and surrounding area slopes downward gently to the south-southwest.
Closest surface water:	Aerial Photography ERIS Physical Setting Report	A pond associated with Tailgate Ranch Company is located approximately 970 feet to the northwest of the subject property.
Geology/Hydrogeology:	ERIS Physical Setting Report	Douglas group is located on the subject property. The unit age is Late Pennsylvanian. The primary rock type is shale and the secondary rock type is sandstone. The unit is described as Lawrence formation and Stranger formation.
Predominant soil type(s) mapped on the subject property:	ERIS Physical Setting Report	Martin silty clay loam, 3 to 7 percent slopes, eroded is mapped on the subject property. The soil is classified as moderately well drained and have moderately high runoff potential when drained and high runoff potential when undrained. Shelby clay loam, 8 to 12 percent slopes, eroded is mapped on the subject property. The soil is classified as well drained and has moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted. None of the soils mapped on the subject property meet hydric criteria.
Estimated depth to first groundwater:	ERIS Physical Setting Report	Depth is estimated to be approximately 75 feet to 90 feet bgs.

Physical Setting Attribute	Source	Description
Anticipated groundwater flow direction:	USGS Topo Map ERIS Physical Setting Report	Regional groundwater flow is anticipated to follow regional topographic and drainage patterns. Local groundwater flow is also anticipated to follow regional topographic drainage patterns, but may vary.
Oil and Gas Resources:	ERIS Physical Setting Report	None were mapped on or adjacent to the subject property.
Mining Resources:	USGS MRDS Database	None were mapped on or adjacent to the subject property.
Other resource or physical characteristics, such as NWI wetlands, mapped on the subject property?	ERIS Physical Setting Report	None were mapped on the subject property.
Is a flood hazard zone mapped on the subject property?	ERIS Physical Setting Report	No.

5.0 SITE RECONNAISSANCE

The location and approximate boundaries of the subject property are illustrated on the appended figures. The legal description of the subject property, if provided to PSI, is appended.

Lydia Leslie, with Kimley-Horn, arranged for our access to the subject property. Heather Reisig, Property Owner, escorted our field personnel during the site reconnaissance.

The field reconnaissance was performed by: Kylee Siegrist on July 22, 2025.

The ground reconnaissance consisted of observing the periphery of the subject property and viewing the subject property from accessible adjoining public access areas. PSI also systematically toured the interior portions of the subject property to provide an overlapping field of view. The peripheries of surface features and/or structures, where present on the subject property, were observed along with accessible interior common areas.

Visual reconnaissance of adjoining properties was limited to areas and facilities that were readily observable from the subject property or from public access areas.

PSI photographed selected features. The captioned photographs collected during the site reconnaissance are appended.

PSI did not access the interior of Building 1, 2 or 3 due to their residential nature of use. Where possible, PSI viewed the interiors through available windows (Building 2 and 3) and did not observe any apparent areas of environmental concerns.

5.1 SUBJECT PROPERTY DESCRIPTION AND CURRENT USES

SUBJECT PROPERTY DESCRIPTION	
Project Number	06032872-9
Project Name	Project Bluestem - Reisig
Address	16408 222nd Street, Tonganoxie, Leavenworth County, Kansas 66086
General Property Use	Farming/Ranch
Number of Parcels	One
Parcel Number	1952100000004010
Property Size (acres)	9.69 ± (per Leavenworth County Assessor's office Record)
Number of Buildings	Four

BUILDING INFORMATION	
Construction Type	Wood-frame construction with vinyl siding; stone foundation
Building Use	Residential home
Building Area (square feet)	1,950

Number of Stories	Two
Basement	Crawl Space
Approx. Construction Date	1900
Major Additions	Remodeled in 1995
Occupancy Status	Occupied
Heating/Cooling Source	Electricity and Propane

BUILDING INFORMATION	
Construction Type	Metal siding on a wood frame
Building Use	Detached garage
Building Area (square feet)	576
Number of Stories	One
Basement	No
Approx. Construction Date	1982
Major Additions	None noted
Occupancy Status	Occupied
Heating/Cooling Source	None

BUILDING INFORMATION	
Construction Type	Concrete block construction
Building Use	Tool shed
Building Area (square feet)	1,080
Number of Stories	One
Basement	No
Approx. Construction Date	1940
Major Additions	None noted
Occupancy Status	Occupied
Heating/Cooling Source	None

BUILDING INFORMATION	
Construction Type	Metal siding on a wood frame

Building Use	Farm utility building and farm utility lean-to
Building Area (square feet)	1980
Number of Stories	One
Basement	No
Approx. Construction Date	1987
Major Additions	None noted
Occupancy Status	Occupied
Heating/Cooling Source	None

UTILITY PROVIDERS	
Water	Water well
Wastewater/Sewer	Septic system
Electricity	Evergy
Natural Gas	Propane

5.2 SUBJECT PROPERTY OBSERVATIONS

A summary of the subject property uses and conditions is tabulated below. Detailed observations are discussed following the summary table for any "yes" answers, along with an opinion about the significance of the observations.

Identified? (check if Yes)	Item Description
Activities	
	Medical or Dental Offices - Biomedical Wastes
	Dry Cleaners or Laundromats
	Automotive or Equipment Repair
	Manufacturing or Significant Use of PFOS or PFOA
	Other Activities of Concern
Equipment or Storage	
	Emergency Generators
	Elevators
	Hydraulic Lifts and/or Equipment
	Photo Processing
	Oil/Water Separators
	Grease Traps
	Wastewater Treatment Systems
✔	Septic Systems, Sewage Tanks, Sewage Lagoons, or Cesspools
	Air Compressors

Identified? (check if Yes)	Item Description
✔	Transformers and/or Other Electrical Equipment That Could Contain PCBs
	Use, Storage, or Disposal of Hazardous Substances
	Use, Storage, or Disposal of Petroleum Products
	Drums, Totes or Other Intermediate Bulk Containers
✔	ASTs or USTs
	Suspect Containers or Containers with Unidentified Contents
Features	
	Drains or Sumps
	Stormwater Retention or Detention Systems
	Pits, Ponds, Lagoons, or Quarries
✔	Pools of Liquid, Standing Water, Streams, Creeks, or Rivers
Other Items of Potential Concern	
	Stains or Corrosion on Floors, Walls, or Ceilings (other than water staining)
	Strong, Pungent or Noxious Odors
	Oil and Gas Wells
✔	Drinking Water, Irrigation, or Monitoring Wells
	Pipeline Markers
	Agrochemical Use or Application
	Railroad Spur, Siding, or Right-of-Way
	Pavement Stains or Corrosion
	Stained Soil or Stressed Vegetation
	Surface Water Sheen or Discoloration
	Exterior Pipe Discharges, Unknown Pipes, or Effluent Discharges
	Solid Waste Dumping, Landfilling, or Suspect Fill Material (not in dumpsters or compactors)
	Construction Debris or Material Stockpiles
	Other Uses or Conditions of Concern

5.2.1 SEPTIC SYSTEMS, SEWAGE TANKS, SEWAGE LAGOONS, OR CESSPOOLS

According to Heather Reisig, the property owner, sewage disposal for the on-site building is provided through an on-site septic system, including tanks and leach fields. The system is generally located northwest of the residential home. Based on the use of the building on the subject property, the septic system is not considered to be evidence of a REC in connection with the subject property.

5.2.2 TRANSFORMERS AND/OR OTHER ELECTRICAL EQUIPMENT THAT COULD CONTAIN PCBS

One pole-mounted transformer was observed on the western portion of the subject property. Non-PCB labeling was not observed on the transformer. It is believed the electrical equipment is the property and responsibility of Evergy, the local electrical utility company, who would be responsible for cleanup related to the equipment that could not be attributed to tenant negligence. The identified electrical equipment appeared to be in good condition, with no

apparent evidence of staining, leakage, or corrosion noted. Based on their observed condition and the local utility ownership, the observed transformer is not considered to be evidence of a REC in connection with the subject property.

5.2.3 ASTS OR USTS

One and 500-gallon propane AST was observed on the subject property. The tank was situated on grass and appeared to be in good condition. Due to the extremely low boiling point of propane, leaks or spills from the tank are not expected to result in contamination of soil or groundwater. Based on the condition of the tank at the time of site their presence is not considered to be evidence of a REC in connection to the subject property.

5.2.4 POOLS OF LIQUID, STANDING WATER, STREAMS, CREEKS, OR RIVERS

Small pools of standing water were observed at the subject property. These pools can be attributed to recent rains and are not considered to be evidence of a REC in connection with the subject property.

5.2.5 DRINKING WATER, IRRIGATION, OR MONITORING WELLS

A potable water well was observed near the residential home on the subject property. Given the apparent domestic nature of its use, this potable water well is not considered to be evidence of a REC in connection with the subject property.

5.3 OFF-SITE OBSERVATIONS

A summary of the adjoining property uses and conditions is tabulated below. Detailed observations are discussed following the summary table for any “yes” answers, along with an opinion about the significance of the observations.

Please note adjoining properties were observed from the subject property boundaries, public rights-of-way or public thoroughfares, but were not accessed.

Direction	Description of Adjoining Property Use
North	Vacant/Ranch land owned by Tailgate Ranch Company.
East	Vacant/Ranch land owned by Tailgate Ranch Company.
South	Vacant/Ranch land owned by Tailgate Ranch Company.
West	222nd Street, followed by vacant grass-covered land to the north/northwest and a single-family residence (16399 222nd Street) to the southwest.

Identified? (check if Yes)	Item Description
Activities	
	Medical or Dental Offices - Biomedical Wastes
	Dry Cleaners or Laundromats
	Automotive or Equipment Repair
	Manufacturing or Significant Use of PFOS or PFOA
	Other Activities of Concern

Identified? (check if Yes)	Item Description
	Equipment or Storage
	Emergency Generators
	Elevators
	Hydraulic Lifts and/or Equipment
	Photo Processing
	Oil/Water Separators
	Grease Traps
	Wastewater Treatment Systems
	Septic Systems, Sewage Tanks, Sewage Lagoons, or Cesspools
	Air Compressors
✔	Transformers and/or Other Electrical Equipment That Could Contain PCBs
	Use, Storage, or Disposal of Hazardous Substances
	Use, Storage, or Disposal of Petroleum Products
	Drums, Totes or Other Intermediate Bulk Containers
	ASTs/USTs
	Suspect Containers or Containers with Unidentified Contents
	Features
	Drains or Sumps
	Stormwater Retention/Detention Systems
✔	Pits, Ponds, Lagoons, or Quarries
✔	Pools of Liquid, Standing Water, Streams, Creeks, or Rivers
	Other Items of Potential Concern
	Stains or Corrosion on Floors, Walls, or Ceilings (other than water staining)
	Strong, Pungent or Noxious Odors
	Oil and Gas Wells
	Drinking Water, Irrigation, or Monitoring Wells
	Pipeline Markers
	Agrochemical Use or Application
	Railroad Spur, Siding, or Right-of-Way
	Pavement Stains or Corrosion
	Stained Soil or Stressed Vegetation
	Surface Water Sheen or Discoloration
	Exterior Pipe Discharges, Unknown Pipes, or Effluent Discharges
	Solid Waste Dumping, Landfilling, or Suspect Fill Material (not in dumpsters or compactors)
	Construction Debris or Material Stockpiles
	Other Uses or Conditions of Concern

5.3.1 TRANSFORMERS AND/OR OTHER ELECTRICAL EQUIPMENT THAT COULD CONTAIN PCBS

Pole-mounted transformers were observed on adjoining properties. Non-PCB labeling was not observed on the transformers. It is believed the electrical equipment is the property and responsibility of Evergy, the local electrical utility company, who would be responsible for cleanup related to the equipment that could not be attributed to tenant negligence. The identified electrical equipment appeared to be in good condition, with no apparent evidence of staining, leakage, or corrosion noted. Based on their observed condition and the local utility ownership, the observed transformers are not considered to be evidence of a REC in connection with the subject property.

5.3.2 PITS, PONDS, LAGOONS, OR QUARRIES

PSI identified a pond located on the adjoining property. No obvious staining, stressed vegetation, or oily sheen was noted in connection with the water observed. Based on PSI's observations, it appears that the pond is used for agricultural and livestock purposes. As such, the presence of the identified pond is not considered to be evidence of a REC in connection with the subject property.

5.3.3 POOLS OF LIQUID, STANDING WATER, STREAMS, CREEKS, OR RIVERS

PSI observed a creek on the south adjoining property. No obvious staining, stressed vegetation, or oily sheen was noted in connection with the water observed. As such, the presence of the identified creek is not considered to be evidence of a REC in connection with the subject property.

6.0 HISTORICAL USES

PSI utilized readily ascertainable historical information sources in order to research the history of the subject property and surrounding area. The intent of this review was to identify historical resources noting historical tenancies or uses of the subject property and surrounding area, which might be considered evidence of a REC. Generally, PSI reviewed the following readily ascertainable historical resources, where they were available:

- PSI requested available historical topographic maps from ERIS, and/or otherwise reviewed available maps at local or other sources to evaluate land development in the area over time. It should be noted that the scale of topographic maps in some cases does not allow for mapping of individual structures and developed areas may be shown by shading only.
- PSI requested available historical aerial photographs from ERIS, and/or otherwise reviewed available photographs at local or other sources to obtain information concerning the development and history of the subject property and surroundings.
- PSI requested available historical city directories from ERIS and/or otherwise reviewed available directories at local sources in order to obtain information on tenancies on the subject property and adjoining properties.
- PSI requested available historical fire insurance maps from ERIS. The Sanborn® Map Company and other regional providers historically mapped urban areas for use by insurance underwriters. In some cases, these maps provide useful information in evaluating previous tenancies and uses of the subject property and surrounding area. “Sanborn”, “Sanborn Map”, “Sanborn Map Company”, and “Sanborn Fire Insurance Maps” are recognized trademarks of the Sanborn Map Company, a subsidiary of Environmental Data Resources, Inc.

Copies of select historical resources obtained from the historical sources are provided in the report appendix; however, it should be noted that some of the historical resources used by PSI may be copyrighted and PSI has summarized those resources herein, but we have not included copies of those resources in the appendix.

6.1 CURRENT AND PRIOR USE INTERVIEWS

PSI conducted or attempted to conduct interviews with persons who are knowledgeable of the current use and history of the subject property. The following individuals were interviewed or provided information.

Name	Title	Company	How Contacted	Date Interviewed
Heather Reisig	Property Owner	Property Owner	In-Person	July 22, 2026

INTERVIEW SUMMARIES

PSI conducted an interview with Heather Reisig, the owner of the subject property, who has owned the property since 2022. Ms. Reisig stated that the property included four buildings, a residence, two garages and outbuilding, with two chicken coops and is served by a private water well and on-site septic system. Heating is provided by propane, and

she noted that the existing propane tank was installed within the past two years to replace a previous tank that had developed a leak. Ms. Reisig indicated that she was not aware of any environmental concerns associated with the subject property and reported no additional known releases or contamination.

No evidence of RECs was identified as a result of the interviews conducted during this assessment. However, the owner reported that a previously leaking propane tank was replaced approximately two years ago. Based on the available information, this condition is considered de minimis and is not considered evidence of a REC.

6.2 SUMMARY OF HISTORICAL SOURCES & RESOURCES

PSI reviewed historical resources from the following sources in order to evaluate the historic uses of the subject property, adjoining and/or surrounding area.

Resource	Historical Data Source	Years Reviewed
Topo Maps	ERIS	1951, 1970, 1978, 2009, 2012, 2016, 2018, 2022
Aerial Photographs	ERIS	1937, 1948, 1959, 1967, 1977, 1985, 1991, 2002, 2003, 2004, 2005, 2006, 2008, 2010, 2012, 2014, 2015, 2017, 2019, 2021, 2023, 2025
City Directories	ERIS	1987, 1991, 1996, 2000, 2003, 2008, 2012, 2016, 2020, 2023, 2025
	Streets Searched:	222nd Street
Fire Insurance Maps	ERIS	No Information Found
Property Cards	The Leavenworth County Assessor's Office website	Current Cards

These limitations are evaluated on the appended Data Gap Worksheet.

6.3 SUMMARY HISTORY OF THE SUBJECT PROPERTY AND ADJOINING PROPERTIES

A chronological summary of the history and use of the subject property and immediately adjoining properties is provided in the following tables. Our interpretation of the historical uses of a particular property reflects a synthesis of information contained on the available resources (as noted in the previous subsection) for a given time period.

6.3.1 SUBJECT PROPERTY

TOPO MAPS

Time Period	Interpreted Use/Observations
1951-1970	Four structures are present on the subject property. Specific land use was not identified.
2009-2022	Structures are no longer present. Specific land use was not identified.

AERIAL PHOTOGRAPHY

Time Period	Interpreted Use/Observations
1937-1977	The current single-family residence is present with four associated outbuildings.
1985-2002	Five outbuildings are present on the subject property. Remaining areas appear the same.
2003-2015	Four outbuildings are present on the subject property. Remaining areas appear the same.
2017-2025	Three outbuildings are present on the subject property. Remaining areas appear the same.

CITY DIRECTORIES

Time Period	Interpreted Use/Listing(s)
1996-2023	Residential. Including: BRIAN FREESE (1996); JEFFREY FREESE (1996); BRIAN FREESE (2000-2003); JEFFREY FREESE (2000-2003); JOHN QUINLAN (2012-2025); MARY QUINLAN (2012-2025); WAYNE HERMANN (2023)

OTHER HISTORICAL SOURCES

Time Period	Interpreted Use/Observations
1900	Assessor records indicate a single-family residence was constructed.
1940	Assessor records indicate a tool shed was constructed.
1982	Assessor records indicate a detached residential garage was constructed.
1987	Assessor records indicate a farm utility building and lean-to were constructed.
1995	Assessor records indicate the residence was remodeled.

Time Period	Interpreted Use/Observations
Present	Assessor records identify the property as a farm homesite associated with farming/ranch operations.

The subject property appeared to formerly be used for agricultural purposes. Although no information or observations indicating the misuse or misapplication of pesticides, herbicides, or fertilizers was obtained during the historical resources review, in certain instances, the chemicals historically applied to the property, or their breakdown products, could be persistent and not biodegrade. As with any agriculturally developed land, there exists the possibility that pesticides, herbicides, or fertilizers have been applied that may still be present at residual concentrations. Therefore, although some potential risk exists that you should be aware of, this occurrence is not considered to represent a REC in connection with the subject property.

No evidence of RECs was identified as a result of the historical review of the subject property that was conducted during this assessment.

6.3.2 IMMEDIATELY ADJOINING PROPERTIES

NORTH	
Time Period	**Interpreted Use/Observations**
1937-1959	Agricultural/vacant grass-covered land is present in the area. Trees and a creek are present to the northwest and a creek is present to the northeast.
1967	Tailgate Ranch Company is present in the area. Vacant, grass-covered ranch land is present in the area. Remaining areas appear the same.
1977-1991	The creek to the northeast is no longer present, a pond has appeared in the area. Remaining areas appear the same.
2002	The trees are no longer visible. The remaining area appears the same.
2003-2025	The creek to the northwest is no longer visible. There are some scattered trees in the area.

EAST	
Time Period	**Interpreted Use/Observations**
1937-1959	Agricultural/vacant grass-covered land is present in the area. A tree line is present to the southeast.
1967-2025	Tailgate Ranch Company is present in the area. Vacant, grass-covered ranch land is present in the area. The tree line remains visible to the southeast.

SOUTH	
Time Period	**Interpreted Use/Observations**
1937-1948	Agricultural/vacant-grass covered land is present in the area. Trees and a creek are present to the south-southwest.
1959	A pond is present and the creek is no longer visible.
1967-2025	Tailgate Ranch Company is present in the area. Vacant, grass-covered ranch land is present in the area. The pond is still visible.

WEST	
Time Period	**Interpreted Use/Observations**
1937-1948	222nd Street followed by agricultural/vacant grass-covered land with a creek is present in the area. A tree line is present to the southwest.
1959-1991	A pond is present in the area and the creek is no longer visible. Remaining areas appear the same.
2002-2005	A pond is present to the southwest. Remaining areas appear the same.
2006-2023	The pond to the southwest is no longer visible and an additional larger pond is located further west. An unpaved road is present in the area. Remaining areas appear the same.
2025	A structure is present to the southwest. Remaining areas appear the same.

The adjoining properties appeared to have been used for agricultural purposes. Although no information or observations indicating the misuse or misapplication of pesticides, herbicides, or fertilizers was obtained during the historical resources review, in certain instances, the chemicals historically applied to the property, or their breakdown products, could be persistent and not biodegrade. As with any agriculturally developed land, there exists the possibility that pesticides, herbicides, or fertilizers have been applied that may still be present at residual concentrations. Therefore, although some potential risk exists that you should be aware of, PSI does not consider this occurrence to represent a REC in connection with the subject property.

No evidence of RECs was identified as a result of the historical review of adjoining properties that was conducted during this assessment.

7.0 ENVIRONMENTAL REGULATORY RECORDS REVIEW

7.1 DATABASE FINDINGS

PSI retained ERIS to provide environmental database information attributed to the subject property and its surroundings. ERIS obtains environmental databases published by local, state, tribal, and federal agencies and maps the information for electronic searches. The report provided by ERIS includes reporting Standard Environmental Records Sources as listed in the Practice.

The search, where applicable, was performed to AMSDs listed in ASTM E1527-21. The search radius required by ASTM varies by database.

The report provided by ERIS also included data for searches of other regulatory databases they believe may have useful information. The AMSDs for those databases are determined by ERIS.

Unplottable (orphan) sites (if any were listed) having insufficient address information to be mapped were evaluated for potential location within the applicable AMSD. Those that could be determined to be within the AMSD are discussed, as appropriate.

The distribution of listed sites with respect to the subject property is tabulated and mapped in the report ERIS provided, which is appended. The reader is referred to that table, which can be found near the front of that report. The full names of the database abbreviations and acronyms used below and in the report can be found in the Database Descriptions appendix of that report.

7.1.1 SUBJECT PROPERTY

The subject property was not listed on the searched governmental databases as a spill site or regulated facility.

7.1.2 ADJOINING PROPERTIES

ERIS's report did not identify sites adjoining the subject property.

7.1.3 SURROUNDING PROPERTIES

ERIS's report did not identify sites in the area surrounding the subject property.

7.2 REGULATORY AGENCY INQUIRIES (FOIA OR EQUIVALENT REQUESTS)

PSI sought information about the subject property and/or surrounding area from the governmental agencies listed in the following sections. FOIA information was requested by telephone, in person, via e-mail, through a state or federal maintained website, or through a written request, as appropriate.

7.2.1 REGULATORY AGENCY MAINTAINED WEBSITES

Information available on the KDHE website was reviewed, which contains the Kansas Environmental Interest Finder (KEIF) and Bureau of Environmental Remediation (BER) Identified Sites List (ISL) interactive mapping applications. This information generally supported details reported by ERIS. Additional sites of potential concern were not identified through this review.

7.2.2 STATE REGULATORY AGENCY

Review of readily available records did not reveal a need to request or review additional state regulatory files as part of this assessment.

7.2.3 FIRE DEPARTMENT OR FIRE PROTECTION DISTRICT

A request for information (RFI) was submitted to Chief John Zimbelmen of the City of Tonganoxie Fire Department. However, a response has not been received as of the date of this report. This is a limitation and evaluated on the appended Data Gap Worksheet. When a response is received, it will be reviewed and if changes to the findings or conclusions of this report are warranted, an addendum will be issued.

8.0 VAPOR ENCROACHMENT SCREENING

8.1 METHODOLOGY

The Phase I ESA process requires the Environmental Professional to evaluate the potential for vapor encroachment onto the subject property, and to determine if such vapor encroachment constitutes evidence of a REC in connection with the subject property. The Practice does not specifically state the methods that must be used to screen for potential vapor encroachment issues. PSI utilized ASTM E2600-22 as a basis to conduct a VES for the subject property. PSI used the Tier 1 Screening procedure from the VES Standard Guide during this assessment. Where Tier 2 Screening information was readily available during the normal course of conducting the Phase I ESA, PSI has combined the Tier 1 and Tier 2 Screening steps.

The VES process utilizes information regarding the potential presence of releases on or near the subject property that were collected as a normal part of the Phase I ESA process. If the User Questionnaire was returned, PSI also reviewed the answers to the vapor encroachment screening questions. No additional data was collected specifically for the purpose of the VES. In order to identify potential sites of concern within the VES AMSDs, PSI reviewed, as available and appropriate, governmental database records, regulatory agency files, topo maps, aerial photography, fire insurance maps, and other information.

The AMSDs were expanded or reduced in the up-gradient, down-gradient, or cross-gradient directions by the environmental professional based on experience in the local area and applying professional judgment to factors such as: where a well-defined regional groundwater flow direction is identified; or whether other geologic features such as low permeability soils or hydrogeologic boundaries (such as rivers or streams) exist which would tend to limit the potential for migration of groundwater or vapors in a particular direction.

If a VEC was identified, the environmental professional determined whether the VEC represented evidence of a REC in connection with the subject property within the context of the Phase I ESA Standard Practice. It should be noted that the identification of a VEC in connection with the subject property does not necessarily indicate that a potential for migration of vapors into existing or proposed structures on the subject property is likely.

8.2 VES RESULTS

Sites of concern were not identified within the VES search radii; therefore, we conclude that no VECs exist on the subject property.

8.3 VES LIMITATIONS

The VES process is not intended to be an exhaustive screening and cannot wholly eliminate uncertainty regarding the presence of VECs in connection with the subject property. In addition, to the limitations inherent in ASTM E2600-22, the screening is intended to reduce, but not eliminate uncertainty regarding whether or not a VEC exists in connection with the subject property.

9.0 ASTM NON-SCOPE CONSIDERATIONS

PSI conducted additional assessment to address conditions beyond the scope of the Practice. These items can be called either BERs or Non-Scope Considerations. Methodologies and protocols used to conduct the assessment and evaluate these considerations follow. Assessors' and laboratories' credentials are appended if applicable. Restoration of sampled locations, if samples were collected, was beyond the scope of our assessment.

9.1 DESKTOP PROTECTED SPECIES RECORDS REVIEW

The Endangered Species Act provides protection for threatened and endangered (T&E) species, including plants and animals, and critical habitat. The Endangered Species Act is administered by the USFWS for non-marine species. Because the presence of T&E species or critical habitat on a property may impact development plans on that property, the client has requested that PSI perform a review of available information related to T&E species that are known to inhabit the area.

9.1.1 METHODOLOGY

The USFWS and each state develop T&E Species lists on a county by county basis in the U.S. PSI has obtained and reviewed the T&E Species list for Leavenworth County from the Kansas Department of Wildlife and Parks. In addition, PSI retrieved a Resources Report from the USFWS Information for Planning and Consulting (IPaC) website for Leavenworth County, specifically in the area of the subject property. Copies of these documents are appended.

Where possible, we have screened out species that would not likely inhabit the property and/or where it is obvious that the on-site habitat is not suitable (e.g. aquatic species on a property with no surface water). It should be noted that this desktop screening did not include an inspection for T&E species or suitable habitat by a qualified biologist that is trained in their identification; however, our assessor did view the subject property. Therefore, the desktop review should be considered preliminary in nature.

9.1.2 RESULTS

The USFWS Threatened and Endangered Species List for Leavenworth County indicates that the following T&E species are known to inhabit areas within the county on at least a transitory basis:

- Northern Long-eared Bat (*Myotis septentrionalis)* is an endangered species with no critical habitat designation.
- Monarch Butterfly (*Danaus plexippus)* is a proposed threatened species with a proposed critical habitat designation. This location does not overlap with the critical habitat.
- Western Regal Fritllary (*Argynnis idalia occidentalis*) is a proposed threatened species with no critical habitat designation.
- Mead's Milkweed (*Asclepias meadil*) is a threatened species with no critical habitat designation.
- Western Prairie Fringed Orchid (*Platanthera praeclara*) is threatened species with no critical habitat designation.

Given the undeveloped nature of the subject property, it is possible that one or more of these species, or critical habitat for these species could be present on the subject property. Additional review by a qualified biologist may result in screening out of a number, or all of these species from consideration. A site reconnaissance by a qualified wildlife biologist may be required to eliminate remaining species from consideration.

Copies of the documents reviewed are appended.

9.2 DESKTOP HISTORICAL PLACES AND ARCHEOLOGICAL SITES RECORDS REVIEW

Listing on the National Register of Historic Places, its state equivalent, or having an archeological site on a property can impose restrictions on that property, such as how the property can be used or modified.

9.2.1 METHODOLOGY

PSI reviewed the National Register of Historic Places database maintained by the National Park Service to attempt to determine if the subject property is a listed on that database. In addition, PSI attempted to review state maintained databases of similar properties, if such databases were available to the public.

9.2.2 RESULTS

The subject property is not listed by address or appears to be included in a Historic District per the NRHP.

If practical, the database listings are appended.

10.0 WARRANTY AND RELIANCE

10.1 STANDARD OF CARE AND WARRANTIES

Our services were not intended to be technically exhaustive. There is a possibility that with the proper application of methodologies, conditions may exist on the property that could not be identified within the scope of the assessment or that were not reasonably identifiable from the available information.

No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with the property. The ESA was intended to reduce, but not eliminate uncertainty regarding the potential for RECs in connection with a property.

Our report is based on commonly known and reasonably ascertainable information, including limited, ground-level visual inspection of the property except where otherwise explicitly indicated, in general conformance with ASTM E1527-21. Findings and conclusions derived from the methodologies described in the Practice contain all of the inherent limitations in the methodologies that are referred to in the Practice.

PSI has assumed that factual information provided to us by the client, or obtained from governmental and historical research firms, the public domain, interviews, and other sources is accurate and unbiased. PSI assumes no liability for the accuracy of data provided to us by others.

PSI did not perform any exploratory probing or discovery, perform tests, operate any specific equipment, or take measurements or samples to perform the ESA scope. The ESA was not a building code, safety, regulatory or environmental compliance inspection. The ESA is not intended to reduce the risk of the presence of mold and physical deficiencies conducive to mold nor the risk that mold or physical deficiencies conducive to mold may pose to the buildings and building occupants.

The methodologies include reviewing information provided by other sources. PSI treats information obtained from the record reviews and interviews concerning the property as reliable and the ASTM protocol does not require PSI to independently verify the information. Therefore, PSI cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete.

PSI has performed the services in a manner consistent with that level of care and skill ordinarily exercised by other members of our profession currently practicing in the same locality and under similar conditions, within the limitations of ASTM E1527-21 standard, and the All Appropriate Inquiries Rule established by the U.S. Environmental Protection Agency (40 CFR Part 312). Future changes in standards, practices, or regulations cannot be anticipated and have not been addressed.

The observations and recommendations (if included) presented in this report are time dependent, and conditions will change. This report speaks only as of its date.

No other warranties are implied or expressed.

10.2 RELIANCE

Kimley-Horn, PSI's client, may rely on this report.

10.3 THIRD PARTY RELIANCE

This report was prepared pursuant to a contract between PSI and its client, as defined in the previous subsection. That contractual relationship included an exchange of information about the subject property that was unique and serves as the basis upon which this report was prepared. Because of the importance of these understandings, our assessment may not be sufficient for the intended purposes of another party.

Reliance and/or any use of this report by anyone other than those parties identified earlier in this section for which it was prepared, except with express written permission, is prohibited and therefore not foreseeable to PSI. Any unauthorized reliance on and/or use of this report, including any of the information or conclusions contained herein, will be at the third party's risk. No warranties or representations expressed or implied in this report are made to any such third party.

Third party reliance letters may be issued:

- upon timely request;
- subject to the permission of our original client; and
- payment of the then-current fee for such letters.

All third parties relying on our report, by such reliance, agree that such reliance is limited by our proposal, contract and/or General Conditions, as applicable.

FIGURES

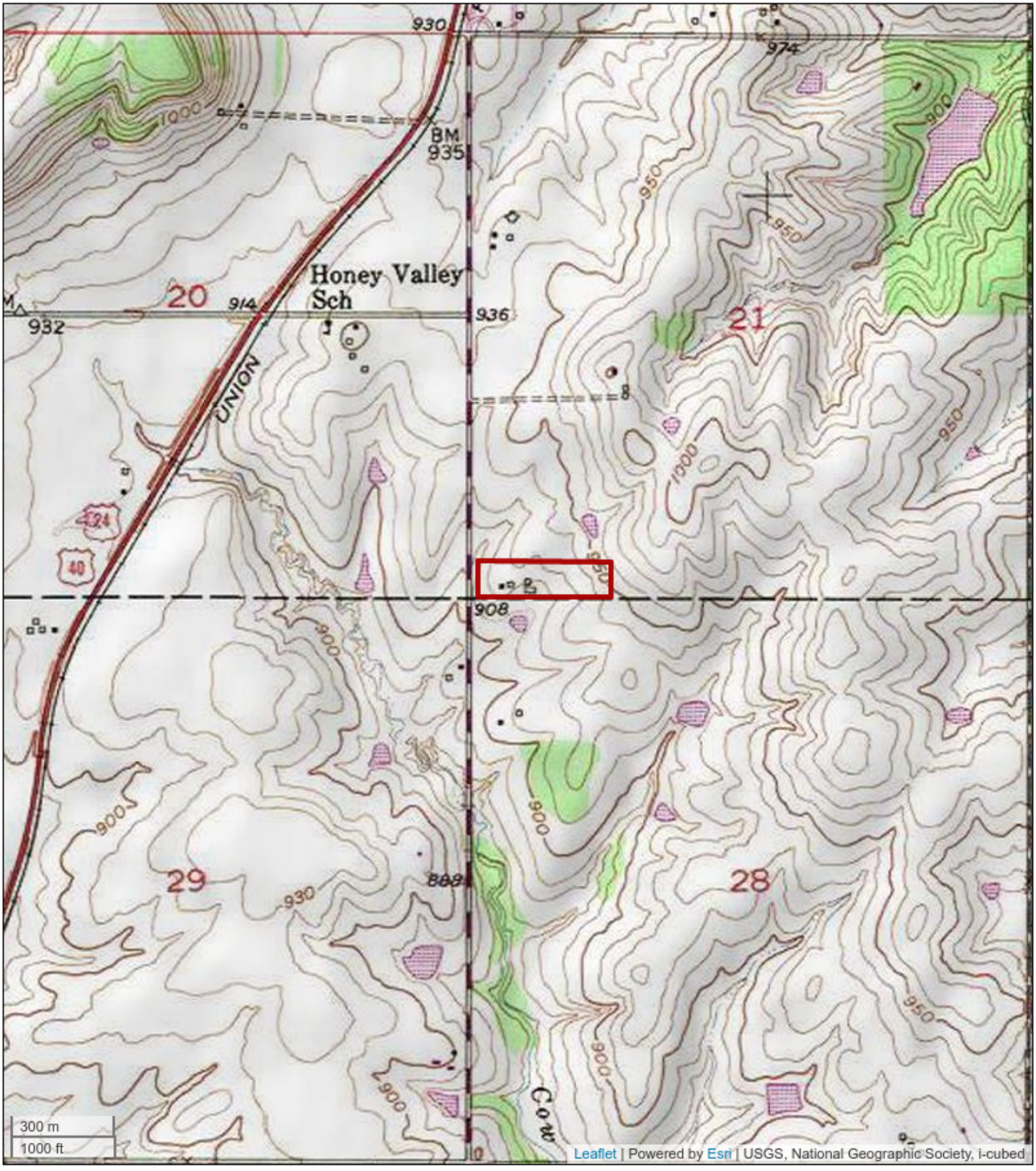


Figure 1 - Topographic Map

Project Bluestem - Reisig
16408 222nd Street
Tonganoxie, Tonganoxie 66086
Project Number: 06032872-9



Figure 2 - Site Vicinity Map

Project Bluestem - Reisig
16408 222nd Street
Tonganoxie, Tonganoxie 66086
Project Number: 06032872-9

PHOTOGRAPHS



Photo 1: View of entrance to subject property



Photo 2: View of entrance to subject property



Photo 3: View of subject property



Photo 4: View of subject property



Photo 5: View of subject property



Photo 6: View of subject property



Photo 7: View of subject property



Photo 8: View of subject property



Photo 9: View of subject property



Photo 10: View of Building 1 and 2 on subject property



Photo 11: View of propane tank on subject property



Photo 12: View of chicken house on subject property



Photo 13: View of chicken coop on subject property



Photo 14: View of chicken coops on subject property



Photo 15: View of water well on subject property



Photo 16: View of transformer on subject property



Photo 17: View of pond located on western portion of subject property



Photo 18: View of Building 4 on subject property



Photo 19: View inside Building 4 on subject property



Photo 20: View inside Building 4 on subject property



Photo 21: View of empty drum/trash can on subject property



Photo 22: View of north adjoining property



Photo 23: View of north adjoining property



Photo 24: View of east adjoining property



Photo 25: View of east adjoining property



Photo 26: View of south adjoining property



Photo 27: View of south adjoining property



Photo 28: View of south adjoining property



Photo 29: View of south adjoining property



Photo 30: View of south adjoining property



Photo 31: View of west adjoining property



Photo 32: View of west adjoining property



Photo 33: View of west adjoining property

USER QUESTIONNAIRE RESPONSES

USER QUESTIONNAIRE

Pursuant to ASTM E1527, ASTM E2600, and the EPA All Appropriate Inquiry Rule, the User of the report must answer specific questions regarding the property and supply this information to the Environmental Professional. While we understand that you may have only limited knowledge of the property, please answer the questions to the best of your ability based on your current knowledge, and return the completed questionnaire to PSI.

Phase I ESA Questions

1. Did a review of land title records (or judicial records where appropriate) identify any environmental cleanup liens filed or recorded against the subject property under federal, tribal, state or local law?
   [X] No [ ] Yes [ ] Unknown (if yes, please briefly discuss on the next page or as an attachment)

2. Did a review of land title records (or judicial records where appropriate) identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law?
   [X] No [ ] Yes [ ] Unknown (if yes, please briefly discuss on the next page or as an attachment)

3. Do you have any specialized knowledge or experience related to the subject property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the subject property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
   [X] No [ ] Yes (if yes, please briefly discuss on the next page or as an attachment)

4. Does the purchase price being paid reasonably reflect the fair market value of the subject property?
   [ ] No [X] Yes [ ] Not Applicable

   If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the subject property?
   [ ] No [ ] Yes [X] Not Applicable (if yes, please briefly discuss on the next page or as an attachment)

5. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:
   (a) Do you know of the past uses of the subject property?
   [X] No [ ] Yes (if yes, please briefly discuss on the next page or as an attachment)
   (b) Do you know of specific chemicals that are present or were once present at the subject property?
   [X] No [ ] Yes (if yes, please briefly discuss on the next page or as an attachment)
   (c) Do you know of spills or other chemical releases that have taken place at the subject property?
   [X] No [ ] Yes (if yes, please briefly discuss on the next page or as an attachment)
   (d) Do you know of any environmental cleanups that have taken place at the subject property?
   [X] No [ ] Yes (if yes, please briefly discuss on the next page or as an attachment)

6. Based on your knowledge and experience related to the subject property are there any obvious indicators that point to the presence or likely presence of contamination at the subject property?
   [X] No [ ] Yes (if yes, please briefly discuss on the next page or as an attachment)

7. Do you know of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property? [X] No [ ] Yes (if yes, please briefly discuss on the next page or as an attachment)

8. Do you know of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?
   [X] No [ ] Yes (if yes, please briefly discuss below or as an attachment)

Further Explain any Answers Requiring Clarification: _____

Vapor Encroachment Screening Questions

1. Currently, what type of property is the subject property?
☐ Commercial ☐ Industrial ☒ Residential ☐ Multi-Tenant ☐ Vacant Land

2. Are there buildings on the subject property?
☒ Yes ☐ No ☐ Unknown (if **yes**, indicate number and construction type):
1 house, 3 ancillary structures/sheds

3. Will buildings or structures be constructed on the subject property in the future?
☐ Yes ☐ No ☒ Unknown (if **yes**, indicate number and construction type)

4. If buildings exist or are proposed, do/will they have elevators?
☐ Yes ☐ No ☒ Unknown

5. What type of below-grade level exists or is proposed?
☐ Full/Partial Basement ☐ Crawl Space ☐ Parking Garage ☐ Multi-Level
☒ None/Unknown (if **none/unknown**, skip to question 11)

6. Is there ventilation currently/proposed in the below-grade level?
☐ Yes ☐ No ☒ Unknown

7. Are there sump pumps, floor drains or trenches existing or proposed in the below-grade level?
☐ Yes ☐ No ☒ Unknown

8. Is there a radon or methane mitigation system installed or proposed?
☐ Yes ☐ No ☒ Unknown (If **yes**, please indicate if passive or active):_____

9. What type of heating system exists or is proposed in the building? (check all that apply)
☐ Hot Air Circulation ☐ Hot Air Radiation ☐ Hot Water Radiation
☐ Hot Water Circulation ☐ Fireplace ☐ Radiant Floor Heat ☐ Fuel Oil Furnace
☐ Electric Baseboard ☐ Heat Pump ☐ Wood Stove ☐ Steam Radiation
☐ Coal Furnace ☐ Kerosene Heater ☐ Used Oil Heater ☐ Natural Gas Furnace
☐ Other

10. How are the utility systems fueled/powered or proposed to be fueled/powered?
(check all that apply)
☐ Natural Gas ☐ Propane ☐ Kerosene ☐ Coal ☐ Wood ☐ Electricity
☐ Fuel Oil ☐ Solar ☐ Wind ☐ Other

11. Have there ever been any environmental problems at the subject property?
☐ Yes ☐ No ☒ Unknown (if **yes**, please describe)

12. Does/will a gas station or dry cleaner operate anywhere on the subject property?
☐ Yes ☐ No ☒ Unknown

13. Do/will any of the tenants use hazardous chemicals in relatively large quantities on the subject property?
☐ Yes ☐ No ☒ Unknown

14. Have any tenants ever complained about odors in the building or experienced health-related problems that may have been associated with the building?

☐ Yes ☐ No ☒ Unknown

15. Are the current or proposed operations on the subject property going to require/require special OSHA or EPA permitting?
☐ Yes ☐ No ☒ Unknown

16. Are there any existing or proposed underground or aboveground storage tanks (ASTs/USTs) on the subject property?
☐ Yes ☐ No ☒ Unknown (if **yes**, please describe)

17. Are there sensitive receptors (for example: children, elderly, people in poor health, and so forth) that occupy or will occupy the subject property?
☐ Yes ☐ No ☒ Unknown

Further Explain any Answers Requiring Clarification: _____

Helpful Documents Checklist

Pursuant to ASTM E 1527 §10.8, do you know whether any of the following documents exist related to the subject property, and if so, whether copies will be provided to PSI for review? If so, please submit such documentation to PSI as soon as practical. Please check all that apply.

☐ Environmental site assessment or investigation reports (for example: Phase I/II ESAs, RBCA corrective action reports, or self-directed or other cleanup activity reports)
☐ Environmental compliance audit reports; or risk assessments
☐ Environmental permits or hazardous waste generation notices or reports
☐ Registrations for above or underground storage tanks, or underground injection systems
☐ Safety data sheets (formerly known as Material Safety Data Sheets or MSDSs)
☐ Community right-to-know plans; safety plans; preparedness and prevention plans; spill prevention, countermeasure and control (SPCC) plans; etc.
☐ Notices or other correspondence from any governmental agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens on the property
☐ Geotechnical studies; or reports regarding hydrogeologic conditions on the property or vicinity
☐ Recorded environmental liens or activity and land use limitations (collectively, Property Use Limitations)

Kelly Dettmer
Name (Authorized User Representative)

Principal Development Manager
Title

Kelly Dettmer
Signature

7/27/2026
Date

LIEN/AUL DOCUMENTATION

No lien or activity and use limitation information, other than that presented on the User Questionnaire(s) and/or the ERIS Database Report, was obtained during this assessment.

PHYSICAL SETTING DOCUMENTATION

PSR
PHYSICAL SETTING REPORT

Property Information

Order Number:		26071500464p
Date Completed:		July 15, 2026
Project Number:		06032872-9
Project Property:		Project Bluestem - Reisig Project Bluestem - Reisig Tonganoxie KS 66086
Coordinates:		
	Latitude:	39.07343207
	Longitude:	-95.09106914
	UTM Northing:	4327006.5881 Meters
	UTM Easting:	319109.6262 Meters
	UTM Zone:	UTM Zone 15S
	Elevation:	925.46 ft
	Slope Direction:	SSW

Topographic Information....2
Hydrologic Information....4
Geologic Information....9
Soil Information....11
Wells and Additional Sources....19
Summary....20
Detail Report....21
Radon Information....23
Appendix....24
Liability Notice....26

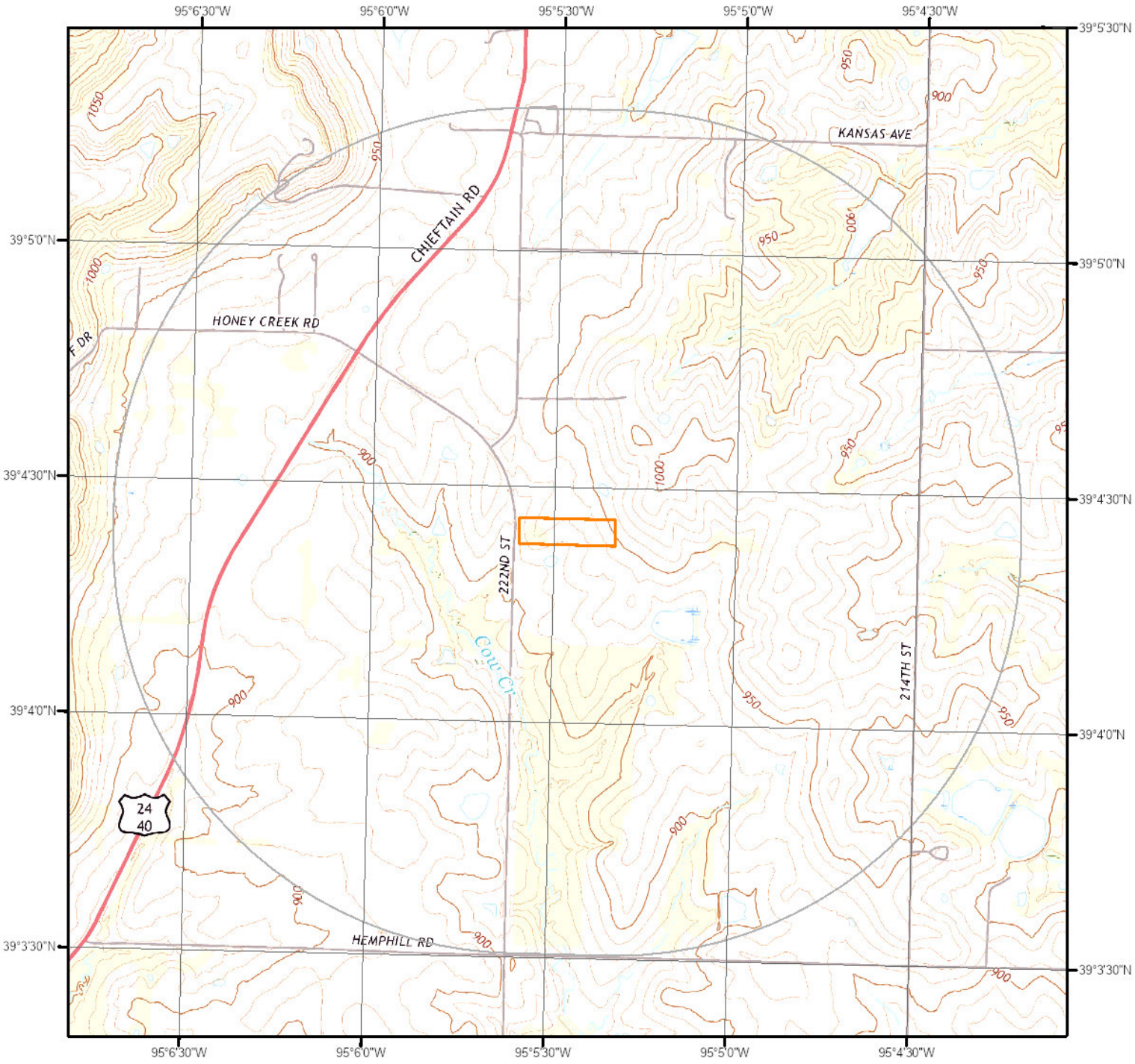
The ERIS ***Physical Setting Report - PSR*** provides comprehensive information about the physical setting around a site and includes a complete overview of topography and surface topology, in addition to hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, public water systems and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

Disclaimer

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

Topographic Information



Current USGS Topo (2022)

0 0.17 0.35 0.7 Miles

N

Quadrangle(s): Tonganoxie,KS

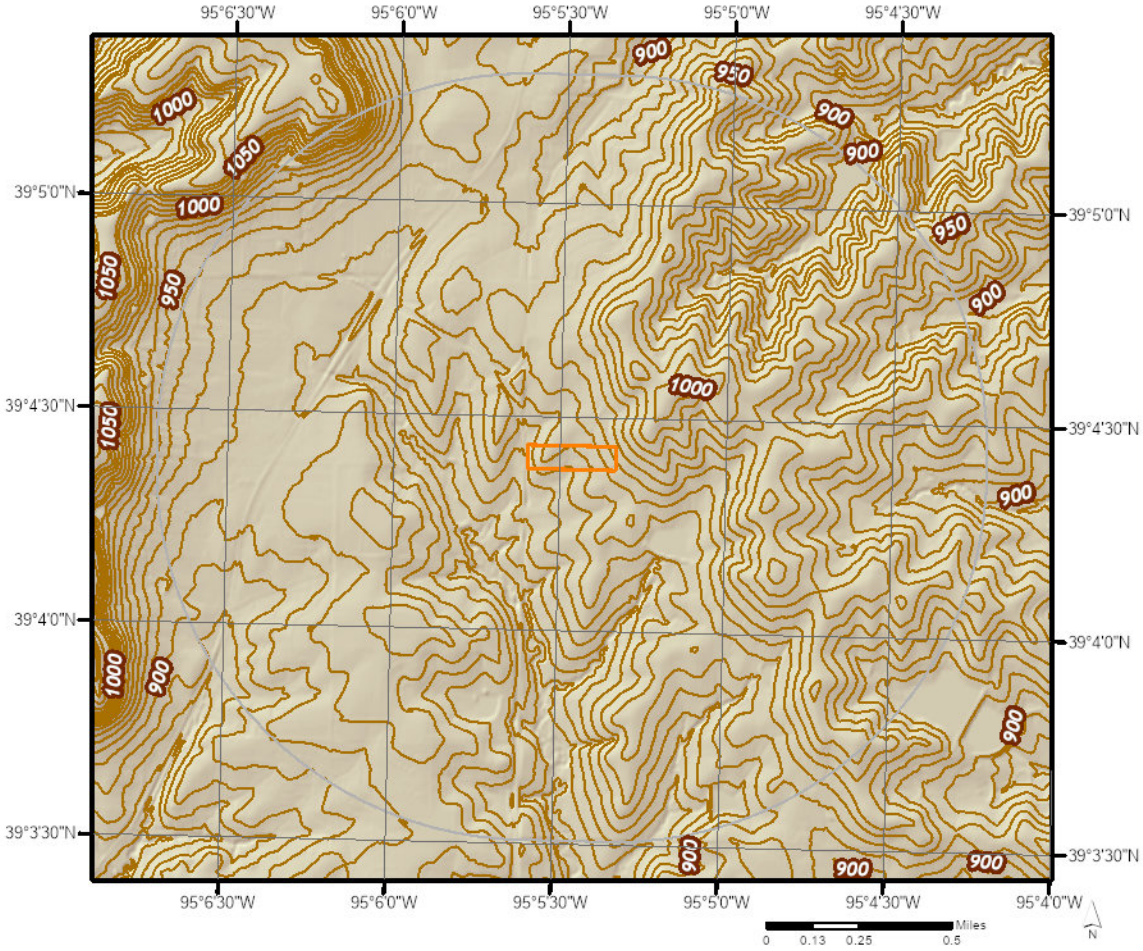
Source: USGS 7.5 Minute Topographic Map

Topographic Information

The previous topographic map(s) are created by seamlessly merging and cutting current USGS topographic data. Below are shaded relief map(s), derived from USGS elevation data to show surrounding topography in further detail.

Topographic information at project property:

Elevation:	925.46 ft
Slope Direction:	SSW



Hydrologic Information



Wetland

0 0.17 0.35 Miles

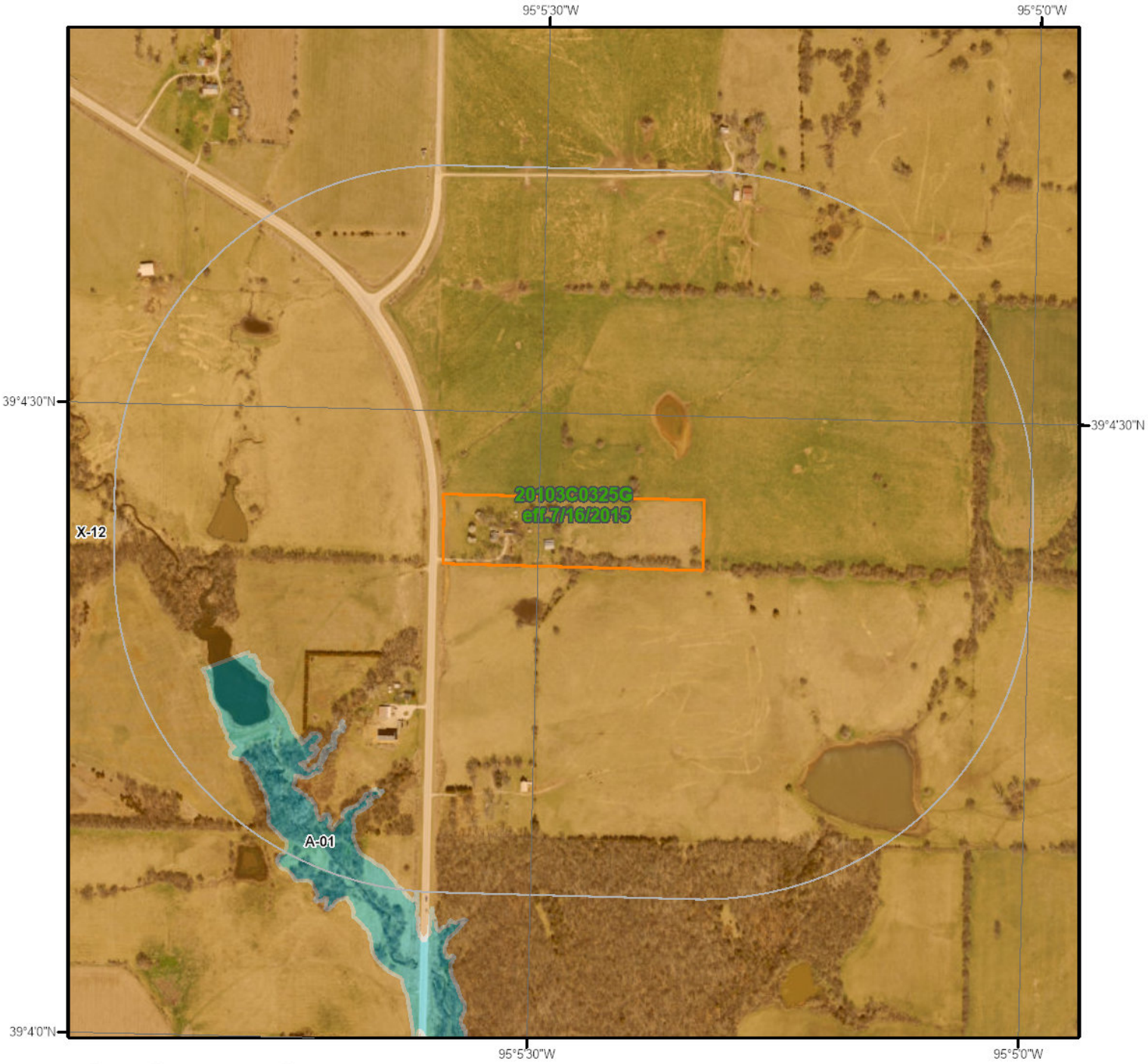
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Flood Hazard Zones

This map shows FEMA flood hazard zones based on FEMA's National Flood Hazard Layer. FIRM Panels are overlayed. An absent FIRM panel represents no data available.

Miles
0 0.1 0.2

N

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- Open Water

Quadrangle(s): Tonganoxie,KS

ERIS

Hydrologic Information

The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below.
For detailed Zone descriptions please click the link: https://floodadvocate.com/fema-zone-definitions

Available FIRM Panels in area:	20103C0325G(effective:2015-07-16)

Flood Zone A-01

Zone:	A
Zone subtype:	

Flood Zone X-12

Zone:	X
Zone subtype:	AREA OF MINIMAL FLOOD HAZARD

Hydrologic Information

FEMA Flood Zone Definitions

Special Flood Hazard Areas – High Risk

Special Flood Hazard Areas represent the area subject to inundation by 1-percent-annual chance flood. Structures located within the SFHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory flood insurance purchase requirements apply in these zones.

ZONE	DESCRIPTION
A	Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.
AE, A1-A30	Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones. (Zone AE is used on new and revised maps in place of Zones A1–A30.)
AH	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are 1–3 feet. BFEs derived from detailed hydraulic analyses are shown in this zone.
AO	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are 1–3 feet. Average flood depths derived from detailed hydraulic analyses are shown within this zone.
AR	Areas that result from the decertification of a previously accredited flood protection system that is determined to be in the process of being restored to provide base flood protection.
A99	Areas subject to inundation by the 1-percent-annual-chance flood event, but which will ultimately be protected upon completion of an under-construction Federal flood protection system. These are areas of special flood hazard where enough progress has been made on the construction of a protection system, such as dikes, dams, and levees, to consider it complete for insurance rating purposes. Zone A99 may be used only when the flood protection system has reached specified statutory progress toward completion. No BFEs or flood depths are shown.

Coastal High Hazard Areas – High Risk

Coastal High Hazard Areas (CHHA) represent the area subject to inundation by 1-percent-annual chance flood, extending from offshore to the inland limit of a primary front al dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. Structures located within the CHHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory purchase requirements apply in these zones.

ZONE	DESCRIPTION
V	Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards associated with storm-induced waves. Because detailed coastal analyses have not been performed, no BFEs or flood depths are shown.
VE, V1-V30	Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. BFEs derived from detailed hydraulic coastal analyses are shown within these zones. (Zone VE is used on new and revised maps in place of Zones V1–V30.)

Hydrologic Information

Moderate and Minimal Risk Areas

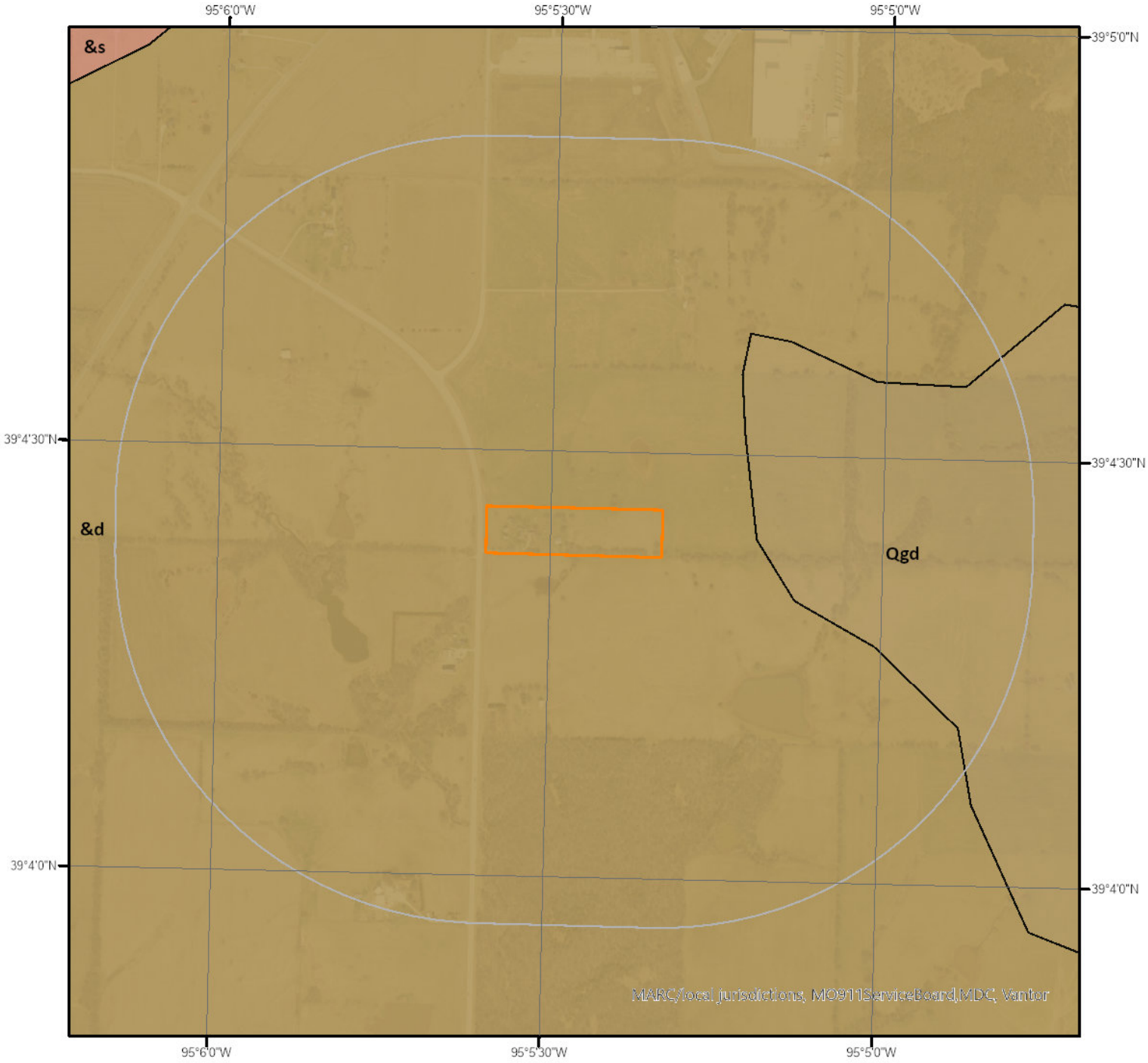
Areas of moderate or minimal hazard are studied based upon the principal source of flood in the area. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Local stormwater drainage systems are not normally considered in a community's flood insurance study. The failure of a local drainage system can create areas of high flood risk within these zones. Flood insurance is available in participating communities, but is not required by regulation in these zones. Nearly 25-percent of all flood claims filed are for structures located within these zones.

ZONE	DESCRIPTION
B, X (shaded)	Moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. No BFEs or base flood depths are shown within these zones. (Zone X (shaded) is used on new and revised maps in place of Zone B.)
C, X (unshaded)	Minimal risk areas outside the 1-percent and .2-percent-annual-chance floodplains. No BFEs or base flood depths are shown within these zones. (Zone X (unshaded) is used on new and revised maps in place of Zone C.)

Undetermined Risk Areas

ZONE	DESCRIPTION
D	Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

Geologic Information



Geologic Units

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.1 0.3 Miles

ERIS

Geologic Information

The previous page shows USGS geology information. Detailed information about each unit is provided below.

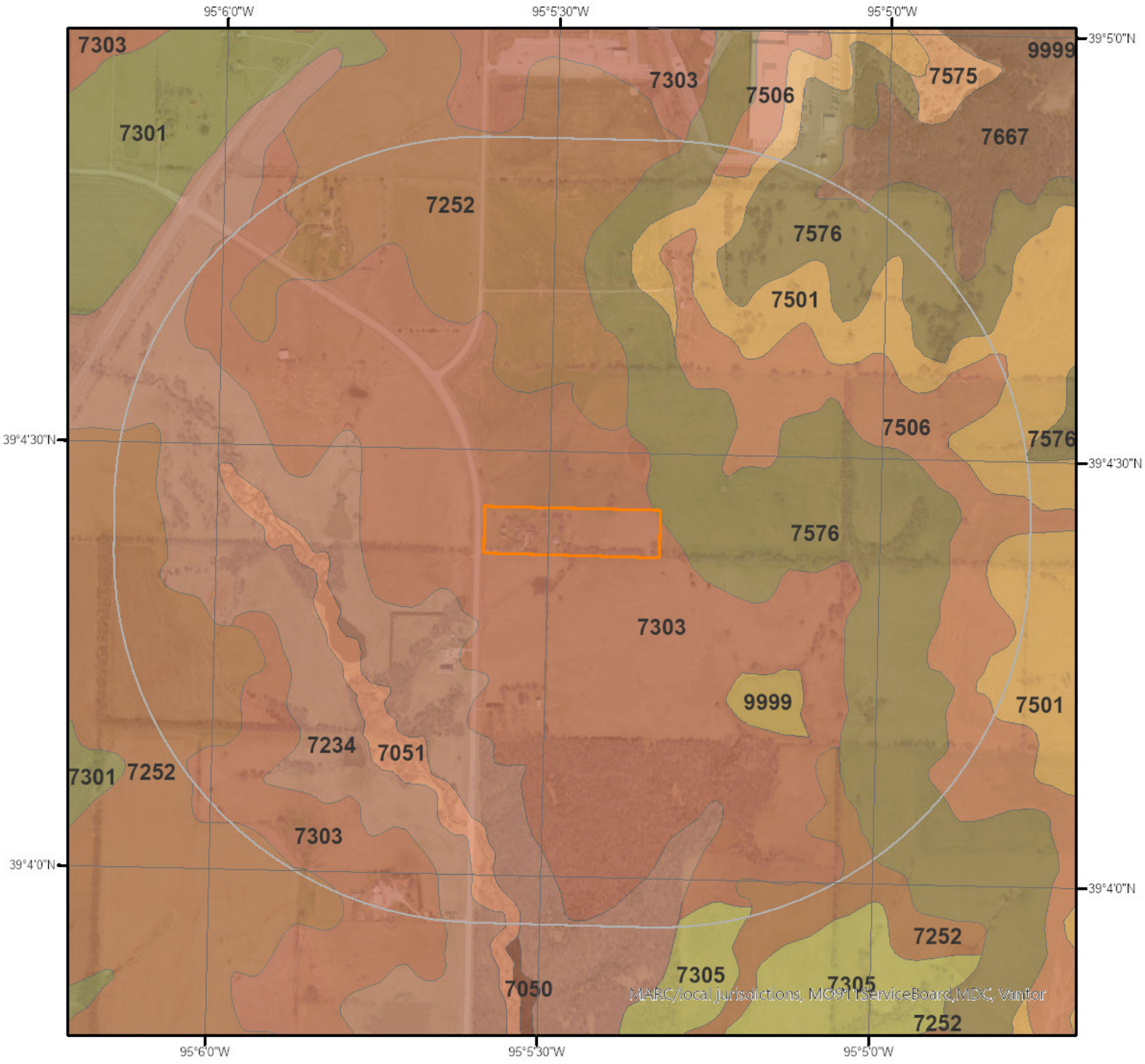
Geologic Unit &d

Unit Name:	Douglas Group
Unit Age:	Late Pennsylvanian- Virgilian
Primary Rock Type:	Shale
Secondary Rock Type:	Sandstone
Unit Description:	Lawrence FM (base LA)- mostly gray shale and sandstone with minor red shale, coal, gray limestone and conglomerate, thickness ranges from 140ft to 250 ft. Stranger FM- five members containing sandstone, shale, and minor limestone, coal and conglomerate ranging from 100 ft. to 180 ft. thickness.

Geologic Unit Qgd

Unit Name:	Drift
Unit Age:	Pleistocene
Primary Rock Type:	Sand
Secondary Rock Type:	Silt
Unit Description:	sand, silt, clay, and some gravel

Soil Information



SSURGO Soils

N

0 0.1 0.3 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information

The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

Map Unit 7051 (2.21%)

Map Unit Name:	Kennebec silt loam, frequently flooded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	107cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.

Major components are printed below

Kennebec(95%)

horizon Ap(0cm to 20cm)	Silt loam
horizon A(20cm to 104cm)	Silt loam
horizon AC(104cm to 137cm)	Silt loam
horizon C(137cm to 200cm)	Silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 7051 - Kennebec silt loam, frequently flooded

Component: Kennebec (95%)
The Kennebec component makes up 95 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains on river valleys. The parent material consists of alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is moderate. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 42 inches during February, March, April, May. Organic matter content in the surface horizon is about 3 percent. This component is in the R106XY013KS Loamy Lowland (pe 30-37) ecological site. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Muscotah (5%)
Generated brief soil descriptions are created for major soil components. The Muscotah soil is a minor component.

Map Unit 7234 (15.12%)

Map Unit Name:	Elmont silt loam, 3 to 7 percent slopes, eroded
Bedrock Depth - Min:	140cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Elmont(85%)

horizon Ap(0cm to 15cm)	Silt loam
horizon A(15cm to 29cm)	Silt loam
horizon Bt(29cm to 70cm)	Silty clay loam
horizon BC(70cm to 102cm)	Silty clay loam
horizon C(102cm to 140cm)	Silty clay loam
horizon Cr(140cm to 150cm)	Weathered bedrock

Component Description:

Soil Information

Minor map unit components are excluded from this report.

Map Unit: 7234 - Elmont silt loam, 3 to 7 percent slopes, eroded

Component: Elmont (85%)
The Elmont, eroded component makes up 85 percent of the map unit. Slopes are 3 to 7 percent. This component is on hillslopes on uplands. The parent material consists of residuum weathered from shale. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R106XY015KS Loamy Upland (pe 30-37) ecological site. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Martin (5%)
Generated brief soil descriptions are created for major soil components. The Martin, eroded soil is a minor component.

Component: Sibleyville (5%)
Generated brief soil descriptions are created for major soil components. The Sibleyville, eroded soil is a minor component.

Component: Vinland (5%)
Generated brief soil descriptions are created for major soil components. The Vinland, eroded soil is a minor component.

Map Unit 7252 (15.33%)

Map Unit Name:	Grundy silty clay loam, 1 to 3 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	36cm
Drainage Class - Dominant:	Somewhat poorly drained
Hydrologic Group - Dominant:	C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Grundy(90%)

horizon Ap(0cm to 15cm)	Silty clay loam
horizon BA(15cm to 28cm)	Silty clay loam
horizon Btg1(28cm to 36cm)	Silty clay
horizon Btg2(36cm to 107cm)	Silty clay
horizon Btg3(107cm to 130cm)	Silty clay loam
horizon C(130cm to 200cm)	Silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 7252 - Grundy silty clay loam, 1 to 3 percent slopes

Component: Grundy (90%)
The Grundy component makes up 90 percent of the map unit. Slopes are 1 to 3 percent. This component is on hillslope hillslopes on uplands uplands. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during February, March, April, May. Organic matter content in the surface horizon is about 4 percent. This component is in the R106XY007KS Clay Upland (pe 30-37) ecological site. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Sharpsburg (10%)
Generated brief soil descriptions are created for major soil components. The Sharpsburg soil is a minor component.

Map Unit 7303 (36.33%)

Map Unit Name:	Martin silty clay loam, 3 to 7 percent slopes, eroded

Soil Information

Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	36cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Martin(85%)

horizon Ap(0cm to 15cm)	Silty clay loam
horizon BA(15cm to 30cm)	Silty clay loam
horizon Bt1(30cm to 43cm)	Silty clay
horizon Bt2(43cm to 142cm)	Silty clay
horizon BC(142cm to 165cm)	Silty clay loam
horizon C(165cm to 200cm)	Silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 7303 - Martin silty clay loam, 3 to 7 percent slopes, eroded

Component: Martin (85%)
The Martin, eroded component makes up 85 percent of the map unit. Slopes are 3 to 7 percent. This component is on hillslopes on uplands. The parent material consists of colluvium derived from limestone and shale. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during February, March, April, May. Organic matter content in the surface horizon is about 4 percent. This component is in the R106XY015KS Loamy Upland (pe 30-37) ecological site. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Clime (5%)
Generated brief soil descriptions are created for major soil components. The Clime, eroded soil is a minor component.

Component: Pawnee (5%)
Generated brief soil descriptions are created for major soil components. The Pawnee, eroded soil is a minor component.

Component: Vinland (5%)
Generated brief soil descriptions are created for major soil components. The Vinland, eroded soil is a minor component.

Map Unit 7305 (0.18%)

Map Unit Name:	Martin silty clay loam, 7 to 12 percent slopes, eroded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	36cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Martin(85%)

horizon Ap(0cm to 15cm)	Silty clay loam
horizon BA(15cm to 28cm)	Silty clay loam
horizon Bt1(28cm to 37cm)	Silty clay
horizon Bt2(37cm to 142cm)	Silty clay
horizon BC(142cm to 165cm)	Silty clay loam
horizon C(165cm to 200cm)	Silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Soil Information

Map Unit: 7305 - Martin silty clay loam, 7 to 12 percent slopes, eroded

Component: Martin (85%)
The Martin, eroded component makes up 85 percent of the map unit. Slopes are 7 to 12 percent. This component is on hillslopes on uplands. The parent material consists of colluvium derived from limestone and shale. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during February, March, April, May. Organic matter content in the surface horizon is about 4 percent. This component is in the R106XY015KS Loamy Upland (pe 30-37) ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Vinland (5%)
Generated brief soil descriptions are created for major soil components. The Vinland, eroded soil is a minor component.

Component: Sibleyville (5%)
Generated brief soil descriptions are created for major soil components. The Sibleyville, eroded soil is a minor component.

Component: Sogn (3%)
Generated brief soil descriptions are created for major soil components. The Sogn, eroded soil is a minor component.

Component: Pawnee (2%)
Generated brief soil descriptions are created for major soil components. The Pawnee, eroded soil is a minor component.

Map Unit 7501 (5.57%)

Map Unit Name:	Pawnee clay loam, 4 to 8 percent slopes, eroded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	36cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Pawnee(85%)	
horizon Ap(0cm to 15cm)	Clay loam
horizon A(15cm to 22cm)	Clay loam
horizon Bt1(22cm to 31cm)	Clay
horizon Bt2(31cm to 105cm)	Clay
horizon BC(105cm to 130cm)	Clay loam
horizon C(130cm to 200cm)	Clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 7501 - Pawnee clay loam, 4 to 8 percent slopes, eroded

Component: Pawnee (85%)
The Pawnee, eroded component makes up 85 percent of the map unit. Slopes are 4 to 8 percent. This component is on hillslopes on uplands. The parent material consists of till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during March, April, May. Organic matter content in the surface horizon is about 2 percent. This component is in the R106XY074NE Clayey Upland ecological site. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Morrill (5%)
Generated brief soil descriptions are created for major soil components. The Morrill, eroded soil is a minor component.

Component: Shelby (4%)
Generated brief soil descriptions are created for major soil components. The Shelby, eroded soil is a minor component.

Soil Information

Component: Grundy (3%)
Generated brief soil descriptions are created for major soil components. The Grundy, eroded soil is a minor component.

Component: Wymore (2%)
Generated brief soil descriptions are created for major soil components. The Wymore, eroded soil is a minor component.

Component: Typic epiaquoll (1%)
Generated brief soil descriptions are created for major soil components. The Typic epiaquoll soil is a minor component.

Map Unit 7506 (7.27%)

Map Unit Name:	Pawnee clay loam, 1 to 4 percent slopes, eroded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	36cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Pawnee(90%)

horizon Ap(0cm to 15cm)	Clay loam
horizon A(15cm to 25cm)	Clay loam
horizon Bt1(25cm to 35cm)	Clay
horizon Bt2(35cm to 115cm)	Clay
horizon BC(115cm to 140cm)	Clay loam
horizon C(140cm to 200cm)	Clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 7506 - Pawnee clay loam, 1 to 4 percent slopes, eroded

Component: Pawnee (90%)
The Pawnee, eroded component makes up 90 percent of the map unit. Slopes are 1 to 4 percent. This component is on hillslopes on uplands. The parent material consists of till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during March, April, May. Organic matter content in the surface horizon is about 2 percent. This component is in the R106XY074NE Clayey Upland ecological site. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Grundy (5%)
Generated brief soil descriptions are created for major soil components. The Grundy, eroded soil is a minor component.

Component: Wymore (5%)
Generated brief soil descriptions are created for major soil components. The Wymore, eroded soil is a minor component.

Map Unit 7576 (17.23%)

Map Unit Name:	Shelby clay loam, 8 to 12 percent slopes, eroded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Shelby(91%)

horizon Ap(0cm to 15cm)	Clay loam
horizon BA(15cm to 22cm)	Clay loam
horizon Bt1(22cm to 30cm)	Clay loam
horizon Bt2(30cm to 90cm)	Clay loam
horizon BC(90cm to 120cm)	Clay loam
horizon C(120cm to 200cm)	Clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 7576 - Shelby clay loam, 8 to 12 percent slopes, eroded

Component: Shelby (91%)
The Shelby, eroded component makes up 91 percent of the map unit. Slopes are 8 to 12 percent. This component is on hillslopes on uplands. The parent material consists of till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This component is in the R106XY015KS Loamy Upland (pe 30-37) ecological site. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Elmont (3%)
Generated brief soil descriptions are created for major soil components. The Elmont, eroded soil is a minor component.

Component: Olmitz (3%)
Generated brief soil descriptions are created for major soil components. The Olmitz soil is a minor component.

Component: Pawnee (2%)
Generated brief soil descriptions are created for major soil components. The Pawnee, eroded soil is a minor component.

Component: Aquolls (1%)
Generated brief soil descriptions are created for major soil components. The Aquolls soil is a minor component.

Map Unit 7667 (0.1%)

Map Unit Name:	Vinland-Rock outcrop complex, 15 to 40 percent slopes
Bedrock Depth - Min:	0cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Vinland(55%)	
horizon A(0cm to 19cm)	Silt loam
horizon Bw(19cm to 30cm)	Silty clay loam
horizon C(30cm to 40cm)	Silty clay loam
Rock outcrop(30%)	
horizon R(0cm to 200cm)	Bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 7667 - Vinland-Rock outcrop complex, 15 to 40 percent slopes

Component: Vinland (55%)
The Vinland component makes up 55 percent of the map unit. Slopes are 15 to 40 percent. This component is on hillslopes on uplands. The parent material consists of sandy and silty residuum weathered from shale. Depth to a root restrictive layer, bedrock,

paralithic, is 15 to 19 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This component is in the R106XY031NE Shallow Savannah ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Rock outcrop (30%)
Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

Component: Wamego (5%)
Generated brief soil descriptions are created for major soil components. The Wamego soil is a minor component.

Component: Bendena (5%)
Generated brief soil descriptions are created for major soil components. The Bendena soil is a minor component.

Component: Oska (5%)
Generated brief soil descriptions are created for major soil components. The Oska soil is a minor component.

Map Unit 9999 (0.67%)

Map Unit Name: Water

No more attributes available for this map unit

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 9999 - Water

Component: Water (100%)
Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Wells and Additional Sources



Wells & Additional Sources

N

0 0.1 0.2 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources Summary

Federal Sources

Public Water Systems Violations and Enforcement Data

Map Key	ID	Distance (ft)	Direction
	No records found		

Safe Drinking Water Information System (SDWIS)

Map Key	ID	Distance (ft)	Direction
	No records found		

USGS National Water Information System

Map Key	Loc Identifier	Distance (ft)	Direction
2	USGS-390417095052501	574.29	S

State Sources

Oil and Gas Wells

Map Key	ID	Distance (ft)	Direction
	No records found		

Water Well Completion Records Database

Map Key	Well ID	Distance (ft)	Direction
1	367434	0.00	-
1	35654	0.00	-

Wells and Additional Sources Detail Report

USGS National Water Information System

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	S	0.11	574.29	921.28	FED USGS

Loc Identifier:	USGS-390417095052501	Well Depth:	160.0
Date Drilled:		Well Depth Unit:	ft
Latitude:	39.0713909899314	Well Hole Depth:	
Longitude:	-95.0905246719801	Well Hole Dpth Unt:	
Loc Horz Coord Std:	NAD83	Loc Country Name:	United States of America
Loc Latitude Stnd:	39.0713909899314	Loc HUC Code:	102701040406
Loc Longitude Stnd:	-95.0905246719801	Loc Aquifer Code:	
Loc Tribl Land Ind:		Loc Aquifer Conte:	
Loc Tribal Land:		Loc Aquifer Desc:	
Location Welltype:		Alt Loc Identif A:	
Alt Loc Identifier:		Alt Loc Identif B:	
Alt Loc Identif 1:		Alt Loc Identif C:	
Alt Loc Identifi 2:			
Site Type:	Well		
Formation Type:			
Reporting Agency:	U.S. Geological Survey		
Station Name:	11S 21E 21CCCD01		

Water Well Completion Records Database

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	-	0.00	0.00	934.46	WATER WELLS

Well ID:	367434	County:	Leavenworth
Well K ID:	1040486357	Township:	11
Other ID:		Twn Dir:	S
DWR No:		Range:	21
Contractors Lic No:		Range Dir:	E
Status:	CONSTRUCTED	Section:	21
Plugged Date:	14-Aug-1972	Spot:	SW SW SW
Well Depth:	160	Longitude:	-95.0920722
Well Use:	Domestic	Latitude:	39.0738888
Static Depth:	90	Long Lat Type:	From PLSS
Elev:	928	NAD83 Longitude:	-95.0923191
Est Yield:	20	NAD83 Latitude:	39.0738909
Contam Source Type:		Scanned:	Yes
Contam Source Dir:		Owner:	Nichols, H.T.
Contam Source Dist:			
Driller:	Breuer Drilling Co.		
Directions:	Tonganoxie		
URL:	https://chasm.kgs.ku.edu/ords/wwc5.wwc5d2.well_details?well_id=367434		

Wells and Additional Sources Detail Report

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	-	0.00	0.00	934.46	WATER WELLS

Well ID:	35654	County:	Leavenworth
Well K ID:	1040198907	Township:	11
Other ID:		Twn Dir:	S
DWR No:		Range:	21
Contractors Lic No:	182	Range Dir:	E
Status:	CONSTRUCTED	Section:	21
Plugged Date:	16-Jan-1990	Spot:	SW SW SW
Well Depth:	140	Longitude:	-95.0920722
Well Use:	Domestic	Latitude:	39.0738888
Static Depth:	75	Long Lat Type:	From PLSS
Elev:		NAD83 Longitude:	-95.0923191
Est Yield:	25	NAD83 Latitude:	39.0738909
Contam Source Type:	Septic Tank	Scanned:	Yes
Contam Source Dir:		Owner:	Tailgate Ranch
Contam Source Dist:	0		
Driller:	Strader Drilling Co., Inc.		
Directions:	from Tonganoxie: 1.75 mi S		
URL:	https://chasm.kgs.ku.edu/ords/wwc5.wwc5d2.well_details?well_id=35654		

Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for *LEAVENWORTH* County: **1**

Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Federal Area Radon Information for *LEAVENWORTH* County

No Measures/Homes:	28
Geometric Mean:	1.6
Arithmetic Mean:	2.5
Median:	2
Standard Deviation:	2
Maximum:	7.3
% >4 pCi/L:	18
% >20 pCi/L:	0
Notes on Data Table:	TABLE 1. Screening indoor radon data from the EPA/State Residential Radon Survey of Kansas conducted during 1986-87. Data represent 2-7 day charcoal canister measurements from the lowest level of each home ested.

Appendix

Federal Sources

FEMA National Flood Hazard Layer — **FEMA FLOOD**

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

Indoor Radon Data — **INDOOR RADON**

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

Public Water Systems Violations and Enforcement Data — **PWSV**

This list of drinking water violations and enforcement actions is sourced from the U.S Environmental Protection Agency's (EPA) Enforcement and Compliance History Online (ECHO) system that incorporates Public Water Systems data from EPA's Safe Drinking Water Information System (SDWIS) database, as part of the national download of Safe Drinking Water Act (SDWA) data. SDWIS contains information on public water systems from the Public Water System Supervision (PWSS) Program, including monitoring, enforcement, and violation data related to requirements established by the SWDA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Radon Zone Level — **RADON ZONE**

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

Safe Drinking Water Information System (SDWIS) — **SDWIS**

This national download of Safe Drinking Water Act (SDWA) data is sourced from the U.S Environmental Protection Agency's (EPA) Enforcement and Compliance History Online (ECHO) system that incorporates Public Water Systems data from EPA's Safe Drinking Water Information System (SDWIS) database. SDWIS contains information on public water systems from the Public Water System Supervision (PWSS) Program related to requirements established by the Safe Drinking Water Act (SDWA). Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Soil Survey Geographic database — **SSURGO**

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

U.S. Fish & Wildlife Service Wetland Data — **US WETLAND**

The U.S. Fish & Wildlife Service Wetland layer represents the approximate location and type of wetlands and deepwater habitats in the United States.

USGS Current Topo — **US TOPO**

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

USGS Geology — **US GEOLOGY**

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

USGS National Water Information System — **FED USGS**

The U.S. Geological Survey's (USGS) National Water Information System (NWIS) is the nation's principal repository of water resources data. The data includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data. This NWIS database information is obtained through the Water Quality Data Portal (WQP). The WQP

is a cooperative service sponsored by the USGS, the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). WQX3.0 is the newest version of the data standard that is delivered from the WQP, and this updated version holds new profiles containing USGS data added since March 11, 2024 sourced from their beta version website.

State Sources

Oil and Gas Wells **OGW**

List of Oil and Gas well records in Kansas made available by the Kansas Geological Survey.

Water Well Completion Records Database **WATER WELLS**

The Water Well Completion Records (WWC5) is provided by Kansas Geological Survey.

Liability Notice

Reliance on information in Report: The Physical Setting Report (PSR) DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a review of environmental databases and physical characteristics for the site or adjacent properties.

License for use of information in Report: No page of this report can be used without this cover page, this notice and the project property identifier. The information in Report(s) may not be modified or re-sold.

Your Liability for misuse: Using this Service and/or its reports in a manner contrary to this Notice or your agreement will be in breach of copyright and contract and ERIS may obtain damages for such mis-use, including damages caused to third parties, and gives ERIS the right to terminate your account, rescind your license to any previous reports and to bar you from future use of the Service.

No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Inc. ("ERIS") using various sources of information, including information provided by Federal and State government departments. The report applies only to the address and up to the date specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. Although ERIS has endeavored to present you with information that is accurate, ERIS Information Inc. disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Trademark and Copyright: You may not use the ERIS trademarks or attribute any work to ERIS other than as outlined above. This Service and Report(s) are protected by copyright owned by ERIS Information Inc. Copyright in data used in the Service or Report(s) (the "Data") is owned by ERIS or its licensors. The Service, Report(s) and Data may not be copied or reproduced in whole or in any substantial part without prior written consent of ERIS.

HISTORICAL DOCUMENTATION: TOPOGRAPHIC MAPS

TOPOGRAPHIC MAPS

Project Property:	Project Bluestem - Reisig
	Project Bluestem - Reisig Tonganoxie KS 66086
Project No:	06032872-9
Requested By:	Intertek PSI
Order No:	26071500464
Date Completed:	July 15, 2026

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

We have searched USGS collections of current topographic maps and historical topographic maps for the project property. Below is a list of maps found for the project property and adjacent area. Maps are from 7.5 and 15 minute topographic map series, if available.

Year	Map Series
1951	7.5
1970	7.5
1978	7.5
2009	7.5
2012	7.5
2016	7.5
2018	7.5
2022	7.5

Topographic Map Symbology for the maps may be available in the following documents:

Pre-1947

Page 223 of 1918 Topographic Instructions

Page 130 of 1928 Topographic Instructions

1947-2009

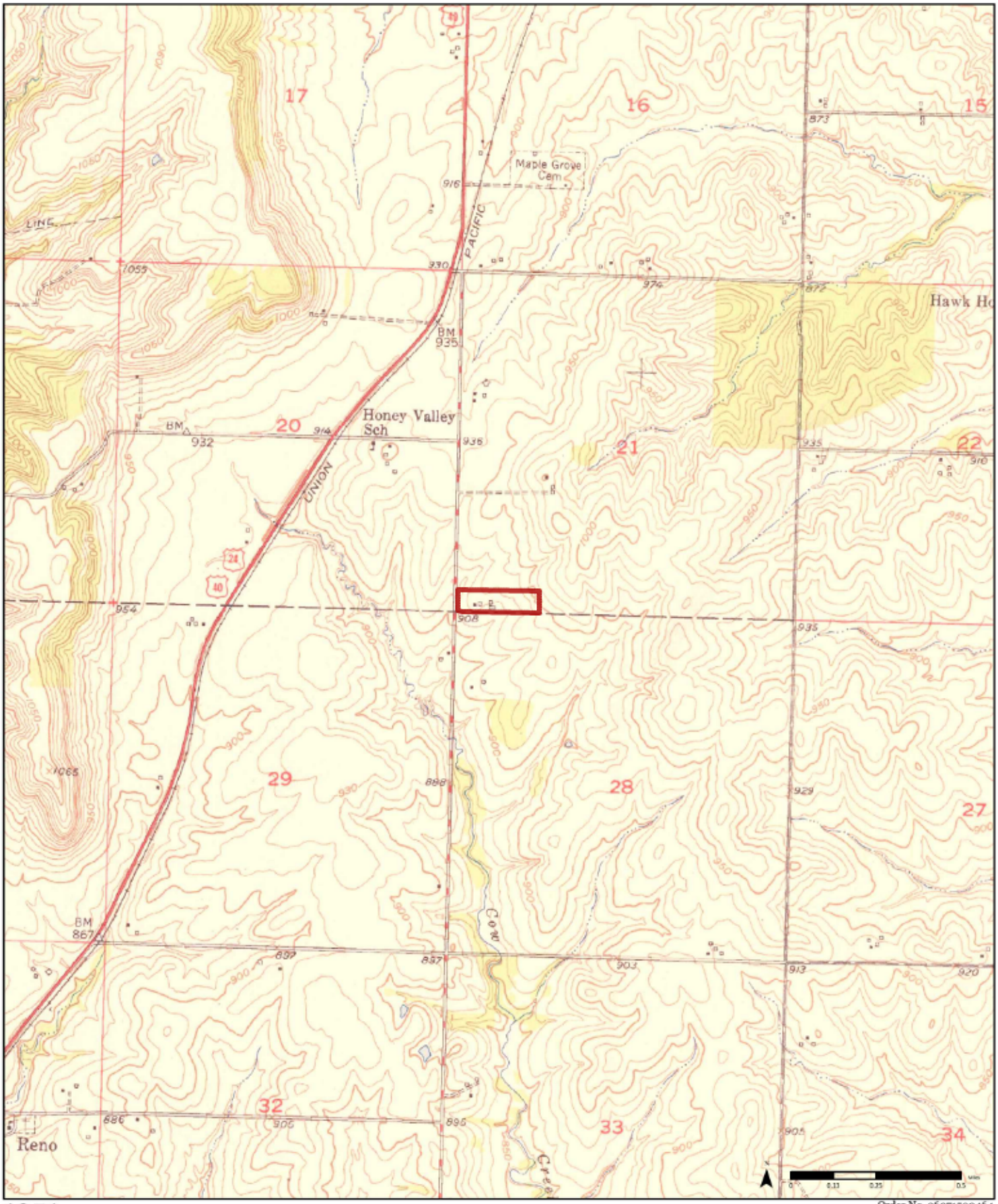
Topographic Map Symbols

2009-present

US Topo Map Symbols

Topographic Maps included in this report are produced by the USGS and are to be used for research purposes including a phase I report. Maps are not to be resold as commercial property.

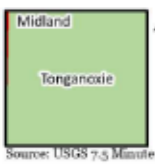
No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Inc.(in the US) and ERIS Information Limited Partnership (in Canada), both doing business as 'ERIS', using Topographic Maps produced by the USGS. This maps contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.



1951 (7-1951)

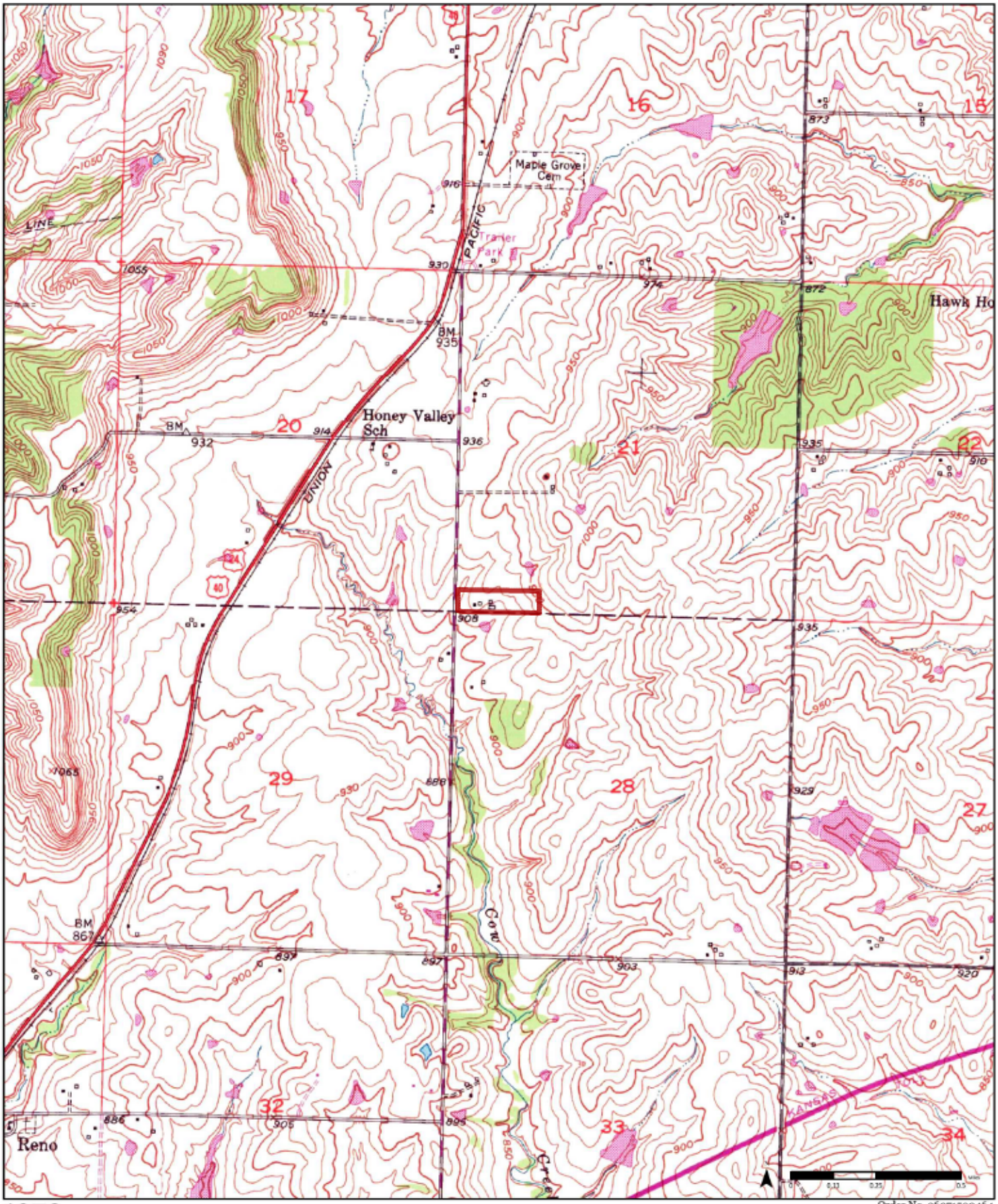
Aerial Photo Year: 1948

Order No. 26071500464



Available Quadrangle(s): Tonganoxie, KS(1-1951)

Source: USGS 7.5 Minute Topographic Map

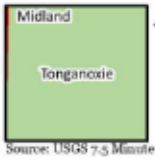


1970 (1-1970)

Aerial Photo Year: 1970

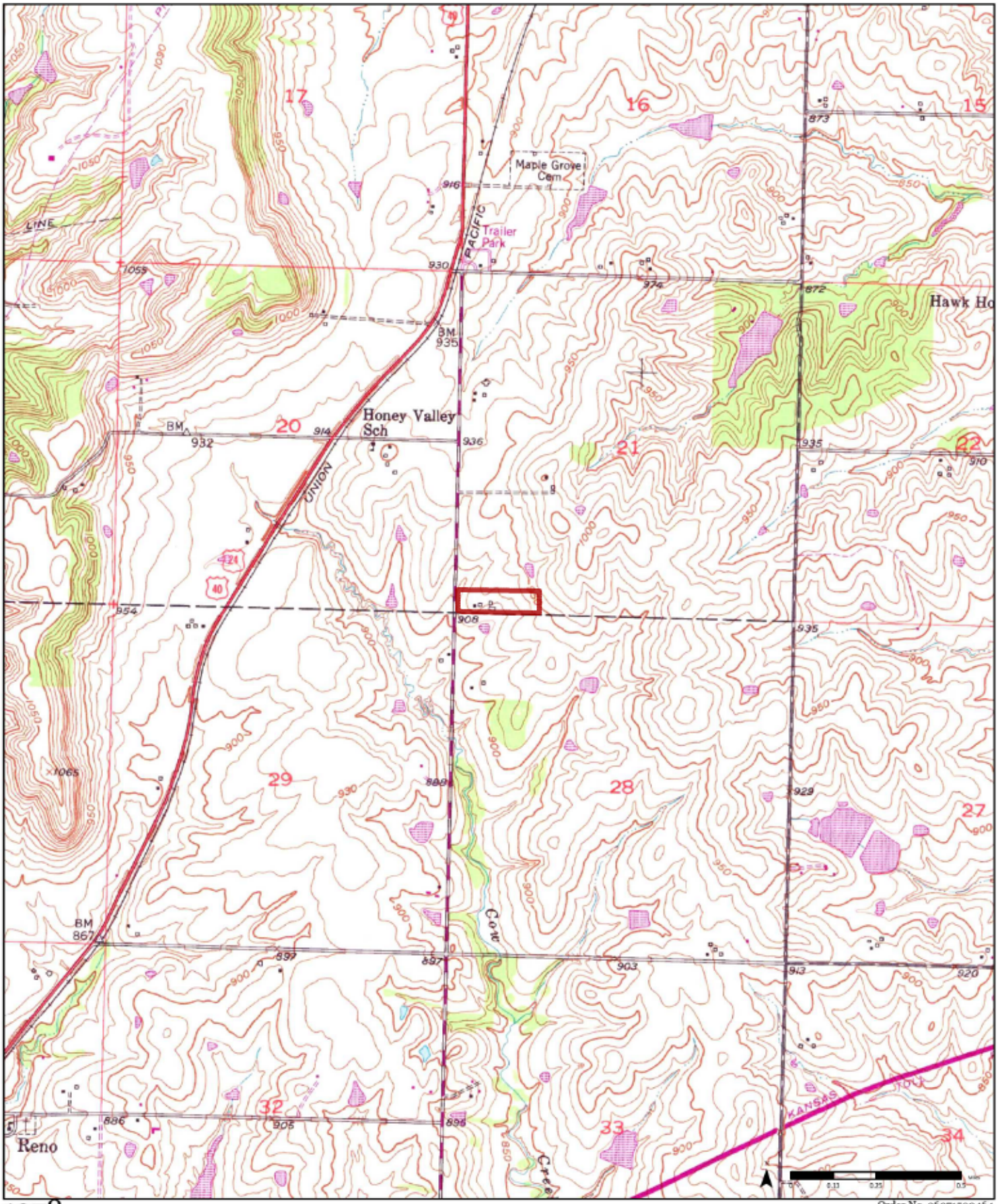
Photo Revision Year: 1970

Order No. 26071500464



Available Quadrangle(s): Tonganoxie, KS(1-1970)

Source: USGS 7.5 Minute Topographic Map

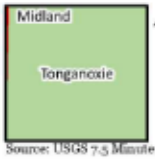


1978 (1-1978)

Aerial Photo Year: 1977

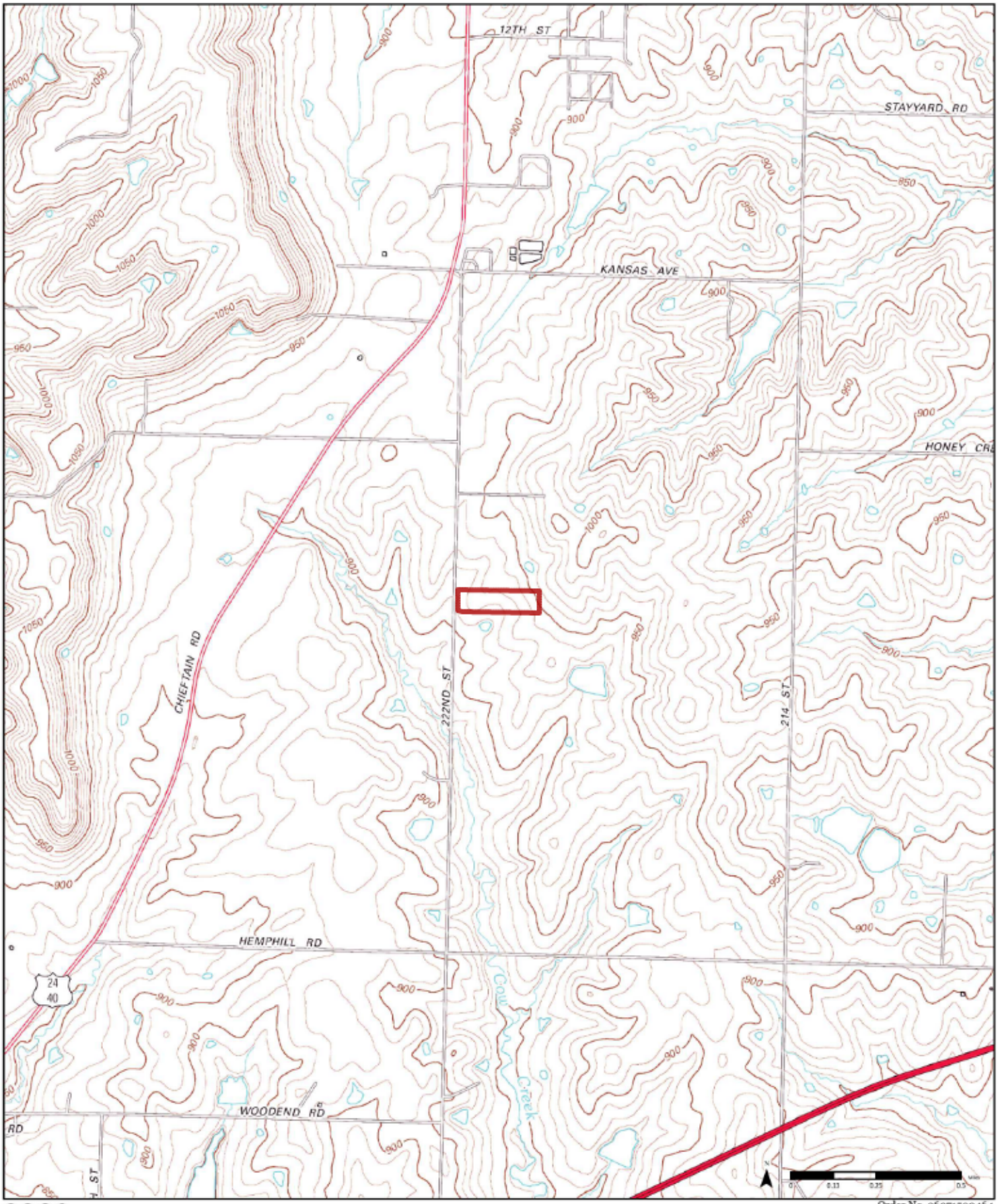
Photo Revision Year: 1978

Order No. 26071500464



Available Quadrangle(s): Tonganoxie, KS(1-1978)

Source: USGS 7.5 Minute Topographic Map



2009

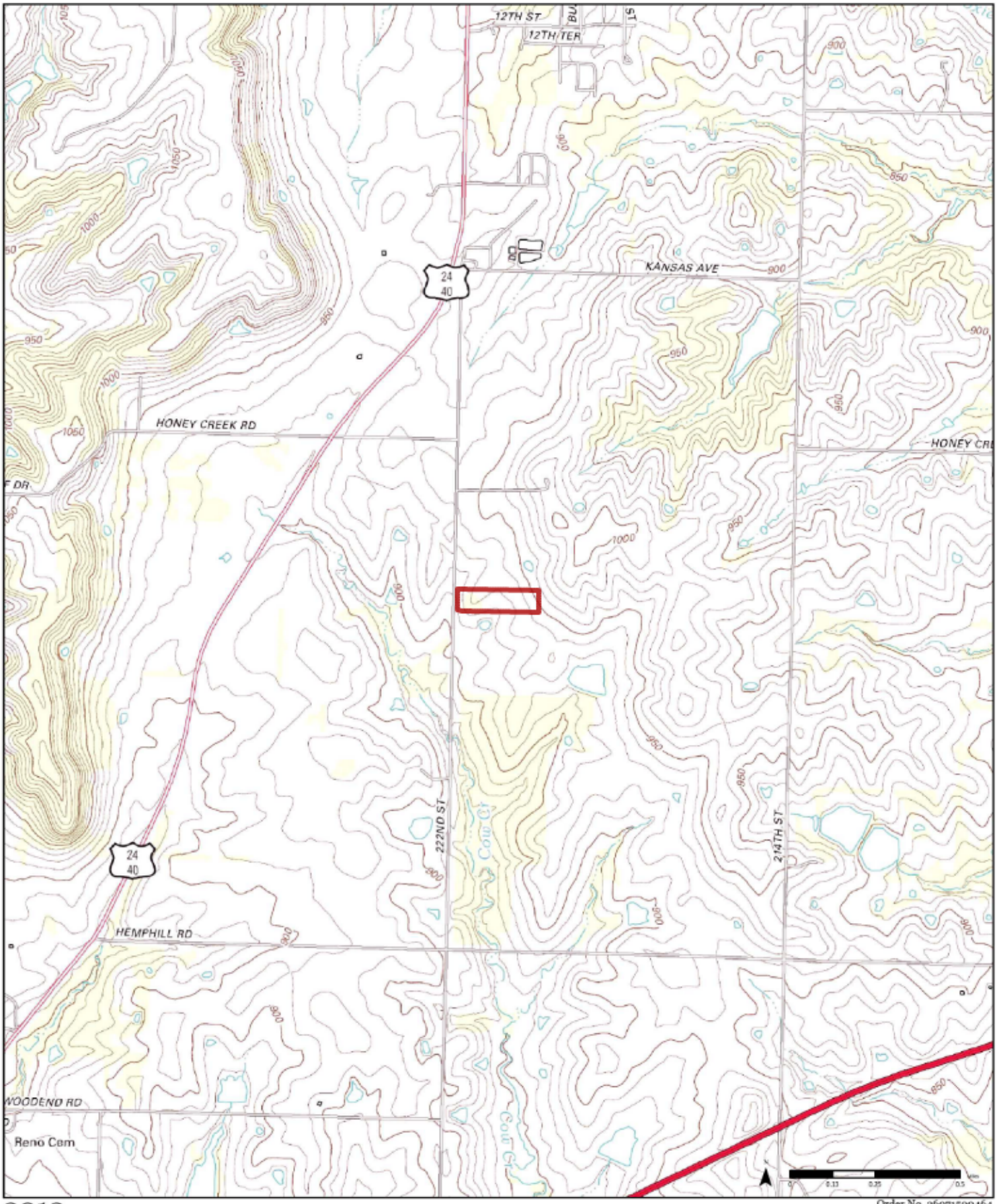
Order No. 26071500464

Midland

Tonganoxie

Available Quadrangle(s): Tonganoxie, KS

Source: USGS 7.5 Minute Topographic Map



2012

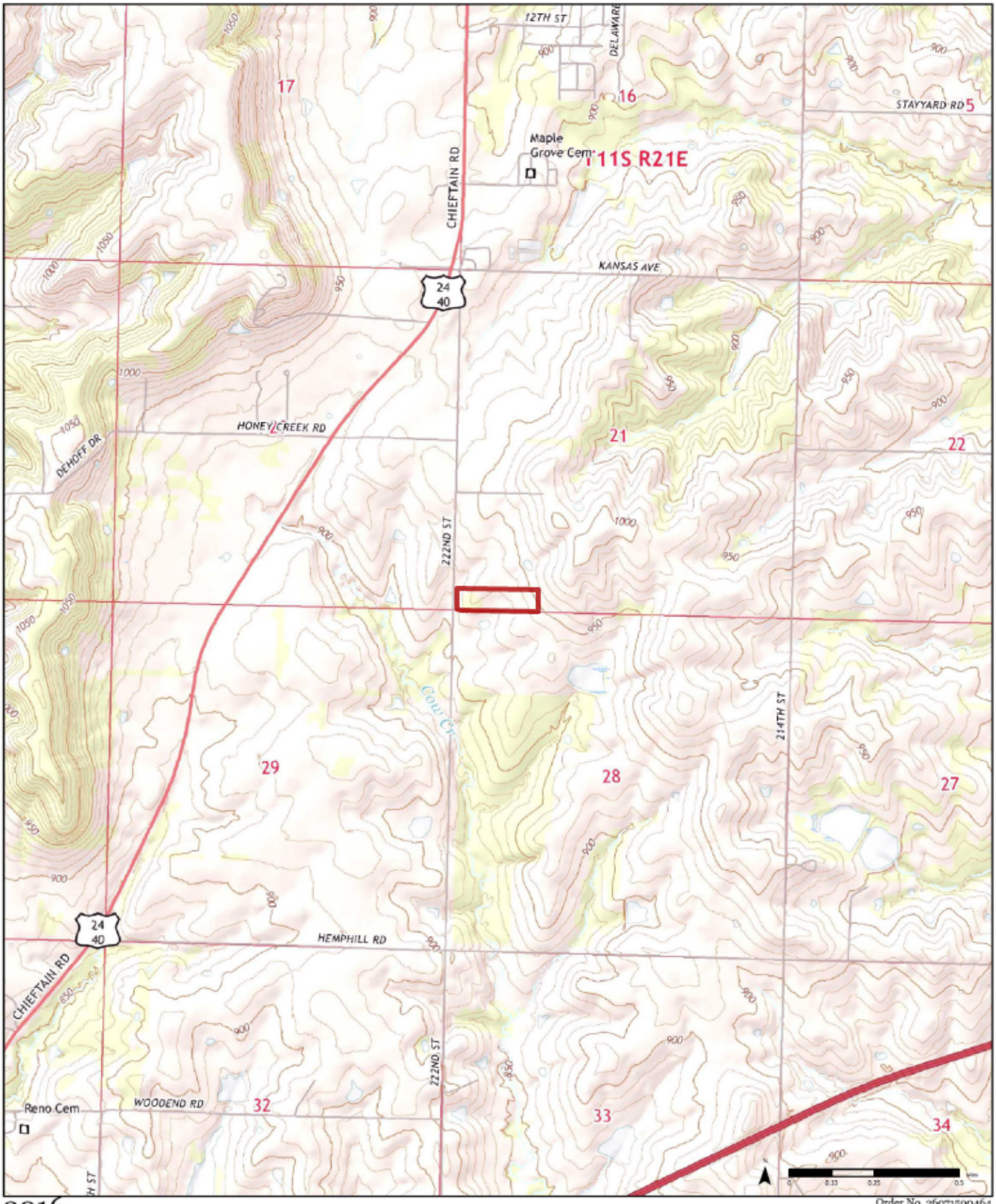
Order No. 26071500464

Midland

Tonganoxie

Available Quadrangle(s): Tonganoxie, KS

Source: USGS 7.5 Minute Topographic Map



2016

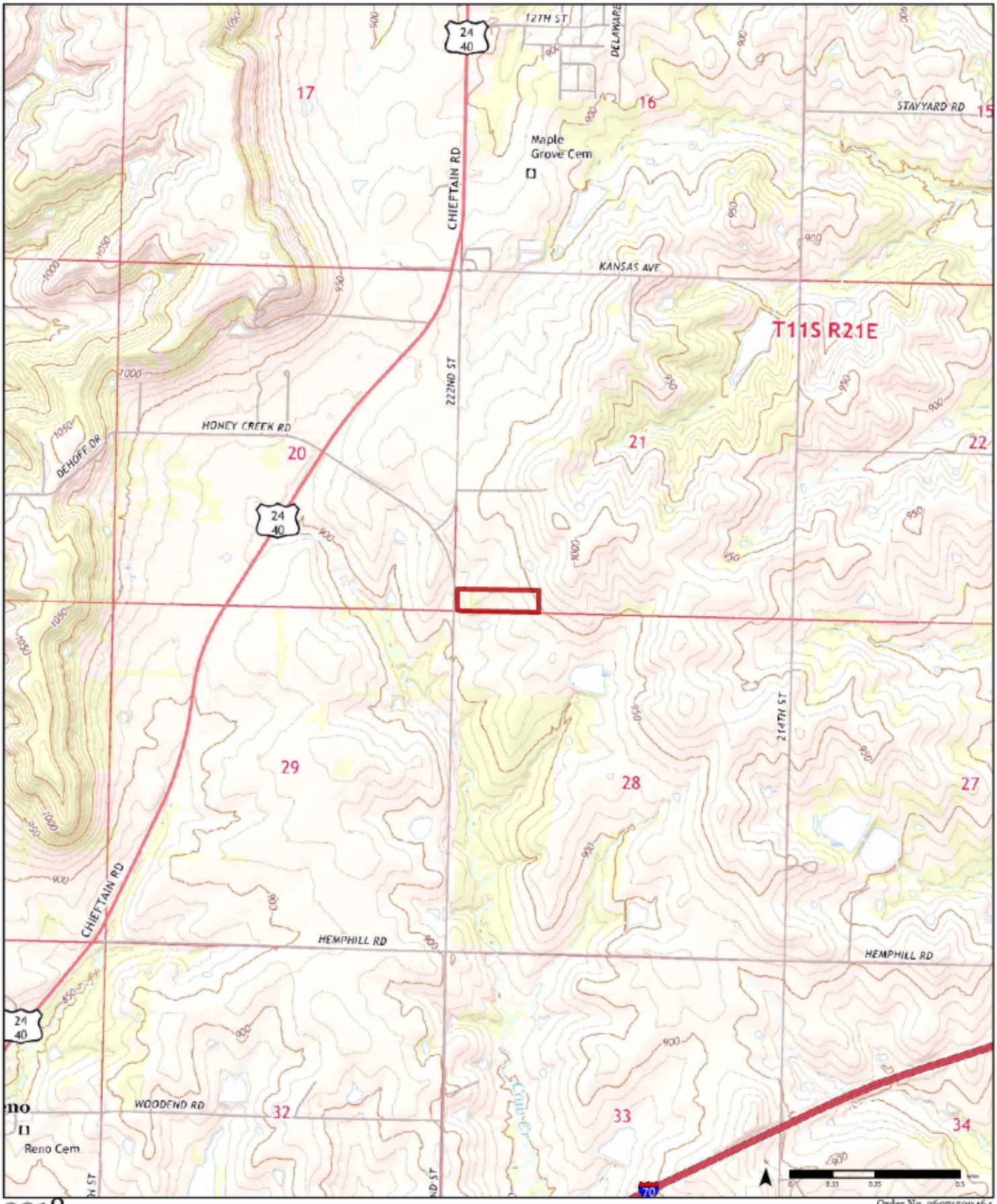
Order No. 26071500464

Midland

Tonganoxie

Available Quadrangle(s): Tonganoxie, KS

Source: USGS 7.5 Minute Topographic Map



2018

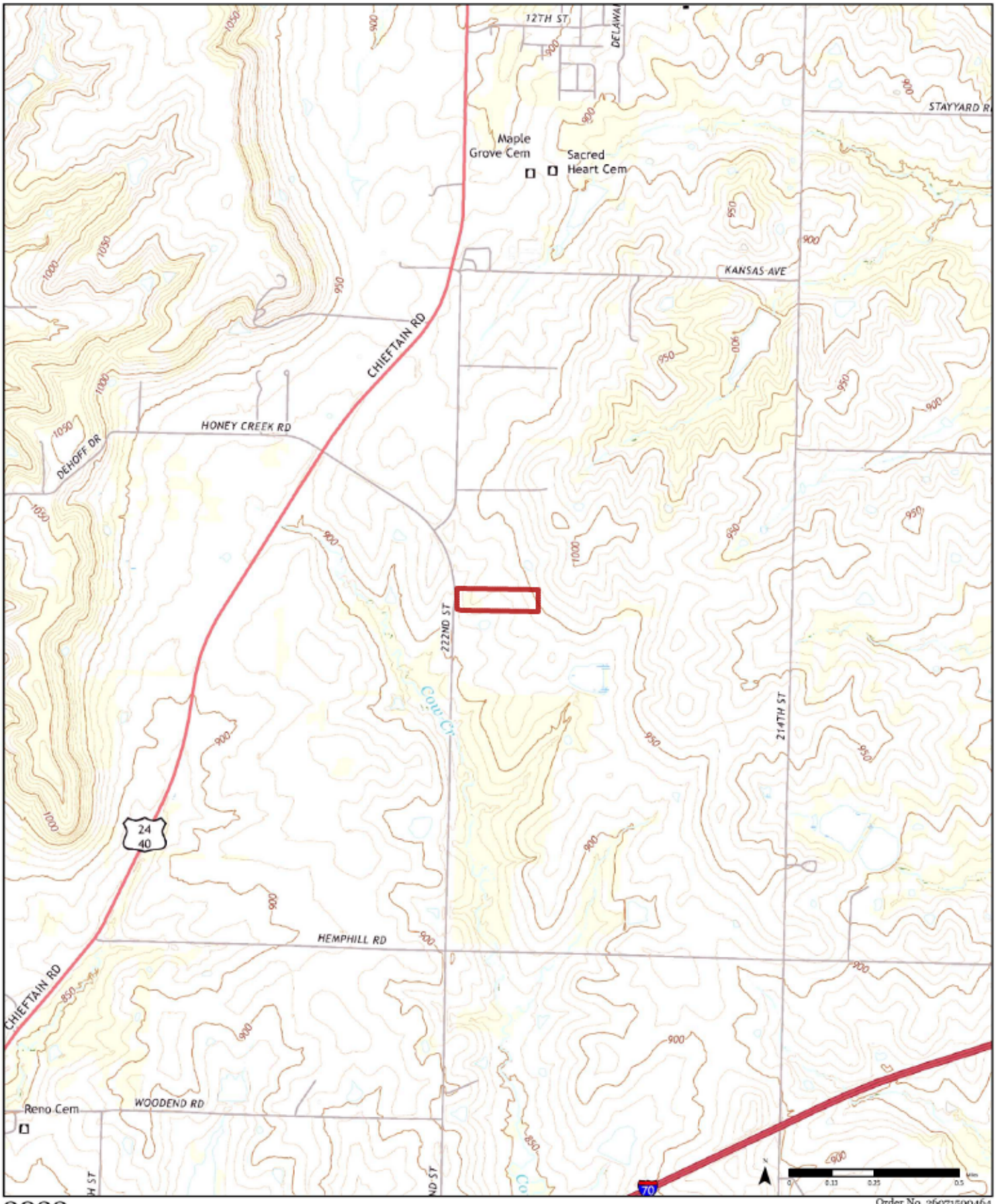
Order No. 26071500464

Midland

Tonganoxie

Available Quadrangle(s): Tonganoxie, KS

Source: USGS 7.5 Minute Topographic Map



2022

Order No. 26071500464

Midland

Tonganoxie

Available Quadrangle(s): Tonganoxie, KS

Source: USGS 7.5 Minute Topographic Map

HISTORICAL DOCUMENTATION: AERIAL PHOTOGRAPHS

HISTORICAL AERIALS

Project Property: Project Bluestem - Reisig
Project Bluestem - Reisig
Tonganoxie KS 66086

Project No: 06032872-9

Requested By: Intertek PSI

Order No: 26071500464

Date Completed: July 20,2026

Aerial Maps included in this report are produced by the sources listed above and are to be used for research purposes including a phase I report. Maps are not to be resold as commercial property. ERIS provides no warranty of accuracy or liability. The information contained in this report has been produced using aerial photos listed in above sources by ERIS Information Inc. (in the US) and ERIS Information Limited Partnership (in Canada), both doing business as 'ERIS'. The maps contained in this report do not purport to be and do not constitute a guarantee of the accuracy of the information contained herein. Although ERIS has endeavored to present information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Date	Source	Scale	Comments
1937	Agricultural Stabilization & Conserv. Service	1" = 500'	
1948	United States Geological Survey	1" = 500'	
1959	Agricultural Stabilization & Conserv. Service	1" = 500'	
1967	United States Geological Survey	1" = 500'	
1977	United States Geological Survey	1" = 500'	
1985	United States Geological Survey	1" = 500'	
1991	United States Geological Survey	1" = 500'	
2002	United States Geological Survey	1" = 500'	
2003	United States Department of Agriculture	1" = 500'	
2004	United States Department of Agriculture	1" = 500'	
2005	United States Department of Agriculture	1" = 500'	
2006	United States Department of Agriculture	1" = 500'	
2008	United States Department of Agriculture	1" = 500'	
2010	United States Department of Agriculture	1" = 500'	
2012	United States Department of Agriculture	1" = 500'	
2014	United States Department of Agriculture	1" = 500'	
2015	United States Department of Agriculture	1" = 500'	
2017	United States Department of Agriculture	1" = 500'	
2019	United States Department of Agriculture	1" = 500'	
2021	United States Department of Agriculture	1" = 500'	
2023	United States Department of Agriculture	1" = 500'	
2025	United States Department of Agriculture	1" = 500'	



Year: 1937
Source: ASCS
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 1948
Source: USGS
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 1959
Source: ASCS
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 1967
Source: USGS
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 1977
Source: USGS
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 1985
Source: USGS
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 1991
Source: USGS
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 2002
Source: USGS
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 2003
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 2004
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 2005
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 2006
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 2008
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS

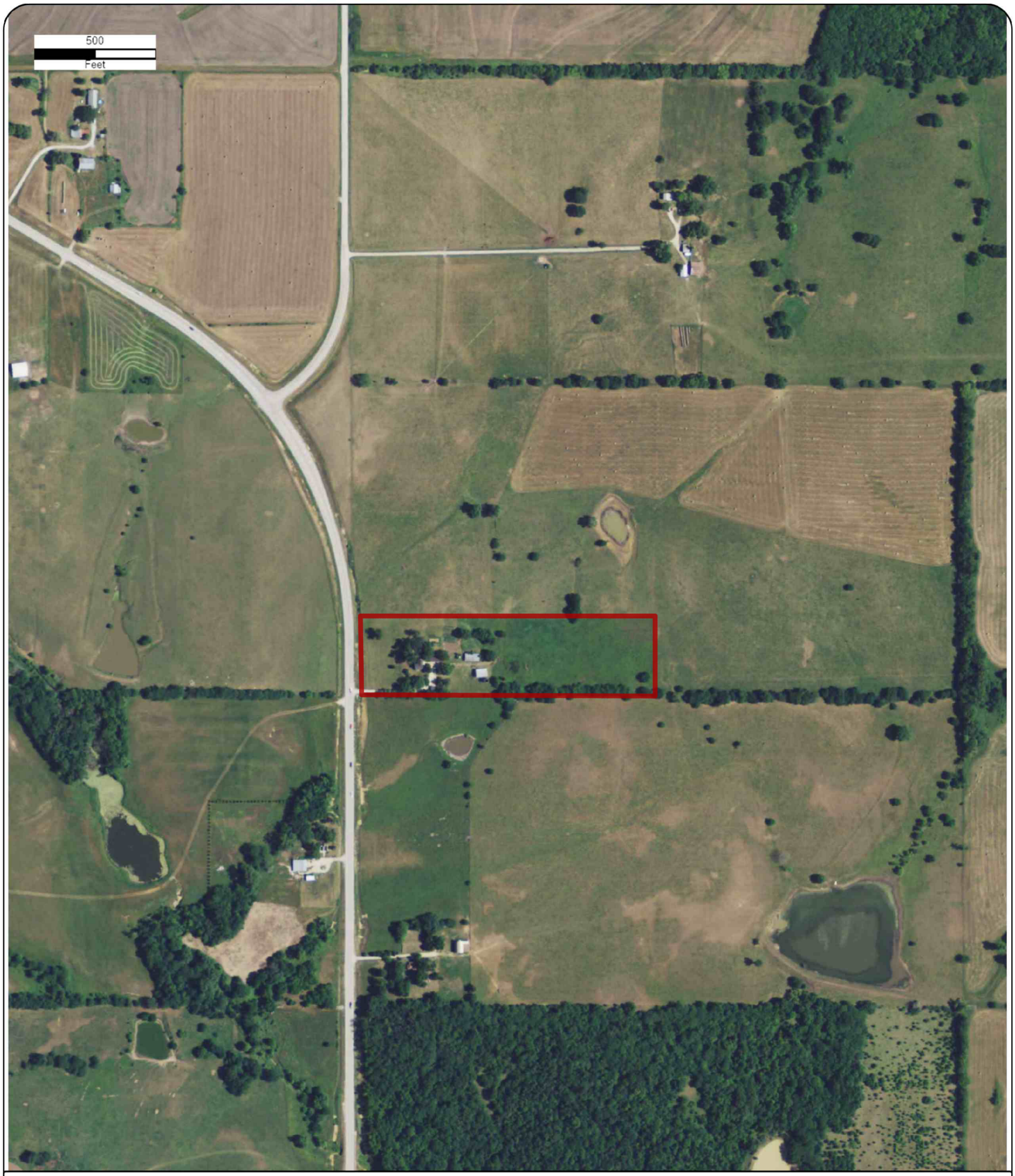


Year: 2010
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS

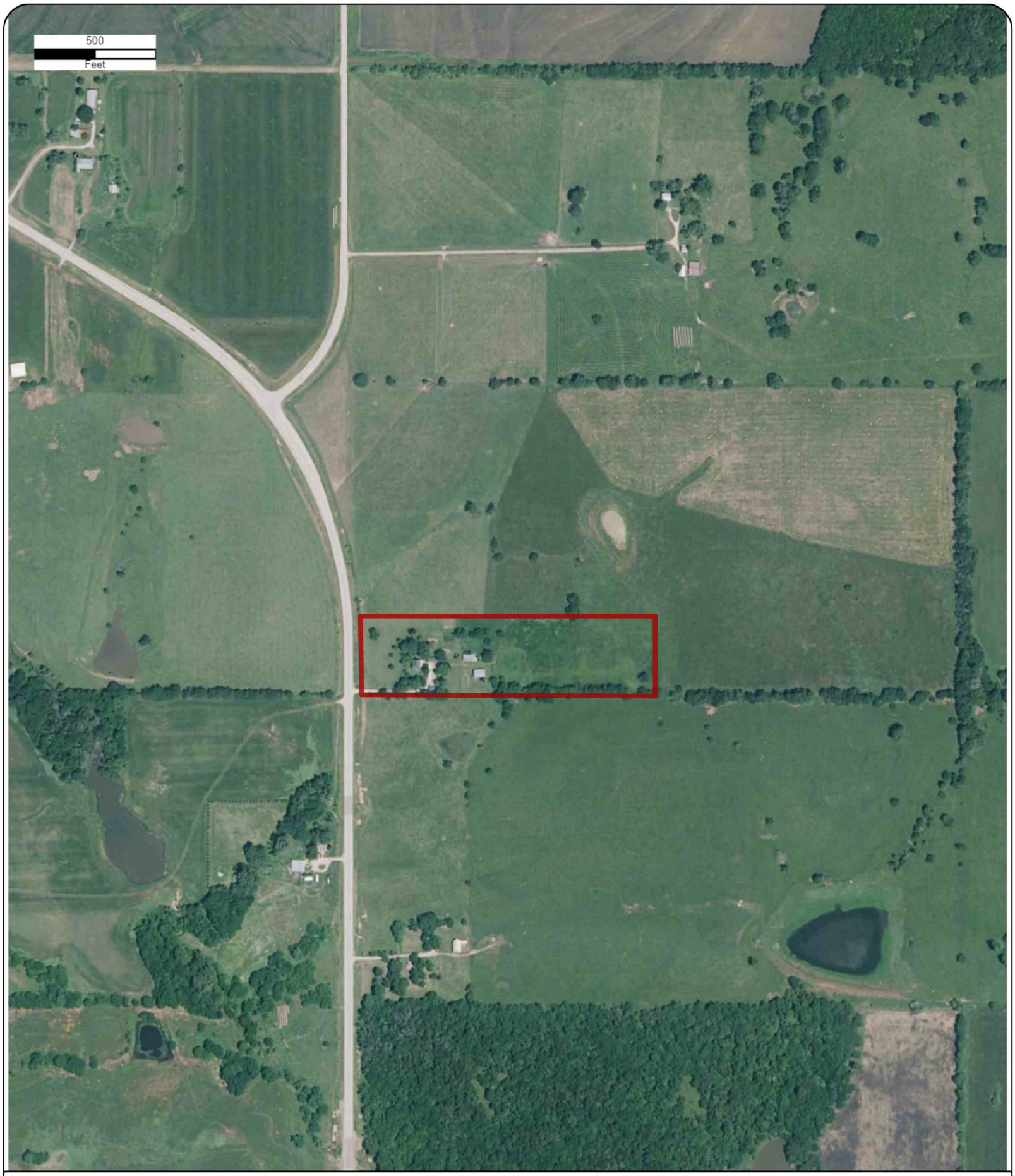


Year: 2012
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 2014
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 2015
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS

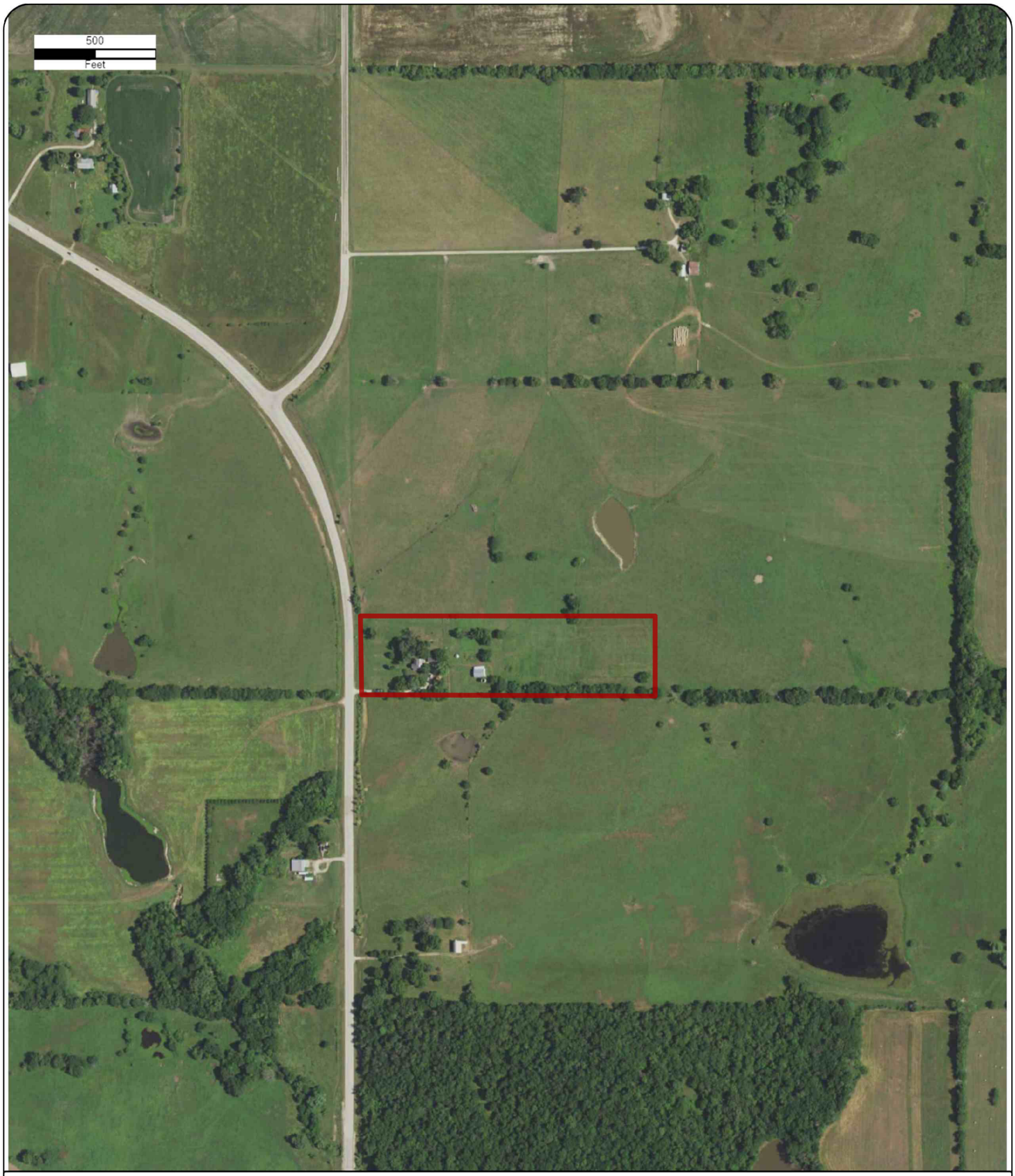


Year: 2017
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS

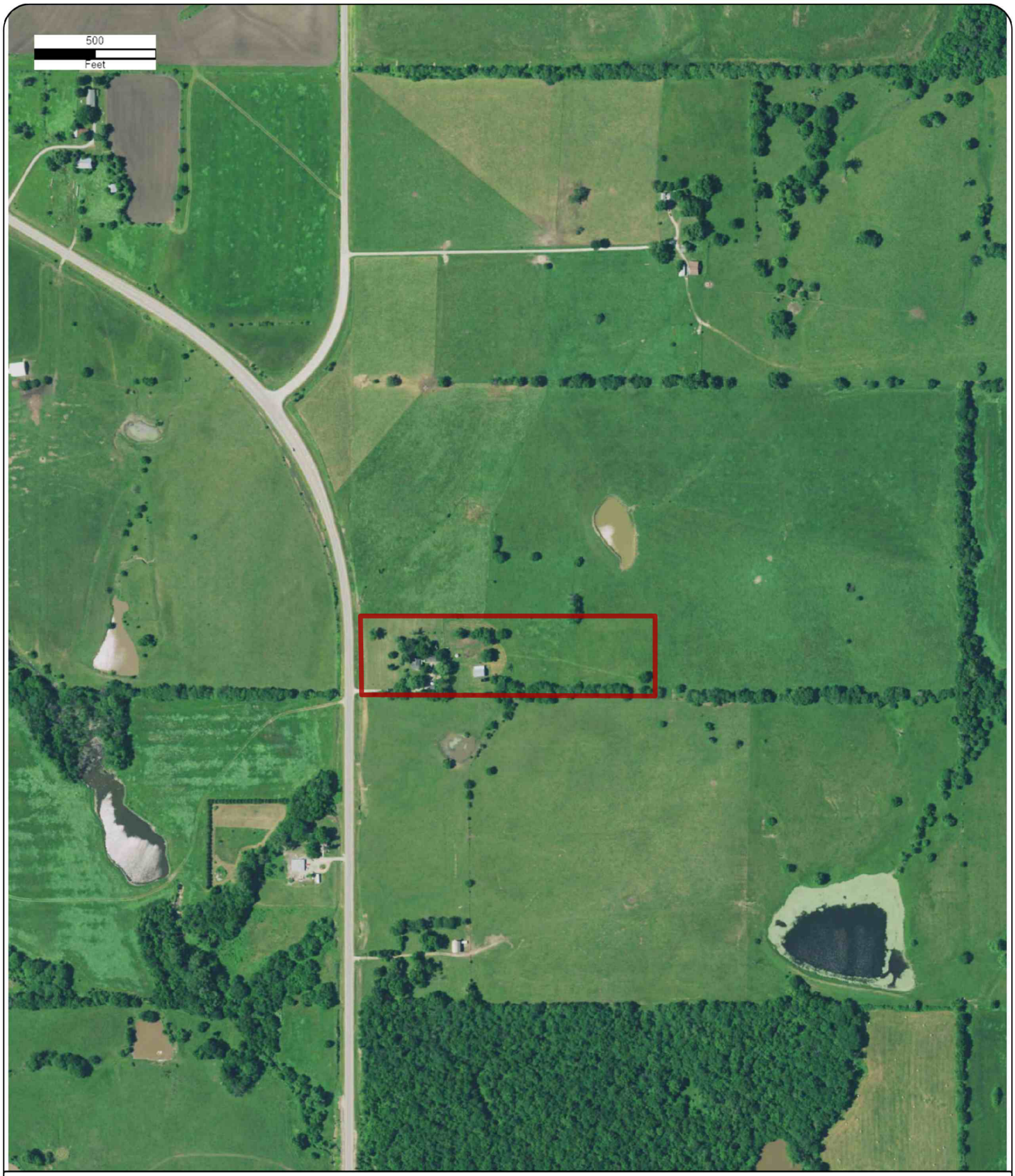


Year: 2019
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 2021
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS

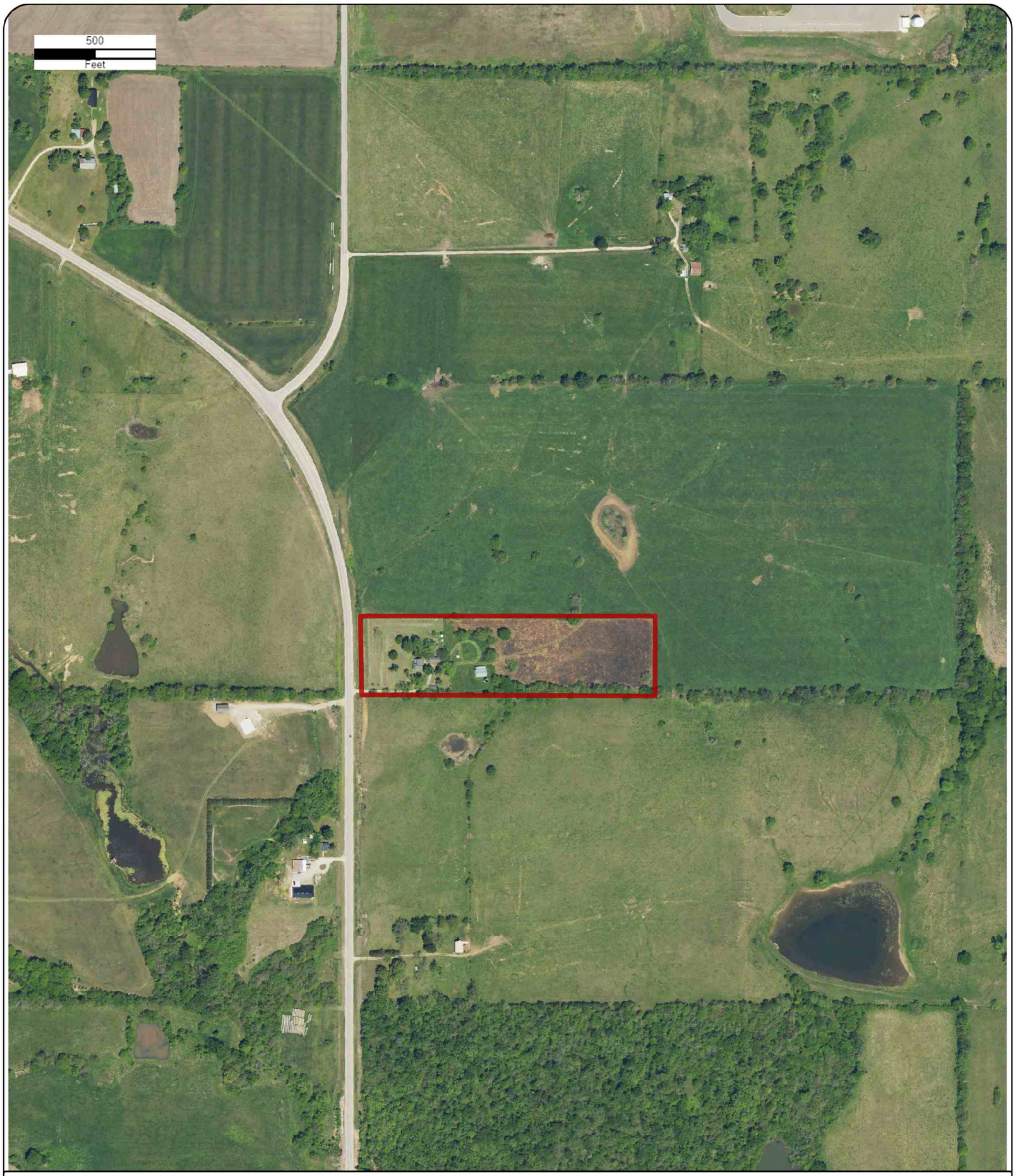


Year: 2023
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS



Year: 2025
Source: USDA
Scale: 1" = 500'
Comment:

Address: Project Bluestem - Reisig, Tonganoxie, KS
Approx Center: -95.09106914,39.07343207

Order No: 26071500464

ERIS

HISTORICAL DOCUMENTATION: CITY DIRECTORIES

CITY DIRECTORY

Project Property:	*Project Bluestem - Reisig* *Project Bluestem - Reisig* *Tonganoxie,KS 66086*
Project No:	*06032872-9*
Requested By:	*Intertek PSI*
Order No:	*26071500464*
Date Completed:	*July 17, 2026*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

July 17, 2026
RE: CITY DIRECTORY RESEARCH
Project Bluestem - Reisig
Tonganoxie,KS 66086

Thank you for contacting ERIS for an City Directory Search for the site described above. Our staff has conducted a reverse listing City Directory search to determine prior occupants of the subject site and adjacent properties. We have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Listing Directories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either utilized the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as multiple digitized directories. These do not claim to be a complete collection of all reverse listing city directories produced.

ERIS has made every effort to provide accurate and complete information but shall not be held liable for missing, incomplete or inaccurate information. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are additional addresses or streets that require searching please contact us at 866-517-5204.

Search Criteria:
15300-17100 of 222nd St
Search Notes:

Search Results Summary

Date	Source	Comment
2025	DIGITAL BUSINESS DIRECTORY	
2023	DIGITAL BUSINESS DIRECTORY	
2020	DIGITAL BUSINESS DIRECTORY	
2016	DIGITAL BUSINESS DIRECTORY	
2012	DIGITAL BUSINESS DIRECTORY	
2008	DIGITAL BUSINESS DIRECTORY	
2003	DIGITAL BUSINESS DIRECTORY	
2000	DIGITAL BUSINESS DIRECTORY	
1996	COLE	
1991	COLE	
1987	COLE	

2025 222ND ST

SOURCE: DIGITAL BUSINESS DIRECTORY

16051 **BILL JONES**...*RESIDENTIAL*
16051 **J JONES**...*RESIDENTIAL*
16220 **TOM SMITH III**...*RESIDENTIAL*
16408 **JOHN QUINLAN**...*RESIDENTIAL*
16408 **MARY QUINLAN**...*RESIDENTIAL*
16680 **CLYDE HULL**...*RESIDENTIAL*

2023 222ND ST

SOURCE: DIGITAL BUSINESS DIRECTORY

16051 **BILL JONES**...*RESIDENTIAL*
16051 **J JONES**...*RESIDENTIAL*
16220 **TOM SMITH III**...*RESIDENTIAL*
16408 **JOHN QUINLAN**...*RESIDENTIAL*
16408 **MARY QUINLAN**...*RESIDENTIAL*
16408 **WAYNE HERMANN**...*RESIDENTIAL*
16680 **CLYDE HULL**...*RESIDENTIAL*

2020 222ND ST

SOURCE: DIGITAL BUSINESS DIRECTORY

16051 **BILL JONES**...*RESIDENTIAL*
16220 **TOM SMITH III**...*RESIDENTIAL*
16408 **JOHN QUINLAN**...*RESIDENTIAL*
16680 **CLYDE HULL**...*RESIDENTIAL*

2016 222ND ST

SOURCE: DIGITAL BUSINESS DIRECTORY

16051 **BILL JONES**...*RESIDENTIAL*
16051 **J JONES**...*RESIDENTIAL*
16220 **MARTHA SMITH**...*RESIDENTIAL*
16220 **TOM SMITH III**...*RESIDENTIAL*
16408 **JOHN QUINLAN**...*RESIDENTIAL*
16408 **MARY QUINLAN**...*RESIDENTIAL*

2012 222ND ST

SOURCE: DIGITAL BUSINESS DIRECTORY

15731 **BILLY SKEET**...*RESIDENTIAL*
15731 **DEBORAH SKEET**...*RESIDENTIAL*
16051 **B JONES**...*RESIDENTIAL*
16220 **MARTHA SMITH**...*RESIDENTIAL*
16220 **TOM SMITH**...*RESIDENTIAL*
16408 **JOHN QUINLAN**...*RESIDENTIAL*
16408 **MARY QUINLAN**...*RESIDENTIAL*
16680 **P HULL**...*RESIDENTIAL*
16680 **PAT HULL**...*RESIDENTIAL*

2008 222ND ST

SOURCE: DIGITAL BUSINESS DIRECTORY

16220 **TOM J III SMITH**...*RESIDENTIAL*
16220 **TOM J SMITH**...*RESIDENTIAL*
16281 **ED & TESA FREEMAN**...*RESIDENTIAL*
16281 **ELITE LANDSCAPING**...*LANDSCAPE CONTRACTORS*
16680 **SHORTY & PAT HULL**...*RESIDENTIAL*

2003 222ND ST

SOURCE: DIGITAL BUSINESS DIRECTORY

16281 **ERNESTO FLORES**...*RESIDENTIAL*
16408 **BRIAN FREESE**...*RESIDENTIAL*
16408 **JEFFREY FREESE**...*RESIDENTIAL*
16680 **SHORTY & PAT HULL**...*RESIDENTIAL*

2000 222ND ST

SOURCE: DIGITAL BUSINESS DIRECTORY

16408 **BRIAN FREESE**...*RESIDENTIAL*
16408 **JEFFREY FREESE**...*RESIDENTIAL*
16680 **J ELMER**...*RESIDENTIAL*

1996 222ND ST

SOURCE: COLE

15265	**EDWIN G SEELBINDER**
16051	**C J MCDANIEL**
16408	**BRIAN FREESE**
16408	**JEFFREY FREESE**
16680	**J ELMER**
19330	**ED BOONE**
19377	**BOB BOWMAN**
19382	**CHARLES J SIRRIDGE**
19448	**ERNEST EDMONDS**
19523	**LEROY WALTERS**
19548	**MARK SHUSTER**

1991 222ND ST

SOURCE: COLE

STREET NOT LISTED

1987 222ND ST

SOURCE: COLE

STREET NOT LISTED

HISTORICAL DOCUMENTATION: FIRE INSURANCE MAPS

FIRE INSURANCE MAPS

Project Property: Project Bluestem - Reisig
Project Bluestem - Reisig Tonganoxie KS 66086
Project No: 06032872-9
Requested By: Intertek PSI
Order No: 26071500464
Date Completed: July 15, 2026

Please note that no information was found for your site or adjacent properties.

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

ENVIRONMENTAL DATABASE REPORT

DATABASE REPORT

Project Property:	*Project Bluestem - Reisig* *Project Bluestem - Reisig* *Tonganoxie KS 66086*
Project No:	*06032872-9*
Report Type:	*Database Report*
Order No:	*26071500464*
Requested by:	*Intertek PSI*
Date Completed:	*July 15, 2026*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Table of Contents

Table of Contents.....2
Executive Summary.....3
Executive Summary: Report Summary.....4
Executive Summary: Site Report Summary - Project Property.....8
Executive Summary: Site Report Summary - Surrounding Properties.....9
Executive Summary: Summary by Data Source.....10
Map.....11
Aerial.....14
Topographic Map.....15
Detail Report.....16
Unplottable Summary.....17
Unplottable Report.....18
Appendix: Database Descriptions.....19
Definitions.....34

Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as database review of environmental records.

License for use of information in Report: No page of this report can be used without this cover page, this notice and the project property identifier. The information in Report(s) may not be modified or re-sold.

Your Liability for misuse: Using this Service and/or its reports in a manner contrary to this Notice or your agreement will be in breach of copyright and contract and ERIS may obtain damages for such mis-use, including damages caused to third parties, and gives ERIS the right to terminate your account, rescind your license to any previous reports and to bar you from future use of the Service.

No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Inc. ("ERIS") using various sources of information, including information provided by Federal and State government departments. The report applies only to the address and up to the date specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Trademark and Copyright: You may not use the ERIS trademarks or attribute any work to ERIS other than as outlined above. This Service and Report (s) are protected by copyright owned by ERIS Information Inc. Copyright in data used in the Service or Report(s) (the "Data") is owned by ERIS or its licensors. The Service, Report(s) and Data may not be copied or reproduced in whole or in any substantial part without prior written consent of ERIS.

Executive Summary

Property Information:

Project Property:		*Project Bluestem - Reisig* *Project Bluestem - Reisig Tonganoxie KS 66086*
Project No:		*06032872-9*
Coordinates:		
	Latitude:	*39.07343207*
	Longitude:	*-95.09106914*
	UTM Northing:	*4,327,006.59*
	UTM Easting:	*319,109.63*
	UTM Zone:	*UTM Zone 15S*
Elevation:		*925 FT*

Order Information:

Order No:	*26071500464*
Date Requested:	*July 15, 2026*
Requested by:	*Intertek PSI*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials (with Project Boundaries)*
City Directory Search	*Smart CD Search*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*
Fire Insurance Maps	*US Fire Insurance Maps*
Physical Setting Report (PSR)	*Physical Setting Report (PSR)*
Topographic Map	*Topographic Maps*
Vapor Screening Tool	*Vapor Screening Tool*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.125	0	0	-	-	-	0
RCRA SQG	Y	0.125	0	0	-	-	-	0
RCRA VSQG	Y	0.125	0	0	-	-	-	0
RCRA NON GEN	Y	0.125	0	0	-	-	-	0
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	PO	0	-	-	-	-	0
FED INST	Y	PO	0	-	-	-	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
FRP	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
SHWS	Y	1	0	0	0	0	0	0
DELISTED SHWS	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	0	0	0	-	0
LAST	Y	0.5	0	0	0	0	-	0
LST	Y	0.5	0	0	0	0	-	0
DELISTED LST	Y	0.5	0	0	0	0	-	0
UST	Y	0.125	0	0	-	-	-	0
AST	Y	0.25	0	0	0	-	-	0
TANK	Y	0.25	0	0	0	-	-	0
DELISTED STORAGE TANK	Y	0.25	0	0	0	-	-	0
INST	Y	PO	0	-	-	-	-	0
VCP	Y	0.5	0	0	0	0	-	0
BROWNFIELDS	Y	0.5	0	0	0	0	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.125	0	0	-	-	-	0
DELISTED INDIAN LST	Y	0.5	0	0	0	0	-	0
DELISTED INDIAN UST	Y	0.25	0	0	0	-	-	0
County	***No County standard environmental record sources available for this State.***							
Additional Environmental Records								
Federal								
OSC RESPONSE	Y	0.125	0	0	-	-	-	0
PFAS GHG	Y	0.5	0	0	0	0	-	0
FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS FED SITES	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
PFAS ERNS	Y	0.5	0	0	0	0	-	0
PFAS NPDES	Y	0.5	0	0	0	0	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
PFAS TSCA	Y	0.5	0	0	0	0	-	0
PFAS E-MANIFEST	Y	0.5	0	0	0	0	-	0
PFAS IND	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
FUDS MRS	Y	1	0	0	0	0	0	0
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	0	0	0	0	0
LM SITES	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
POWER PLANTS	Y	0.125	0	0	-	-	-	0
NPDES BIOSOLIDS	Y	PO	0	-	-	-	-	0
State								
DRYC REM REL	Y	0.5	0	0	0	0	-	0
DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
SPILLS	Y	0.125	0	0	-	-	-	0
PFAS	Y	0.5	0	0	0	0	-	0
CDL	Y	0.125	0	0	-	-	-	0
TIER 2	Y	0.125	0	0	-	-	-	0
Tribal	***No Tribal additional environmental record sources available for this State.***							
County	***No County additional environmental record sources available for this State.***							
Total:			0	0	0	0	0	0

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the project property.

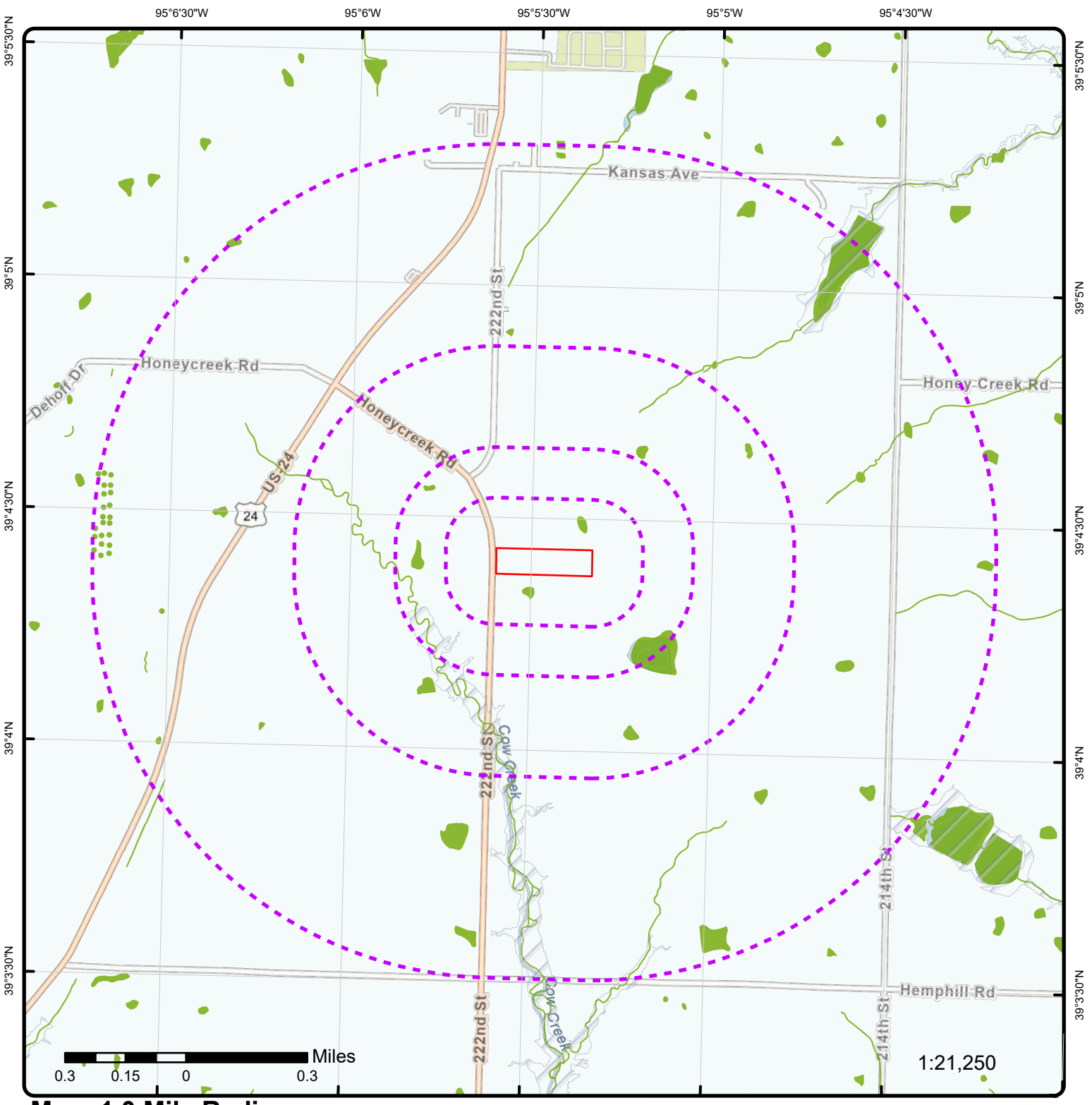
Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the surrounding properties.

Executive Summary: Summary by Data Source

No records found in the selected databases for the project property or surrounding properties.



Map: 1.0 Mile Radius

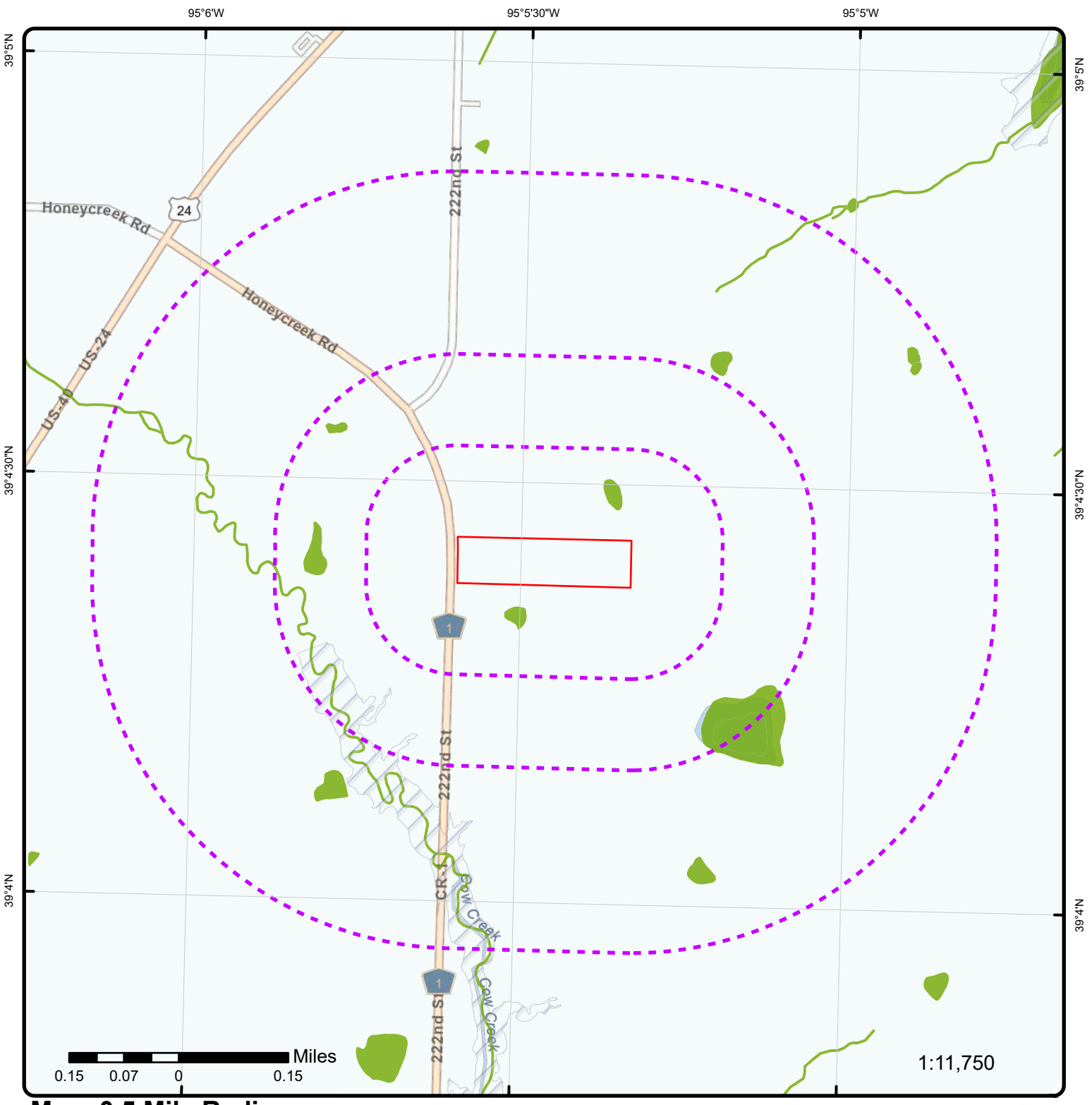
Order Number: 26071500464

Address: Project Bluestem - Reisig, Tonganoxie, KS

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

© ERIS Information Inc.



Map: 0.5 Mile Radius

Order Number: 26071500464

Address: Project Bluestem - Reisig, Tonganoxie, KS

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

© ERIS Information Inc.



Map: 0.25 Mile Radius

Order Number: 26071500464

Address: Project Bluestem - Reisig, Tonganoxie, KS

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

© ERIS Information Inc.



Aerial

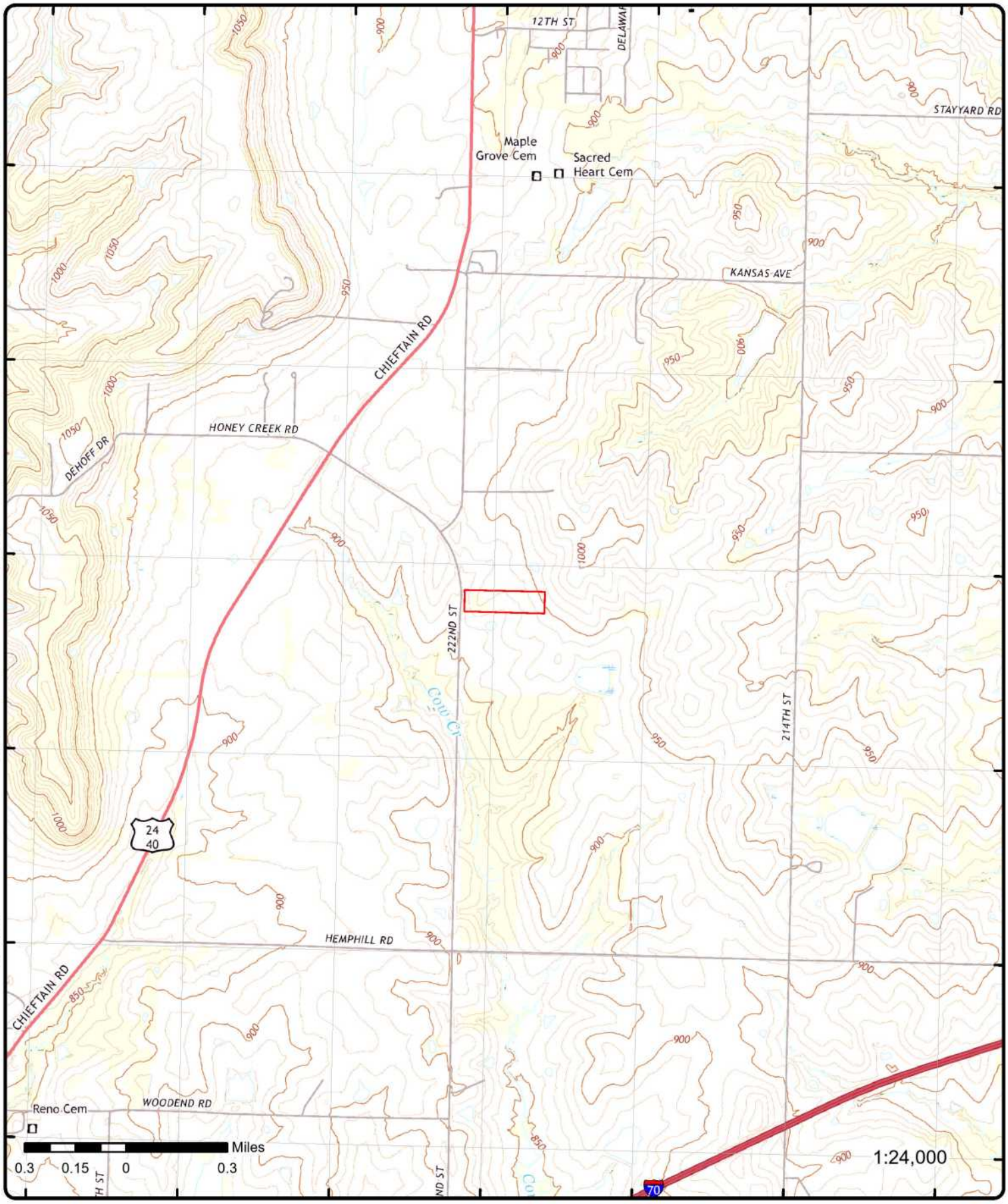
Year: 2024

Order Number: 26071500464

Address: Project Bluestem - Reisig, Tonganoxie, KS

Source: ESRI World Imagery

© ERIS Information Limited Partnership



Topographic Map

Year: 2022

Order Number: 26071500464

Address: Project Bluestem - Reisig, KS

Quadrangle(s): Tonganoxie KS, Midland KS

Source: USGS Topographic Map

© ERIS Information Inc.

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

No records found in the selected databases for the project property or surrounding properties.

Unplottable Summary

Total: 0 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID

No unplottable records were found that may be relevant for the search criteria.

Unplottable Report

No unplottable records were found that may be relevant for the search criteria.

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13 and E1527-21, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

National Priority List: NPL

The U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL) includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program, based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action. This data includes NPL sites represented as polygons, where available, that can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS), and is limited to those sites where the NPL Status reflects the site is 'Currently on the Final NPL (F)' and/or the 'Site is Part of NPL Site (A)'. These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. As site investigation and remediation progress, OUs may be added, modified or refined. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 31, 2026

National Priority List - Proposed: PROPOSED NPL

Sites proposed by the U.S. Environmental Protection Agency (EPA), the state agency, or concerned citizens for addition to the National Priorities List (NPL) due to contamination by hazardous waste and identified by the EPA as a candidate for cleanup because it poses a risk to human health and/or the environment. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 31, 2026

Deleted NPL: DELETED NPL

Sites deleted from the U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL). The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 31, 2026

SEMS List 8R Active Site Inventory: SEMS

The U.S. Environmental Protection Agency's (EPA) Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. This data includes SEMS sites from the List 8R Active file as well as applicable sites from the EPA's Facility Registry Service map tool. This data may also include applicable sites represented as polygons sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS), and is limited to those sites where the NPL Status reflects the site is 'Not on the NPL (N)' , 'Removed from Proposed (R)', and/or 'Pre-Proposal Site (S)'. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 26, 2026

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

SEMS List 8R Archive Sites: SEMS ARCHIVE

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. This data includes sites from the List 8R Archived site file. This data may also include applicable sites represented as polygons sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS), and is limited to those sites where the NPL Status reflects the site is 'Not on the NPL (N)' , 'Removed from Proposed (R)', and/or 'Pre-Proposal Site (S)'. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 26, 2026

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA). This database was provided by the United States Environmental Protection Agency (EPA). Refer to SEMS LIEN as the current data source for Superfund Liens.

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: May 17, 2026

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites that have indicated engagement in the treatment, storage, or disposal of hazardous waste which requires a RCRA hazardous waste permit.

Government Publication Date: May 17, 2026

RCRA Generator List: RCRA LQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste. This list also includes RCRAInfo sites that have notified as LQGs that do not have a registered Site Manager or Certifier in RCRAInfo.

Government Publication Date: May 17, 2026

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month. This list also includes RCRAInfo sites that have notified as SQGs that do not have a registered Site Manager or Certifier in RCRAInfo.

Government Publication Date: May 17, 2026

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: May 17, 2026

RCRA Non-Generators: RCRA NON GEN

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: May 17, 2026

RCRA Sites with Controls: RCRA CONTROLS

List of Resource Conservation and Recovery Act (RCRA) facilities with institutional controls in place. RCRA gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Government Publication Date: May 17, 2026

Federal Engineering Controls-ECs: FED ENG

List of Engineering controls (ECs) made available by the United States Environmental Protection Agency (EPA). ECs encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. The EC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Mar 26, 2026

Federal Institutional Controls- ICs: FED INST

List of Institutional controls (ICs) made available by the United States Environmental Protection Agency (EPA). ICs are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site. The IC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Mar 26, 2026

Land Use Controls Information System: LUCIS

The Land Use Controls Information System (LUCIS) database is sourced from the U.S. Department of the Navy (DON). This data contains information for former Base Realignment and Closure (BRAC) properties across the United States. DON's BRAC office was tasked with tracking certain base closures while requiring the prevention of risks to human health and the environment of those properties with LUCs in place. Regarding currently available LUC Sites data, the sites listing is limited to centroid point locations for the overall installation property boundaries. Formerly obtained LUC Sites data may reflect site details that applied previously for a BRAC property.

Government Publication Date: Jun 13, 2024

Institutional Control Boundaries at NPL sites: NPL IC

These boundaries of Institutional Control areas at sites on the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL), or as Proposed or Deleted, are sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). The EPA's NPL includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes.

Government Publication Date: Mar 31, 2026

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Apr 12, 2026

Brownfields Properties: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. This list of Brownfields Properties is provided by the United States Environmental Protection Agency (EPA) and is sourced from the Cleanups in My Community (CIMC) web application. The brownfields data are reported by grant recipients through the EPA's Assessment, Cleanup and Redevelopment Exchange System (ACRES). Many properties meet the definition of a brownfield but are not funded by the EPA's program. Such properties may instead be supported by state or local governments, private organizations, or nonprofit entities.

Government Publication Date: Mar 31, 2026

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

This listing contains facilities that have submitted Facility Response Plans (FRPs) to the U.S. Environmental Protection Agency (EPA). Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit FRPs. Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments. The list includes FRP facilities sourced from the EPA FOIA office and from previously available Homeland Infrastructure Foundation-Level Data (HIFLD) file/s. Disclaimer: Per the EPA FOIA Office, the verification process for current requested FRP data is undergoing review and revision, and any similar reporting will be made public in Fiscal Year 2027. For this reason, the latest available FOIA file may be incomplete.

Government Publication Date: Jun 1, 2025

Delisted Facility Response Plans: DELISTED FRP

Facilities that once appeared in - and have since been removed from - the list of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Jun 1, 2025

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

This list of petroleum refineries is sourced from the U.S. Energy Information Administration (EIA), Refinery Capacity Report. The listing includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year. The geographic area the report covers is the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, and other U.S. possessions. Per the EIA, the facility location data represents the approximate location based on research of publicly available information from sources such as Federal agencies, company websites, and satellite images on public websites.

Government Publication Date: Oct 31, 2024

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

A list of petroleum product and crude oil rail terminals from the U.S. Energy Information Administration (EIA), as well as petroleum terminals sourced from Oak Ridge National Laboratory hosted by the Homeland Infrastructure Foundation-Level Database. Data includes operable bulk petroleum product terminals with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil with activity between 2017 and 2018. EIA petroleum product terminal data comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings.

Government Publication Date: Jun 5, 2025

LIEN on Property: SEMS LIEN

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) provides Lien details on applicable properties, such as the Superfund lien on property activity, the lien property information, and the parties associated with the lien.

Government Publication Date: Mar 26, 2026

Superfund Decision Documents: SUPERFUND ROD

This database contains a list of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include completed Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD) for active and archived sites stored in the Superfund Enterprise Management System (SEMS), along with other associated memos and files. This information is maintained and made available by the U.S. Environmental Protection Agency.

Government Publication Date: Mar 31, 2026

State

Identified Sites List: SHWS

The Identified Sites List (ISL) is a public record of environmentally contaminated sites (Excluding underground and above-ground tank sites). This list is made available by the Kansas Department of Health and Environment, Bureau of Environmental Remediation (BER). The BER ISL dataset is also utilized from the web map provided through the KS Data Access and Support Center (DASC). This database serves a purpose similar to that of the federal Superfund Enterprise Management System (SEMS), functioning as a state-level counterpart for tracking potential hazardous substance release sites.

Government Publication Date: Apr 13, 2026

Delisted Identified Sites: DELISTED SHWS

This database contains environmentally contaminated sites (Excluding underground and above-ground tank sites) that were removed from Kansas Department of Health and Environment's Identified Sites list.

Government Publication Date: Apr 13, 2026

Solid Waste Disposable Facilities: SWF/LF

This list of Solid Waste Facilities and Closed City Dump Cleanup Sites is provided by the Kansas Department of Health and Environment's (KDHE) Bureau of Waste Management (BWM). KDHE regulated solid waste facilities include municipal solid waste Landfills. The Old City Dump Cleanup Program provides funds to cities or counties for the repair of old, unused municipal dump sites; these sites primarily operated between the 1940s and the 1970s before many counties had landfills and prior to the current solid waste regulations. The data includes applicable map layers sourced from KDHE Solid Waste Database Viewer.

Government Publication Date: Sep 25, 2024

Leaking Underground Storage Tank Data: LUST

A list of Leaking Underground Storage Tank (LUST) facilities registered with the Kansas Petroleum Storage Tank Release Trust Funds. This list is made available by the Kansas Department of Health and Environment(KDHE), Bureau of Remediation (BER) Storage Tank Section.

Government Publication Date: May 7, 2026

Aboveground Storage Tank Assessment Database (Leaking Tanks): LAST

A list of Leaking Aboveground Storage Tank (LAST) facilities registered with the Kansas Petroleum Storage Tank Release Trust Funds. This list is made available by the Kansas Department of Health and Environment(KDHE), Bureau of Remediation (BER) Storage Tank Section.

Government Publication Date: May 7, 2026

Leaking Storage Tanks: LST

A list of facilities registered with the Kansas Petroleum Storage Tank Release Trust Funds. This listing includes facilities for which there is not adequate information to determine whether the facility is associated with a leak from an Aboveground tank (LAST) or Underground tank (LUST). Listing made available by the Kansas Department of Health and Environment.

Government Publication Date: Feb 1, 2026

Delisted Leaking Storage Tanks: DELISTED LST

This database contains a list of leaking storage tank sites that were removed from the Petroleum Storage Tank Release Trust Funds, Kansas Department of Health and Environment.

Government Publication Date: May 7, 2026

Underground Storage Tanks: UST

This list of Underground Storage Tank (UST) facilities is made available by the Kansas Department of Health and Environment (KDHE).

Government Publication Date: May 4, 2026

Aboveground Storage Tanks: AST

This list of Aboveground Storage Tank (AST) facilities is made available by the Kansas Department of Health and Environment (KDHE).

Government Publication Date: May 4, 2026

Storage Tank Facilities: TANK

A list of storage tank facilities without associated tank details, not distinguished as either Underground Storage Tanks (UST) or Aboveground Storage Tanks (AST). This facilities listing is made available by the Kansas Department of Health and Environment (KDHE).

Government Publication Date: May 4, 2026

Delisted Storage Tanks: DELISTED STORAGE TANK

This database contains a list of storage tank sites that were removed from the Kansas Department of Health and Environment storage tank database.

Government Publication Date: May 4, 2026

Environmental Use Control/Institutional Control Information: INST

A list of sites with Environmental Use Control/Institutional Control Information in Kansas. This list is made available by the Kansas Department of Health and Environment.

Government Publication Date: Apr 13, 2026

Voluntary Cleanup Sites: VCP

A list of sites registered with the Voluntary Cleanup and Property Redevelopment Program (VCPRP). This list is made available by the Kansas Department of Health and Environment. Under the VCPRP, developers and buyers who perform successful cleanups of contaminated properties that are within established criteria will be granted a "No Further Action" determination by the department, satisfying the regulated community's need for protection from potential future liabilities.

Government Publication Date: Apr 13, 2026

Brownfields: BROWNFIELDS

A list of Brownfield sites in the state of Kansas. This list is made available by Kansas Department of Health and Environment.

Government Publication Date: Apr 13, 2026

Tribal

Leaking Underground Storage Tanks on Tribal/Indian Lands: INDIAN LUST

This list of leaking underground storage tanks (LUSTs) on Tribal/Indian Lands in Region 7, which includes Kansas, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: May 27, 2026

Underground Storage Tanks on Tribal/Indian Lands: INDIAN UST

This list of underground storage tanks (USTs) on Tribal/Indian Lands in Region 7, which includes Kansas, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: May 27, 2026

Delisted Tribal Leaking Storage Tanks: DELISTED INDIAN LST

Leaking Underground Storage Tank (LUST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian LUST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: May 28, 2026

Delisted Tribal Underground Storage Tanks: DELISTED INDIAN UST

Underground Storage Tank (UST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian UST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: May 28, 2026

County

No County standard environmental record sources available for this State.

Additional Environmental Record Sources

Federal

On-Scene Coordinator Response Sites: OSC RESPONSE

This list of On-Scene Coordinator (OSC) Response Sites is provided by the U.S. Environmental Protection Agency (EPA). OSCs are the federal officials responsible for monitoring or directing responses to all oil spills and hazardous substance releases reported to the federal government. OSCs coordinate all federal efforts with, and provide support and information to local, state, and regional response communities. An OSC is an agent of either EPA or the U.S. Coast Guard (USCG), depending on where the incident occurs. EPA's OSCs have primary responsibility for spills and releases to inland areas and waters. USCG OSCs have responsibility for coastal waters and the Great Lakes. In general, an OSC has the following key responsibilities during and after a response: Assessment, Monitoring, Response Assistance, and Evaluation. The site listing is made available by the EPA's secure Freedom of Information Act (FOIA) process.

Government Publication Date: Mar 24, 2026

PFAS Greenhouse Gas Emissions Data: PFAS GHG

The U.S. Environmental Protection Agency's (EPA) Greenhouse Gas Reporting Program (GHGRP) collects Greenhouse Gas (GHG) data from large emitting facilities (25,000 metric tons of carbon dioxide equivalent (CO2e) per year), and suppliers of fossil fuels and industrial gases that results in GHG emissions when used. This dataset is sourced from the EPA through its Enforcement and Compliance History Online (ECHO) PFAS Analytic Tools, and it includes GHG emissions data for facilities that emit or have emitted since 2010 chemicals identified as PFAS based on EPA's CompTox Chemicals Dashboard lists of PFAS with defined and undefined structures. PFAS emissions data has been identified for facilities engaged in the following industrial processes: Aluminum Production (GHGRP Subpart F), HCFC-22 Production and HFC-23 Destruction (Subpart O), Electronics Manufacturing (Subpart I), Fluorinated Gas Production (Subpart L), Magnesium Production (Subpart T), Electrical Transmission and Distribution Equipment Use (Subpart DD), and Manufacture of Electric Transmission and Distribution Equipment (Subpart SS). Over time, other industrial processes with required GHGRP reporting may include PFAS emissions data and the list of reportable gases may change over time. Note that some regulatory programs have specified chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard.

Government Publication Date: May 18, 2026

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Jan 1, 2026

Toxics Release Inventory (TRI) Program: TRIS

The U.S. Environmental Protection Agency's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of toxic chemicals from U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. There are currently 770 individually listed chemicals and 33 chemical categories covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual reporting forms for each chemical. Note that the TRI chemical list does not include all toxic chemicals used in the U.S. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment. This database includes TRI Reporting Data for calendar years 1987 through 2024.

Government Publication Date: Nov 5, 2025

PFOA/PFOS Contaminated Sites: PFAS NPL

This list of Superfund Sites with Per- and Polyfluoroalkyl Substances (PFAS) detections is provided by the U.S. Environmental Protection Agency (EPA) through its Enforcement and Compliance History Online (ECHO) PFAS Analytic Tools. EPA's Office of Land and Emergency Management and EPA Regional Offices maintain what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment. Limitations: Detections of PFAS at National Priorities List (NPL) sites do not mean that people are at risk from PFAS, are exposed to PFAS, or that the site is the source of the PFAS. For Federal Facilities data, the other Federal agencies (OFA) are the lead agency for their data and provided them to EPA.

Government Publication Date: Mar 30, 2026

Federal Agency Locations with Known or Suspected PFAS Detections: PFAS FED SITES

This list of federal agency locations with known or suspected detections of Per- and Polyfluoroalkyl Substances (PFAS) is made available by the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools data. The EPA outlines that these data are gathered from several federal entities, such as the federal Superfund program, Department of Defense (DOD), National Aeronautics and Space Administration (NASA), Department of Transportation (DOT), and Department of Energy (DOE). The dates this data was extracted for the PFAS Analytic Tools range from 2022 to 2025 per agency entity dataset. Sites on this list do not necessarily reflect the source/s of PFAS contamination and detections do not indicate level of risk or human exposure at the site. Agricultural notifications in this data are limited to DOD sites only. At this time, the EPA is aware that this list is not comprehensive of all Federal agencies.

Government Publication Date: May 30, 2025

SSEHRI PFAS Contamination Sites: PFAS SSEHRI

This PFAS Contamination Site Tracker database is compiled by the PFAS Project Lab, part of the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents. Locations for the Known PFAS Contamination Sites are sourced from the PFAS Sites and Community Resources Map by the PFAS-REACH team, credited to PFAS Project Lab, Silent Spring Institute, and PFAS Exchange. Disclaimer: The source conveys the data undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Access the following source link for the most current information: https://pfasproject.com/pfas-sites-and-community-resources/

Government Publication Date: Aug 1, 2025

National Response Center PFAS Spills: PFAS ERNS

This Per- and Poly-Fluoroalkyl Substances (PFAS) Spills dataset is provided by the U.S. Environmental Protection Agency (EPA) through its Enforcement and Compliance History Online (ECHO) PFAS Analytic Tools. The National Response Center (NRC), operated by the U.S. Coast Guard, is the designated federal point of contact for reporting all oil, chemical, and other discharges into the environment, for the United States and its territories. This dataset contains NRC spill information from 1990 to the present that is restricted to records associated with PFAS and PFAS-containing materials. Incidents are filtered to include only records with a "Material Involved" or "Incident Description" related to Aqueous Film Forming Foam (AFFF). The keywords used to filter the data included "AFFF," "Fire Fighting Foam," "Aqueous Film Forming Foam," "Fire Suppressant Foam, "PFAS," "PERFL," "PFOA," "PFOS," and "Genx." Limitations: The data from the NRC website contains initial incident data that has not been validated or investigated by a federal/state response agency. Keyword searches may misidentify some incident reports that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS spills/release incidents.

Government Publication Date: Apr 27, 2026

PFAS NPDES Discharge Monitoring: PFAS NPDES

This list of National Pollutant Discharge Elimination System (NPDES) Discharge Monitoring Report (DMR) permitted facilities, with required monitoring for Per- and Polyfluoroalkyl Substances (PFAS), is provided by the U.S. Environmental Protection Agency (EPA) through its Enforcement and Compliance History Online (ECHO) PFAS Analytic Tools. Any point-source wastewater discharger to waters of the United States must have a NPDES permit, which defines a set of parameters for pollutants and monitoring to ensure that the discharge does not degrade water quality or impair human health. This list includes NPDES permitted facilities associated with permits that monitor for PFAS, limited to the years 2007 - present. EPA Disclaimer: Currently, fewer than half of states have required PFAS monitoring for at least one of their permittees, and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future. For states that may have required monitoring, some reporting and data transfer issues may exist on a state-by-state basis.

Government Publication Date: Mar 30, 2026

Perfluorinated Alkyl Substances (PFAS) from Toxic Release Inventory: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a per- or polyfluoroalkyl (PFAS) substance included in the U.S. Environmental Protection Agency's (EPA) consolidated PFAS Master List of PFAS Substances. Encompasses Toxics Release Inventory records included in the EPA PFAS Analytic Tools. The EPA's TRI database currently tracks information on disposal or releases of 770 individually listed toxic chemicals and 33 chemical categories from thousands of U.S. facilities and details about how facilities manage those chemicals through recycling, energy recovery, and treatment. This listing includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.

Government Publication Date: Sep 20, 2023

PFAS Water Quality Portal Sampling Data: PFAS WATER

This Per- and Poly-Fluoroalkyl Substances (PFAS) Environmental Media Sampling Data is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The Water Quality Portal (WQP), as a cooperative service sponsored by the United States Geological Survey, the EPA, and the National Water Quality Monitoring Council, is part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations, and individuals submit project details and sampling results to this public repository. Limitations: EPA did not carry out the sampling or testing of a majority of the data in the WQP PFAS dataset. EPA can only speak to the accuracy and completeness of the data from projects like the National Aquatic Resource Surveys for which EPA is the data owner/organization. Data may exist within the file on Quality Assurance Project Plans (QAPPs) and the approving agency of the QAPP, if a QAPP is entered.

Government Publication Date: Feb 2, 2026

PFAS TSCA Manufacture and Import Facilities: PFAS TSCA

The U.S. Environmental Protection Agency (EPA) issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. This list is specific only to TSCA Manufacture and Import Facilities with reported per- and poly-fluoroalkyl (PFAS) substances. Data file is sourced from EPA's PFAS Analytic Tools TSCA dataset which includes CDR/Inventory Update Reporting data from 1998 up to 2020. Disclaimer: This data file includes production and importation data for chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures in DSSTox. Note that some regulations have specific chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard. Reporting information on manufactured or imported chemical substance amounts should not be compared between facilities, as some companies claim Chemical Data Reporting Rule data fields for PFAS information as Confidential Business Information.

Government Publication Date: Jan 5, 2023

PFAS Waste Transfers from RCRA e-Manifest: PFAS E-MANIFEST

This Per- and Poly-Fluoroalkyl Substances (PFAS) Waste Transfers dataset is provided by the U.S. Environmental Protection Agency (EPA) through its Enforcement and Compliance History Online (ECHO) PFAS Analytic Tools. Every shipment of hazardous waste in the U.S. must be accompanied by a shipment manifest, which is a critical component of the cradle-to-grave tracking of wastes mandated by the Resource Conservation and Recovery Act (RCRA). According to the EPA, currently no Federal Waste Code exists for any PFAS compounds. To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: • PFAS • PFOA • PFOS • PERFL • AFFF • GENX • GEN-X (plus the Vermont state-specific waste codes). Limitations: Amount or concentration of PFAS being transferred cannot be determined from the manifest information. Keyword searches may misidentify some manifest records that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS waste transfers.

Government Publication Date: Apr 25, 2026

PFAS Industry Sectors: PFAS IND

This Per- and Poly-Fluoroalkyl Substances (PFAS) Industry Sectors dataset is provided by the U.S. Environmental Protection Agency (EPA) through its Enforcement and Compliance History Online (ECHO) PFAS Analytic Tools. The dataset was developed from various sources that show which industries may be handling PFAS including: EPA's ECHO records restricted to potential PFAS-handling industry sectors, based on the North American Industry Classification System (NAICS) Codes and Standard Industrial Classification (SIC) Codes associated federal regulatory programs (e.g., Clean Water Act, Clean Air Act, and Resource Conservation and Recovery Act) at the facility level; ECHO records for Fire Training Sites identified where fire-fighting foam may have been used in training exercises; and 14 CFR Part 139 Airports compiled from historic and current records from the FAA Airport Data and Information Portal. Since July 2006, all certificated Part 139 Airports are required to have fire-fighting foam onsite that meet certain military specifications, which to date have been fluorinated (Aqueous Film Forming Foam). Limitations: Inclusion in this dataset does not indicate that PFAS are being manufactured, processed, used, or released by the facility. Listed facilities potentially handle PFAS based on their industrial profile but are unconfirmed by the EPA. Keyword searches in ECHO for Fire Training Sites may misidentify some facilities and should not be considered to be an exhaustive list of fire training facilities in the U.S.

Government Publication Date: May 4, 2026

Hazardous Materials Information Reporting System: HMIRS

The Hazardous Materials Incident Reporting System (HMIRS) database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.

Government Publication Date: Jan 29, 2026

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department"), Drug Enforcement Administration (DEA), provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Nov 30, 2023

Toxic Substances Control Act: TSCA

The U.S. Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule. The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI). EPA CDR collections occur approximately every four years and reporting requirements change per collection.

Government Publication Date: May 12, 2022

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.
Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN
An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.
Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP
An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.
Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP
Early in the site cleanup process, the U.S. Environmental Protection Agency (EPA) conducts a search to find the Potentially Responsible Parties (PRPs). The EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site. This listing contains PRPs, Noticed Parties, at sites in the EPA's Superfund Enterprise Management System (SEMS).
Government Publication Date: Mar 26, 2026

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER
The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin. Since 2017, the SCRD no longer maintains this data, refer to applicable state source data where available.
Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS
The Integrated Compliance Information System (ICIS) database contains integrated enforcement and compliance information across most of U.S. Environmental Protection Agency's (EPA) programs. The vision for ICIS is to replace EPA's independent databases that contain enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions and a subset of the Permit Compliance System (PCS), which supports the National Pollutant Discharge Elimination System (NPDES). This information is maintained by the EPA Headquarters and at the Regional offices. A future release of ICIS will completely replace PCS and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities that support compliance and enforcement programs, including incident tracking, compliance assistance, and compliance monitoring.
Government Publication Date: May 2, 2026

Drycleaner Facilities: FED DRYCLEANERS
A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) data as made available by the U.S. Environmental Protection Agency (EPA), sourced from the ECHO Exporter file. This EPA source file tracks facilities that possess NAICS and SIC codes that classify businesses as drycleaner establishments.
Government Publication Date: Apr 19, 2026

Delisted Drycleaner Facilities: DELISTED FED DRY
List of sites which once appeared on - and have since been removed from - the list of drycleaner facilities included in Enforcement and Compliance History Online (ECHO) data as made available by the U.S. Environmental Protection Agency (EPA), sourced from the ECHO Exporter file. This EPA source file tracks facilities that possess NAICS and SIC codes that classify businesses as drycleaner establishments.
Government Publication Date: Apr 19, 2026

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DOD) is responsible for environmental restoration. The FUDS Annual Report to Congress (ARC) is published by the U.S. Army Corps of Engineers (USACE). This data is sourced from the USACE's Geospatial FUDS Property Point, FUDS Project Point, and FUDS Property Polygon layers which apply to the Fiscal Year 2024 Inventory. DISCLAIMER: Polygon data are based on preliminary findings, and not all properties currently have polygon data available. This data represents the results of data collection/processing for a specific USACE activity and is in no way considered comprehensive or to be used in any legal or official capacity as presented on this site. The USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein.

Government Publication Date: Apr 15, 2026

FUDS Munitions Response Sites: FUDS MRS

This Munitions Response Sites (MRS) dataset is published with the Formerly Used Defense Sites (FUDS) Annual Report to Congress (ARC) for Fiscal Year 2024 by the U.S. Army Corps of Engineers (USACE). An MRS is a discrete location within a Munitions response area (MRA) that is known to require a munitions response. An MRA means any area on a defense site that is known or suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC). This data is compiled from the USACE's Geospatial FUDS MRS data layer. The USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein.

Government Publication Date: Apr 15, 2026

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 2, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

This list of flagged pipeline incidents is made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types. Accidents reported on hazardous liquid gravity lines (§195.13) and reporting-regulated-only hazardous liquid gathering lines (§195.15) and incidents reported on Type R gas gathering (§192.8(c)) are not included in the flagged incident file data.

Government Publication Date: Jan 7, 2026

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) is provided by the United States Department of Labor, Mine Safety and Health Administration (MSHA). This file, which was originally created in the 1970's, contained many Mine-IDs that were invalid. MSHA removes invalid IDs from the MIF upon discovery. MSHA applicable data includes the following: all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970; mine addresses for all mines in the database except for Abandoned mines prior to 1998 from MSHA's legacy system (addresses may or may not correspond with the physical location of the mine itself); violations that have been assessed penalties as a result of MSHA inspections beginning on 1/1/2000; and violations issued as a result of MSHA inspections conducted beginning on 1/1/2000.

Government Publication Date: May 8, 2026

Surface Mining Control and Reclamation Act Sites: SMCRA

This inventory of land and water impacted by past mining (primarily legacy coal mining operations) is maintained by the U.S. Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE), as it provides information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). This inventory contains information on the type and extent of Abandoned Mine Land (AML) Problems, as well as information on the cost associated with the reclamation of those problems. The data is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed. Disclaimer: Per the OSMRE, States and tribes who enter their data into e-AMLIS (AML Inventory System) may truncate their latitude and longitude so the precise location of usually dangerous AMLs is not revealed in an effort to protect the public from searching for these AMLs, most of which are on private property. If more precise location information is needed, please contact the applicable state/tribe of interest.

Government Publication Date: May 7, 2026

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2016

DOE Legacy Management Sites: LM SITES

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) currently manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The LM manages sites with diverse regulatory drivers (statutes or programs that direct cleanup and management requirements at DOE sites) or as part of internal DOE or congressionally-recognized programs, such as but not limited to: Formerly Utilized Sites Remedial Action Program (FUSRAP), Uranium Mill Tailings Radiation Control Act (UMTRCA Title I, Tile II), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Decontamination and Decommissioning (D&D), Nuclear Waste Policy Act (NWPA). The intent of the site location is to provide a general reference point to the site on a national scale. The coordinates of each site point can be the location of a site monument, the centroid of the site boundary, or a general location of the site. This site listing includes data exported from the DOE Office of LM's Geospatial Environmental Mapping System (GEMS). GEMS Data disclaimer: The DOE Office of LM makes no representation or warranty, expressed or implied, regarding the use, accuracy, availability, or completeness of the data presented herein.

Government Publication Date: Jan 9, 2026

Alternative Fueling Stations: ALT FUELS

This list of alternative fueling stations is sourced from the U.S. Department of Energy's (DOE) Alternative Fuels Data Center (AFDC) and National Renewable Energy Laboratory (NREL). The DOE's Office of Energy Efficiency & Renewable Energy launched the AFDC in 1991 as a repository for alternative fuel vehicle performance data, which provides a wealth of information and data on alternative and renewable fuels, advanced vehicles, fuel-saving strategies, and emerging transportation technologies. The data includes Biodiesel (B20 and above), Compressed Natural Gas (CNG), Electric, Ethanol (E85), Hydrogen, Liquefied Natural Gas (LNG), Propane (LPG), and Renewable Diesel (R20 and above) fuel type locations.

Government Publication Date: Jun 4, 2026

Superfunds Consent Decrees: CONSENT DECREES

This list of Superfund consent decrees is provided by the Department of Justice, Environment & Natural Resources Division (ENRD) through a Freedom of Information Act (FOIA) applicable file. This listing includes Cases filed since 2010 limited to the following: Consent Decrees for CERCLA or Superfund Sites filed and/or as proposed within the ENRD's Case Management System (CMS); and applicable ENRD's Environmental Defense Section (EDS) CERCLA Cases with "Consent" in History Note. CMS may not reflect the latest developments in a case, nor can the agency guarantee the accuracy of the data. ENRD Disclaimer: Congress excluded three discrete categories of law enforcement and national security records from the requirements of the FOIA; response is limited to those records that are subject to the requirements of the FOIA; however, this should not be taken as an indication that excluded records do, or do not, exist.

Government Publication Date: Dec 30, 2025

Air Facility System: AFS

This EPA retired Air Facility System (AFS) dataset contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners. AFS does not contain data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. ECHO Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014; the EPA retired this system for Clean Air Act stationary sources and transitioned to ICIS-Air.

Government Publication Date: Oct 17, 2014

Registered Pesticide Establishments: SSTS

This national list of active EPA-registered foreign and domestic pesticide and/or device-producing establishments is based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that each producing establishment must place its EPA establishment number on the label or immediate container of each pesticide, active ingredient or device produced. An EPA establishment number on a pesticide product label identifies the EPA registered location where the product was produced. The list of establishments is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Sep 26, 2025

Polychlorinated Biphenyl (PCB) Transformers: PCBT

Locations of Transformers Containing Polychlorinated Biphenyls (PCBs) registered with the United States Environmental Protection Agency. PCB transformer owners must register their transformer(s) with EPA. Although not required, PCB transformer owners who have removed and properly disposed of a registered PCB transformer may notify EPA to have their PCB transformer de-registered. Data made available by EPA.

Government Publication Date: Oct 15, 2019

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: Aug 12, 2025

Power Plants: POWER PLANTS

This list of power plants is provided by the U.S. Energy Information Administration (EIA). The listing includes operable electric generating plants in the United States by energy source, originating from the EIA-860, Annual Electric Generator Report; EIA-860M, Monthly Update to the Annual Electric Generator Report; and EIA-923, Power Plant Operations Report. It includes all operable plants by energy source with a combined nameplate capacity of 1 megawatt or more that are operating, are on standby, or out of service for short- or long-term.

Government Publication Date: Jun 5, 2025

NPDES Biosolids Program Permit Holders: NPDES BIOSOLIDS

This Water National Pollutant Discharge Elimination System (NPDES) Biosolids Permits list is sourced from the U.S. Environmental Protection Agency's (EPA) Enforcement and Compliance History Online data. EPA's Integrated Compliance Information System (ICIS) for NPDES includes facility and compliance information for NPDES permits in the ECHO Biosolids facility universe. Per the EPA, when sewage from households and businesses (and sometimes wastewater from industrial dischargers) is sent to a wastewater treatment plant, the liquids are separated from the solids, producing a semi-solid, nutrient-rich product known as "sewage sludge" or "biosolids". The EPA typically uses the term "biosolids" to mean sewage sludge that has been treated to meet the agency's regulatory requirements and is intended to be land applied as a soil conditioner or fertilizer.

Government Publication Date: May 2, 2026

State

Dry Cleaner Remediation & Release Trust Fund Applicant Sites: DRYC REM REL

This list of Dry Cleaner Remediation Sites and Dry Cleaner Facility Release Trust Fund Applicant Sites is maintained by the Bureau of Environmental Remediation (BER) of the Kansas Department of Health and Environment (KDHE). Applicable BER sites are sourced from the KDHE's Kansas Environmental Information Management System (KEIMS).

Government Publication Date: Aug 27, 2025

Dry Cleaner Sites: DRYCLEANERS

This list of currently and formerly registered and Dry Cleaners is maintained by the Bureau of Environmental Remediation (BER) of the Kansas Department of Health and Environment (KDHE). Applicable sites are sourced from the KDHE's Kansas Environmental Information Management System (KEIMS).

Government Publication Date: Aug 27, 2025

Delisted Drycleaners List: DELISTED DRYCLEANERS

List of sites removed from the drycleaners list made available by the Department of Health and Environment.

Government Publication Date: Aug 27, 2025

Kansas Spills Database: SPILLS

A list of Spills, discharges, and emergency release sites reported to the Kansas Department of Health and Environment (KDHE). This list is made available by KDHE.

Government Publication Date: Jun 7, 2026

Inventory of potential Perfluoroalkyl substances (PFAS) sites in Kansas: PFAS

List of sites in the statewide inventory of potential Perfluoroalkyl substances (PFAS) sites in Kansas, made available by the Kansas Department of Health and Environment (KDHE). The KDHE is taking steps to address Per-and polyfluoroalkyl substances (PFAS) in drinking water through a joint investigation conducted by the Bureau of Environmental Remediation and the Bureau of Water, including the development of the statewide inventory and prioritization of potential PFAS sources.

Government Publication Date: Jun 30, 2019

Clandestine Drug Lab Locations: CDL

A list of illegal clandestine drug laboratories that are found throughout Kansas. This list was made available by the Kansas Department of Health and Environment (KDHE) and contains sites only till 2009. KDHE stopped funding the cleanup program in 2009 and now only provides technical advice and clean up guidance.

Government Publication Date: Aug 11, 2013

Tier 2 Report: TIER 2

A list of facilities which have reported hazardous substances to the Kansas Department of Health and Environment under the Kansas and Federal Emergency Planning and Community Right to know Act (EPCRA). Data provided by the Kansas Department of Health and Environment.

Government Publication Date: Sep 11, 2024

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental record sources available for this State.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

DATA GAP WORKSHEET

DATA GAP WORKSHEET

Requirement	Status	Reference Source(s) Obtained or Sources PSI Used to Try to Close Data Gap	SDG
User Responsibilities			
User Knowledge and Information	Complete		
Environmental Lien and AUL Information	Incomplete	The client answered Unknown to these questions on the returned User Questionnaire	No
PSI Obtained Environmental Lien/AUL Search on Behalf of Client	NO	Not requested.	No
Environmental Records Review			
Standard Environmental Records Source Information	Complete		
Discretionary or Local Environmental Record Source Information	Complete		
Physical Setting Sources Review			
Standard Physical Setting Record Information (topo map)	Complete		
Additional Physical Setting Record Information	Complete		
Historical Data Sources Review			
Subject Property History Identified to 1940	Complete		
Subject Property History Identified to First Developed Use	Incomplete	The earliest historical documentation was an aerial photograph which displays the subject property as being used for agricultural purposes.	No
Gaps of >5 Years in Historical Data Sources	YES	Historical sources indicate no significant in use or site configuration when gaps of greater than five years were noted.	No
Surrounding Property History Information	Complete		
Site Reconnaissance Observations			
Exterior Areas of the Subject Property	Complete		
Interior Areas of the Subject Property Buildings	Incomplete	The interior of on-site buildings was not accessed during the site reconnaissance.	No
Current and Past Uses of the Subject Property	Complete		
Adjoining Property	Complete		

Requirement	Status	Reference Source(s) Obtained or Sources PSI Used to Try to Close Data Gap	SDG
Current and Past Uses of the Adjoining and Surrounding Property	Complete		
Interviews (with...)			
Current Owner	Complete		
Identified Key Site Manager	Complete		
Non-Residential Major Occupants	N/A		
Occupants with Operations Likely to Indicate RECs	N/A		
Past Owners, Operators, and/or Occupants	Complete	None were identified.	No
If Subject Property Abandoned, Owner or Occupants of Neighboring Properties	N/A		
State or Local Government Official	Incomplete	A response from City of Tonganoxie and the fire department has not been received.	No
FOIAs (to...)			
City of Tonganoxie	Incomplete	A response has not been received.	No
Fire Department or Fire Protection District	Incomplete		No
SDG = Significant Data Gap. List Identified SDGs in Section 1.2.1 of the Report; N/A = Not Applicable.			

COMMENTS AND EXPLANATIONS

Based on the information reviewed to date and observations at the time of site reconnaissance, the data gaps identified do not appear to be SDGs.

PERSONNEL QUALIFICATIONS

KYLEE SIEGRIST

ENVIRONMENTAL TECHINICAN

KANSAS CITY, KANSAS

STARTED WITH INTERTEK-PSI: 2024

Education

- University of Kansas State, B.S. Geology
- University of Missouri – Kansas City, Missouri, M.S. Environmental & Urban Geosciences

Certifications/Registration/Technical Training

- AHERA Asbestos Inspector (KS, MO, NE, IA)
- OSHA 40-Hour HAZWOPER
- Lead Inspector (KS, MO)

Memberships/Affiliations

- GSA member (Geological Society of America)

Professional Experience

Ms. Siegrist supports the PSI Kansas City team with onsite and field work for the environmental department. She has spent time working as a geotechnical geologist and has experience in preparing detailed geotechnical reports for various projects, evaluating laboratory results and providing strategic recommendations tailored to project needs. She also has experience with ArcGIS.

Her responsibilities with PSI will include Phase I and Phase II Environmental Site Assessment (ESAs), groundwater sampling, and Industrial Hygiene (IH) services, project management, data interpretation, coordination of fieldwork, proposal and report writing, maintaining good client relationships and interacting with regulatory agencies.

Representative Project Experience

- KC Water River Sampling, Kansas City, MO
- Koppers Well Sampling, Kansas City, MO
- Insite Phase I, Olathe, KS
- Arvest Bank Phase II, Blue Springs , MO
- 1858 Properties, LSI Vapor Sampling, Salina, KS
- Alliance Development Phase II, Omaha, NE
- Project Jones Phase I ESA, Gravette, AR
- Salina Blue Print Phase I ESA, Salina, KS
- JWCS, Hazards Materials Survey, Kansas City, MO

Publications

- *Thesis:* Siegrist, K., "Hydrologic Response to Prescribed Burning in the Flint Hills, Kansas," Jejung Lee, University of Missouri - Kansas City, 2023.
- Li, C., Chen, Z., Lee, J., Richey, M., Kimes, T., Ji, W., Brunton, L., and Siegrist, K. 2022, "Sustainable Development and Assessment of Urban Flood Vulnerability," Annual Kansas City Geotechnical Conference, Geo-Institute, American Society of Civil Engineers, April, 2022, Overland Park, Kansas (Awarded the second best paper)
- Li, C., Siegrist, K., Brunton, L., Lee, J., Chen, Z., Rickey, M., Walton, J., Ji, W. 2023, "Assessment of Urban Flood Vulnerability: A Case Study of Flood Hazard in Kansas City, Missouri," World Environmental & Water Resources Congress 2023, American Society of Civil Engineer, May, 2023, Henderson, Nevada (Accepted for publication)

SCOTT J. DAHLGREN

SENIOR CONSULTANT/PRINCIPAL CONSULTANT

ST. LOUIS, MISSOURI

STARTED WITH PROFESSIONAL SERVICE INDUSTRIES, INC. (PSI) AN INTERTEK COMPANY: 1992
YEARS IN INDUSTRY: 30

Education

- Bachelor of Science in Geology & Geophysics, University of Missouri at Rolla

Certifications/Registrations/Technical Training

- Principal Consultant Designation, Phase I Environmental Site Assessments, PSI
- Principal Consultant Designation, Asbestos Surveys, PSI
- Principal Consultant Designation, Lead-Based Paint Surveys, PSI
- EPA AHERA Asbestos Inspector
- EPA AHERA Asbestos Management Planner
- EPA Lead-Based Paint Inspector
- EPA Lead-Based Paint Risk Assessor
- Certified or Licensed Asbestos Inspector, Missouri, Illinois
- Certified or Licensed Asbestos Management Planner, Missouri
- Certified or Licensed Asbestos Air Sampling Professional, Missouri, Illinois
- Licensed Lead-Based Paint Inspector, Missouri
- Licensed Lead-Based Paint Risk Assessor, Missouri
- OSHA 40-Hour Hazardous Waste Site Activity Training
- OSHA 8-Hour Hazardous Waste Supervisor Training
- Microscopial Identification of Asbestos, McCrone Research Institute
- Environmental Professional, Phase I and II Environmental Site Assessments (ESAs), PSI
- NIOSH 582 Equivalent Training
- RMD LPA-I, Lead Paint Inspection System Factory Training
- Viken Pb100i Lead Paint Inspection System Factory Training
- TSI Indoor Air Quality, With Hands-On Training Making Indoor Air Quality Measurements
- National Environmental Training Association, Designing and Delivering Effective Lead-Abatement Training
- IAQ and Mold Inspector Course, PSI
- Phase I and II ESA Training, PSI
- ASTM E2600 Vapor Encroachment Screening Training, ASTM
- Project Manager Certification, PSI
- Geo-Seal vapor Intrusion Barrier Certified Inspector, Land Science Technologies

SCOTT J. DAHLGREN (CONTINUED)

Professional Experience

Scott is a project manager in the Environmental Services Consulting group of the St. Louis, Missouri, office. Scott is responsible for project coordination activities including proposal writing, scheduling of projects, staffing of projects, report delivery coordination, and technical oversight of environmental consulting projects, and assistance in the preparation of property condition assessment reports. Scott brings this expertise and familiarity with diverse regulations along with familiarity on the diverse equipment and sampling protocols necessary for a successful environmental consulting project, assessment, whether a short or long term project.

As a Phase I ESA, asbestos survey, and lead-based paint survey Principal Consultant, Scott is responsible for the technical and risk management review of proposals, reports, or any document with professional opinions in connection with a Phase I ESA or an asbestos or lead-based paint survey, and general risk management and technical oversight regarding Phase I ESAs, and asbestos and lead-based paint surveys for offices throughout the country. He also assists in the development of proposal and report templates and forms in general compliance with current American Society of Testing and Materials (ASTM) Phase I ESA protocols and other protocols.

Representative Phase I Environmental Site Assessment Project Experience

- Confidential National Restaurant Chain; Various Sites, St. Louis, St. Charles and Boone Counties, Missouri – Performed Phase I ESAs using the American Society for Testing and Materials (ASTM) protocol with short turnaround times in established restaurant facilities.
- Confidential Retail Property Developers; Various Sites, Missouri, Illinois and southern Iowa – Performed Phase I ESAs using the ASTM protocol at a variety of developed and undeveloped properties.
- Confidential National Restaurant Chain; Various Sites, St. Louis and St. Charles Counties, Missouri, Dodge, Douglas, and Sarpy Counties, Nebraska – Performed Phase I ESAs using the ASTM protocol with short turnaround times in established restaurant facilities.
- Confidential Newspaper Client; Various Sites, Dawson, Lincoln, Cheyenne, and Scotts Bluff Counties, Nebraska, Pottawattamie and Harrison Counties, Iowa – Performed Phase I ESAs using the ASTM protocol with short turnaround times in established newspaper facilities
- Confidential Bank Client, Exhaust Repair Facility; Sioux City, Iowa – Performed a Phase I ESA using the ASTM protocol with a short turnaround time. The assessment was complicated by the former presence of a gasoline service station prior to the current use and the presence of a gasoline station with free product present on an adjoining property.
- Confidential Bank Client, Former Meat Packing Plant; Omaha, Nebraska - Performed a Phase I ESA using the ASTM protocol. This plant included extensive freezer and mechanical systems on multiple levels.

SCOTT J. DAHLGREN (CONTINUED)

- Confidential Client, Former Meat Slaughter and Processing Plant; Omaha, Nebraska - Performed a Phase I ESA using the ASTM protocol with a short turnaround time of a former meat packing plant that dated to the early 1900's and had been added on to piecemeal over the years, including numerous USTs and mechanical renovations on multiple levels. The client was to use the Phase I ESA for a self-audit.
- Confidential Car Dealership; Kansas City, Missouri - Performed Phase I ESAs using the ASTM protocol of two car dealership sites. One of these dealerships was a new dealership and one was a dealership dating back into the late 1970's, both with full service automotive repair facilities and the older dealership also had an auto body shop.
- Confidential Developer; Omaha, Nebraska – Performed two Phase I ESAs, with asbestos and LBP surveys on adjoining properties, one a former creamery and food warehouse, and one a former automotive repair facility and garden supply facility in a historic section of Omaha. The properties were vacant at the time of the assessment, but complicating factors included the presence of asbestos materials in poor condition, fire damage, a leaking UST incident, and offsite businesses of environmental concern.
- Confidential Law Firm, Restaurant Sites; South Central and South East, Kansas – Perform Phase I ESAs on approximately 25 operational fast-food restaurant sites as part of an acquisition process on a tight turnaround. Provided field services, report preparation, report review, and technical support services.

Representative Communications Tower Site Assessment Project Experience

- Confidential Communications Tower Developer; Iowa, South Dakota, and Nebraska – Performed field reconnaissance and historical research for approximately 25 sites for a client who was not able to cost-effectively perform the field work themselves.
- American Tower Corporation; Various Sites, Lincoln, Saint Genevieve, Saint Charles, and Perry Counties, Missouri – Performed Phase I ESAs of numerous proposed tower sites. In addition, assisted in the completion of the Federal Communications Commission National Environmental Protection Act checklist that was required for each of these sites. These projects were performed in an expedited manner with tight turnaround times.
- Confidential Communications Tower Developer; Sioux City, Iowa, South Dakota, and Nebraska – Performed the field reconnaissance and historical research for approximately 25 sites for a client who was not able to cost effectively perform the field work themselves.
- Confidential National Communications Carrier; Various Sites in Nebraska and Iowa – Performed Phase I ESAs of numerous proposed tower sites. In addition, performed research to assist in the completion of the Federal Communications Commission National Environmental Protection Act checklist for each site. This process was complicated by the requirements of the State Historical Society of Iowa, which had unusual consultation requirements.

SCOTT J. DAHLGREN (CONTINUED)

Representative Hybrid and Advanced Environmental Site Assessment Project Experience

- Kansas Department of Health and Environment (KDHE), UST Trust Fund Project; Sedgwick, Hanston, and Scott City, Kansas – Performed pollution control assessments (PCAs) for underground storage tank facilities. Duties included supervision of drilling and sampling operations.
- NBS Partners; St. Louis, Missouri – Performed Phase II and III ESAs as part of a grant application for renovation and demolition of public housing. Investigation included the presence of offsite sources including a railroad and a cab company with USTs. Managed project from preliminary investigation through drilling, sampling, and final report preparation.
- First Union Real Estate; Fort Dodge, Iowa – Performed Phase II ESA at a shopping mall facility adjacent to several leaking underground storage tank (LUST) facilities. Supervised and managed all aspects of the project including drilling, sampling, and report preparation.
- Union 70 PCA; St. Louis, Missouri – Performed investigation to identify an unknown substance noted on a geotechnical boring log at a former car assembly plant. This investigation included drilling, sampling, and comprehensive laboratory analysis to identify the material.
- United States Postal Service, State of Iowa Underground Storage Tank Financial Responsibility Program; Wellman, Donnellson, LeClaire, and Cedar Falls, Iowa – Performed hybrid Phase I, II, and III environmental site investigations (ESIs) of post offices. This included developing a site history, scheduling and implementing drilling and sampling plans, conducting follow-up investigation of soil and groundwater contamination identified to determine the extent of the contamination plume, determining hydraulic conductivity of water-bearing zone, and producing final reports.
- Iowa UST Financial Responsibility Program; Cedar Rapids, Sioux City, Atlantic, Riverton, Denison, and Walnut, Iowa - Performed hybrid Phase I, II, and III ESIs of nearly 175 underground storage tank facilities. This included researching the site history and ownership of the facility, scheduling and implementing drilling and sampling plans, conducting multiple follow up investigations on soil and groundwater contamination identified to determine the extent of the contamination plume, determining hydraulic conductivity of water-bearing zone, and producing final reports.
- Nebraska Department of Roads; Fremont, Nebraska – Performed a Tier I Site Investigation, which is similar to a Risk-Based Corrective Action (RBCA) investigation, for a former gasoline station that had been demolished since the LUST incident and was, at the time of the investigation, a four-lane divided highway. During this investigation, the site conditions differed considerably from what was expected and PSI worked closely with the Nebraska Department of Environmental Quality to assist in developing the information needed to bring this site to a “No Further Action” status.

SCOTT J. DAHLGREN (CONTINUED)

Representative Asbestos Project Experience

- Big River Zinc; Sauget, Illinois – Assisted in inspection of a metals processing plant. Also assisted in air monitoring of abatement of the asbestos-containing materials identified in the inspection.
- US Housing and Urban Development; St. Louis, Missouri – Assisted in performance of an asbestos and hazardous materials survey and assessment of a public housing complex which included a high-rise building and 13 low-rise apartment buildings. Also performed air monitoring and project supervision of abatement of the materials identified in the inspection phase of project.
- State of Missouri Design and Construction Division, St. Louis State Hospital Facility; Missouri – Coordinated and performed an asbestos and lead-based paint (LBP) survey of eight buildings at the state hospital complex. Buildings included a power plant, service tunnels, warehouse, offices, kitchen, gymnasium complex, smokestacks, and abandoned buildings.
- Confidential National Department Store Client; Various Sites, Iowa and Nebraska – Performed asbestos assessments of active department store properties in connection with a remodeling effort. The assessments were performed according to the client's protocol in a phased schedule with tight turnaround times to accommodate abatement after the assessment was performed and performance of remodeling activities in a timely manner.
- Confidential National Client; St. Louis, Missouri – Performed emergency assessments and sampling of suspect asbestos-containing building materials. Also assisted in the project supervision and air monitoring of abatement projects. The projects were performed on a 24-hour a day basis on weekends and holidays so as not to interfere with normal operations of the client.

Representative Lead-Based Paint Project Experience

- Confidential Hospital Parking Garage; St. Louis Area, Missouri – Performed XRF testing of client-selected items in a parking garage in advance of renovation and demolition activities in the garage.
- Salvation Army; St. Louis, Missouri – Performed XRF testing of a facility as part of a renovation project.
- Confidential Client; St. Louis, Missouri - Performed LBP wipe sampling in response to complaint from tenants of a housing complex.
- Confidential Client; St. Louis, Missouri – Performed paint chip sampling to identify the presence of LBP on existing components of a construction operation. Also performed wipe sampling to monitor the effectiveness of the abatement of materials identified as having LBP.
- State of Missouri Design and Construction Division, St. Louis State Hospital Facility; Missouri – Coordinated and performed a LBP and asbestos survey of eight buildings at the state hospital complex. Buildings included a power plant, service tunnels, warehouse, offices, kitchen, gymnasium complex, smokestacks, and abandoned buildings.

SCOTT J. DAHLGREN (CONTINUED)

Representative Remediation Investigation Project Experience

- J.C. Penney Corporation; Hays, Kansas – Implemented an investigation into the feasibility of a chosen remediation method and installed necessary wells for the implementation of the chosen remediation method. Also performed ongoing monitoring well and irrigation well sampling required by the regulatory agency.

Representative Petroleum Project Experience

- Graybar Electric Company Inc.; St. Louis, Missouri – Provided supervision and regulatory reporting services on the closure of a 6,000 gallon heating oil UST in a confined area.
- United States National Guard; Doniphan, Missouri – Provided supervision and regulatory reporting services on the closure of a 500-gallon heating oil UST. Removal of the tank was complicated by the presence of utility lines over and immediately adjacent to the UST and the presence of a drainage ditch also immediately adjacent to UST. Tank was removed successfully without loss of any utility service to facility.

Representative Environmental Monitoring Project Experience

- Montgomery Ward; Topeka, Kansas – Performed periodic groundwater monitoring of leaking UST facility.
- Midas Realty Corporation; Overland, Missouri – Performed organic vapor monitoring of soils at a former UST facility as part of a geotechnical project related to a real estate transaction.

Representative Indoor Air Quality Assessment Project Experience

- Confidential Developer; St. Louis, Missouri – Performed and prepared the report for an investigation of a multi-story hotel building for the presence of indoor air contaminants and the presence of fungi during the course of a real estate transaction. The work also included the preparation of a “Mold Remediation and Prevention Plan” based on the results of the investigation.
- Confidential Developer; Omaha, Nebraska – Assisted in the performance of a physical condition assessment by performing an assessment of potential moisture intrusion and fungal growth in a strip mall type shopping property.
- Confidential Building Owner; Omaha, Nebraska – Performed IAQ investigation of a lease space in a multi-story office building in response to tenant complaints. The investigation was performed while the space was occupied by the tenant.

SCOTT J. DAHLGREN (CONTINUED)

Representative Property Condition Assessment Project Experience

- Confidential Property Manager; Bella Vista, Arkansas – Performed property condition assessments on a shopping center and post office, and assisted in the performance of property condition assessments on three other shopping centers and a commercial building.
- Confidential Developer; St. Louis, Missouri – Assisted in the performance of a property condition assessment on a six building high-rise apartment complex, including an underground garage structure.
- Confidential Developer; Omaha, Nebraska – Assisted in the performance of a property condition assessment on two adjoining strip-mall type properties with a variety of tenant types.

Representative Geotechnical Project Experience

- Scharhag Architects; Kansas City, Missouri – Assisted in the performance of a geotechnical exploration in support of an addition to an existing church building.
- Confidential Client; Leawood, Kansas – Assisted in the performance of a geotechnical exploration in support of a new approximately 6,000-quare foot single-tenant office building.
- Confidential National Retail Food Chain; Platte City, Missouri – Assisted in the performance of a geotechnical exploration in support of a new retail restaurant facility.
- City of Lee's Summit, Missouri; Lee's Summit, Missouri – Assisted in the performance of a geotechnical exploration in support of a replacement fire station facility.
- Confidential Client; St. Charles, Missouri – Assisted in the performance of a geotechnical exploration in support of a new machine press in an existing facility. The placement of this machine press was complicated by undocumented fill issues, and the dynamic loading of the press itself.
- Confidential National Retail Chain; Locations in Missouri and Illinois – Assisted in the performance of a geotechnical exploration in support of new retail stores at various locations in the St. Louis Bi-State area.