

DRAFT ENVIRONMENTAL ASSESSMENT

for

Hardin County Radio Communications Tower Facility

Hardin County, Iowa

prepared for

Hardin County Sheriff's Department

PART 4

ATTACHMENT 1:

ARCHAEOLOGICAL SURVEY

prepared by

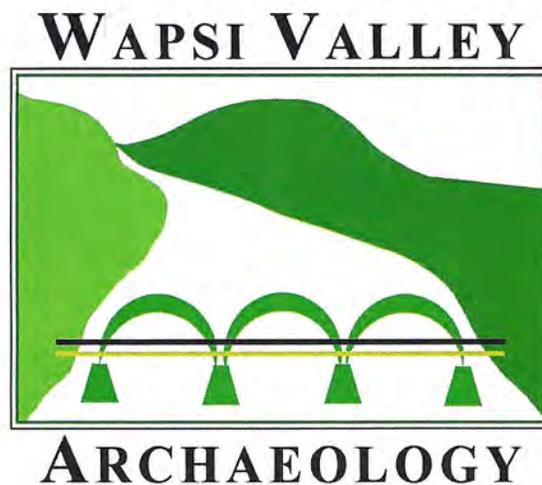
WAPSI VALLEY ARCHAEOLOGY

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October 2008



**Phase I Intensive Archaeological Survey of a
Proposed Radio Tower Northwest of Eldora,
Hardin County, Iowa**

*Wapsi Valley Archaeology
Report #386*

**Prepared for:
Hardin County Sheriff's Office
Eldora, Iowa**

Toby A. Morrow
Principal Investigator

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P.O. Box 244
Anamosa, Iowa 52205
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October 2008

ARCHAEOLOGICAL SURVEY SHORT REPORT FORM

State Historical Society of Iowa
The Historical Division of the Department of Cultural Affairs
600 E. Locust
Des Moines, Iowa 50319-0290

R & C#: _____

Reviewer: _____

Date: _____

ASSR Accepted: Yes () No ()

Locational Information and Survey Conditions

County(ies): Hardin

Quadrangle(s): Owasa, IA Date(s): 1974

Project type/title: Phase I Intensive Archaeological Survey of a Proposed Radio Tower Northwest of Eldora, Hardin County, Iowa.

Responsible federal/state agencies: FCC

Legal Location: SW 1/4, SE 1/4 and SE 1/4, NW 1/4, SE 1/4 of Section 26, T88N, R20W, Jackson Township, Hardin County, Iowa.

UTM coordinates: 15 488170mE 4693970mN

Project description:

The project involves the construction of a new radio tower east of the Hardin County Home facility northwest of Eldora in rural Hardin County, Iowa. The proposed tower is to be a 350 foot (106.7 m) tall guyed tower with a 300 foot (91.44 m) guy radius. The project also requires an access road measuring approximately 1640 feet (500 m) in length and 15 feet (4.57 m) in width. The total project APE encompasses approximately 20.96 acres (8.49 ha).

Topography

Soil associations: The project is situated in the Clarion-Nicolett-Webster soil association. The specific soil units mapped in the project area are Clarion loam, 2 to 5 percent slopes (138B) and Clarion loam, 5 to 9 percent slopes, moderately eroded (138C2). Clarion soils are well drained soils developed in glacial till under a native vegetation of prairie grasses.

Reference: Voy 1985

Landform: Des Moines Lobe

Reference: Prior 1991

Drainage Name: Iowa River

Land use/ground cover/percent visibility: At the time of the fieldwork, the project area was in mature soybeans that had largely defoliated. Ground surface visibility ranged from 25 to 80 percent.

Survey Limitations: Survey conditions were good.

Archaeological and Historical Information

Previously reported sites: None

Previous surveys: None

Citation(s): N/A

Regional archaeologist contacted:

Toby A. Morrow

Phone number: (319) 462-4760

Investigation Techniques: Surface survey and subsurface auger testing. Surface reconnaissance was undertaken across the entire project area at 5 meter intervals. At the time of the survey the tower base and the three guy wire anchor positions had been staked. A subsurface auger test was excavated at each of these four staked locations to document soil stratigraphy. Auger tests were excavated well into subsoil in 10 cm arbitrary levels. All sediments were screened through 1/4 inch wire mesh.

Historical sources consulted: Andreas 1970 [1875]; Harris and Warner (1875); North West (1892); Gardner Map and Atlas (1903); Midland Map (1918); Hixson (1930)

Time expended: 1.0 days Person hours: 16 hours

Area surveyed: 20.96 acres

8.49 ha

Contractor and Surveyor Information

Archaeological contractor: Wapsi Valley Archaeology

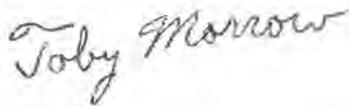
Address: P.O. Box 244, Anamosa, IA 52205

Surveyor's Name(s): Kelly Finn, Toby A. Morrow

Date(s) surveyed: 2 and 3 October, 2008

ASSR completed by: Toby A. Morrow

ASSR submitted by: Toby A. Morrow



Signature: _____

Address (if the address is not the same as the contractor address): N/A

Attachments Checklist

- 1. Project location map depicting general project location, scale, and north arrow
- 2. U.S.G.S. topographic map depicting project limits, scale, north arrow, and date of map
- 3. Sketch map(s) depicting project limits, scale, north arrow, date of map, all subsurface tests, shovel probes, soil cores, and soil profiles
- 4. Copies of historical plat map(s) consulted
- 5. Relevant depiction(s) of soil profiles and soil descriptions
- 6. References cited section
- 7. Additional information sheets as necessary

Contractor and ASSR Assurance Control

I (We), the (Co-) Principal Investigator(s): Toby A. Morrow



(sign here),

do hereby assure that the Phase I archaeological reconnaissance has located no archaeological materials or no historic properties (sites over 50 years of age from the date of this report); project clearance is recommended.

Address(es) of the agency or person to whom SHPO comments should be mailed:

Primary Contact: Sheriff Tim Smith, Hardin County Sheriff's Office, 1116 14th Avenue, Eldora, Iowa 50627, Ph. (641) 939-8189

Secondary Contact: Rey Freeman, GeoComm, 13517 Larkin Drive, Minnetonka, Minnesota 55305, Ph. (952) 541-0747

Comments: Background research indicated no archaeological sites had been recorded in or near the project area and that no archaeological surveys had been completed within one mile of the proposed project. Historic plat maps dating from 1875 to 1930 and late 1930s aerial photographs do not illustrate any structures within the project area.

The project area is situated in high, rolling uplands at the headwaters of small unnamed tributaries of Beaver Creek. Surface visibility was good to excellent across the project area during the survey. No prehistoric or historic artifacts were observed on the ground surface. The positions of the tower base and the three guy anchors were staked at the time of the fieldwork. Auger tests were excavated at each of these four locations to document soil stratigraphy. These tests revealed a surficial plowzone from 20 to 25 cm thickness overlying a loamy and gravelly B horizon. No artifacts were recovered from any of these four tests.

The Phase I archaeological survey did not find any significant cultural resources in the proposed area of impact. As a result, no additional archaeological work is recommended.

It should be noted that all archaeological surveys involve sampling. If any cultural resources are unexpectedly found, the federal agency involved with the project should be contacted. If any human remains are encountered, it is required by Iowa law [Code of Iowa, Chapters 263B and 716.5; IAC 685, Ch. 11.1] that all work in the area of the remains be temporarily stopped, security provided for the remains, local law enforcement officials notified to help protect the remains, and the State Burials Program Director contacted immediately at (319) 384-0740. Archaeologists with the State Historical Society of Iowa at (515) 281-4358 and Wapsi Valley Archaeology at (319) 462-4760 can also be called upon to offer advice on matters relating to unanticipated findings of cultural resources.

Reviewer's comments:

Attachments Continued

References

Andreas, Alfred T.

1970 [1875] *Illustrated Historical Atlas of the State of Iowa*. Reprinted. State Historical Society of Iowa, Iowa City. Originally published 1875, Andreas Atlas, Chicago.

Gardner Map and Atlas

1903 *Plat Book of Hardin County, Iowa*. Gardner Map and Atlas Company, Eldora, Iowa.

Harris and Warner

1875 *Atlas of Hardin County, Iowa*. Harris and Warner, Philadelphia, Pennsylvania.

Hixson, W. W.

1930 *Plat Book of Hardin County, Iowa*. W. W. Hixson and Company, Rockford, Illinois.

Iowa Department of Natural Resources

2000 *Landform Regions of Iowa*. Map. Iowa Department of Natural Resources.

Midland Map

1918 *Atlas of Hardin County, Iowa*. Midland Map Company, Knoxville, Iowa.

North West Publishing

1892 *Atlas of Hardin County, Iowa*. North West Publishing Company, Philadelphia, Pennsylvania.

Prior, Jean

1991 *Landforms of Iowa*. University of Iowa Press, Iowa City.

Voy, Kermit D.

1985 *Soil Survey of Hardin County, Iowa*. United States Department of Agriculture, Soil Conservation Service, Washington D.C.

Table 1. Description of soil profiles in auger tests.

Auger No.	Depth (cm)	Description and Comments
1	0-20	Very dark grayish brown (10YR 3/2) loam
	20-35	Very dark gray (10YR 3/1) loam
	35-50	Dark gray (10YR 4/1) loam
2	0-20	Very dark gray (10YR 3/1) loam
	20-35	Dark gray (10YR 4/1) loam
	35-45	Grayish brown (10YR 5/2) loam
3	0-20	Very dark grayish brown (10YR 3/2) loam
	20-30	Yellowish brown (10YR 5/4) clay loam
4	0-25	Very dark gray (10YR 3/1) loam
	25-45	Dark gray (10YR 4/1) loam
	45-55	Gray (10YR 5/1) loam

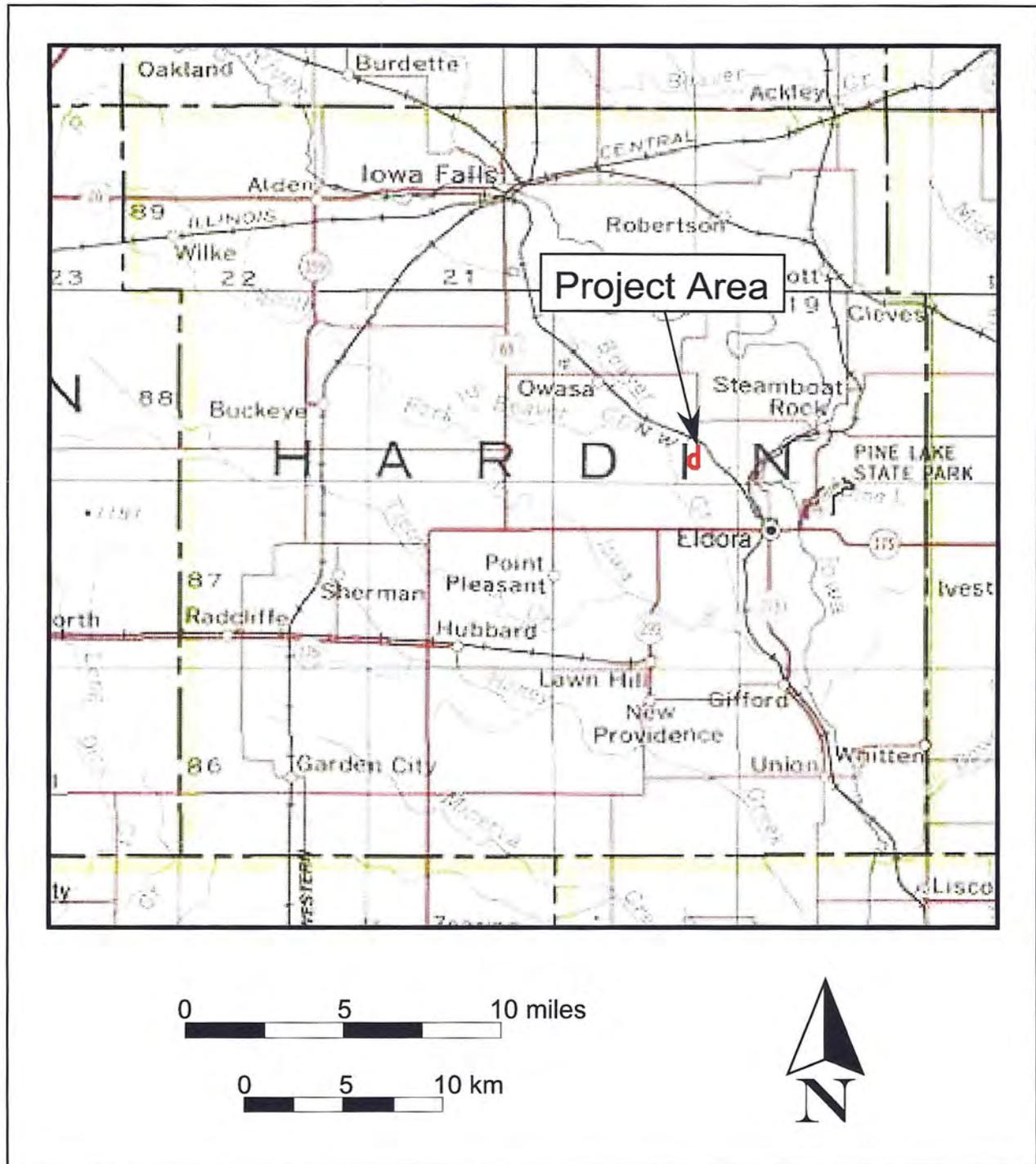


Figure 1. Map showing Hardin County and the location of the project area.
 Source: USGS 500K series, TOPO! 2003.

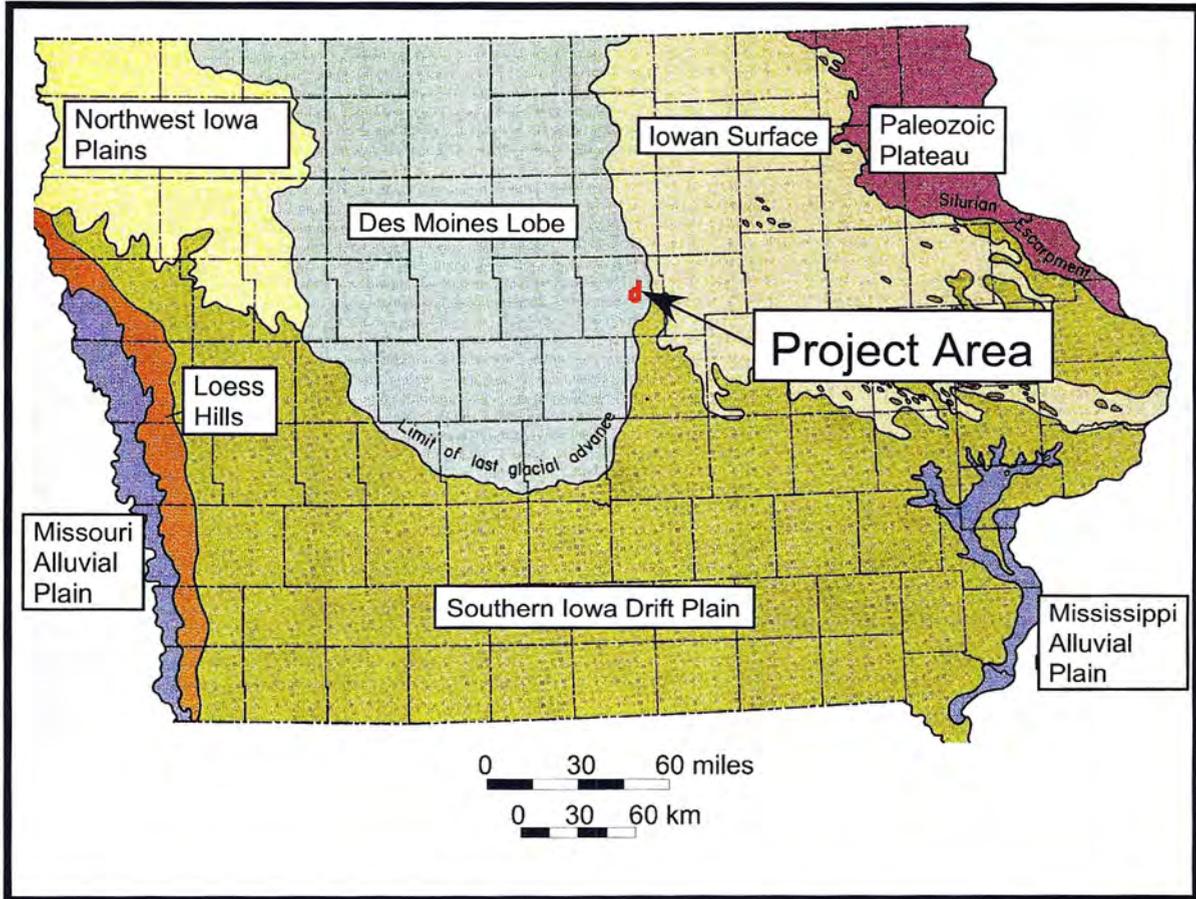


Figure 2. Iowa landforms showing the Des Moines Lobe and location of the project area. Source: *Landform Regions of Iowa*. Iowa Department of Natural Resources 2000.

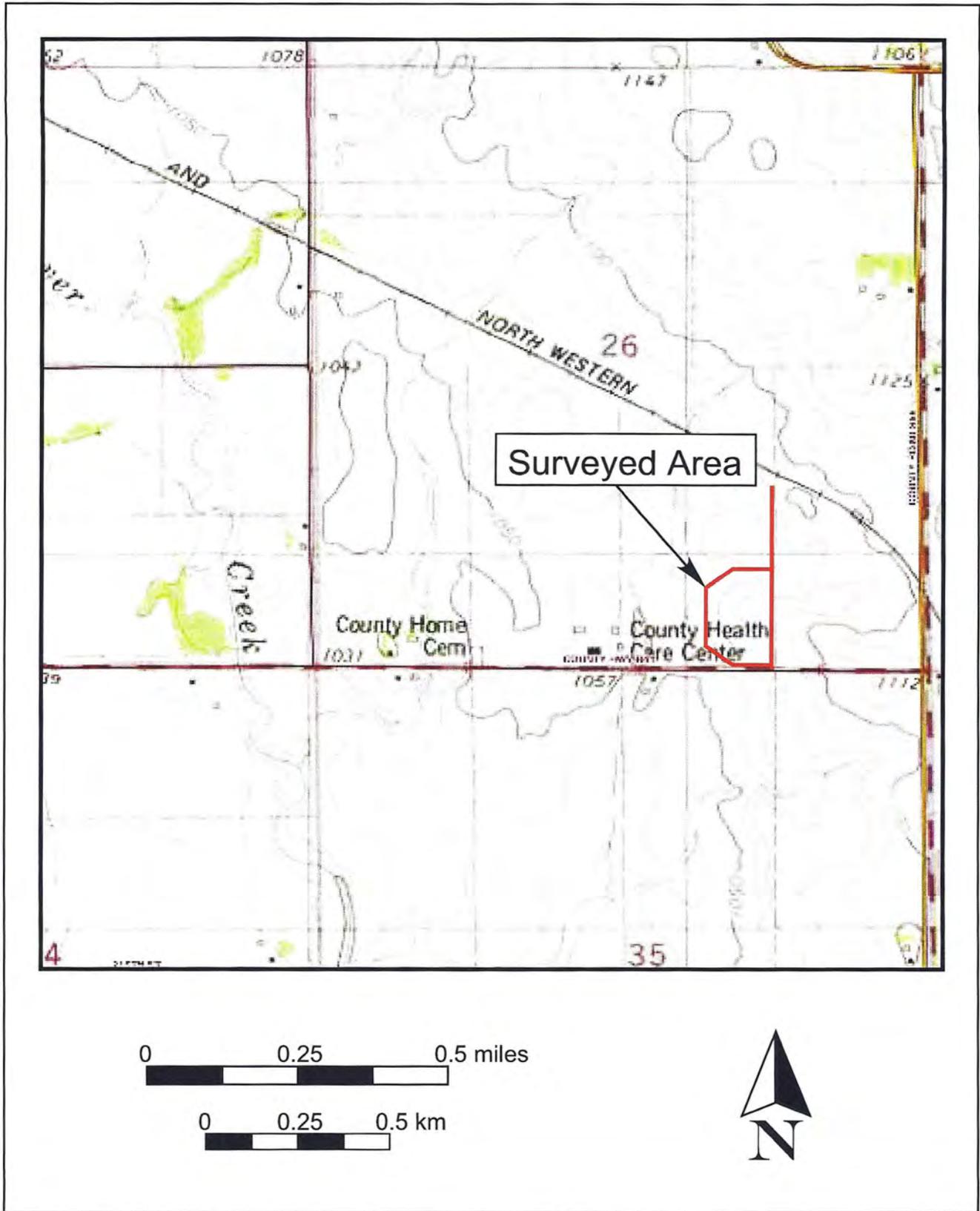


Figure 3. Topography and elevations within the project area. Source. USGS, Owasa, Iowa, 1974, 7.5 series quadrangle maps. Scale: 1:24,000.

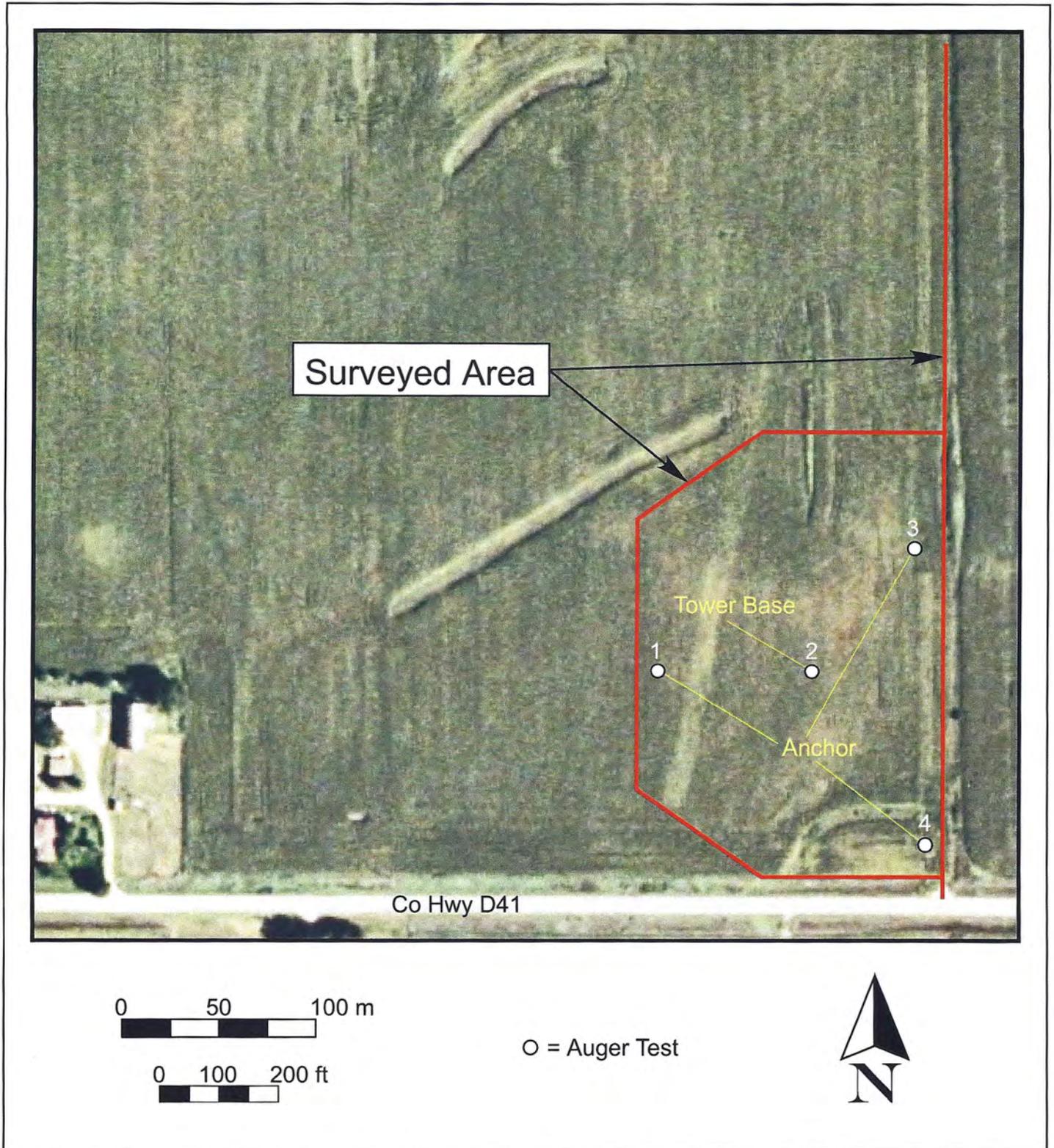


Figure 4. Plan map of the project area showing the locations of auger tests, tower base, and anchors. *Source: USDA natural color Orthophoto 2006, ISU and MIT, GISU Web site.*

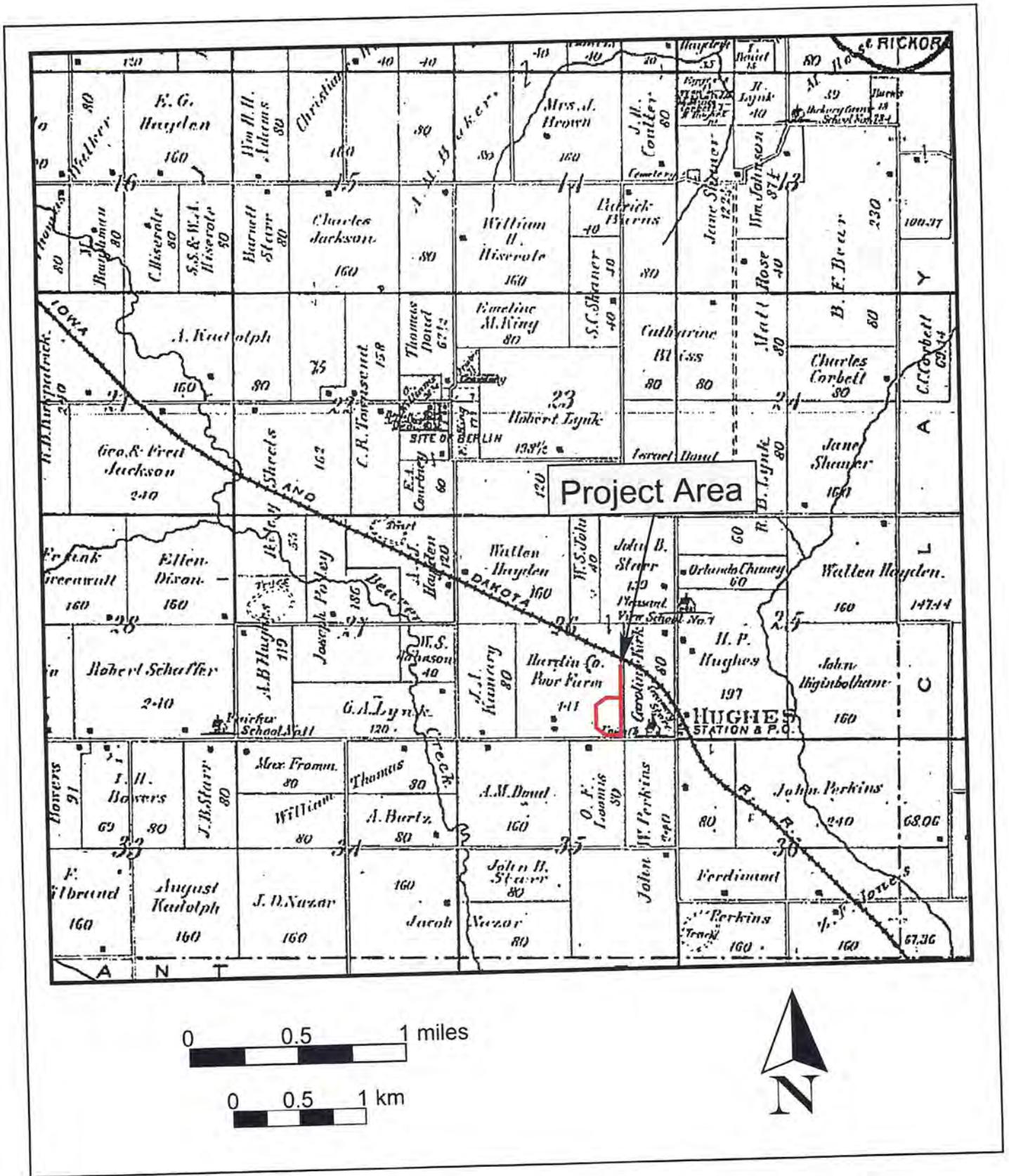


Figure 5. Historic plat map of the project area. Source: North West Publishing Co. 1892.

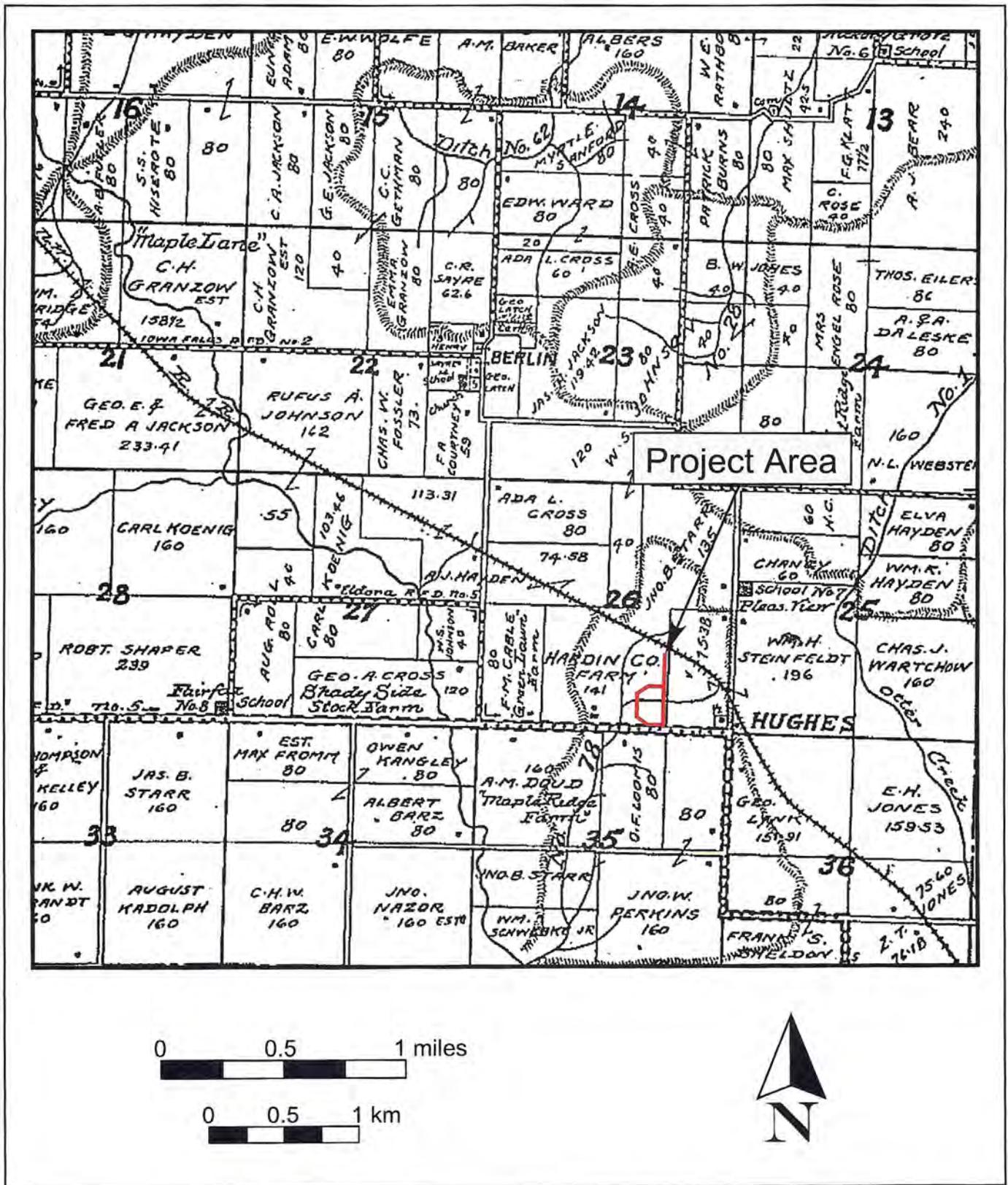


Figure 6. Historic plat map of the project area. Source: The Midland Map Co. 1918.

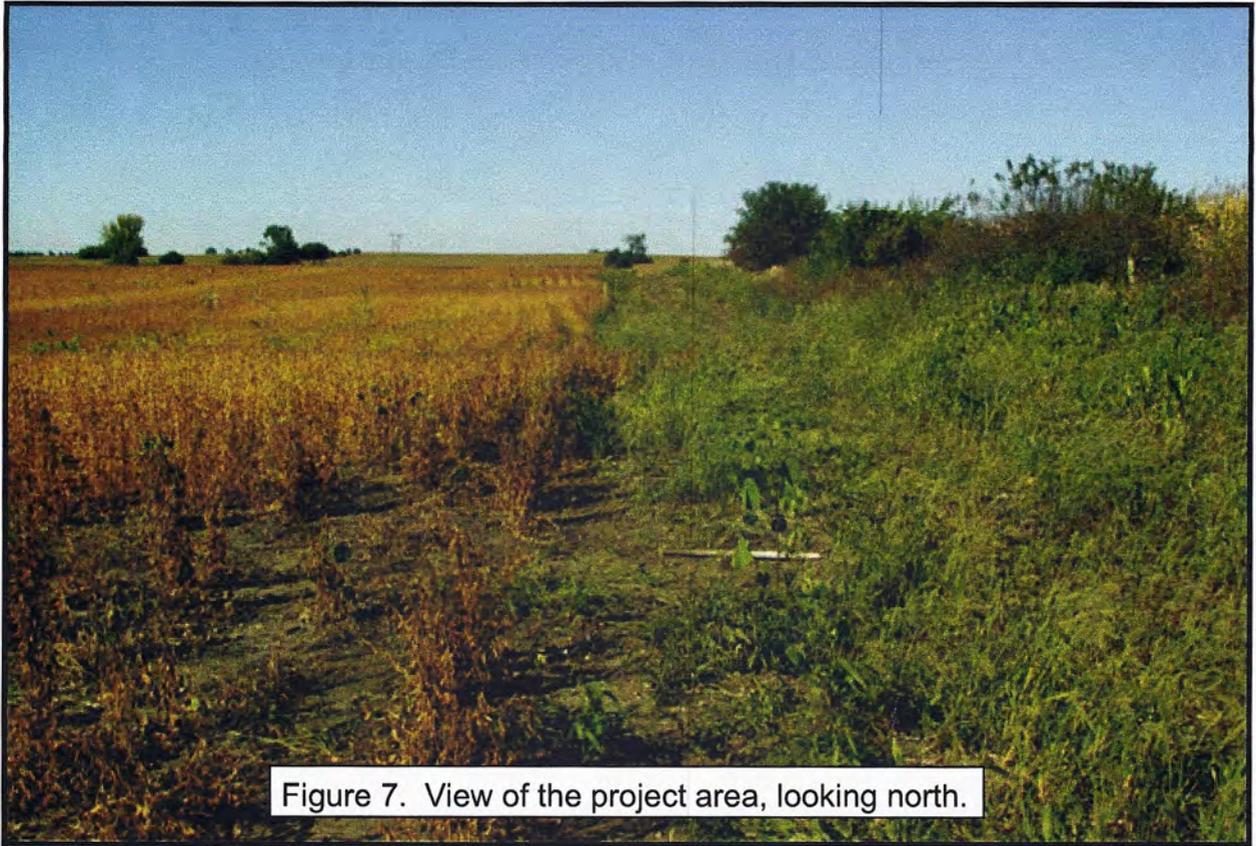


Figure 7. View of the project area, looking north.

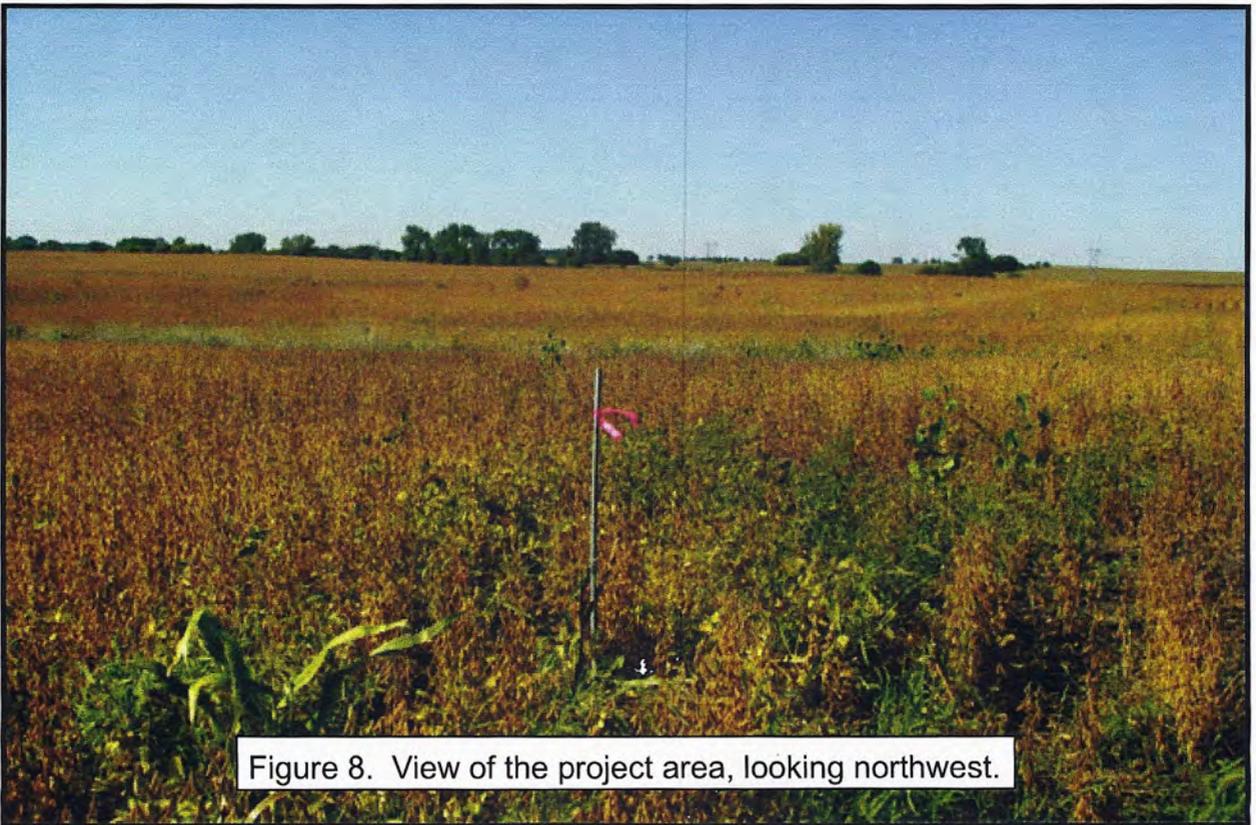


Figure 8. View of the project area, looking northwest.

Database Doc Number: _____

NATIONAL ARCHAEOLOGICAL DATABASE – REPORTS: DATA ENTRY FORM

1. R and C #:

2. Authors: Toby A. Morrow
Publication Date: October 2008

3. Title: Phase I Intensive Archaeological Survey of a Proposed Radio Tower Northwest of Eldora, Hardin County, Iowa.

4. Report Title:
Volume #: Report #: 386 NTIS:
Publisher: Wapsi Valley Archaeology, Inc.
Place: Anamosa, Iowa

5. Unpublished
Sent From:
Sent To:
Contract #:

6. Federal Agency: FCC

7. State: Iowa
County: Hardin
Town:

8. Work Type: 31 [Phase I]

9. Keyword: 0 - Types of resources / Features 1 - Generic terms / Research Questions 2 - Taxonomic Names
3 - Artifact Types / Material Classes 4 - Geographic Names / Locations 5 - Time Periods
6 - Project names / Study Unit 7 - Other Key Words
20.96 acres [7]
Des Moines Lobe [4]
Iowa River Basin [4]
No resources [0]

10. UTM Zone: 15 Easting: 488170 Northing: 4693970
15 Easting: Northing:

11. Township: 88N
Range: 20W

Other Publication Types:

1. Monograph:

Name:

Place:

2. Chapter: In: First: Last:

3. Journal: Volume: Issue: First: Last:

4. Dissertation:

Degree: Ph.D. LL.D. M.A. M.S. B.A. B.S. Institute:

5. Paper: Meeting:

Place: Date:

6. Other:

Reference Line:

7. Site #:

8. Quad Map: Owasa, Iowa

Date: 1974
