Appendix J

FRA Categorical Exclusion Worksheet

Lead applicant
Iowa Department of Transportation

Partnering agency
Minnesota Department of Transportation

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Public reporting burden for this information collection is estimated to average 176 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is 2130-0548. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection, including suggestions for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave., N.W., Washington D.C. 20590.

Federal Railroad Administration (FRA)
CATEGORICAL EXCLUSION WORKSHEET

The purpose of this worksheet is to assist Project sponsors in gathering and organizing materials for environmental analysis required under the National Environmental Policy Act (NEPA), particularly for projects that may qualify as Categorical Exclusions. Categorical Exclusions are categories of actions (i.e. types of projects) that the FRA has determined, based on its experience, typically do not individually or cumulatively have a significant effect on the human environment and which generally do not require the preparation of either an environmental impact statement (EIS) or an environmental assessment (EA). Decisions to prepare EAs and EISs are made by FRA.

Submission of the worksheet by itself does not meet NEPA requirements. FRA must concur in writing with the Categorical Exclusion recommendation for NEPA requirements to be met.

The Project sponsor is responsible for providing FRA with a sufficient level of documentation and analysis to help inform FRA's determination that a Categorical Exclusion is the appropriate NEPA class of action. Documentation and analysis may include background research, results of record searches, field investigations, field surveys, and any past planning or studies.

Instructions for completing this worksheet are available on the FRA website at: http://www.fra.dot.gov/eLib/Details/L02708. Please complete this worksheet using compatible word processing software and submit and transmit the completed form in MS Word electronic format.

The following documents must be submitted along with this worksheet:

1. Include maps or diagram of the Project area that identifies locations of critical resource areas, wetlands, potential historic sites, or sensitive noise receptors such as schools, hospitals, and residences.
2. Include maps or diagrams of the proposed modifications to existing railways, roadways, and parking facilities.
3. Copies of all agency correspondence particularly with permitting agencies.
4. Representative photographs of the Project area.

I. PROJECT DESCRIPTION

Project Sponsor Tamara Nicholson	**Date Submitted to FRA** 6/4/2015	**FRA Funding (TIGER, HSIPR, Rail Line Relocation, RRIF, etc.) or other FRA Action** TIGER
Contact Person **Diane McCauley**	**Phone** **515-239-1670**	**E-mail address** **Diane.Mccauley@dot.iowa.gov**
Proposed Project Title Upper Midwest Transportation Hub		
Location (Include Street Address, City or Township, County, and State) Manly, Iowa		

NEPA Contact	Phone	E-mail Address
Matt Oetker	515-239-1786	Matthew.Oetker@dot.iowa.gov

Description of Proposed Action (Project): Fully describe the Project including specifics that may be of environmental concern such as: *widening an embankment to stabilize roadbed; repairing or replacing bridge pier foundations, extending culverts, including adding rip-rap in a waterway; earthwork and altering natural (existing) drainage patterns and creating a new water discharge; contaminated water needing treatment; building a new or adding on to a shop building; fueling or collection of fuel or oil and contaminated water; building or extending a siding; and building or adding on to a yard. Where applicable fully describe the operational characteristics of the facility to be improved by the proposed action and any anticipated operational changes that may result.*

The Upper Midwest Transportation Hub (UMTH) will add intermodal capabilities to the established rail-served Manly Logistics Park. The UMTH will be located within the Manly Transportation Campus, a 350-acre transportation facility that includes three distinct functional units – the Manly Logistics Park, the Manly Terminal, and the IANR Manly Yard.

The UMTH will be sited within a newly constructed 15,000-foot loop track at the 160-acre Manly Logistics Park. The Park currently has one tenant, Sukup Manufacturing, a metal building fabricator.

Manly Terminal is a 100-acre terminal that includes 5.5 million gallons of liquid storage and infrastructure for the transfer of liquid commodities such as chemicals, fuel and fuel components, feed additives, and other liquids used in various manufacturing processes throughout the region.

Manly Yard is a 90-acre railroad yard that supports the Manly Logistics Park (site of the new UMTH) and the Manly Terminal. The yard includes 11 classification and switching tracks with adjacent car repair facility, grain staging tracks, engine house, maintenance of way material yard, support tracks and several other customer transload areas, including a new food grade rail-to-truck transfer station.

The proposed action involves the construction of a full service intermodal facility with container loading equipment, a container staging area, and the security and track infrastructure to support the intermodal activity. See attached aerial map showing the Manly Logistics Park and the Manly Terminal. All of the proposed action is within the boundaries of the Manly Logistics Park. However, environmental studies have been completed for both the Manly Logistics Park and Manly Terminal in this Categorical Exclusion Worksheet.

The proposed construction of the UMTH includes infrastructure for a sizeable, full services intermodal facility and container yard, including a second loop track, drainage and storm sewers, access roads, parking lots, paving, fencing, lights, gates, sewer/septic, electrical, gas, potable water, communication system, and security system. Final paving and marking of roadways, signage and final ground preparation will be completed.

The proposed action will not invovlve utility relocations, closures or detours of public roads or accesses, or disruption of current business practices or operations. All staging areas will be on site. All borrow material will be obtained and stockpiled on site. There will be no changes in existing rail service.

Purpose and Need of Proposed Action (Project).

The purpose of the proposed action is to create a major regional transportation hub that will enable staging and loading/unloading domestic and international shipping trailers and containers. The proposed action would address the following transportation needs:

1) Lack of intermodal service - The region served by UMTH suffers from a lack of nearby intermodal infrastructure and service. In 1980, Iowa had 23 facilities located in 15 cities. Today, due to trends toward mega intermodal center in major metropolitan areas, Iowa has only a single facility located on the western border of the state. The availability of efficient international and domestic containerization of freight dictates the success or failure of many producers and shippers and can be a key factor in locating a new business or expanding an existing one. The lack of a full service intermodal facility to serve the Iowa/Minnesota region limits the region's ability to preserve existing industries and to attract new industry.

2) Container imbalance - Iowa has a 1:3 imbalance of inbound versus outbound international shipping containers which creates a severe shortage of empty containers available to Iowa producers for loading. Empty containers must be shipped (drayed) into Iowa to meet demand. This dramatically increases cost. Minnesota has a 6:5 imbalance of inbound versus outbound containers. Regionally, consolidation of major portions of the two states would provide an almost even match (7.2:7.6) of inbound to outbound containers. The lack of a regional intermodal terminal in north central Iowa prevents consolidation and the ability for shippers to have access to the containers they need.

3) Trucking industry capacity shortages - The upper midwest region currently has an over reliance on long and medium range trucking, either to final destination or to the Chicago area. Because of this over reliance, current and growing capacity constraints in the trucking industry will have a greater impact on this region. Also, as the recession recedes and shipments increase, the capacity constrints are expected to grow. The Iowa DOT Freight Advisory council has identified driver shortages as one of the seven major challenges facing freight movement in Iowa. The lack of a regional intermodal terminal prevents the diversion of long haul truck moves to intermodal and the elimination of the current dray to Chicago for a portion of shippers.

4) Access - The largest volumes of Iowa and Minnesota commerce are with the U.S. eastern seaboard, Texas/Mexico, and California. The intermodal facilities in Minneapolis/St. Paul, MN are land locked, open a limited number of hours per day to customer access, and are located on high density, urban, congested roadways and city streets. Many potential shippers are located in the area between the Minneapolis/St. Paul, MN and Manly, IA. No direct, competitive, time-sensitive intermodal service to these destinations exists today from the upper midwest region. Therefore, the primary movement of goods to and from this region generally requires the expensive and time-consuming truck or dray moves of containers and trailers to and from Chicago to enter the international intermodal network. The lack of a regional intermodal terminal in a rural area such as Manly, Iowa prevents loads from being delivered or picked up quickly without the delays associated with the congestion in Minneapolis/St. Paul and Chicago.

II. NEPA CLASS OF ACTION

Please check the category or categories that the Project best fits. If no category applies, contact FRA as an EA or EIS may need to be prepared.

- ☐ Changes in plans for a Project for which an environmental document has been prepared, where the changes would not alter the environmental impacts of the action. *(Describe the full consequences of the changes only in part III)*
- ☐ Maintenance of: existing railroad equipment; track and bridge structures; electrification, communication, signaling, or security facilities; stations; maintenance-of-way and maintenance-of-equipment bases; and other existing railroad-related facilities. *("Maintenance" means work, normally provided on a periodic basis, which does not change the existing character of the facility, and may include work characterized by other terms under specific FRA programs)*
- ☐ Temporary replacement of an essential rail facility if repairs are commenced immediately after the occurrence of a natural disaster or catastrophic failure.
- ☐ Operating assistance to a railroad to continue existing service or to increase service to meet demand, where the assistance will not result in a change in the effect on the environment.
- ☐ Financial assistance for the construction of minor loading and unloading facilities, provided that proposals are consistent with local zoning, do not involve the acquisition of a significant amount of land, and do not significantly alter the traffic density characteristics of existing rail or highway facilities.
- ☐ Minor rail line additions *including construction of side tracks, passing tracks, crossovers, short connections between existing rail lines, and new tracks within existing rail yards,* provided that such additions are consistent with existing zoning, do not involve acquisition of a significant amount of right of way, and do not substantially alter the traffic density characteristics of the existing rail lines or rail facilities.
- ☐ Acquisition of existing railroad equipment, track and bridge structures, electrification, communication, signaling or security facilities, stations, maintenance of way and maintenance of equipment bases, and other existing railroad facilities or the right to use such facilities, for the purpose of conducting operations of a nature and at a level of use similar to those presently or previously existing on the subject properties.
- ☐ Research, development and/or demonstration of advances in signal, communication and/or train control systems on existing rail lines provided that such research, development and/or demonstrations do not require the acquisition of substantial amounts of right-of-way, and do not substantially alter the traffic density characteristics of the existing rail line.
- ☐ Improvements to existing facilities to service, inspect, or maintain rail passenger equipment, *including expansion of existing buildings, the construction of new buildings and outdoor facilities, and the reconfiguration of yard tracks.*
- ☐ Alterations to existing facilities, locomotives, stations and rail cars in order to make them accessible for the elderly and persons with disabilities, *such as modifying doorways, adding or modifying lifts, constructing access ramps and railings, modifying restrooms, and constructing accessible platforms.*
- ☐ Bridge rehabilitation, reconstruction or replacement, the rehabilitation or maintenance of the rail elements of docks or piers for the purposes of intermodal transfers, and the construction of bridges, culverts, or grade separation projects, predominantly within existing right-of-way, that do not involve extensive in-water construction activities, *such as projects replacing bridge components including stringers, caps, piles, or decks, the construction of roadway overpasses to replace at-grade crossings, construction or reconstruction of approaches and/or embankments to bridges, or construction or replacement of short span bridges.*
- ☐ Acquisition (including purchase or lease), rehabilitation, or maintenance of vehicles or equipment that does not cause a substantial increase in the use of infrastructure within the existing right-of-way or other previously disturbed locations, *including locomotives, passenger coaches, freight cars, trainsets, and construction, maintenance or inspection equipment.*

☐ Installation, repair and replacement of equipment and small structures designed to promote transportation safety, security, accessibility, communication or operational efficiency that take place predominantly within the existing right-of-way and do not result in a major change in traffic density on the existing rail line or facility, *such as the installation, repair or replacement of surface treatments or pavement markings, small passenger shelters, passenger amenities, benches, signage, sidewalks or trails, equipment enclosures, and fencing, railroad warning devices, train control systems, signalization, electric traction equipment and structures, electronics, photonics, and communications systems and equipment, equipment mounts, towers and structures, information processing equipment, and security equipment, including surveillance and detection cameras.*

☐ Environmental restoration, remediation and pollution prevention activities in or proximate to existing and former railroad track, infrastructure, stations and facilities conducted in conformance with applicable laws, regulations and permit requirements, *including activities such as noise mitigation, landscaping, natural resource management activities, replacement or improvement to storm water oil/water separators, installation of pollution containment systems, slope stabilization, and contaminated soil removal or remediation activities.*

☐ Assembly or construction of facilities or stations that are consistent with existing land use and zoning requirements, do not result in a major change in traffic density on existing rail or highway facilities and result in approximately less than ten acres of surface disturbance, *such as storage and maintenance facilities, freight or passenger loading and unloading facilities or stations, parking facilities, passenger platforms, canopies, shelters, pedestrian overpasses or underpasses, paving, or landscaping.*

☐ Track and track structure maintenance and improvements when carried out predominantly within the existing right-of-way that do not cause a substantial increase in rail traffic beyond existing or historic levels, *such as stabilizing embankments, installing or reinstalling track, re-grading, replacing rail, ties, slabs and ballast, installing, maintaining, or restoring drainage ditches, cleaning ballast, constructing minor curve realignments, improving or replacing interlockings, and the installation or maintenance of ancillary equipment.*

III. PROJECT INFORMATION

Potential impacts from both construction and changes to operations (where applicable) should be analyzed and identified for each resource type below. Where appropriate, the Project sponsor may commit to mitigation measures to avoid, reduce, or minimize impacts, including the use of Best Management Practices (BMP). Mitigation measures necessary to comply with other laws or regulations (e.g. Clean Water Act Section 404) should also be identified and the impacts from mitigation considered.

A. Affected Environment: *Briefly describe the ecosystems and environmental conditions in the area affected by the Project (defined as broadly as necessary to evaluate potential impacts and address Project area habitats).*

The project site is located in rural, north central Iowa approximately 0.5 mile north of the city of Manly, Worth County. Nearly all of the land surrounding the site is in row crops. Land that is not in agricultural production is either isolated farm residences, the UMTH facility itself, Beaver Creek with its wooded riparian corridor, roadways, railroad tracks, and the Tostenson Wildlife Area, a Worth County Conservation facility. See attached Location Map and USGS Quad Map.

B. *Location & Land Use:* *Briefly describe the existing land use of the Project site and surrounding properties and resources and identify and discuss any potential inconsistencies the Project might have with local land use plans and policies.*

The proposed project is located in rural, north central Iowa.

Existing land uses are row crop agriculture sourrounding the UMTH facility, and light industrial for the facility itself. Beaver Creek flows from northwest to southeast through the existing facility. The Tostenson Wildlife Area is locoated west, approximately 2,200 feet from the existing UMTH facility. The undeveloped portion of the facility, UMTH, is currently in row crops. The project is consistent with local land use plans and policies. See attached Aerial Map.

C. Cultural Resources: *Is the Project of the type where there is no potential to affect historic properties? Check yes or no depending on whether resources have been identified in the immediate vicinity of the Project (Area of Potential Effect)*

☒ *Yes, explain how Project has no potential to affect historic properties. (Continue to D)*

A review of the statewide archaeological database indicated that no archaeological sites have been recorded on the UMTH site. LiDAR and historic aerial images of the site suggested typical row crop agriculture on the site. Historic Atlases (Anderson 1913; Huebinger 1904) confirmed this. The desktop analysis indicated that the project area had limited potential for archaeological sites. An intensive Phase I archaeological investigation of the UMTH North site was conducted. No archaeological resources were encountered and the consultant recommended no further archaeological investigation was required for the UMTH site. See attached Phase I Archaeological Report. Note: Iowa DOT will coordinate with FRA for SHPO and Tribal consultation after the project has been awarded funds.

☐ *No, there is potential to affect historic properties. Describe identification procedures to determine the existence of cultural resources in the Project area.*

Describe any resource(s) identified in the project area and then describe any potential effect of the Project on the resource(s).

Has consultation with the State Historic Preservation Office occurred?

☒ *No, contact FRA*

☐ *Yes, describe and attach relevant correspondence*

What resources of interest to Federally-recognized Native American Tribes are known to be present in the Project area?

None.

D. Parks and Recreational Facilities: *Are there any publicly owned park, wildlife and waterfowl refuge, or recreational area of national, state, or local significance within or directly adjacent to the Project area?*

☒ No, include a short statement describe efforts to identify parks and recreational facilities in the Project area.

County and state park maps and Google Earth maps of the project vicinity were reviewed to determine whether parks, recreational facilities, and wildlife and waterfowl refuges are located within or adjacent to the project site. The Tostenson Wildlife Area, owned by Worth County Conservation, is located approximately 2,200 feet west of the project site and would not be impacted by the project. See attached Aerial Map.

☐ Yes, include a detailed description of the property, including map or drawing, describe the recreational uses of the property, any unique characteristics of the property, any consultations with the entity with legal jurisdiction over the property, and the potential impact on the property.

E. **Transportation:** *Would the Project have any effect (beneficial or adverse) on transportation including but not limited to other railway operations, road traffic, or increase the demand for parking?*

☐ No, explain why the Project would have no effect (beneficial or adverse) on transportation

☒ Yes, describe potential transportation, traffic, and parking impacts, and address capacity constraints and potential impacts to existing railroad and highway operations. Also, summarize any consultation that has occurred with other railroads or highway authorities whose operations this Project will impact.

The State of Iowa has invested approximately $1 million and Worth County has invested $215,000 in improvements to Iowa highway 9 and U.S. 65 to accommodate truck traffic in the area of the UMTH. These improvements include addition of turning lanes, increased pavement strength, and access roads for the facility.

F. Noise and Vibration: *Are there any sensitive receptors in the Project area?*

☐ No, describe why there are no sensitive receptors (residences, parks, schools, hospitals, public gathering spaces) in or near the Project area. (Continue to G)

☒ Yes, will the Project change the noise and/or vibration exposure of the sensitive receptors when applying the screening distances for noise and vibration assessment found in FRA and Federal Transit Administration's noise impacts assessment guidance manuals? Such changes in exposure might include changes in noise emissions and/or events, or changes in vibration emissions and/or events.

There are 3 residences on the west side of the project site and 2 on the east side. See attached Aerial Map. On July 5, 2013, Iowa DOT personnel conducted a field noise survey of the area and obtained noise measurements at 2 residences in closest proximity to the proposed project. Noise measurements were recorded in Leq using the "A" weighted scale. Existing noise conditions at 3882 Orchid Avenue (west side of UMTH) and at 3844 Partridge Avenue (east side of UMTH)were recorded as 60 dB(A) and 57 dB(a), respectively. Based on these field measurements and FRA noise guidance, noise impacts due to the proposed project are not anticipated to be signficant. See attached Noise Assessment Memo.

If the Project is anticipated to change the noise or vibration exposure of sensitive receptors, complete and attach a General Noise and/or Vibration Assessment. Describe the results of the Assessment and any mitigation that will address potential impacts.

G. Air Quality: *Is the Project located in a Non-Attainment or Maintenance area?*

☒ No, identify any air emissions increases or benefits that the project will create. (Continue to H)

☐ Yes, for which of the following pollutants:

☐ Carbon Monoxide (CO) ☐ Ozone (O_3), volatile organic compounds or Nitrous Oxides (NO_x)
☐ Particulate Matter (PM_{10} and $PM_{2.5}$)

Will the Project, both during construction and operation, result in new emissions of criteria pollutants including Carbon Monoxide (CO), Ozone (O_3), volatile organic compounds, or Nitrous Oxides NO_x, Particulate Matter (PM_{10} and $PM_{2.5}$)?

☒ No ☐ Yes, Attach an emissions analysis for General Conformity regarding CO, O_3, PM_{10}, and NO_x.

Based on the emissions analysis, will the Project increase concentrations of ambient criteria pollutants to levels that exceed the NAAQS, lead to the establishment of a new non-attainment area, or delay achievement of attainment?

☐ No ☐ Yes, Describe any substantial impacts from the Project.

H. Hazardous Materials*: Does the Project involve the use or handling of hazardous materials?*

☐ No (continue to I)

☒ Yes, describe the use and measures that will mitigate any potential for release and contamination.

Large volumes of ethanol were handled through the Manly Terminal section of the existing facility from 2007 through 2011. The Manly Terminal also stores and transfers corn oils, liquids and chemicals used in manufacturing bio-fuels, and animal feed ingredients.

I. Hazardous Waste: *Is the Project site in a developed area or was previously developed or used for industrial or agricultural production,*

☐ No, describe the steps taken to determine that hazardous materials are not present on the Project site. (Continue to J)

☒ Yes. *If yes, is it likely that hazardous materials will be encountered by undertaking the Project? (Prior to acquiring land or a facility with FRA funds, FRA must be consulted regarding the potential presence of hazardous materials)*

☐ Yes, complete a Phase I site assessment and attach.

☒ No, explain why it is unlikely that hazardous materials will be encountered.

Review of US EPA and Iowa Department of Natural Resources databases did not identify any hazardous materials issues with the UMTH site.

If a Phase I survey was completed, is a Phase II site assessment recommended?
☐ No, explain why a Phase II site assessment is not recommended.

☐ Yes, describe the mitigation and clean-up measures that will be taken to remediate any hazardous materials present and what steps will be taken to ensure that the local community is protected from contamination during construction and operation of the Project.

J. Property Acquisition: *Is property acquisition needed for the Project?*

☐ No (continue to K)

☒ Yes, indicate how much property and whether the acquisition will result in relocation of businesses or individuals. **Note:** *acquiring property prior to completing the NEPA process and receiving written FRA concurrence in the NEPA recommendation may jeopardize Federal financial participation in the Project.*

The project requires acquisition of 104 acres of property located within the existing Manly Logistics Park (UMTH). There would be no relocations of businesses or individuals.

K. Community Impacts and Environmental Justice: *Is the Project likely to result in impacts to adjacent communities? Impacts might be both beneficial (e.g. economic benefits) or adverse (e.g. reduction in community cohesion).*

☐ No, describe the steps taken to determine whether the Project might result in impacts to adjacent communities. (Continue to L)

☒ Yes, characterize the socio-economic profile of the affected community, including the presence of minority or low-income populations.

Manly, Iowa is a rural farming community of approximately 1,323 residents (2010 Census). The population is 97.7% white. The median household income is $48,438 and approximately 12.1% of the population is below the poverty level (American Community Survey 5-year estimates). The proposed project is expected to increase employment opportunities in the area. Approximately 10 direct, on-project jobs are expected to be created. During the immediate period after award of a TIGER grant, it is expected that construction contractors will employ approximately 35 to 45 workers. Moreover, 51 counties within the UMTH regional sphere of influence, including Worth County, Iowa where the UMTH is located, are designated as economically distressed areas. The proposed project is expected to encourage regional growth in warehousing and distribution centers and to provide access to new markets for agricultural products, both of which will have the potential to improve the economies of these 51 counties. Also, the lack of nearby intermodal facilities constrains growth and freight shipment capacity resulting in increased prices for Iowa shippers/receivers.

Describe any potential adverse effects to communities, including noise, visual and barrier effects. Indicate whether the Project will have a disproportionately high and adverse effect on minority or low-income populations. Describe outreach efforts targeted specifically at minority or low-income populations.

L. Impacts On Wetlands: *Does the Project temporarily or permanently impact wetlands or require alterations to streams or waterways?*

☒ No, describe the steps taken to determine that the Project is not likely to temporarily or permanently impact wetlands or require alterations to streams or waterways.

A desktop review of National Wetland Inventory maps, soil survey maps, and aerial photography of the area indicated that the only waters of the U.S., including wetlands, located on the site is Beaver Creek, which flows from northwest to southeast along the southern border of Manly Terminal. See attached Wetlands Memo. On July 3, 2013, an Iowa DOT biologist performed a field review of the project area and confirmed that no wetlands are present. The proposed project is not expected to impact Beaver Creek. See attached Aerial Map.

☐ Yes, show wetlands and waters on the site map and classification. Describe the Project's potential impact to on-site and adjacent wetlands and waters and attach any correspondence with the US Army Corps of Engineers.

Is a Section 404 Permit necessary?

☐ Yes, attach all permit related documentation

☒ No

M. Floodplain Impacts: *Is the Project located within the 100-year floodplain or are regulated floodways affected?*

☒ No (continue to N)

☐ Yes, describe the potential for impacts due to changes in floodplain capacity or water flow, if any and how the Project will comply with Executive Order 11988. If impacts are likely, attach scale maps describing potential impacts and describe any coordination with regulatory entities.

N. Water Quality: *Are protected waters of special quality or concern, or protected drinking water resources present at or directly adjacent to the Project site?*

☒ No, describe the steps taken to identify *protected waters of special quality or concern, or protected drinking water resources present at or directly adjacent to the Project site.*

☐ Yes, describe water resource and the potential for impact from the Project, and any coordination with regulatory entities.

O. Navigable Waterways: *Does the Project cross or have effect on a navigable waterway?*

☒ No (continue to P)

☐ Yes, describe potential for impact and any coordination with US Coast Guard.

P. Coastal Zones: *Is the Project in a designated coastal zone?*

☒ No (continue to Q)

☐ Yes, describe coordination with the State regarding consistency with the coastal zone management plan and attach the State finding if available.

Q. Prime and Unique Farmlands: *Does the Project impact any prime or unique farmlands?*

☐ No, describe the steps taken to identify *impacts to prime or unique farmlands.*

☒ Yes, describe potential for impact and any coordination with the Soil Conservation Service of the US Department of Agriculture.

The existing Manly Logistics Park site encompasses approximately 165 acres of property that is classified as agricultural land. See attached Aerial Map. The Farmland Conversion Impact Rating form was completed and coordinated with the Natural Resources Conservation Service. See attached NRCS-CPA-106 form. The project received a rating of 163 points.

R. Critical Habitat and Endangered Species: *Are there any designated critical habitat areas (woodlands, prairies, wetlands, rivers, lakes, streams, and geological formations determined to be essential for the survival of a threatened or endangered species) within or directly adjacent to the Project site?*

☒ No, describe the steps taken to identify critical habitat within or directly adjacent to the Project site.

The U.S. Fish and Wildlife list of federally listed species and the Iowa Department of Natural Resources Natural Areas Inventory (NAI) were reviewed to determine the likelihood of the proposed project impacting threatened and endangered species. The 2011 NAI database indicated occurrences of one state endangered species (Pearl dace, Margariscus margarita) within a one-mile radius of the project. On July 3, 2013 an Iowa DOT biologist performed a field review of the project area for potentially suitable habitat for threatened and endangeres species. No suitable habitat was observed. See attached Threatened and Endangered Species Memo and Determination of Effect form.

☐ Yes, describe them and the potential for impact.

Are any Threatened or endangered species located in or adjacent to the site?

☒ No, describe the steps taken to identify the presence of endangered species directly adjacent to the Project site.

☐ Yes, describe them and the potential for impact. Describe any consultation with the State and the US Fish and Wildlife Service about the impacts to these natural areas and on threatened

and endangered fauna and flora that may be affected. If required prepare a biological assessment and attach it and any applicable agency correspondence.

S. Public Safety: *Will the Project result in any public safety impacts?*

☒ No, describe method used to determine whether the Project results in any safety or security impacts

☐ Yes, describe the safety or security concerns and the measures that would need to be taken to provide for the safe and secure operation of the Project during and after its construction.

T. Cumulative Impacts: A "cumulative impact" is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts may include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or resulting from smaller actions that individually have no significant impact. Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern.

Are cumulative impacts likely? ☒ No ☐ Yes, describe the impacts:

Since the project is not expected to have adverse effects on the resources listed in A through S of this CE, overall cumulative impact of the proposed action and the consequences of subsequent related actions are not expected to be collectively significant.

U. Indirect Impacts: "Indirect impacts" are those that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect impacts may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Are Indirect impacts likely? ☐ No ☒ Yes, describe the impacts:

The majority of indirect impacts are expected to be beneficial. Implementation of the UMTH has the potential to induce development of truck warehousing and distribution centers in the area near Manly, which would bring new jobs to the area. Access to UMTH could benefit economic activity, job creation, and job retention within a 150-mile radius of Manly, which encompasses a total population of approximately 7.4 million people. This area includes the Des Moines, IA and Minneapolis/St. Paul, MN metropolitan areas. It also includes Rochester, MN; La Crosse, WS; and Cedar Rapids, Waterloo, Dubuque, and Iowa City, IA. The proposed project would enhance the region's ability to attract new industry.

V. Commitments: List all measures, procedures and practices that have been incorporated into the Project avoid and minimize impacts, if any, as identified in the above sections of this worksheet.

None

W. Public Notification: *Briefly describe any public outreach efforts undertaken on behalf of the Project, if any. Indicate opportunities the public has had to comment on the Project (e.g., Board*

meetings, open houses, special hearings).

The proposed project has been discussed at several local government board meetings.

Has the Project generated any public discussion or concern, even though it may be limited to a relatively small subset of the community? Indicate any concerns expressed by agencies or the public regarding the Project.

No

X. Related Federal, State, or Local Actions: *Does the Project require any additional actions (e.g., permits) by other Agencies?* Attach copies of relevant correspondence. It is not necessary to attach voluminous permit applications if a single cover Agency transmittal will indicate that a permit has been granted. Permitting issues should be described in the relevant resource discussion above.

☒ **Section 106** *Historic Properties*

☐ **Section 401/**404 **of the Clean Water Act**; *Wetlands and Water Quality*

☒ **Section 402 of the Clean Water Act**

☐ **USCG 404** *Navigable Waterways*

☐ **Migratory Bird Treaty Act**

☐ **Endangered Species Act** *Threatened and Endangered Biological Resources*

☐ **Magnuson-Stevens Fishery Conservation and Management Act** *Essential Fish Habitat*

☐ **Safe Drinking Water Act**

☐ **Section 6(f) Land and Conservation Act**

☐ **Other State or Local Requirements** (Describe)

For Agency Use	*Date Received:*
Reviewed By: *Date:*	*Recommendation for action:* ☐ *Accept* ☐ *Return for Revisions* ☐ *Not Eligible*
Comments:	
Concurrence by Approving Official:	*Date:*

For Agency Use

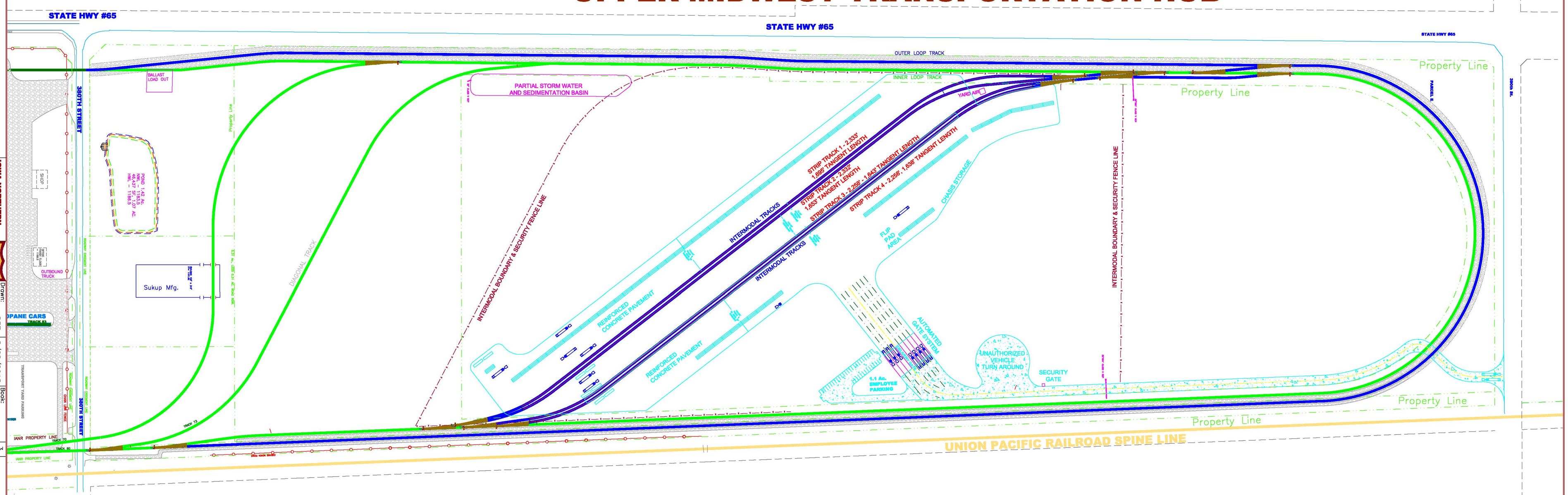
Will the Proposal result in the use of a resource protected by 49 U.S.C. §303 (Section 4(f)) of the Department of Transportation Act of 1966?

☐ YES ☐ NO

Is the proposal an integral part of a program of current Federally supported actions which, when considered separately, would not be classified as major actions, but when considered together may result in substantial impacts?

☐ YES ☐ NO

UPPER MIDWEST TRANSPORTATION HUB



UPPER MIDWEST TRANSPORTATION HUB

IOWA NORTHERN RAILWAY COMPANY

Title:

Page 1 of 1

Project No. UMTH

IOWA NORTHERN RAILWAY COMPANY
2500 BLAIRS FERRY RD NE
CEDAR RAPIDS, IA
52401

Drawn:	DPT	5/28/2015	Book:
Checked:			
Reviewed:			

Scale: 1" = 180'

No.	Revision	Date
1.		
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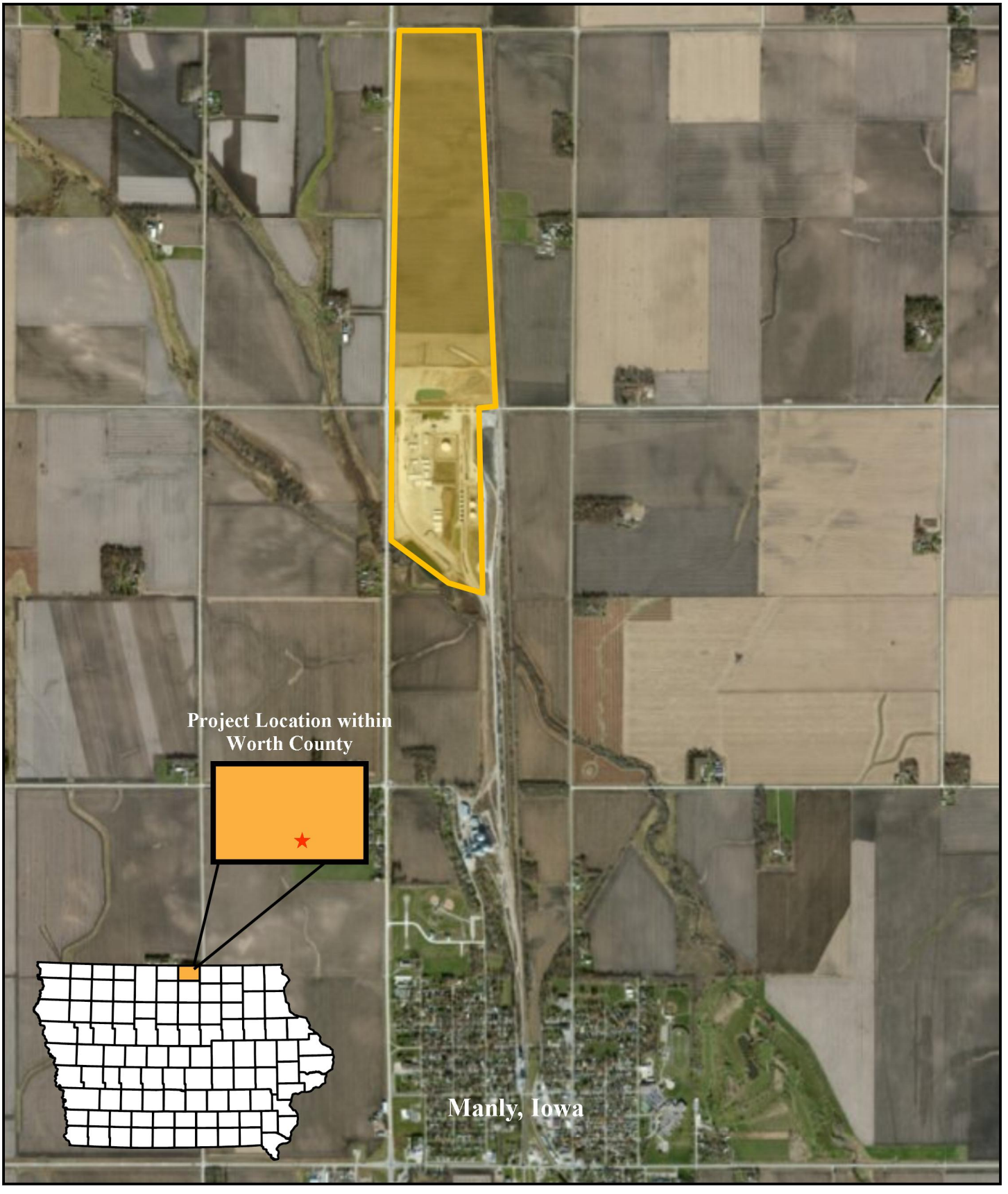
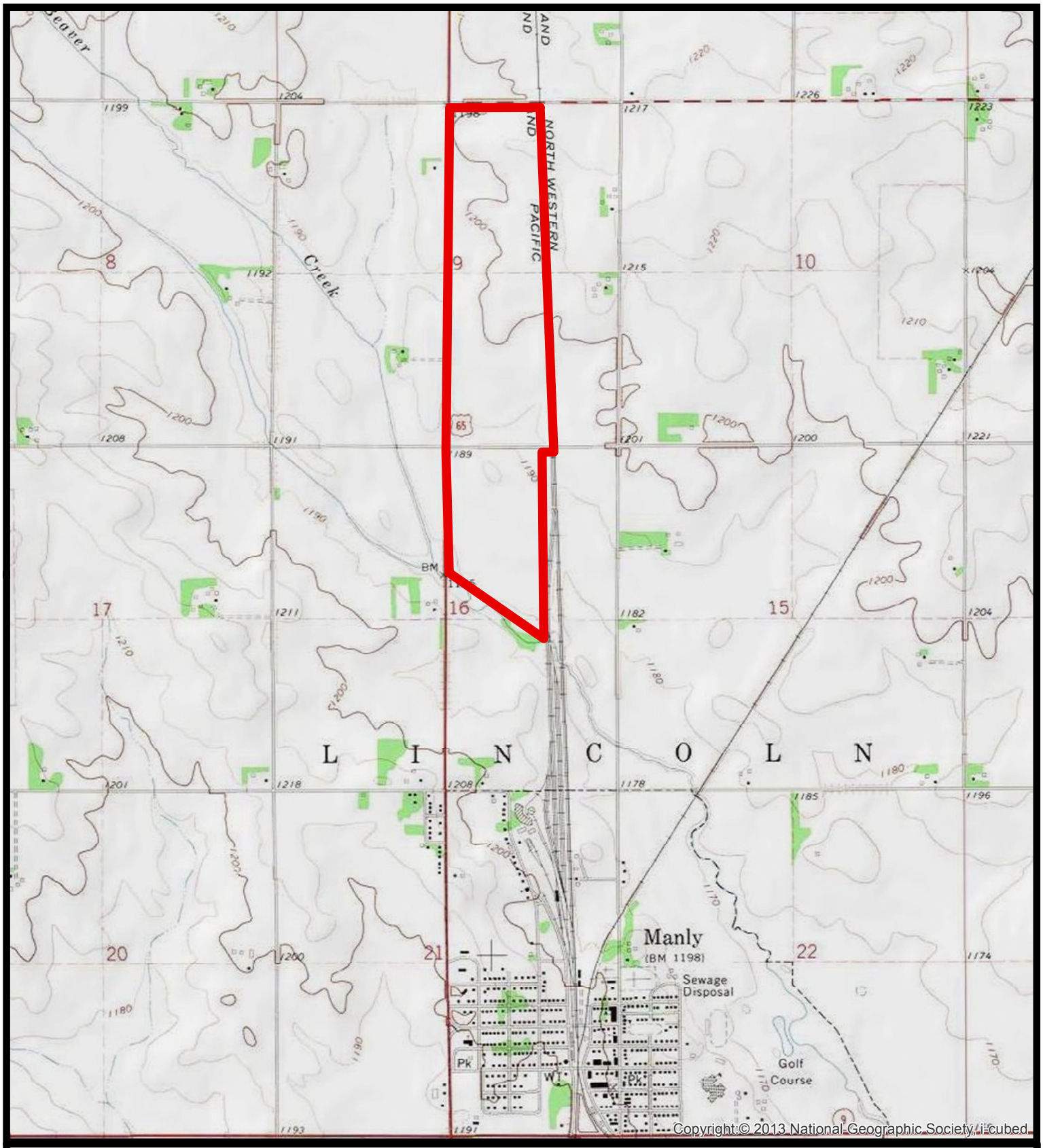
Location Map - Upper Midwest Transportation Hub



Project Boundary

IOWA DOT
SMARTER | SIMPLER | CUSTOMER DRIVEN



IOWA DOT
SMARTER | SIMPLER | CUSTOMER DRIVEN

Created April 2014

N

0 0.25 0.5
Miles

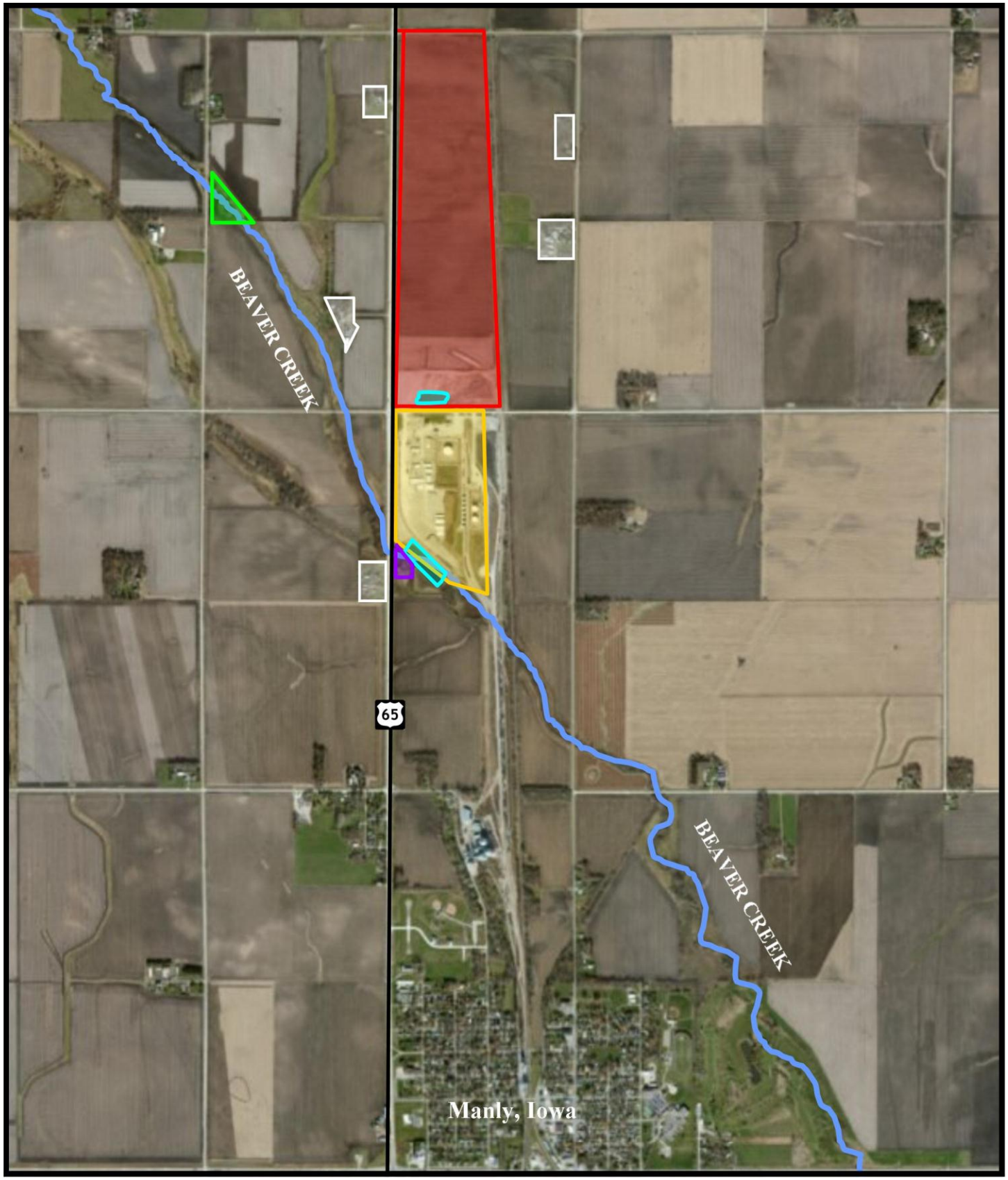
Project Area

Upper Midwest Transportation Hub

Intermodal Freight Rail/Truck Transportation Project

Manly. Iowa

Aerial Map - Upper Midwest Transportation Hub



Tostenson Wildlife Area

Upper Midwest Transportation Hub (Manly Logistics Park)

Manly Terminal

Private Residential Property

US Highway 65

Beaver Creek

Retention Pond

Wetland Mitigation Area

N

IOWA DOT
SMARTER I SIMPLER I CUSTOMER DRIVEN

INTENSIVE PHASE I ARCHEOLOGICAL INVESTIGATION FOR LANDS NORTH OF MANLY ASSOCIATED WITH THE IOWA NORTHERN RAILWAY COMPANY, LINCOLN TOWNSHIP, WORTH COUNTY, IOWA

Section 9, T98N, R20W

BCA #1999

Prepared for
Iowa Northern Railway Company
1330 Sheffield Avenue
Waterloo, Iowa 50702

Prepared by
Branden K. Scott
(Principal Investigator)

Bear Creek Archeology, Inc.
P.O. Box 347
Cresco, Iowa 52136
David G. Stanley, Director

June 2013

MANAGEMENT SUMMARY

This report presents the results of an intensive Phase I archeological investigation conducted for the Iowa Northern Railroad Company of Waterloo, Iowa, by Bear Creek Archeology, Inc. of Cresco, Iowa. This investigation was requested to provide information about archeological resources that might exist at a possible development area north of Manly in Section 9, T98N, R20W, Lincoln Township, Worth County, Iowa. The project area encompasses approximately 68.7 ha (169.7 ac) within the Iowan Surface physiographic region. Bear Creek Archeology, Inc. personnel conducted the field investigation on June 17 and 18, 2013.

Prefield research indicated the project area had limited potential for archeological sites. The soil survey and topographic map show the project area on a flat upland plain removed from significant waterways. These areas are comprised of poorly drained uplands and glacial depressions. No previously recorded archeological sites occurred in or near the project area based on a site records search. A review of historic plat maps and aerial photographs indicated that no documented historic structures occurred within the project area. Modern aerial photographs did indicate that significant disturbances are present in the southern portion of the investigated area.

The field investigation consisted of obtaining profiles using a soil probe (n = 4) and a pedestrian survey. The geomorphological analysis indicated the project area occurred on a broad flat upland landform, small glacial depressions, and a disturbed area. No buried soils were encountered. The project area was found in an agricultural field and a disturbed area. Ground surface visibility in project area was good and a pedestrian survey was conducted at 15 m (49.2 ft) intervals. No archeological resources were encountered. Because no archeological sites were encountered, Bear Creek Archeology, Inc. recommends no further work for the project area.

INTRODUCTION

This report presents the results of an intensive Phase I archeological investigation conducted for the Iowa Northern Railroad Company, Waterloo, Iowa, by Bear Creek Archeology, Inc. (BCA), Cresco, Iowa. This investigation was requested to provide information concerning archeological resources that might exist at a possible development area north of Manly in the E½, Section 9, T98N, R20W, Lincoln Township, Worth County, Iowa. The project area encompasses approximately 68.7 ha (169.7 ac) of upland and wetland landforms in the Iowan Surface physiographic region.

This archeological survey was conducted in accordance with the National Historic Preservation Act (Advisory Council of Historic Preservation 1984, 1999) and the Secretary of the Interior's standards for the identification of historic properties (National Park Service 1983). The fieldwork and report presented herein were designed and conducted to meet or exceed the guidelines for archeological investigations in Iowa (Association of Iowa Archaeologists [AIA] 1999). This report details the information gathering process concerning archeological sites that might exist in or near the project area. It provides descriptions of archeological resources when encountered, their natural contexts, and recommendations concerning the impact of the proposed activities on archeological properties. Branden K. Scott and Shay C. Gooder conducted the field investigations on June 17 and 18, 2013. The field investigation consisted of landform evaluations and a pedestrian survey.

Prefield research indicated the project area had limited potential for archeological sites. The soil survey and topographic map depict the project area as residing on a flat upland plain removed from significant waterways. The area was documented as being comprised of wet uplands and depressions. No previously recorded archeological sites occur in or near the project area. A review of historic plat maps and aerial photographs indicate that no documented historic structures occur within the project area. Significant disturbances have occurred toward the southern portion of the investigated area.

The field investigation consisted of obtaining soil profiles (n = 4) and a pedestrian survey. The geomorphological analysis indicated the project area occurs on a broad flat upland landform, small glacial depressions, and a disturbed area. Due to the flatness of the upland landform, the area is poorly drained. No buried soils were encountered. Visibility in the project area was good. No archeological resources were encountered.

PROJECT LOCATION

The project area is located in the Iowan Surface physiographic region (Prior 1991; Figure 1). The project area is situated in the E½ of Section 9, T98N, R20W, Lincoln Township, Worth County, Iowa (Figure 2). The project area is bounded to south by 380th Street, to the west by U.S. Highway 65/Orchid Avenue, to the north by 390th Street, and to the east

by the Northwestern and Pacific Railway. The project area resides on upland and drained wetland landforms.

The project area is approximately 68.7 ha (169.7 ac) and occupies an agricultural field and a disturbed area. At present, it is unclear what is to be constructed at this location or how this area will be used. Therefore, all archeological resources, no matter the depth, need to be identified and evaluated to ensure that they will not be adversely affected in the future (should archeological sites occur).

INVESTIGATION PREMISES

The survey strategy used for this investigation is based on the examination of the project area and the landforms that exist within it. Archeological sites are integrated into the environment by natural surficial and formation processes, and may be viewed not only as cultural remains but also as geologic deposits. Geological processes condition the geographic and pedologic character of a region and being aware of a region's geologic development is a necessary component to any evaluation of the archeological record. Landform and soil attributes have a strong influence on the presence, absence, and distribution of the plant and animal populations exploited by human groups. Geological processes affect not only the patterns of human settlement and land use, but they are also largely responsible for the preservation, destruction, and manipulation of the archeological record. The archeological record should therefore be viewed as a product of both cultural and geological processes (Bettis and Green 1991).

This outlook on site locations enables the researcher to predict site occurrence and patterned distributions within a given region in relation to local landforms (Bettis and Benn 1984; Bettis and Thompson 1981). This approach also assists in the recognition of post-settlement alluvium, made-land, plowzones, and other disturbances and site formation processes that may have modified the landscape and the archeological record.

As a tool of cultural resource management, this type of landform modeling is critical to the development and implementation of survey strategies. Geologically sensitive survey strategies allow the investigator to focus on areas where the probabilities of site occurrence are highest. This reduces or eliminates the costs of surveying areas where sites should not sensibly occur in situ (e.g., made-land, heavily disturbed areas, landforms consisting entirely of recent alluvium). Informed survey strategies, such as the one outlined above, allow for the determination of the vertical and horizontal distribution of subsurface tests necessary to detect buried archeological deposits. The nature of the proposed impacts can also be assessed in terms of the landforms present.

ENVIRONMENTAL CONTEXT

Physiographic Region

The project area is located in north-central Iowa in the physiographic region known as the Iowan Surface (Prior 1991; Figure 1). The Iowan Surface is slightly inclined to gently rolling with long slopes, low topographic relief, and extended views to the horizon. Iowan Surface hillslopes are gradually multi-leveled or stepped surfaces that progress outwardly to drainage divides (Prior 1991:68). A well-defined valley edge is generally difficult to distinguish and the drainage networks are well established and have low topographic relief (Prior 1991:69). According to Prior (1991), this physiographic region experienced its last glaciation during the pre-Illinoian period and has since been subjected to episodes of weathering, development of soils, loess deposition, and erosion.

The erosional surface complex advanced gradually from stream valleys to the adjacent interstream divides, leaving residual concentrations of coarse pebbles, clays, silts, and sands on each developing surface level. Fluvial actions, slope-wash, and wind deflation eroded these residual deposits during the same period that loess was deposited on the landscape. Thick loess accumulations occur on undisturbed topographic highs consisting of elongated ridges and isolated oblong hills known as "pahas" and interstream divides (Prior 1991).

Upland Landform Model

The upland landform model used in this report is based on Ruhe's (1969; Figure 3) analysis of hillslope evolution detailing the erosional and depositional sequences of upland landform components. The upland hillslope is divided into five components (listed in descending order): summit, shoulder, sideslope, footslope, and toeslope.

Summits comprise the upper portion of the landform and tend to be stable, but they are subjected to minor deposition and erosion by eolian processes. Shoulders are formed by the gradual back cutting of hillslopes and are generally convex in cross-section with a low degree of slope. Sideslopes are erosional features formed by the back cutting of valley walls. Footslopes, the lower remnants of hillslopes, are eroded and often covered by colluvial deposits derived from the shoulder and sideslope. Toeslopes can be found at the base of the upland landform and consist almost entirely of colluvial deposits.

Due to their low degree of erosion and relative flatness, summits and shoulders have high potential for containing sites. These landforms have been shown capable of containing intact, shallowly buried archeological materials (Van Nest 1993). Footslope and toeslope areas also are considered to have good site potential because these landforms are depositional in nature and generally have a low degree of slope (Van Nest 1993). Sideslopes, because of their steep inclines and high degree of erosion, rarely contain intact prehistoric archeological materials). Historic archeological sites can be found on nearly any upland landform component.

When using this model, it is important to account for agriculturally induced wind and water erosion. All cultivated upland components have been subjected to erosional pressures. Therefore, summit, shoulder, footslope, and toeslope positions that have been historically cultivated typically possess lower potential for intact sites.

Project Area Soils and Landscape Analysis

The information presented here was obtained from the Soil Survey of Worth County, Iowa (Buckner and Highland 1976) and the Natural Resources Conservation Service (NRCS; 2006). The soils summarized below in Table 1 are the soil types likely to be encountered in the project area (Figure 4).

Table 1. Soil information (Buckner and Highland 1976; NRCS 2006)

Designation	Soil Series	Member/ Landform	Description
184	Klinger silty clay loam, 1–3% slopes	Upland	This is a nearly level to gently sloping, somewhat poorly drained soil found on broad ridge crests and long sideslopes. This soil formed in loess over glacial till. The native vegetation was prairie grasses. Permeability is moderate to moderately slow and the available water capacity is high. The typical profile is Ap-A-AB-Bg1-2Bg2-2Bg3-2BC1-2BC2. The archeological potential is moderately low due to poor drainage.
382	Maxfield silty clay loam, 0–2% slopes	Upland	This is a nearly level, poorly drained soil found on long, slightly concave to slightly convex slopes in the uplands. This soil formed in loess over glacial till. The native vegetation was water-tolerant prairie grasses. Permeability is moderate and the available water capacity is high. The typical profile is Ap-A-Bg-2Bw1-2Bw2-2BC1-2BC2. The archeological potential is moderately low due to poor drainage.
399	Readlyn loam 1–3% slope	Upland	This is a gently sloping, somewhat poorly drained soil found on broad ridge crests and long sideslopes. This soil formed in loamy material and the underlying glacial till under prairie grasses. Permeability is moderate to moderately slow and the available water capacity is high. The typical profile is A1-A2-BA-Bw-2Bg1-2Bg2-2BCg-2BC. The archeological potential is moderately low due to wetness.
507	Canisteo silty clay loam, 0–2% slopes	Wetland/ depression	This is a nearly level, poorly drained soil found in waterways and on the borders of some glacial depressions. This soil formed in glacial sediment under water-tolerant grasses. Permeability is moderate and the available water capacity is high. The typical profile is Ap-A-Bkg1-Bkg2-Cg1-Cg2. The archeological potential is low due to landscape position and wetness.

While the soil survey depicts most of the project area on upland landforms, these landforms appear to be poorly drained. The frequent occurrence of Bg horizons suggests that this area was unsuitable for human habitation throughout much of the year. The Canisteo soil represents a prehistoric wetland/marsh. These areas often do not contain archeological sites because they tended to be underwater. While archeological sites can occur along the margins of such landforms, in this instance, archeological sites are not anticipated because the surrounding uplands are also perennially wet.

The topographic map shows the project area on a nearly level glacial plain (Figure 2). Elevation ranges from 362.7 m (1,190 ft) to 365.8 m (1,200 ft) above the National Geodetic Vertical Datum. There are no waterways within the project area. Beaver Creek is located approximately 240 m (787.4 ft) to the west. At this location, Beaver Creek is a very small stream. Beaver Creek flows southeast and meets with the Shell Rock River south of Plymouth. A LiDAR image shows the project area on a nearly flat upland landform with some disturbances to the south (Figure 5). The stream valleys to the west have not incised deeply. Based on the topographic map and the LiDAR image, the project area is unlikely to yield archeological materials because this location is too far removed from major waterways of the Iowan Surface.

METHODS AND RESULTS

To obtain the information needed to complete the survey, archival research and field survey were conducted under the protocols for archeological investigations in Iowa (AIA 1999).

Archival Research

Prior to fieldwork, information regarding previously documented archeological sites as well as former surveys within or near the project area was obtained from the on-line resource provided by the Office of the State Archaeologist. This archival search indicated that no previously recorded archeological sites or previous archeological surveys are located within a 1.6 km (1 mi) radius of the project area.

A General Land Office (GLO) map (1854; Figure 6) was used to document the early history of the project area. There are no historical resources documented on the GLO. Two historic plat maps were used to identify documented historic properties that might occur in the project area (Anderson Publishing Company 1913; Andreas 1875; Figures 7 and 8). No historical structures are documented on either map. Both maps depict a set of railroad tracks on the east side of the project area. No streams are ever depicted in the project area.

Caution needs applied when using plat maps for information regarding structure/farmstead and channel locations. These features are often misplaced or absent on the maps and field verification is necessary to substantiate these historical sources.

Aerial photographs from 1939, 1953, and 1965 were used to determine if structures or disturbances occurred within the project area (Figures 9–11). No historic structures or disturbances are documented on these aerial photographs. A recent aerial photograph depicts significant disturbances in the southern part of the project area (Figure 12).

Field Investigation

The survey strategy utilized for this investigation was determined by the results of the geomorphic study, the conditions observed in the field, and the potential of a given landform to contain archeological resources. The field investigation included the hand coring of soils and a pedestrian survey. To determine the archeological potential of the landforms occurring in the project area, a ¾" soil probe was used ($n = 4$; Figure 12). The results of these profiles are presented below.

DESIGNATION: 1999-1
LANDSCAPE POSITION: disturbed upland
SLOPE: 0–2%
METHOD: soil probe
VEGETATION: sparse grass, 60–70% ground surface visibility (GSV)
DESCRIBED BY: B. Scott
DATE: 6/18/13
REMARKS: This profile was taken in an area obviously reworked by modern earthmoving. Intact archeological resources are not anticipated.

Depth (cm)	Soil Horizon	Description
0–37	Disturbed	Mostly olive brown (2.5Y 4/3) with some very dark grayish brown (10YR 3/2) silty clay loam; massive structure; plastic. End.

DESIGNATION: 1999-2
LANDSCAPE POSITION: upland plain
SLOPE: 0–2%
METHOD: soil probe
VEGETATION: agricultural field, 80–90% GSV
DESCRIBED BY: B. Scott
DATE: 6/18/13
REMARKS: This profile appears to have been placed adjacent to a buried field tile.

Depth (cm)	Soil Horizon	Description
0–12	Ap	Black (10YR 2/1) sandy loam; weak, fine subangular blocky structure friable; clear boundary.
12–35	Backfill/ disturbed	Black (10YR 2/1) sandy loam; moderate, medium subangular blocky structure; firm; abrupt boundary.
35–37	Disturbed	Dark grayish brown (10YR 4/2) clay loam; massive structure; plastic; abrupt boundary.
37–68+	Cg	Yellowish brown (10YR 5/4) sandy clay loam with strong brown (7.5YR 4/6) iron mottles; massive structure; wet; water table at 60 cm. End.

DESIGNATION: 1999-3
LANDSCAPE POSITION: upland plain
SLOPE: 0–2%
METHOD: soil probe
VEGETATION: agricultural field, 80–90% (GSV)
DESCRIBED BY: B. Scott
DATE: 6/18/13
REMARKS: An A horizon remains at this location. The A horizon is underlain by an excessively wet B horizon. This wetness is likely due to the flatness of the landform.

Depth (cm)	Soil Horizon	Description
0–12	Ap	Black (10YR 2/1) silt loam; weak, fine subangular blocky structure friable; clear boundary.
12–30	A	Black (10YR 2/1) silt loam; moderate, medium platy structure; firm; clear boundary.
30–40	Bg	Yellowish brown (10YR 5/4) and black (10YR 2/1) silt loam; massive structure; plastic; some krotovina; clear boundary.
40–52+	Btg	Pale brown (10YR 6/3) sandy clay loam; massive structure; plastic; wet. End.

DESIGNATION: 1999-4
LANDSCAPE POSITION: upland plain
SLOPE: 0–2%
METHOD: soil probe
VEGETATION: agricultural field, 80–90% GSV
DESCRIBED BY: B. Scott
DATE: 6/18/13
REMARKS: This profile was taken on one of the highest points within the project area. A Btg horizon was still encountered, indicating that this area is poorly drained.

Depth (cm)	Soil Horizon	Description
0–11	Ap	Very dark gray (10YR 3/1) silt loam; weak, fine subangular blocky structure; friable; clear boundary.
11–25	A	Black (10YR 2/1) silt loam; weak, fine subangular blocky structure; friable; clear boundary.
25–35	AB	Very dark grayish brown (10YR 3/2) and dark brown (10YR 3/3) silt loam; moderate, fine subangular blocky structure; friable; clear boundary.
35–50+	Btg	Dark yellowish brown (10YR 4/4) sandy clay loam; massive structure; plastic; wet. End.

Using the soil profiles and a geomorphological assessment as a guide, the project area generally resides on a relatively flat, poorly drained glacial plain. In the northeastern and north central part of the project area, small wetlands occur. The southern portion of the project area occupies a disturbed upland landform. No buried soils were observed in this cultivated upland. Most of the project area occurred in an unplanted field (80–90% GSV; Figures 12–14). Some small, planted corn occurred in isolated areas but due to recent hail damage, the small plants did not change the surface visibility. In the disturbed area to the south, rock dominated the terrain (Figures 12 and 15). Sparse grass also occurred

in the disturbed area (60–70% GSV; Figures 12 and 16). A modern pond and new drainages/ditches were also cut into the disturbed area (Figure 12).

A pedestrian survey was conducted across the project area's agricultural field. Pedestrian survey transects were spaced at 15 m (49.2 ft) intervals. These transects were walked from north to south to north. A pedestrian survey was also conducted in the disturbed area to the south. The disturbed area consisted mostly of rock and a modern pond. Although surface visibility was more than adequate and the area was intensively surveyed, no archeological sites were encountered.

CONCLUSIONS AND RECOMMENDATIONS

This report presented the results of an intensive Phase I archeological investigation conducted for the Iowa Northern Railroad Company by BCA. This investigation was requested to provide information concerning archeological resources that might exist at a possible development area north of Manly in Section 9, T98N, R20W, Lincoln Township, Worth County, Iowa. The project area encompassed approximately 68.7 ha (169.7 ac). BCA personnel conducted the field investigations on June 17 and 18, 2013.

Prefield research suggested the project area had limited archeological site potential. The soil survey and topographic map showed the project area on a flat upland plain removed from significant waterways. The upland plain consisted of wet uplands and glacial depressions. No previously recorded archeological sites occurred in or near the project area. A review of historic plat maps and aerial photographs indicated that no documented historic structures occurred within the project area. Aerial photographs indicated significant disturbances in the southern part of the investigated area.

The field investigation consisted of obtaining profiles using a soil probe (n = 4) and a pedestrian survey. The geomorphological analysis indicated that the project area occurred on a broad, flat upland landform, small glacial depressions, and a disturbed area. No buried soils were encountered. Visibility in project area was good and a pedestrian survey was conducted at 15 m (49.2 ft) intervals. No archeological resources were encountered. Because no archeological sites were encountered, BCA recommends no further work for the project area.

No technique of modern archeological research is adequate to identify all archeological sites or cultural deposits within a given area. In the event that any cultural materials not recorded by this investigation are discovered during the course of the proposed development activities, the Bureau of Historic Preservation at the State Historical Society of Iowa is to be contacted immediately. The developer is responsible for the protection of cultural resources from disturbance until a professional examination can be made or authorization to proceed is granted by the State Historic Preservation Office or a designated representative.

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FIGURES

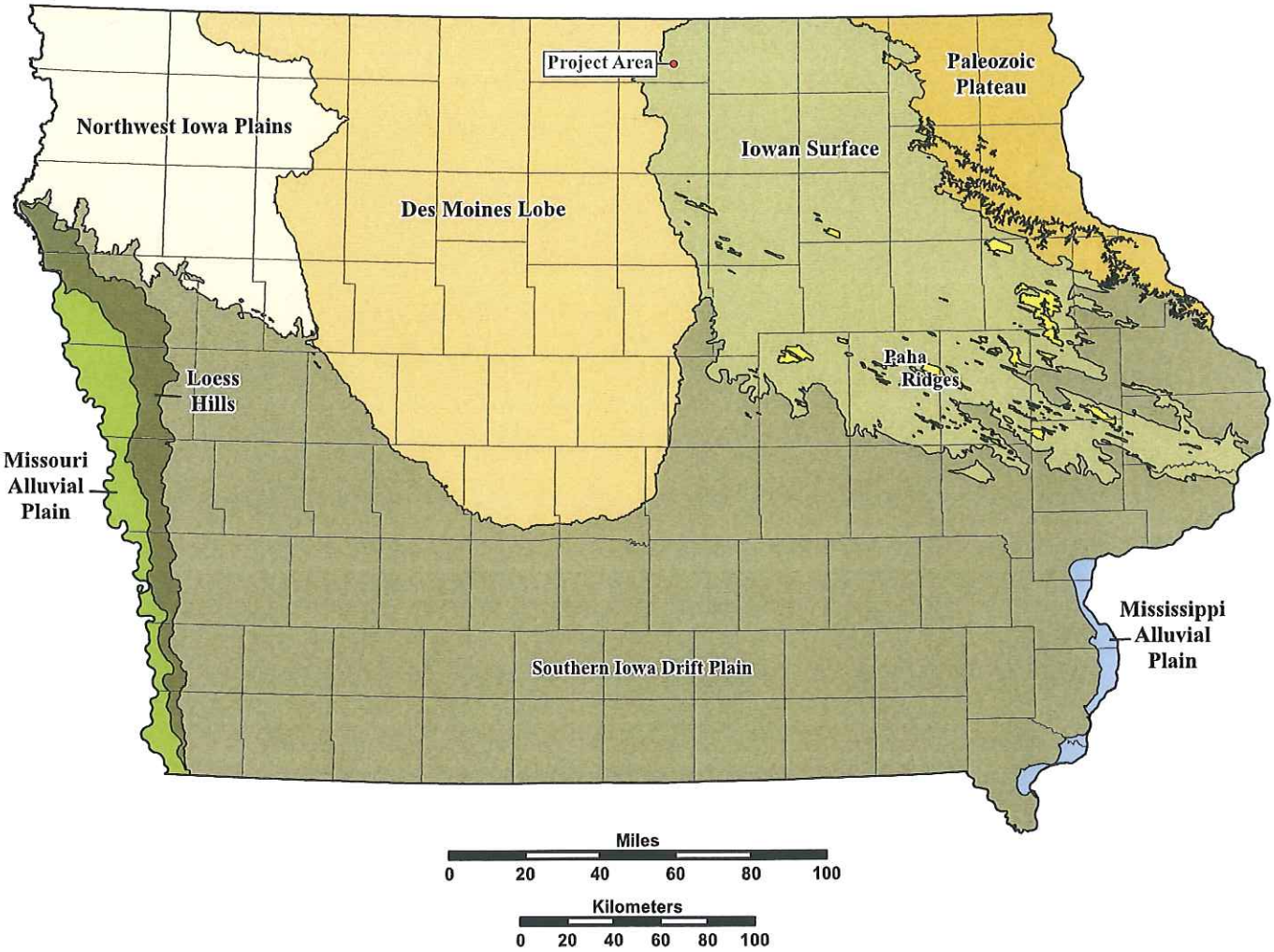

Figure 1. Physiographic location of the project area (adapted from Prior [1991:31]).

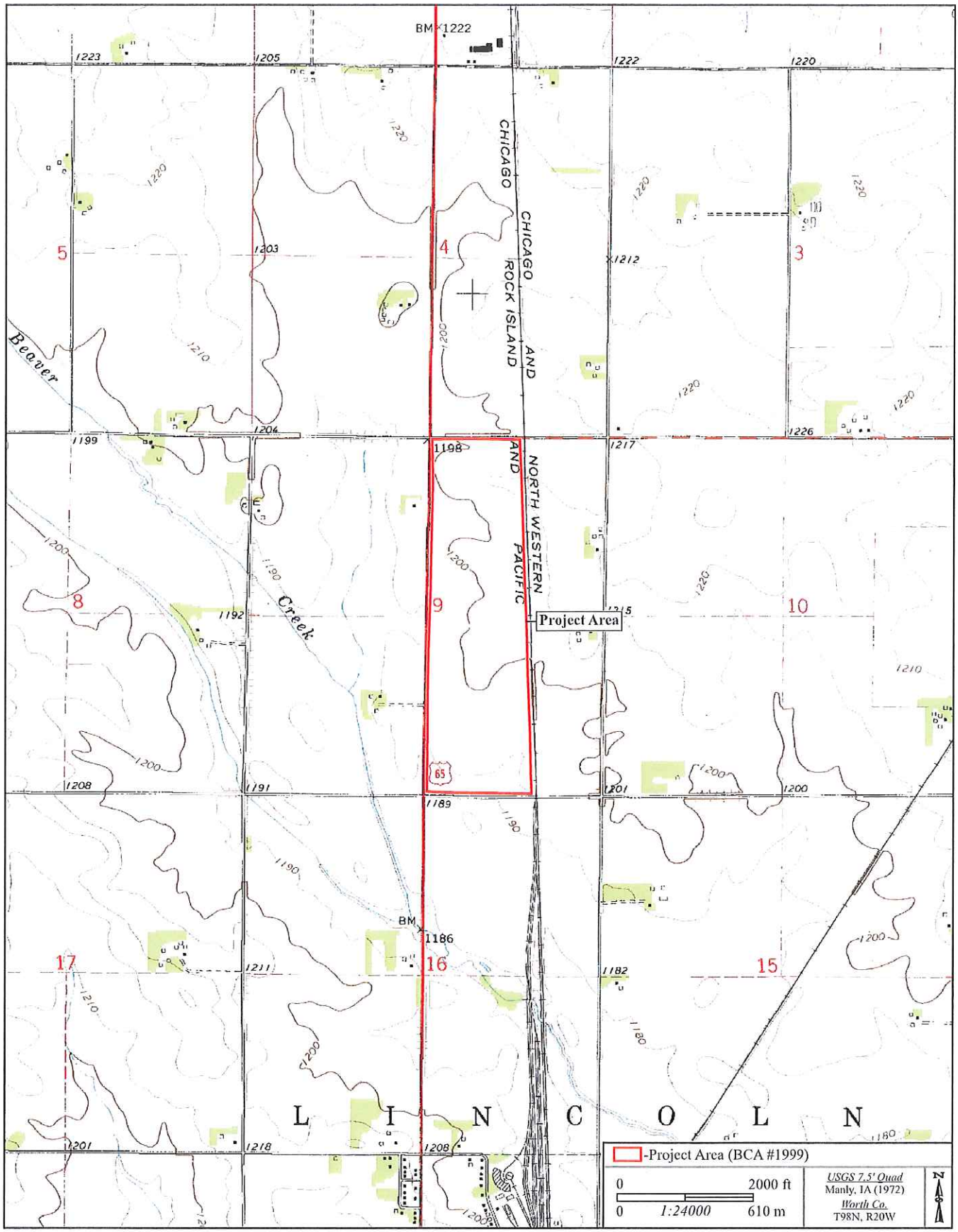

Figure 2. Topographic coverage of the project area.

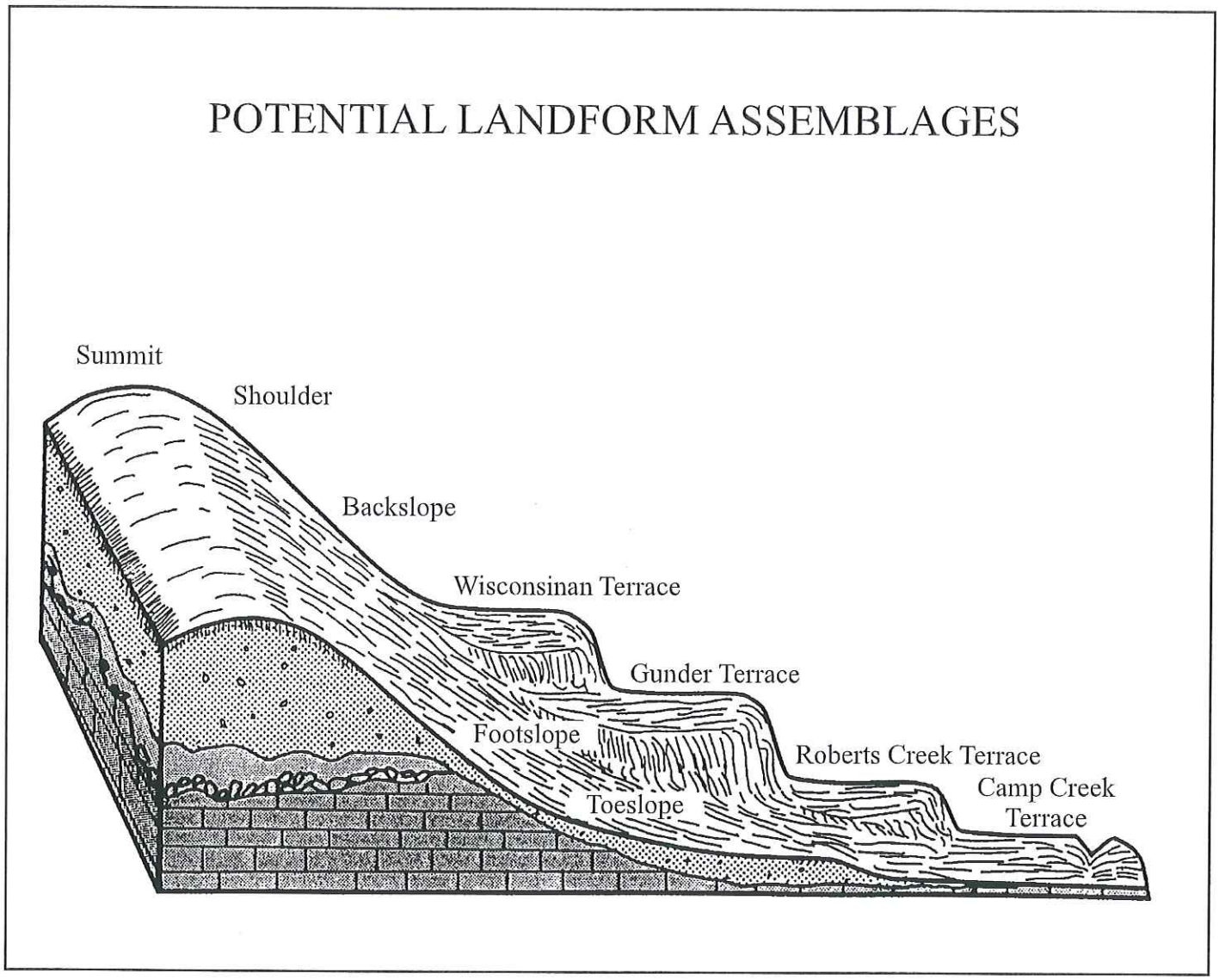

Figure 3. Diagram of potential landform components (adapted from Ruhe [1969]).

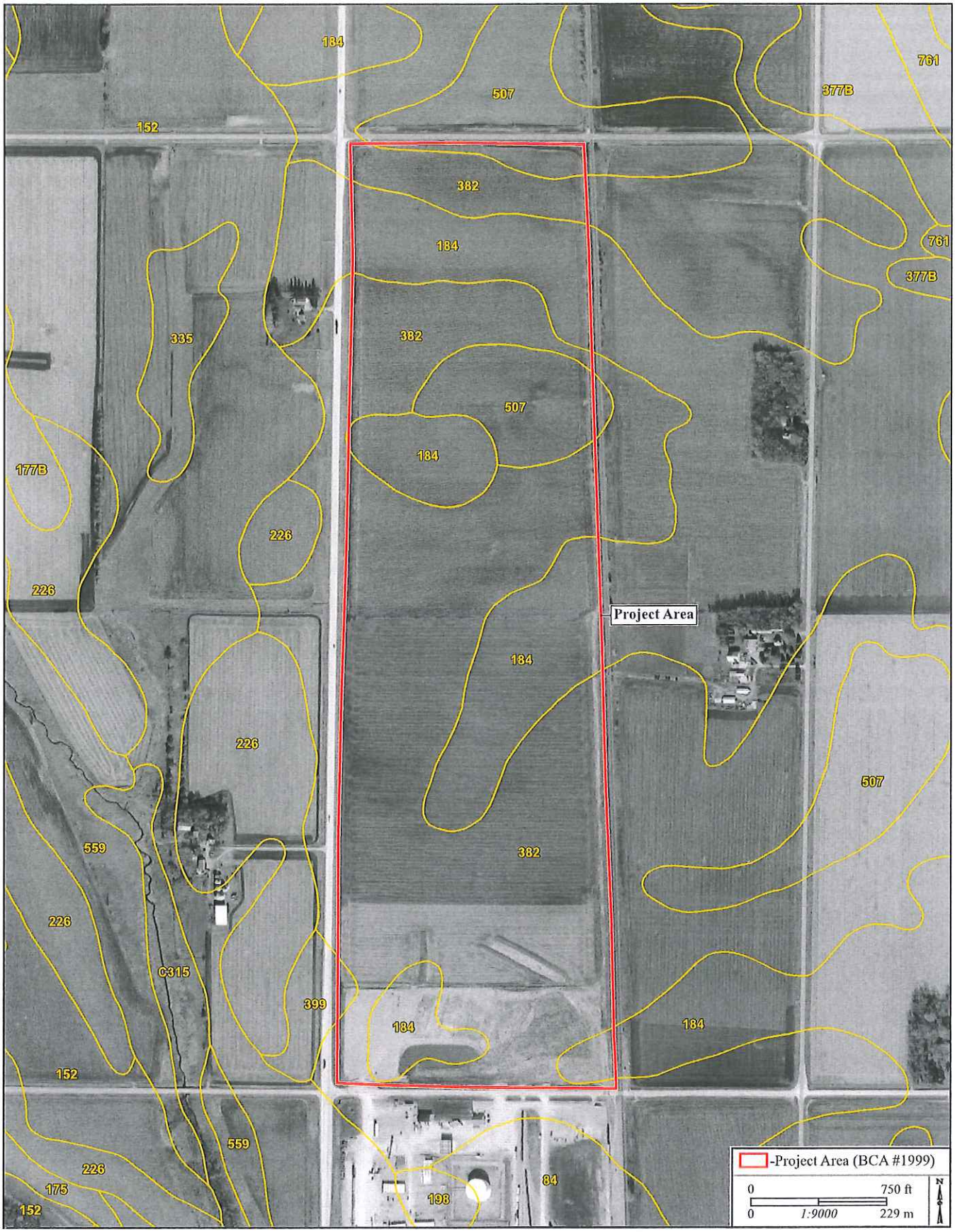

Figure 4. Soil map of the project area (NRCS 2006).

Figure 5. LiDAR image of the project area.

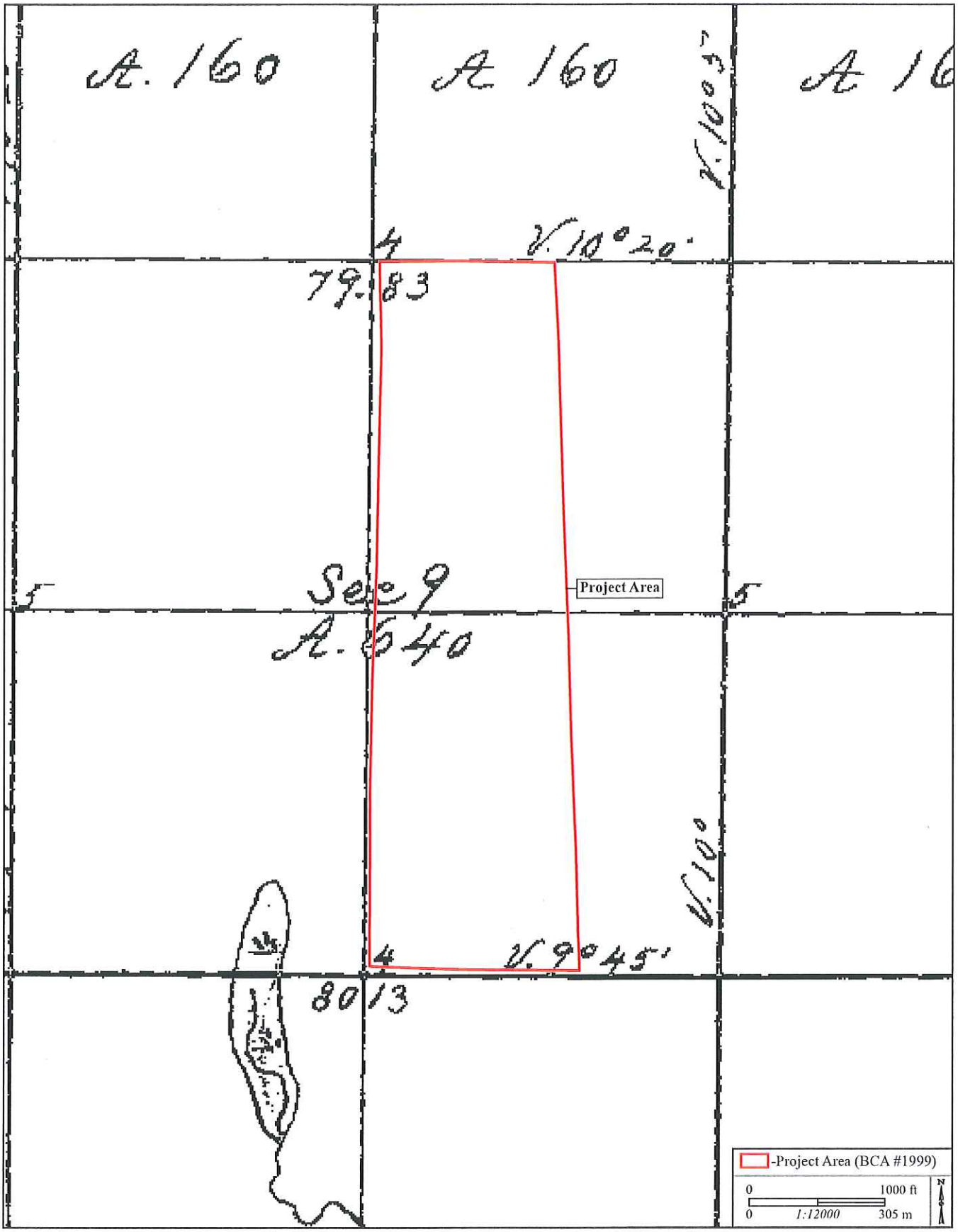

Figure 6. 1854 map of the project area (GLO).

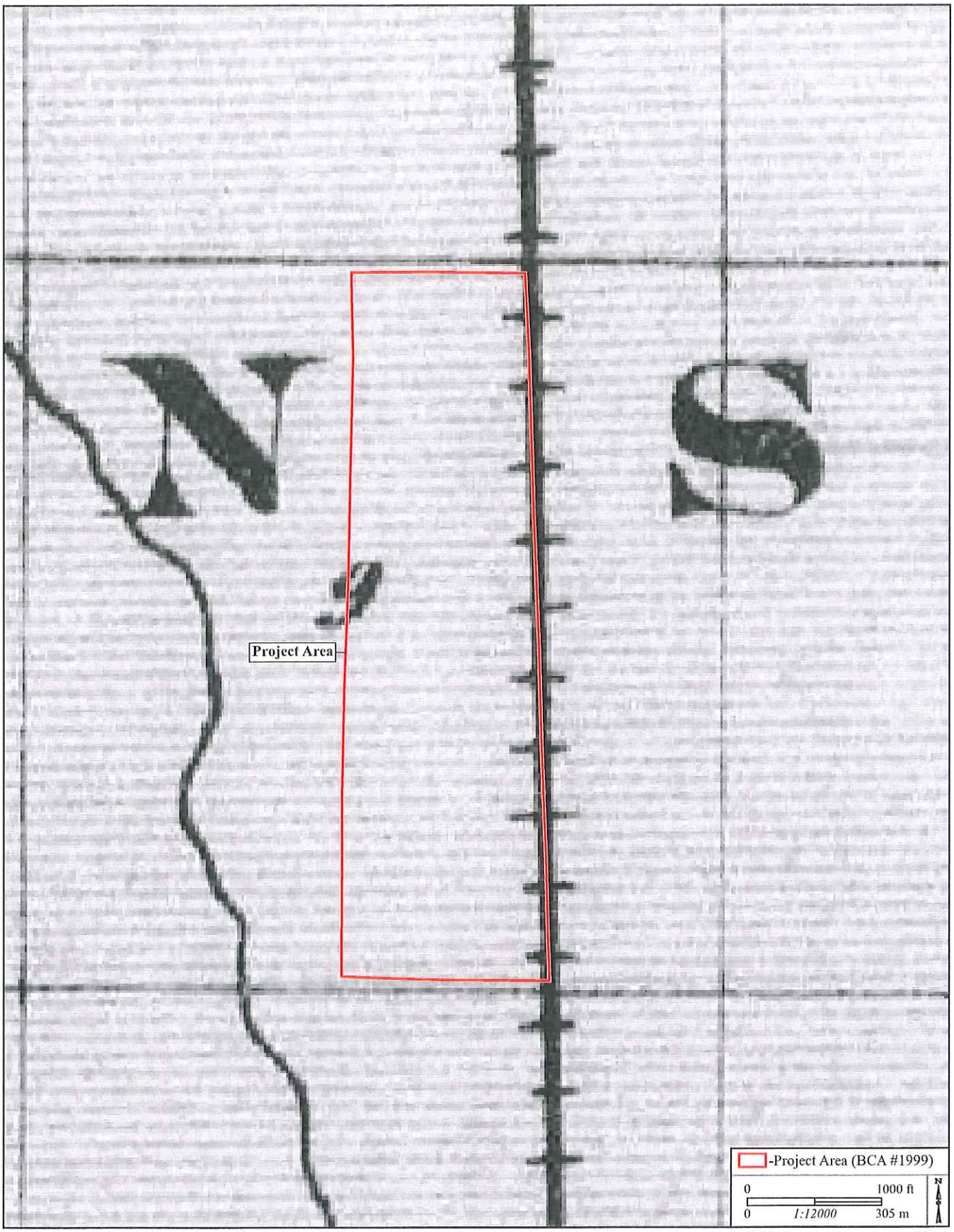

Figure 7. 1875 map of the project area (Andreas).

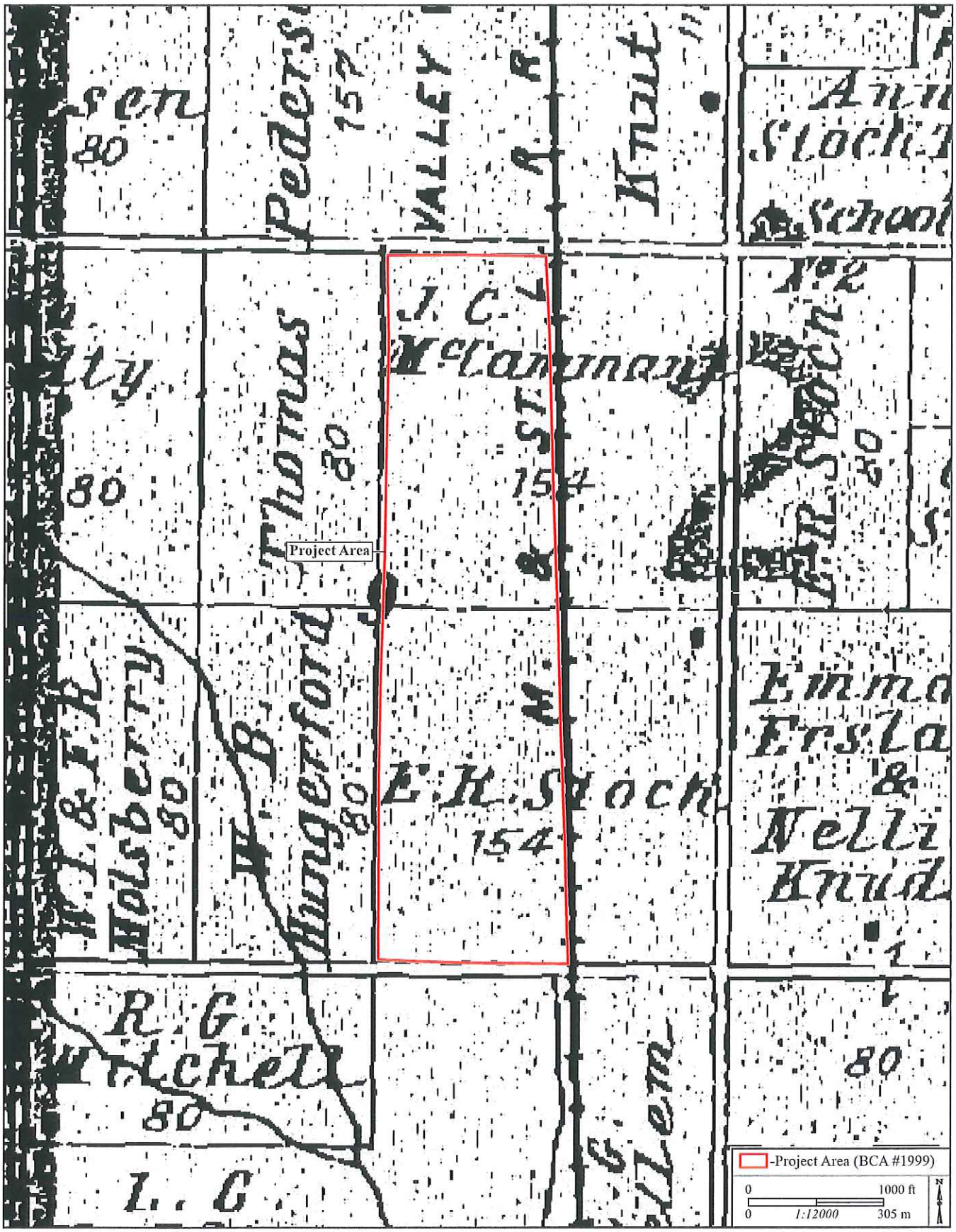

Figure 8. 1913 map of the project area (Anderson Publishing Company).

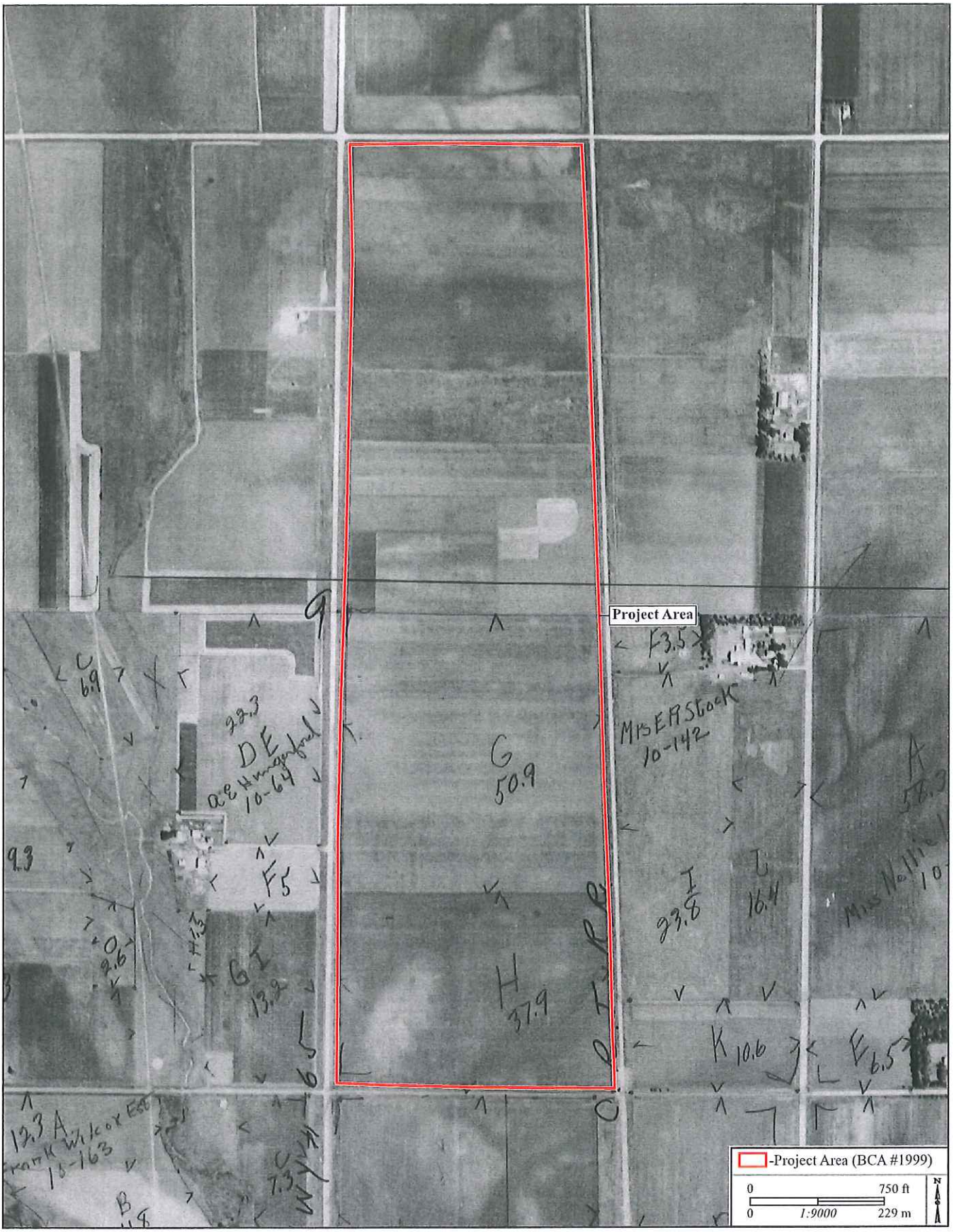

Figure 9. 1939 aerial photograph of the project area.

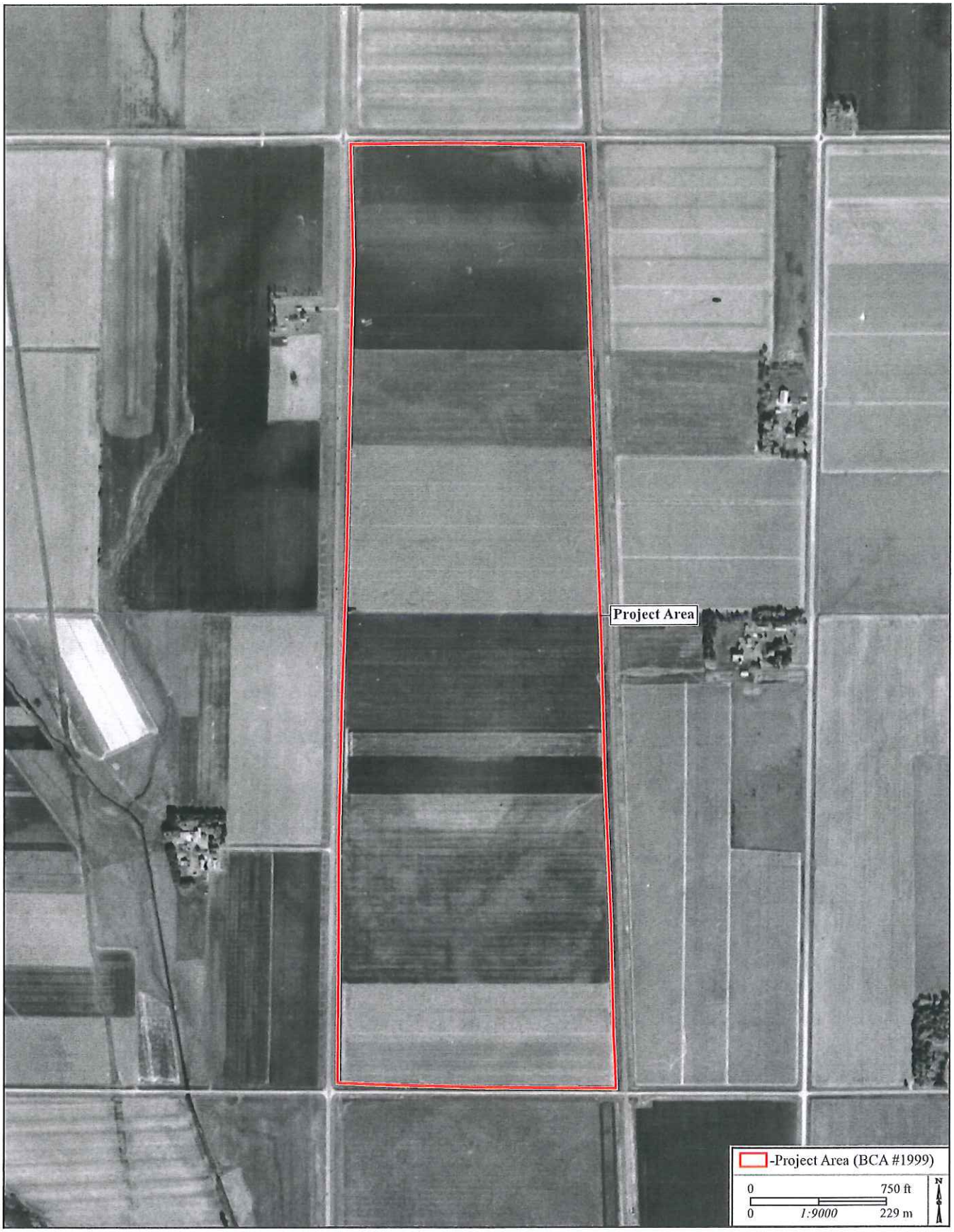

Figure 10. 1953 aerial photograph of the project area.

Figure 11. 1965 aerial photograph of the project area.

Figure 12. Scale map of the project area.

Figure 13. Coverage of the project area. View to the east (6/17/13).

Figure 14. Coverage of the project area. View to the north (6/17/13).

Figure 15. Coverage of the project area. View to the east (6/18/13).

Figure 16. Coverage of the project area. View to the west (6/18/13).

APPENDIX A
National Archaeological Database Form

Database Doc Number:_____

NATIONAL ARCHAEOLOGICAL DATABASE – REPORTS; DATA ENTRY FORM

1. R and C #: _____
2. Authors: Scott, Branden K.

Year of Publication 2013

3. Title Intensive Phase I Archeological Investigation for Lands North of Manly Associated with the Iowa Northern Railway Company, Lincoln Township, Worth County, Iowa

---

3. Report Title: BCA Reports

Volume #: _____ Report #: BCA 1999 NTIS: _____

Publisher: Bear Creek Archeology, Inc.

Place: Cresco, Iowa

---

5. Unpublished

Sent From: _____

Sent To: _____

Contract #: _____

---

6. Federal Agency: _____

---

7. State: Iowa

County: Worth

Town: _____

---

8. Work Type: 31

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	
68.7 ha (169.7 ac)	[7]		[ ]
Iowan Surface	[4]		[ ]
No resources	[0]		[ ]
Upland landforms	[7]		[ ]
	[ ]		[ ]
	[ ]		[ ]
	[ ]		[ ]

---

10. UTM Zone:

15	Easting:	Northing:	
15	Easting:	Northing:	
15	Easting:	Northing:	
15	Easting:	Northing:	

11. Township: 98N

Range: 20W

Other Publication Types:

12. Monographs:

Name: _____

Place: _____

---

13. Chapter: In: _____ First: _____ Last: _____

---

14. Journal: Volume: _____ Issue: _____ First: _____ Last: _____

---

15. Dissertation:

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

---

16. Paper: Meeting: _____

Place: _____ Date: _____

---

17. Other:

Reference Line: _____

---

18. Site #:

---

19. Quad Map: Name Manly, Iowa Date 1972

IOWA DEPARTMENT OF TRANSPORTATION

TO OFFICE: Rail Transportation **DATE:** August 29, 2013

ATTENTION: Tamara Nicholson

FROM: Charles Bernhard

OFFICE: Location and Environment (OLE)

SUBJECT: Preliminary Noise Assessment for the Manly Rail Terminal Project

On July 5, 2013, OLE personnel conducted a field noise survey of the area adjacent to the proposed expansion (north of existing terminal). While in the area, OLE personnel did not observe train activity; however, significant semi-trailer activity from US 65 was observed.

OLE personnel obtained noise measurements at two residences in closest proximity to the proposed project - one residence west of the project area and one residence located west of the project area. Noise measurements taken where recorded in L_{eq} using the "A" weighted scale. Recorded measurements were as follows:

3882 Orchid Ave.: 60 dB(A) (west of project and just west of US 65)
3844 Partridge Ave.: 57 dB(A)

Significant increases in noise due to the project are not anticipated. Based on field measurements and Federal Rail Administration guidance, noise impacts due to the project are not anticipated.

If you have any questions, please call me at 239-1410.

CB:sm
cc: S. Marler (OLE)
J. Vine (NEPA)

Newell, Deeann [DOT]

From: Edgar, Lindsay [DOT]
Sent: Tuesday, May 14, 2013 4:30 PM
To: Newell, Deeann [DOT]
Cc: Marler, Scott [DOT]
Subject: RE: TIGER Applications: NEPA and environmental support requested

Dee -

A desktop review shows no waters of the U.S., including wetlands, are located within the project area. Let me know if you need an "official" clearance e-mail.

Thanks.

Lindsay Edgar
Wetlands Section, Office of Location and Environment
1-7863

From: Newell, Deeann [DOT]
Sent: Tuesday, May 14, 2013 6:50 AM
To: Dolan, Brennan [DOT]; Edgar, Lindsay [DOT]; Rudloff, Jill [DOT]; Azeltine, Brad [DOT]; Bernhard, Charles [DOT]
Cc: Marler, Scott [DOT]; Poole, Angela [DOT]; Hofer, Brad [DOT]
Subject: FW: TIGER Applications: NEPA and environmental support requested

The Office of Rail Transportation has requested support from the Office of Location and Environment in completing "desktop" surveys for the Manly Logistics Park in northern Iowa (Worth County). This information is needed for a Tiger Grant Application and is the State of Iowa's priority application; therefore, Rail has requested that the desktop surveys be completed by Monday, May 20th, for inclusion in the NEPA document and grant application.

A shape file showing the boundary of the area in state plane coordinates has been provided:
W:\Highway\EnvServices\In Box\Manly Rail Desktop Review

Additional project information is also included in the folder. Please complete your review and place the appropriate shape files in the same …\In Box\Manly Rail Desktop Review file.

The desktop surveys are needed for:
Archaeology and Cultural Resources
Wetlands
Prime farmland conversion
T&E species
Water Quality

DeeAnn Newell | NEPA Section Leader
Office of Location and Environment | Iowa DOT
Phone 515-239-1364 | Fax 515-817-6635
deeann.newell@dot.iowa.gov

From:	Garton, Jill [DOT]
To:	Vine, Janet [DOT]
Subject:	Revised T&E Clearance - Upper Midwest Transportation Hub (UMTH)
Date:	Wednesday, April 23, 2014 9:23:04 AM
Attachments:	Upper Midwest Transportation Hub_Determination of No Effect_7-8-2013.pdf

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Our office has reviewed the United States Fish and Wildlife (USFWS) list of federally listed species as well as the Iowa Department of Natural Resources (DNR) Natural Areas Inventory (NAI) to determine the likelihood of the proposed project impacting threatened and/or endangered species. The 2011 Iowa DNR NAI database shows occurrences of one state endangered species within a one-mile radius of the project; Pearl dace (*Margariscus margarita*).

On July 3, 2013, an Iowa DOT biologist performed a field review of the project area for potentially suitable habitat for threatened and endangered species. The project area has been disturbed and appears to be actively farmed. No suitable habitat for threatened or endangered species was observed.

Iowa DOT has determined that there will be no effect on federally or state listed species and the project will not result in the destruction or adverse modification of federally designated critical habitat. The Determination of Effect form is attached. Consultation with USFWS and the Iowa DNR is not required.

Thanks,

Jill Garton, Environmental Specialist Senior
Iowa Department of Transportation
Office of Location and Environment
800 Lincoln Way
Ames, Iowa 50010
Phone: 515-239-1698
Fax: 515-239-1726
Email: jill.garton@dot.iowa.gov

Iowa Department of Transportation

Determination of Effect for Threatened & Endangered Species

Form 760004 (06-13)

Project Name: Manly Logistics Park			Highway No.:	County: Worth
Project No.:	Letting Date:	PLSS/UTM:	Station No.:	

Project Description:

The Manly Logistics Park Wind Railport project is designed to develop an additional 165 acres for wind and related industries, as well as expansion of the Manly support railyard for expanded distribution capacity.

Are there documented occurrences of T&E species within 1 mile of the project? ☒ Yes ☐ No

If yes, list species:

Pearl dace (*Margariscus margarita*)

Are there documented occurrences of T&E species within the limits of construction? ☐ Yes ☒ No

If yes, list species:

Is there likely to be habitat for T&E species within the project's limits of construction? ☐ Yes ☒ No

If yes, list species:

Describe current geographic setting *(native habitats, adjacent land use, etc.)* and potential project impacts:

Actively farmed, existing disturbance

Will the project likely require borrow? ☒ Yes ☐ No

DETERMINATION OF EFFECT - ACTION

☒ No Effect ☐ No Effect *(by following recommendations)* ☐ Needs Further Study
☐ May Affect – Not Likely to Adversely Affect ☐ May Affect – Likely to Adversely Affect

Further Study – *Consisting of the Following*	Iowa DOT Recommendations

References:

☒ Natural Areas Inventory ☒ T&E Species Range Maps ☒ Aerial Photos ☐ Soils of Concern Data
☒ Other: July 3, 2013 field review

Prepared by: Jill Rudloff **Date:** July 8, 2013

Agency Concurrence: N/A **Date:**