Table of Contents (Continued)

List of Appendices

Wetland Delineation Report

Hi-Crush Proppants LLC
Wyeville Site

1.0 Introduction

The purpose of this study was to investigate the project area, identify areas meeting the technical criteria for wetlands, delineate the jurisdictional extent of the wetland basins, and classify the wetland habitat. This field delineation will be the basis on which wetland impacts from the proposed project will be determined.

This report describes the methodology and results of the field delineation performed on August 11, 2011. Figures referred to in the text are included at the end of the report.

1.1 Site Description

The project site is located in the SE ¼ of Section 08 and the NE ¼ of Section 17 in Township 18 North, Range 01 East in the Town of Byron, Monroe County, Wisconsin as shown on **Figure 1**. The approximately 190-acre site is bounded on the north by a constructed cranberry bed, on the east by the Lemonweir River, on the southwest by railroad tracks.

The project site consists of a variety of plant communities. The upland community adjacent to the wetlands consists of agricultural fields planted with soybeans. The wetland communities on-site are described in more detail in the following sections.

2.0 Wetland Delineation

2.1 Wetlands Definition

Wetlands are defined in federal Executive Order 11990 as follows:

> *"Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."*

According to *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (USACE 2009) one positive indicator (except in certain situations) from each of three elements must be present in order to make a positive wetland determination, which are as follows:

- Greater than 50 percent dominance of hydrophytic plant species.
- Presence of hydric soil.
- The area is either permanently or periodically inundated, or soil is saturated to the surface during the growing season of the dominant vegetation.

2.2 Methodology

2.2.1 Resource Review

Topographic maps, aerial photographs, the Web Soil Survey (NRCS 2011) for Monroe County, the Monroe County hydric soils list, and the Wisconsin Department of Natural Resources (WDNR) Wisconsin Wetlands Inventory (WWI) map were reviewed prior to visiting the site to locate potential wetland habitats. **Figure 2** is a 2010 aerial photograph of the area investigated for wetlands. **Figure 3** is a copy of the WWI map, showing a large wetland mapped in the southeast portion of the site and smaller wetlands scattered over the project site. **Figure 4** is a copy of the soil map for the project area. Soils throughout the area investigated are mapped as hydric.

Historical aerials (**Appendix A**) and NRCS slides from several years between 1939 and 2010 were reviewed for the project site. The site was cropped in all the years available for photo review, except for a forested area in the southeast between the Lemonweir River and a secondary channel. Wetland signatures are visible on the east side of the site near the Lemonweir River. These areas were relatively consistent with areas marked as wetland in the WWI map, and were investigated in greater detail during the field delineation. The cranberry bog north of the project site was constructed recently, after the 2010 photo was taken.

2.2.2 Field Procedures

The project site was examined on August 11, 2011 for areas meeting the technical wetland criteria in accordance with the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (USACE 2009). The *Manual* and *Interim Regional Supplement* requires that all three wetland parameters (as discussed above) be present in order for an area to be classified as wetland.

The delineation procedures in the Corps *Manual* (*i.e.*, the Routine Onsite Determination Method), in combination with wetland indicators and guidance provided in the *Interim Regional Supplement* were applied for this delineation. Where differences in the two documents occur, the *Interim Regional Supplement* takes precedence over the Corps *Manual* for applications in the Northcentral and Northeastern Region (USACE 2009).

Field notes, samples, and photographs were taken at representative locations in each wetland basin. Transects were completed during the field evaluation to assist in determining the wetland boundaries. At least one representative transect was completed for each delineated wetland and the respective wetland and upland plots for each wetland were documented on Wetland Determination Data Form (**Appendix B**). Each data sheet is referenced to a sample location along the identified wetland boundary by the plot ID number. Numbers ending in "W" identify data collected within the wetland boundary. Numbers ending in "U" identify data collected outside the wetland basin. Relevant photographs of the site and representative sample locations are included in **Appendix C**; all other photographs will be retained on file at SEH.

Wetland boundaries were located and marked with sequentially-numbered, pink "WETLAND DELINEATION" flagging tape to allow for surveying and mapping. The wetland edge is considered the highest extent of the wetland basin; areas above the boundary fail to meet the three required wetland parameters while areas below the edge meet the wetland parameters required by the field delineation methodology. The location of the delineated wetland boundaries were surveyed and mapped. The results of the delineation are

shown on **Figure 5**. The sample points noted identify where data was collected and are recorded on corresponding Wetland Determination Data Forms (see **Appendix B**).

2.3 Hydrophytic/Wetland Vegetation

Wetland plant species nomenclature follows the *National List of Plant Species that Occur in Wetlands* (U.S. Department of the Interior 1988). Identification was aided when necessary with field guides for the region. Vegetation was sampled in nested circular plots: 5-ft radius for herbaceous species, 15-ft radius for shrubs, and 30-ft radius for trees.

2.4 Hydric/Wetland Soils

Soils were observed for hydric soil characteristics. Soils were examined in cores taken with a Dutch auger. Soil profiles were observed at a depth necessary to confirm hydric soil characteristics. Typical soil profile depths are typically within 18-24 inches below ground surface to allow for: (1) observation of an adequate portion of the soil profile to determine presence/absence of hydric soil characteristics; (2) observation of hydrology including depth to the water table and saturated soils; and, (3) identification of disturbances (*e.g.*, buried horizon, plow line, etc.). Where site conditions preclude observing soil profile depths at the typical 18-24 inches below ground surface or where observed hydric soil indicators are documented above or below 18-24 inches below ground surface, justification is provided. Soil color determinations were made using MUNSELL Soil Color Charts (Gretag-Macbeth 1994). Site soil characteristics were compared to those mapped and described in the Soil Survey for Monroe County (USDA Web Soil Survey 2011). Hydric soil characteristics were compared to those identified in the *Interim Regional Supplement* (USACE 2009)and the most recent version of the Natural Resources Conservation Service (NRCS) publication *Field Indicators of Hydric Soils in the United States, Version 7.0* (USDA 2010).

2.5 Hydrology

Primary and secondary indicators of hydrology were identified in the field to determine the presence or absence of wetland hydrology. Subsurface wetland hydrology indicators were examined using the soil cores and/or soil pits as deep as 24 inches to confirm soil saturation in the upper 12 inches of the soil profile.

2.5.1 Wetland Classification

Wetland classification follows the methods described in *Wetlands and Deepwater Habitats of the United States* (Cowardin, et al. 1979). The Circular 39 classification (Shaw and Fredine 1956), Eggers & Reed (1997), and classification according to the WDNR WWI are also provided.

3.0 Results

The field delineation was conducted under temperature and precipitation conditions that were above normal as compared to the historical average for the region according to National Weather Service climate data (**Appendix D**). Most of the vegetation was identifiable, including all dominant species.

Five wetland basins were identified, delineated and classified (**Figure 5**). The Wetland Determination Data Forms indicate the dominant species of vegetation and the soil and hydrologic characteristics at representative locations around each basin. **Table 1** is a summary of the size and classification of each wetland basin.

3.1 Wetland 1 – Floodplain Forest (Type 1/PFO1A/T3K)

Wetland 1 is located on the south and east side of the area investigated, adjacent to the Lemonweir River. A secondary channel of the river runs through the wetland (**Figure 5**). Wetland 1 is classified as a floodplain forest. The dominant hydrophytic or wetland species observed during the on-site evaluation included red maple (*Acer rubrum* – FAC) and silver maple (*Acer saccharinum* – FACW) in the tree stratum, glossy buckthorn (*Rhamnus frangula* – FAC) and common elderberry (*Sambucus canadensis* – FACW) in the shrub layer, and reed canary grass (*Phalaris arundinacea* – FACW) in the herbaceous stratum.

A typical soil profile in Wetland 1 consisted of black (10YR 2/1) loamy sand from 0-6 inches below ground surface (BGS). From 6-20 inches BGS, the soil was dark grayish brown (10YR 4/2) sand with 10% of 7.5YR 5/8 redoximorphic features as iron concentrations. The soil profile met the technical hydric soil indicator S5: Sandy Redox. At the sampling point, soils were saturated to the surface. Flowing surface water was visible in the secondary channel to the east of the sample plot.

Upland adjacent to Wetland 1 was a cultivated soybean field. Soybeans (*Glycine max* – UPL) were the only dominant plant species. Soils in the upland were very dark brown (10YR 2/2) loamy sand over light gray (10YR 7/1) sand from 8-20 inches BGS. No indicators of wetland hydrology were observed at the upland sample point.

Supporting documentation of field observations are found in **Appendix B** on data sheets labeled SP1W (wetland sample point) and SP1U (upland sample point).

3.2 Wetland 2 – Fresh (wet) Meadow (Type 2/PEMB/E1K)

Wetland 2 is located in a small swale that connects to the Lemonweir River (**Figure 5**). Dominant plant species were reed canary grass and prairie cord grass (*Spartina pectinata* – FACW) in the herbaceous layer. There were a few glossy buckthorn plants in the shrub layer.

The soil profile was stratified, with 10YR 2/1 loamy sand from 0-2 inches, 10YR 7/1 sand with 10% of 10YR 5/6 redoximorphic features as iron concentrations from 2-12 inches, 10YR 3/1 loamy sand from 12-16 inches, 10YR 7/1 sand with 5% of 10YR 5/6 iron concentrations from 16-20 inches, and 10YR 3/1 sand with 10% of 5YR 3/4 iron concentrations from 20-24 inches. The soil met the technical hydric soil indicator S5: Sandy Redox, and the test indicator S8: Polyvalue Below Surface. Soil saturation was encountered at 20 inches BGS. Secondary indicators of wetland hydrology D2: Geomorphic Position (swale with a connection to the Lemonweir River) and D5: FAC-Neutral Test were met at the wetland point.

Surrounding upland was the same soybean field adjacent to Wetland 1. Soybeans were the dominant plant species. At the sample point, soils were dark brown (7.5YR 2.5/2) loamy sand from 0-16 inches, over 10YR 7/1 sand from 16-24 inches. No indicators of primary or secondary wetland hydrology were observed.

Supporting documentation of field observations are found in **Appendix B** on data sheets labeled SP2W (wetland sample point) and SP2U (upland sample point).

3.3 Wetland 3 – Fresh (wet) Meadow/Deep Marsh (Type 2/4, PEMB/PEMF, E1K/E1H)

Wetland 3 is a larger swale that also drains to the Lemonweir River (**Figure 5**). The wetland is mostly Type 2 fresh (wet) meadow, with an area of Type 4 deep marsh at the lowest part. The dominant vegetation at the sample point was reed canary grass in the herbaceous stratum

and a few glossy buckthorn plants in the shrub stratum. Cattails (*Typha* sp. – OBL) were present in the deep marsh portion.

Wetland 3 soils were stratified, similar to the soil profile in Wetland 2, with 10YR 2/1 loamy sand from 0-2 inches, 10YR 7/1 sand with 10% of 10YR 5/6 redoximorphic features as iron concentrations from 2-12 inches, 10YR 3/1 loamy sand from 12-16 inches, 10YR 7/1 sand with 5% of 10YR 5/6 iron concentrations from 16-20 inches, and 10YR 3/1 sand with 10% of 5YR 3/4 iron concentrations from 20-24 inches. The soil met the technical hydric soil indicator S5: Sandy Redox, and the test indicator S8: Polyvalue Below Surface. Secondary indicators of wetland hydrology D2: Geomorphic Position (swale with a connection to the Lemonweir River) and D5: FAC-Neutral Test were met at the wetland point.

The surrounding upland habitat was again cultivated soybean field. Soils were 7.5YR 2.5/2 loamy sand from 0-8 inches, over 10YR 7/1 sand from 8-24 inches. No indicators of primary or secondary wetland hydrology were observed.

Supporting documentation of field observations are found in **Appendix B** on data sheets labeled SP3W (wetland sample point) and SP3U (upland sample point).

3.4 Wetland 4 – Seasonally Flooded Basin (Type 1, PEMAf, E4Kf)

Wetland 4 is a small farmed basin surrounded by upland agricultural field (**Figure 5**). Soybeans were the dominant vegetation in the basin. Although soybeans have UPL indicator status, the plants were stunted and yellowed within the wetland boundary, and absent entirely from the lowest part of the basin.

A typical soil profile in Wetland 4 consisted of 10YR 2/1 loamy sand from 0-6 inches BGS. The subsurface horizon was 10YR 7/1 sand with 10% of 10YR 5/8 redoximorphic features as iron concentrations from 6-20 inches BGS. This soil profile met the technical hydric soil indicator S5: Sandy Redox. The soils are within an actively cultivated agricultural field and are disturbed. The soils were saturated at two (2) inches BGS, and multiple other indicators of wetland hydrology (including an algal crust and a sparsely vegetated concave surface) were observed.

The surrounding upland habitat was again cultivated soybean field. Soils were 7.5YR 2.5/2 loamy sand from 0-16 inches, over 10YR 7/1 sand from 16-24 inches. No indicators of primary or secondary wetland hydrology were observed.

Supporting documentation of field observations are found in **Appendix B** on data sheets labeled SP4W (wetland sample point) and SP4U (upland sample point).

3.5 Wetland 5 – Seasonally Flooded Basin (Type 1, PEMAf, E4Kf)

Wetland 5 was located just east of Wetland 4 (**Figure 5**), and was nearly identical in size and wetland characteristics. Dominant vegetation was soybeans, which were again stunted and yellowed at the highest points of the wetland, and absent from the lowest.

A typical soil profile in Wetland 4 consisted of 10YR 2/1 loamy sand from 0-6 inches BGS. The subsurface horizon was 10YR 7/1 sand with 10% of 10YR 5/8 redoximorphic features as iron concentrations from 6-20 inches BGS. This soil profile met the technical hydric soil indicator S5: Sandy Redox. .The soils are within an actively cultivated agricultural field and are disturbed. The soils were saturated at two (2) inches BGS.

The surrounding upland habitat was cultivated soybean field. Soils were 7.5YR 2.5/2 loamy sand from 0-16 inches, over 10YR 7/1 sand from 16-24 inches. No indicators of primary or secondary wetland hydrology were observed in the upland.

Supporting documentation of field observations are found in **Appendix B** on data sheets labeled SP5W (wetland sample point) and SP5U (upland sample point).

Table 1
Wetland Characteristics

Basin ID	Size (acres)[1]	WWI Classification	Circular 39 Classification	Eggers & Reed Classification	Cowardin Classification
1	34.15	T3K	Type 1	Floodplain Forest	PFO1A
2	0.10	E1K	Type 2	Fresh (wet) Meadow	PEMB
3	1.61	E1K/E1H	Type 2/4	Fresh (wet) Meadow / Deep Marsh	PEMB / PEMF
4	0.07	E4Kf	Type 1	Seasonally Flooded Basin	PEMAf
5	0.09	E4Kf	Type 1	Seasonally Flooded Basin	PEMAf

[1] Size includes areas of wetland within the area of investigation only. Wetlands may extend beyond the limits of the area investigated and actual wetland size may be larger than that indicated.

3.6 Regulatory Considerations

Wetlands in the project area are regulated by agencies at the local, state, and federal levels including the USACE and the EPA at the federal level and the WDNR at the state level.

Construction plans that propose any direct alteration or indirect impact to wetlands or watercourses within the project area will require permits from the appropriate regulatory agencies. Violation of wetland regulations can result in substantial civil and/or criminal penalties.

4.0 Bibliography

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service. 131 pp.

Eggers, S. D. and D. M. Reed 1997. Wetland Plants and Plant Communities of Minnesota and Wisconsin. U.S. Army Corps of Engineers, St. Paul District, St. Paul, Minnesota.

Gretag-Macbeth. 1994. MUNSELL SOIL COLOR CHARTS. Macbeth Division of Kollmorgen Instruments Corporation, Newburgh, New York.

Shaw, S. P. and C. G. Fredine. 1956. Wetlands of the United States. U.S. Fish and Wildlife Service, Circular 39. 67 pp.

U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. Waterways Experiment Station, Vicksburg, Mississippi.

U.S. Army Corps of Engineers. 1988. Wetland Evaluation Methodology for the North Central United States. 97 pp. plus appendices.

U.S. Army Corps of Engineers, 2009. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region. 152 pp. plus appendices.

U.S. Department of Agriculture, Natural Resources Conservation Service. 2010. Field Indicators of Hydric Soils in the United States, Version 7.0. L. M. Vasilas, G. W. Hurt, and C. V. Noble (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

U.S. Department of Agriculture - Soil Conservation Service. 1991. Hydric Soils of the United States. In cooperation with the National Technical Committee for Hydric Soils. USDA-SCS, Washington, D.C.

U.S. Department of Agriculture - Soil Conservation Service, 1994. Keys to Soil Taxonomy. Pocahontas Press, Inc., Blacksburg, Virginia.

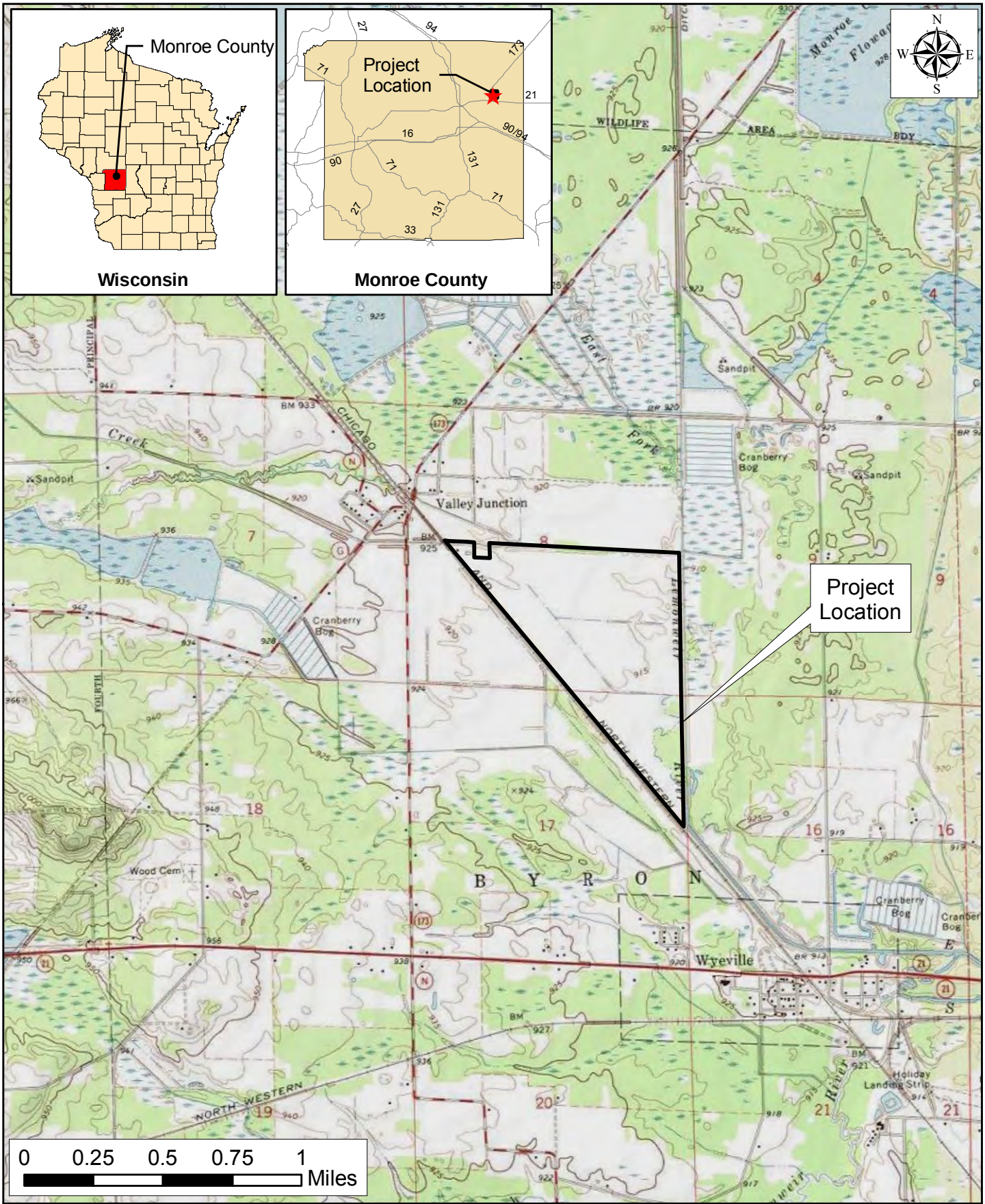
U.S. Department of Agriculture - Soil Conservation Service. 1992. Midwestern Wetland Flora: Field Office Guide to Plant Species. Midwest National Technical Center, Lincoln, Nebraska.

U.S. Department of Agriculture - Web Soil Survey for Monroe County, Wisconsin. 2011. National Cooperative Soil Survey On-line Database. http://websoilsurvey.nrcs.usda.gov/app/.

U.S. Department of the Interior. 1988. National List of Plant Species that Occur in Wetlands: North Central (Region 3). Biological Report 88 (26.3), Fish and Wildlife Service. In cooperation with the National and Regional Interagency Review Panels. Washington, D.C.

U.S. Geological Survey 7.5' Quadrangle Map, 44090-A4, Wisconsin Quadrangle, 1970. Scale: 1" = 2,000'.

List of Figures



421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729
PHONE: (715) 720.6200
FAX: (715) 720.6300
WATTS: 800.472.5881
www.sehinc.com

Project: REDOG 114987
Print Date: 09/13/2011

Map by: bpt
Projection: NAD83 UTM15N
Sources: SEHInc, ESRI
Background: ESRI US Topo Maps

Project Location Map
Hi-Crush Proppants - Wyeville Site

WYEVILLE, WISCONSIN

Figure 1

421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729
PHONE: (715) 720.6200
FAX: (715) 720.6300
WATTS: 800.472.5881
www.sehinc.com

Project: REDOG 114987
Print Date: 09/13/2011

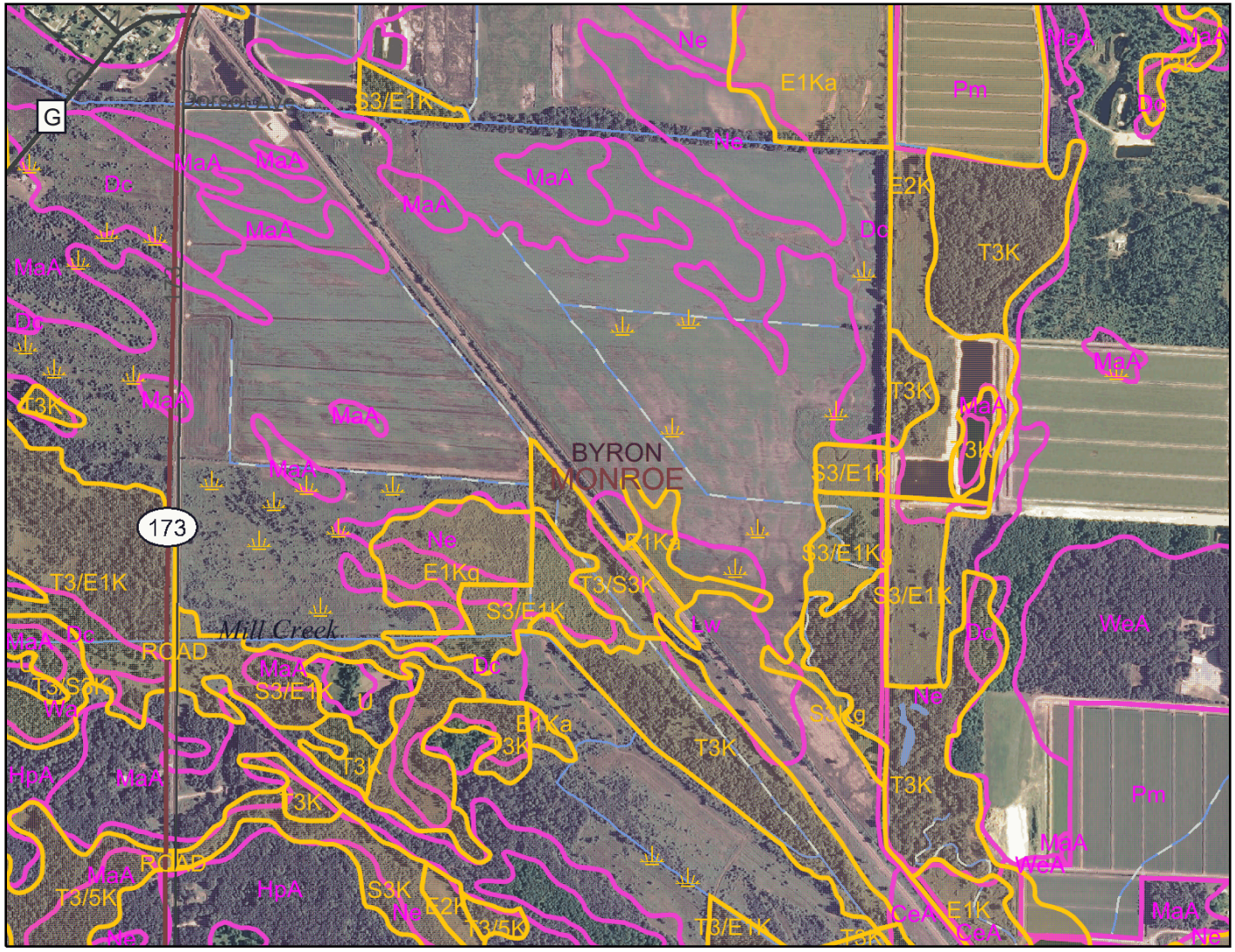
Map by: bpt
Projection: NAD83 UTM15N
Sources: SEHInc, WROC
Background: 2010 WROC

2010 Aerial Photograph
Hi-Crush Proppants - Wyeville Site

WYEVILLE, WISCONSIN

Figure 2

Figure 3 - Wisconsin Wetland Inventory Map



0 1400 2800 4200 ft.

Map created on Sep 13, 2011

Legend

Major Highways
- Interstate
- State Highway
- U.S. Highways

County Roads

Local Roads

24K County Boundaries

Civil Towns
- Civil Town

USDA Wetspots

DNR Wetland Points
- Excavated Pond
- Dammed Pond
- Wetland Too Small to Delineate
- Filled Excavated Pond
- Filled Dammed Pond
- Filled Wetland Too Small to Delineate
- Filled or Drained Wetland

DNR Wetland Areas
- Upland
- Wetland
- Filled or Drained Wetland

Wetland Indicator Soils

24K Open Water

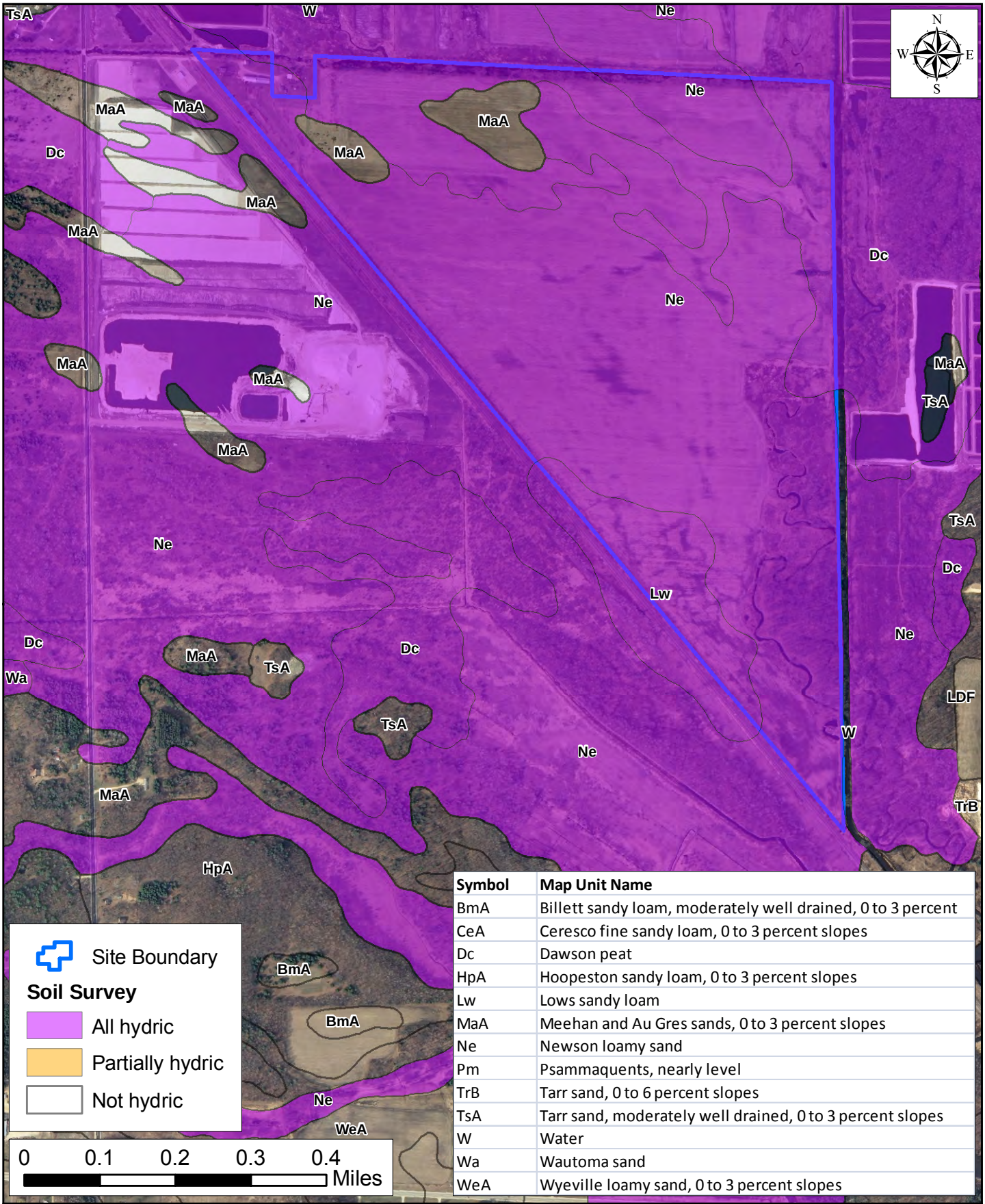
24K Rivers and Shorelines
- Intermittent
- Fluctuating
- Perennial

N

Scale: 1:14,945

Wisconsin Wetland Inventory (WWI) maps show graphic representations of the type, size and location of wetlands in Wisconsin. These maps have been prepared from the analysis of high altitude imagery in conjunction with soil surveys, topographic maps, previous wetland inventories and field work. State statutes define a wetland as "an area where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions." The principal focus of the WWI is to produce wetland maps that are graphic representations of the type, size and location of wetlands in Wisconsin. Within this context, the objective of the WWI is to produce reconnaissance level information on the location, type, size of these habitats such that they are accurate at the nominal scale of the 1:24,000 (1 inch = 2000 feet) base map. The DNR recognizes the limitations of using remotely sensed information as the primary data source. They are to be used as a guide for planning purposes. There is no attempt, in either the design or products of this inventory, to define the limits of jurisdiction of any Federal, State, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, State, or local agencies concerning specified agency regulatory programs and jurisdictions that may affect such activities. The most accurate method of determining the legal extent of a wetland for federal or state regulations is a field delineation of the wetland boundary by a professional trained in wetland delineation techniques.

Notes: Map created on Sept 13, 2011 using WDNR Surface Water Data Viewer (http://dnrmaps.wi.gov/imf/imf.jsp?site=SurfaceWaterViewer)



Symbol	Map Unit Name
BmA	Billett sandy loam, moderately well drained, 0 to 3 percent
CeA	Ceresco fine sandy loam, 0 to 3 percent slopes
Dc	Dawson peat
HpA	Hoopeston sandy loam, 0 to 3 percent slopes
Lw	Lows sandy loam
MaA	Meehan and Au Gres sands, 0 to 3 percent slopes
Ne	Newson loamy sand
Pm	Psammaquents, nearly level
TrB	Tarr sand, 0 to 6 percent slopes
TsA	Tarr sand, moderately well drained, 0 to 3 percent slopes
W	Water
Wa	Wautoma sand
WeA	Wyeville loamy sand, 0 to 3 percent slopes

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729
PHONE: (715) 720.6200
FAX: (715) 720.6300
WATTS: 800.472.5881
www.sehinc.com

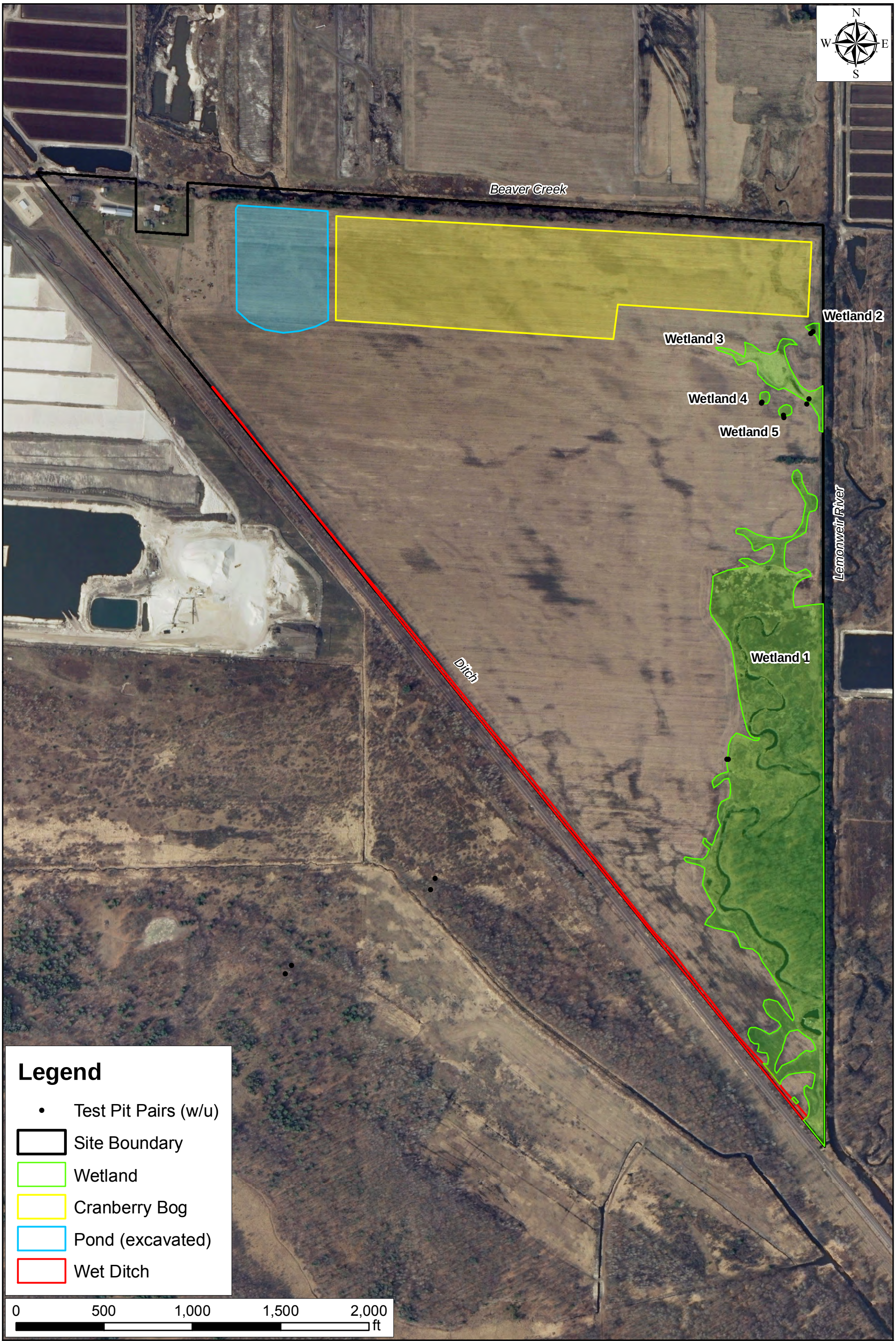
Project: REDOG 114987
Print Date: 09/13/2011

Map by: bpt
Projection: NAD83 UTM15N
Sources: SEHInc, WROC, NRCS
Background: 2010 WROC

Soil Survey Map
Hi-Crush Proppants - Wyeville Site

WYEVILLE, WISCONSIN

Figure 4



SEH
3535 VADNAIS CENTER DR.
ST. PAUL, MN 55110
PHONE: (651) 490-2000
FAX: (651) 490-2150
WATTS: 800-325-2055
www.sehinc.com

Project: REDOG 114987
Print Date: 09/13/2011

Map by: bpt
Projection: WI Monroe County (ft)
Source: WROC, SEHInc, HCP
Background: 2010 WROC

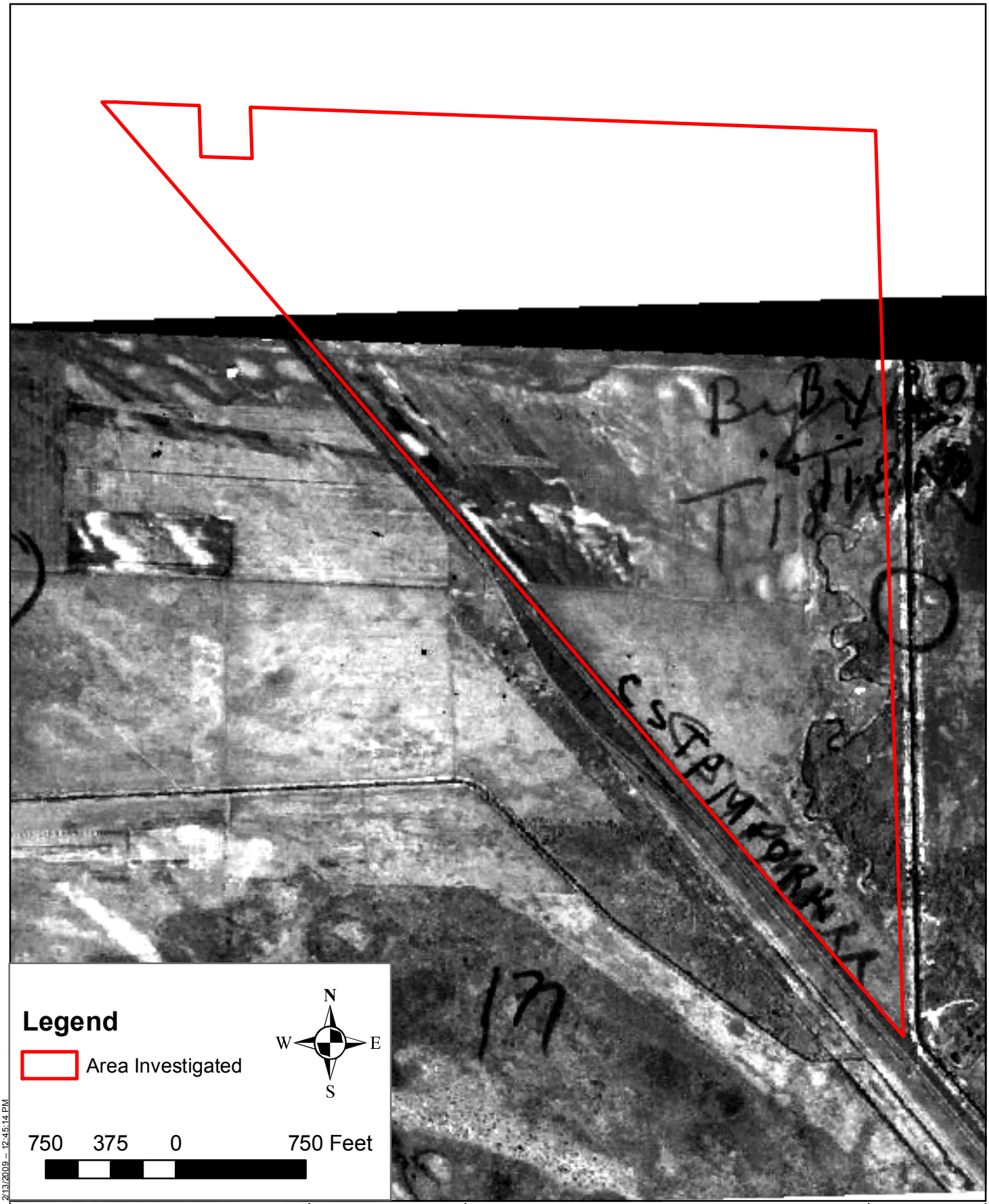
WETLAND DELINEATION RESULTS

Hi-Crush Proppants - Wyeville Site
WYEVILLE, WISCONSIN

Figure 5

Appendix A

Historical Aerial Photographs



Map Document: (L:\Resources\Cartographic\Templates\EmptyLayouts\A_ANSI_8x11P\8x11P_Std.mxd)
2/13/2009 – 12:45:14 PM

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS WI 54729-3374
PHONE: (715) 720-6200
FAX: (715) 720-6300
www.sehinc.com

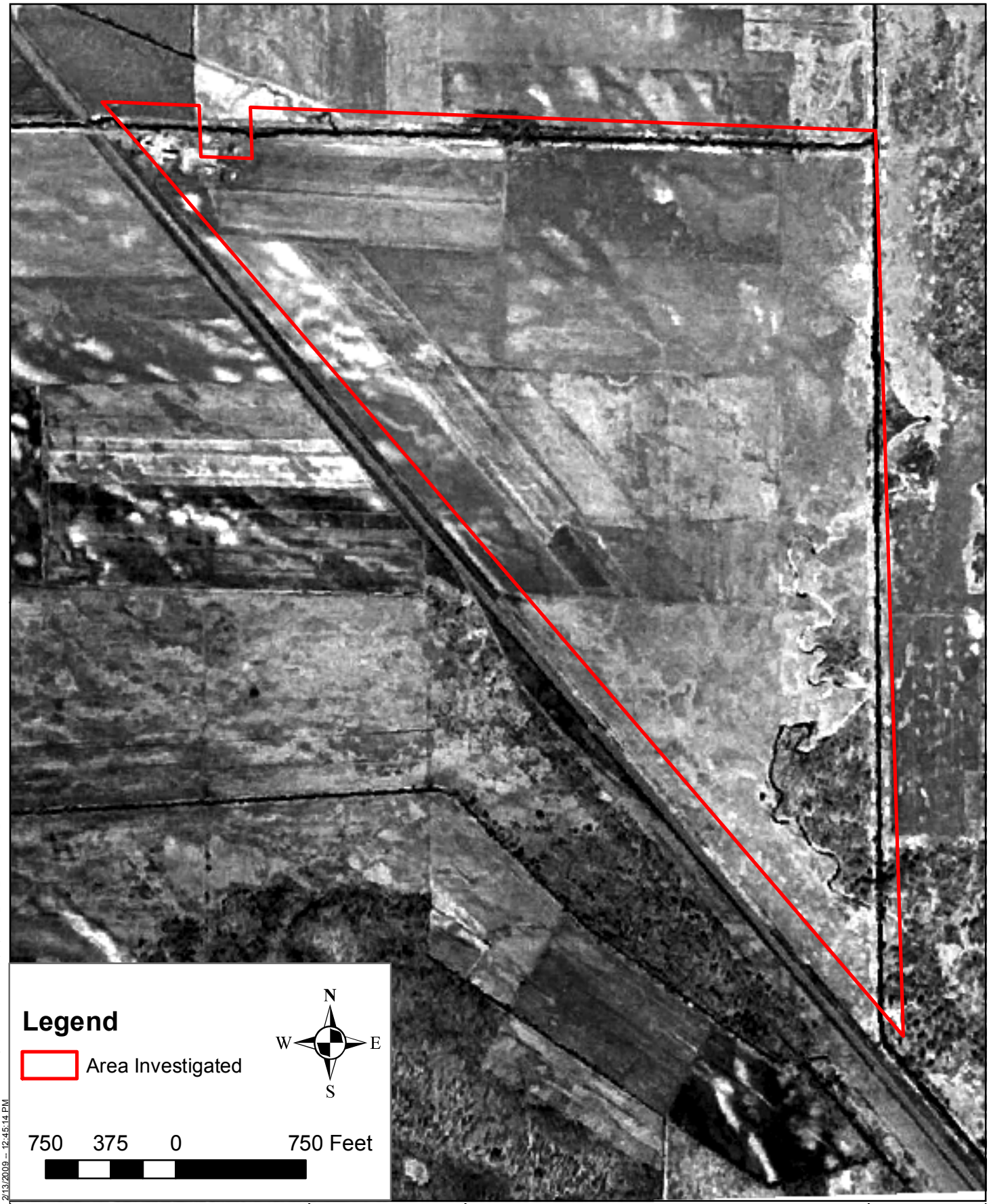
Project: REDOG 114987
Print Date: 09/13/2011

Map by: NAW
Projection: Monroe Co (ft)
Source: HIG, SEH

1939 AERIAL PHOTO

HI-CRUSH PROPPANTS - WYEVILLE SITE
Town of Byron, WI

Figure
A - 1



Map Document: (L:\Resources\Cartographic\Templates\EmptyLayouts\A_ANSI_8x11P\8x11P_Std.mxd)
2/13/2009 – 12:45:14 PM

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS WI 54729-3374
PHONE: (715) 720-6200
FAX: (715) 720-6300
www.sehinc.com

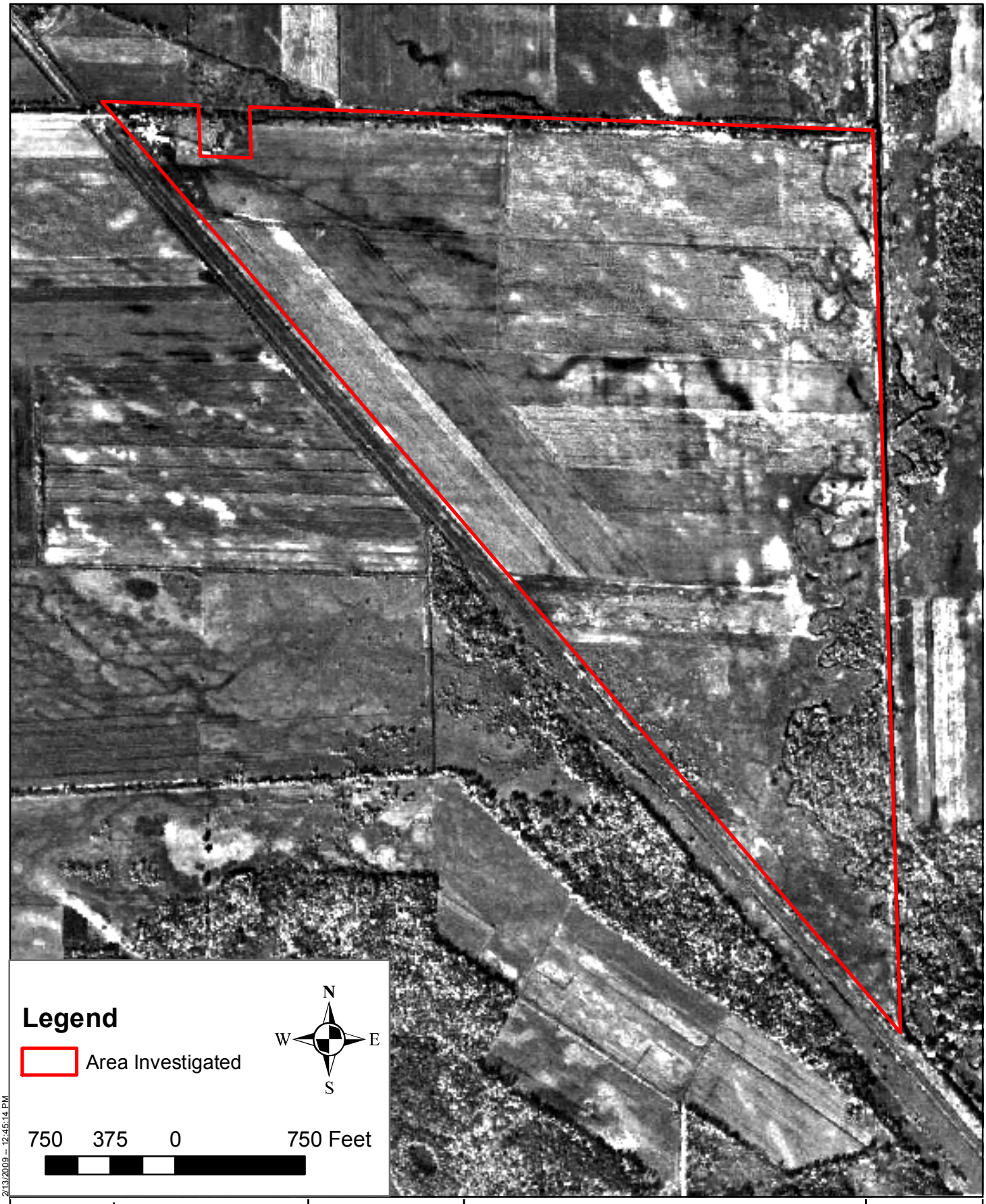
Project: REDOG 114987
Print Date: 09/13/2011

Map by: NAW
Projection: Monroe Co (ft)
Source: HIG, SEH

1957 AERIAL PHOTO

HI-CRUSH PROPPANTS - WYEVILLE SITE
Town of Byron, WI

Figure
A - 2



Map Document: (L:\Resources\Cartographic\Templates\EmptyLayouts\A_ANSI_8x11P\8x11P_Std.mxd)
2/13/2009 – 12:45:14 PM

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS WI 54729-3374
PHONE: (715) 720-6200
FAX: (715) 720-6300
www.sehinc.com

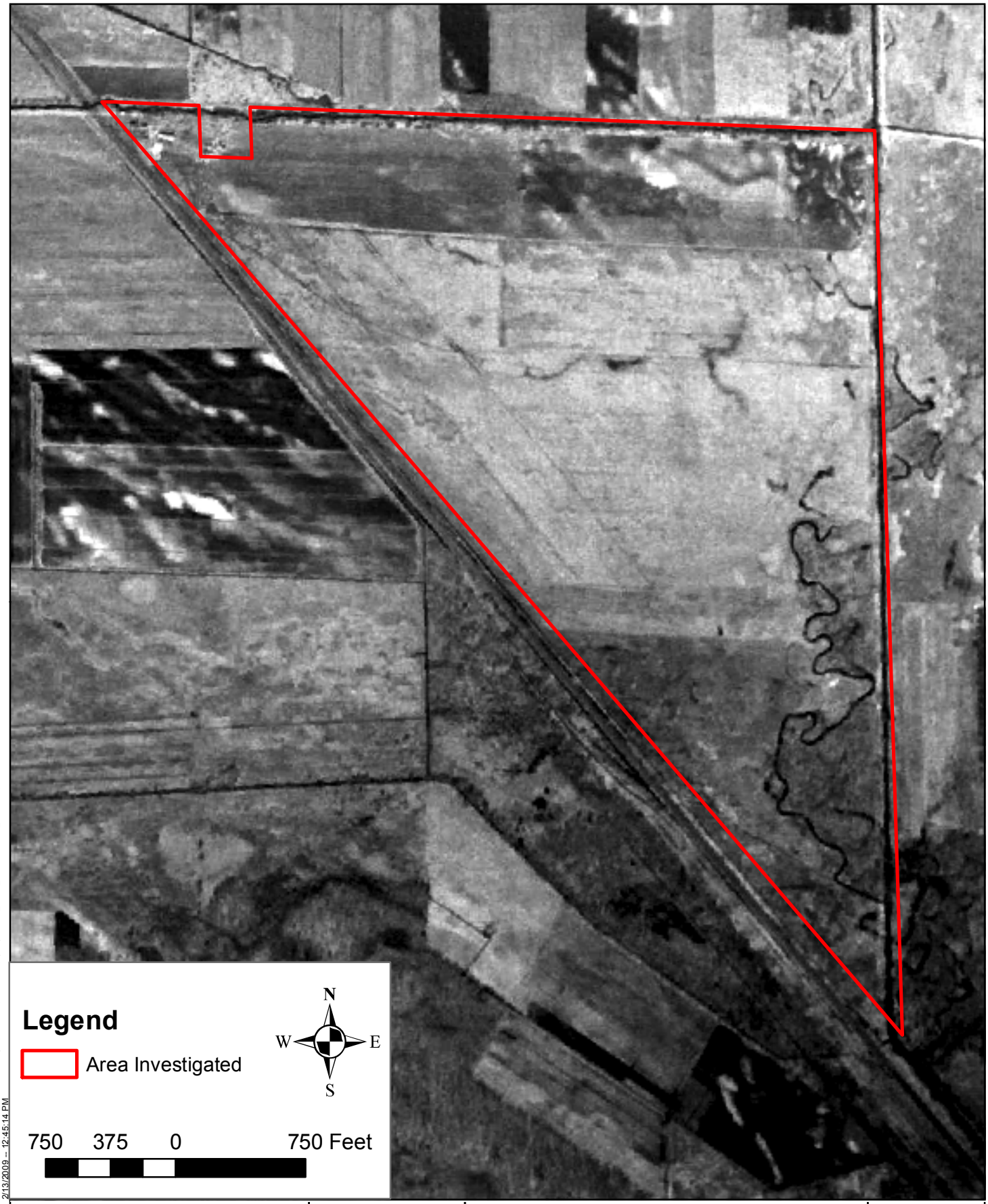
Project: REDOG 114987
Print Date: 09/13/2011

Map by: NAW
Projection: Monroe Co (ft)
Source: HIG, SEH

1965 AERIAL PHOTO

HI-CRUSH PROPPANTS - WYEVILLE SITE
Town of Byron, WI

Figure
A - 3



Map Document: (L:\Resources\Cartographic\Templates\EmptyLayouts\A_ANSI_8x11P\8x11P_Std.mxd)
2/13/2009 – 12:45:14 PM

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS WI 54729-3374
PHONE: (715) 720-6200
FAX: (715) 720-6300
www.sehinc.com

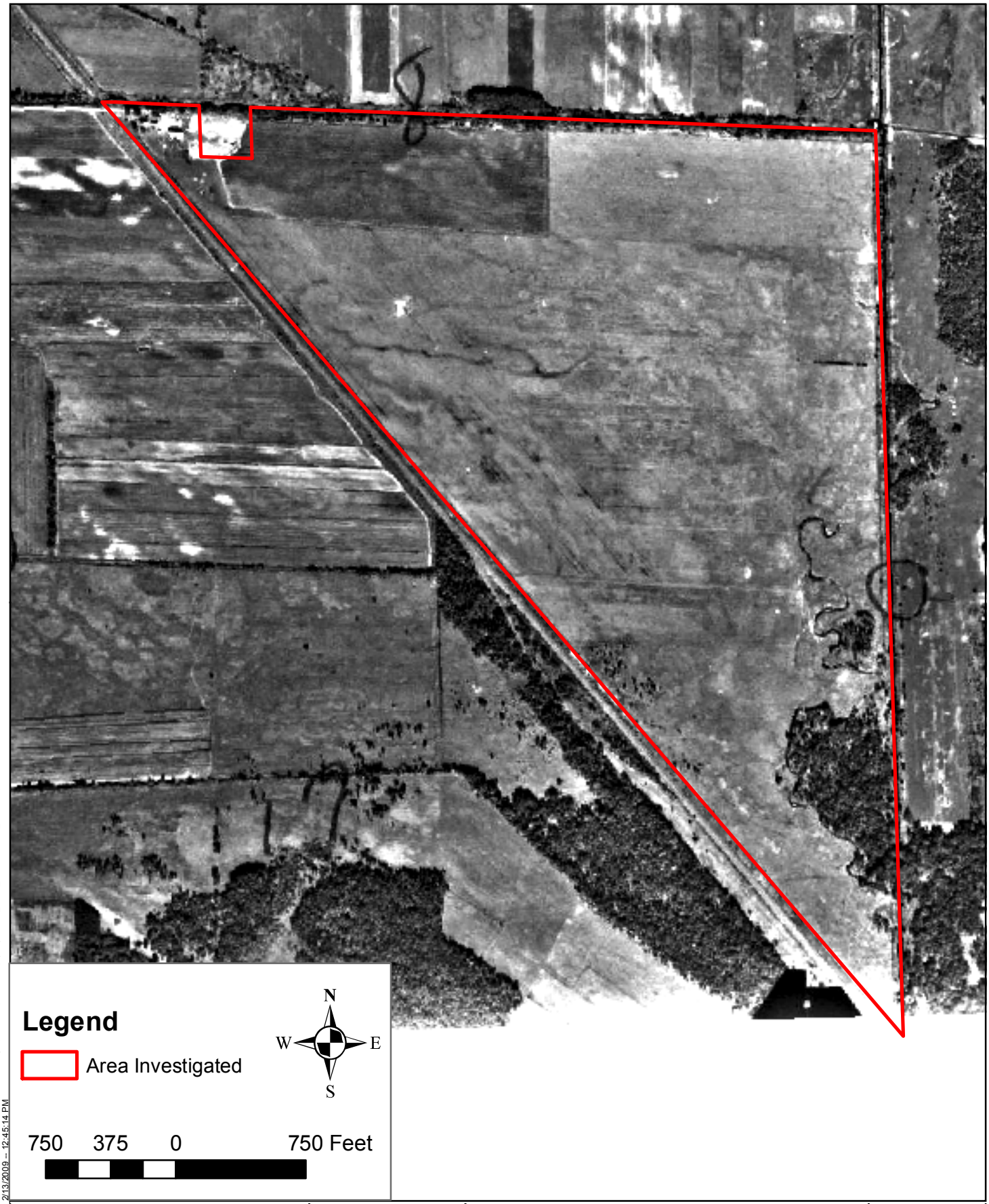
Project: REDOG 114987
Print Date: 09/13/2011

Map by: NAW
Projection: Monroe Co (ft)
Source: HIG, SEH

1969 AERIAL PHOTO

HI-CRUSH PROPPANTS - WYEVILLE SITE
Town of Byron, WI

Figure
A - 4



Map Document: (L:\Resources\Cartographic\Templates\EmptyLayouts\A_ANSI_8x11P\8x11P_Std.mxd)
2/13/2009 – 12:45:14 PM

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS WI 54729-3374
PHONE: (715) 720-6200
FAX: (715) 720-6300
www.sehinc.com

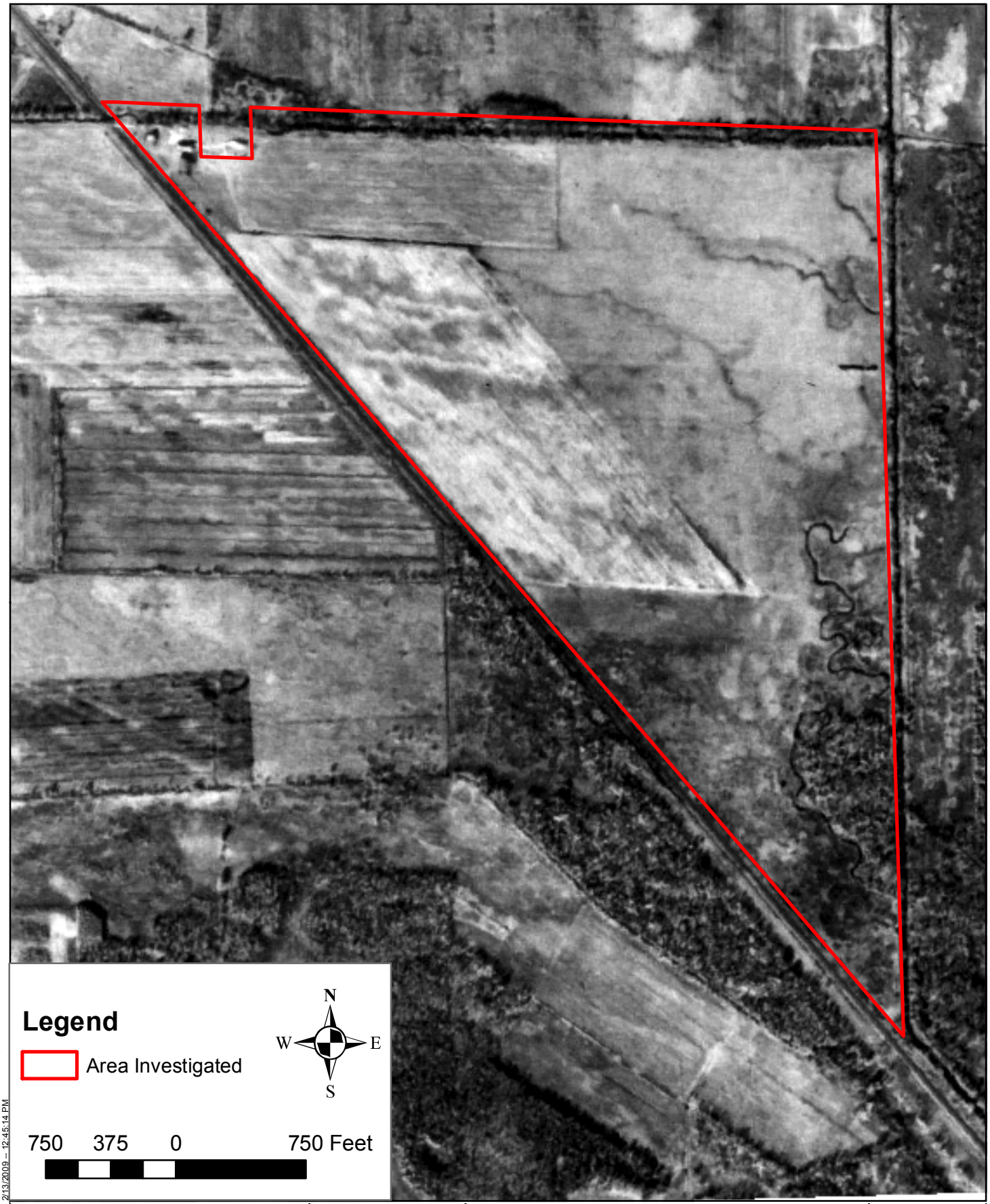
Project: REDOG 114987
Print Date: 09/13/2011

Map by: NAW
Projection: Monroe Co (ft)
Source: HIG, SEH

1972 AERIAL PHOTO

HI-CRUSH PROPPANTS - WYEVILLE SITE
Town of Byron, WI

Figure
A - 5



Map Document: (L:\Resources\Cartographic\Templates\EmptyLayouts\A_ANSI_8x11P\8x11P_Std.mxd)
2/13/2009 – 12:45:14 PM

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS WI 54729-3374
PHONE: (715) 720-6200
FAX: (715) 720-6300
www.sehinc.com

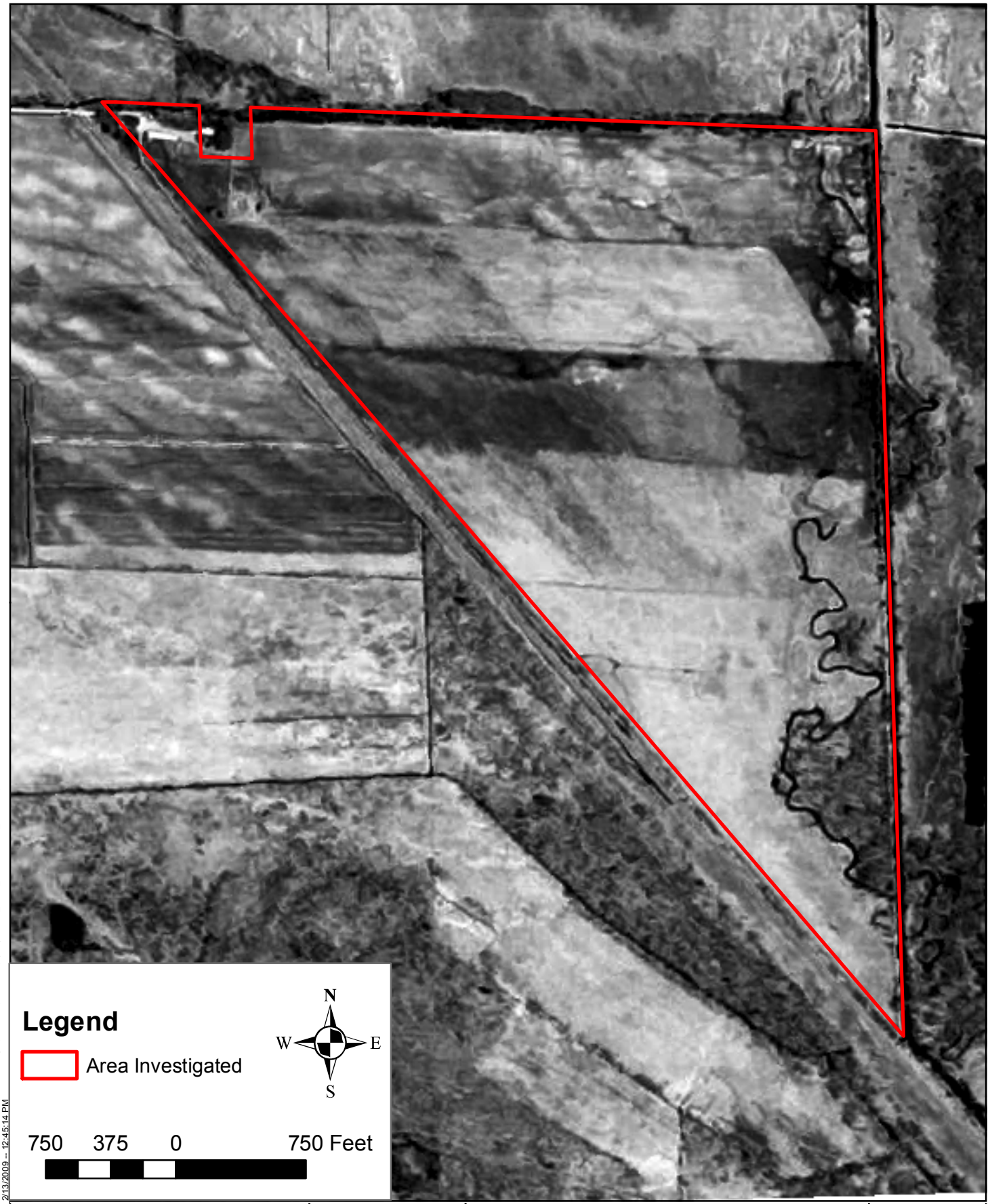
Project: REDOG 114987
Print Date: 09/13/2011

Map by: NAW
Projection: Monroe Co (ft)
Source: HIG, SEH

1980 AERIAL PHOTO

HI-CRUSH PROPPANTS - WYEVILLE SITE
Town of Byron, WI

Figure
A - 6



Map Document: (L:\Resources\Cartographic\Templates\EmptyLayouts\A_ANSI_8x11P\8x11P_Std.mxd)
2/13/2009 – 12:45:14 PM

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS WI 54729-3374
PHONE: (715) 720-6200
FAX: (715) 720-6300
www.sehinc.com

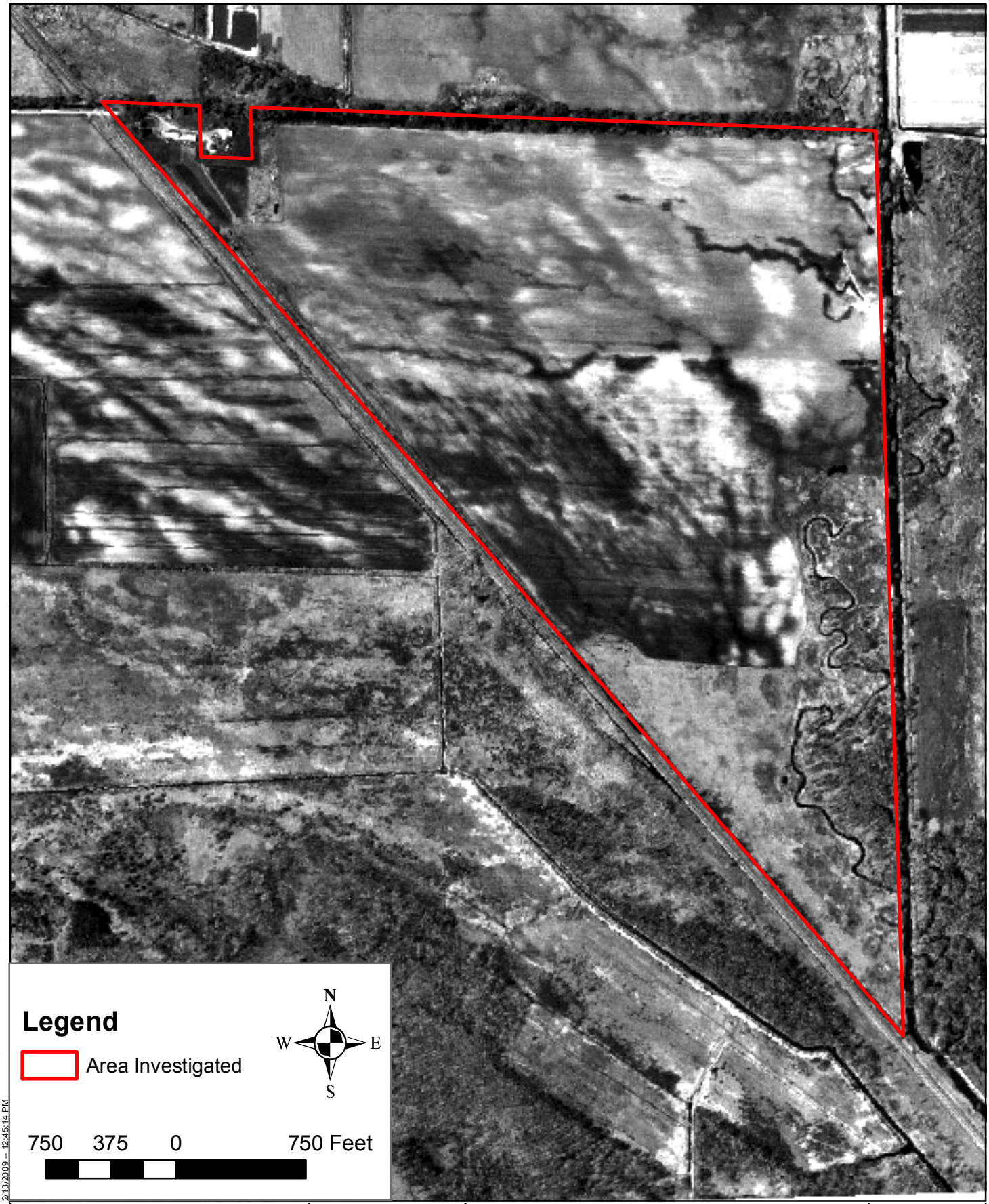
Project: REDOG 114987
Print Date: 09/13/2011

Map by: NAW
Projection: Monroe Co (ft)
Source: HIG, SEH

1992 AERIAL PHOTO

HI-CRUSH PROPPANTS - WYEVILLE SITE
Town of Byron, WI

Figure
A - 7



Map Document: (L:\Resources\Cartographic\Templates\EmptyLayouts\A_ANSI_8x11P\8x11P_Std.mxd)
2/13/2009 – 12:45:14 PM

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS WI 54729-3374
PHONE: (715) 720-6200
FAX: (715) 720-6300
www.sehinc.com

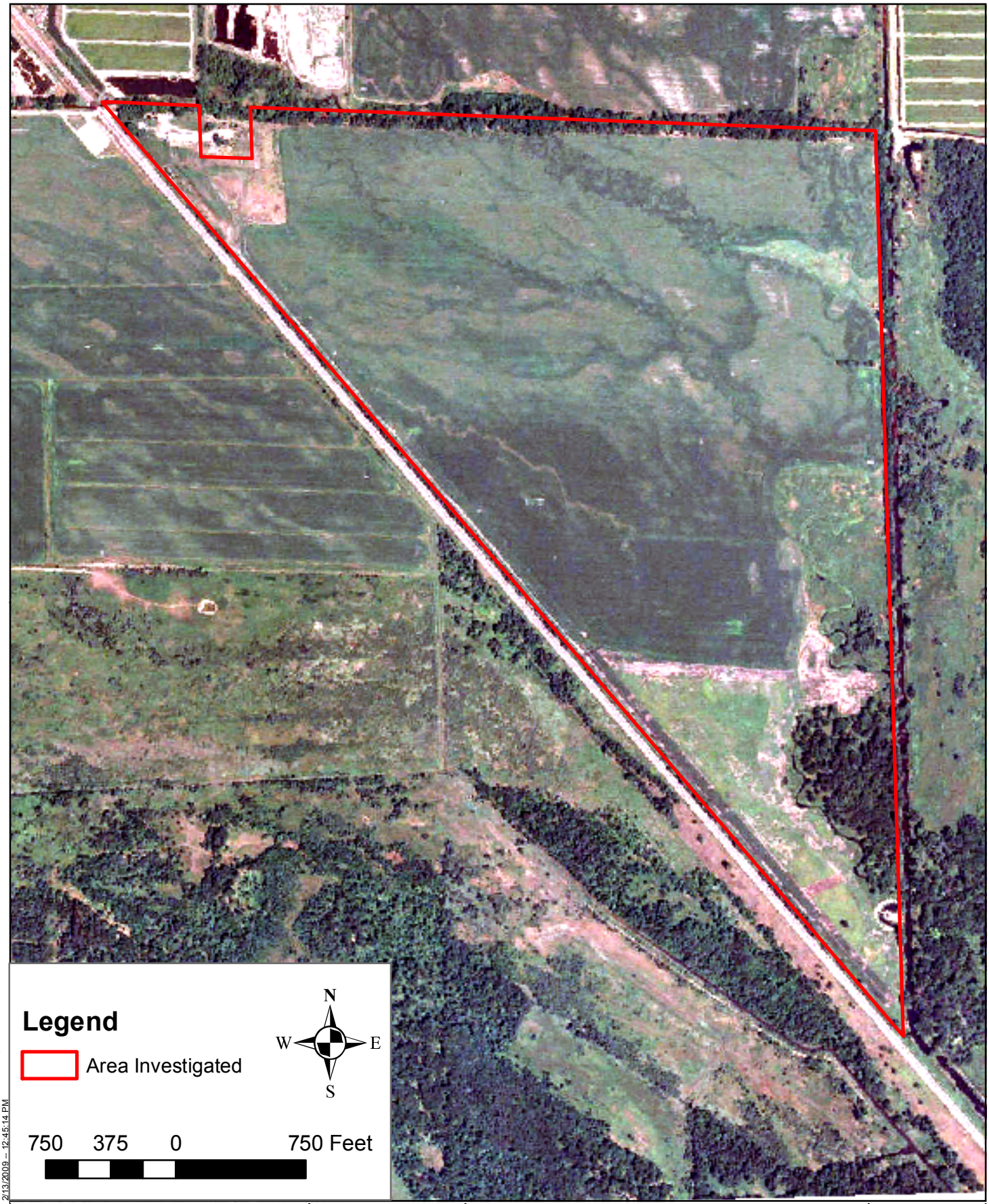
Project: REDOG 114987
Print Date: 09/13/2011

Map by: NAW
Projection: Monroe Co (ft)
Source: HIG, SEH

1999 AERIAL PHOTO

HI-CRUSH PROPPANTS - WYEVILLE SITE
Town of Byron, WI

Figure
A - 8



Map Document: (L:\Resources\Cartographic\Templates\EmptyLayouts\A_ANSI_8x11P\8x11P_Std.mxd)
2/13/2009 – 12:45:14 PM

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS WI 54729-3374
PHONE: (715) 720-6200
FAX: (715) 720-6300
www.sehinc.com

Project: REDOG 114987
Print Date: 09/13/2011

Map by: NAW
Projection: Monroe Co (ft)
Source: HIG, SEH

2005 AERIAL PHOTO

HI-CRUSH PROPPANTS - WYEVILLE SITE
Town of Byron, WI

Figure
A - 9