

WETLAND DELINEATION REPORT

PAR FORE PROPERTY CITY OF FITCHBURG, DANE COUNTY, WISCONSIN

December 21, 2007

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NRC Project # 007-0275-01

A handwritten signature in black ink, appearing to read "Jeff Kraemer", is positioned above a horizontal line.

Jeff Kraemer, W.P.I.T.
Associate Principal Scientist

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INTRODUCTION AND OBJECTIVE

Natural Resources Consulting, Incorporated (NRC) performed a wetland determination and delineation within the Par Fore Property (“the Property”) located in Sections 1 and 12 of Township 6 North, Range 9 East, City of Fitchburg, Dane County, Wisconsin. The Property lies within Fitchburg’s Northeast Neighborhood, northwest of the intersection of CTH MM and Goodland Park Road (Figure 1). The Property is approximately 250 acres and is comprised primarily of active agricultural fields. A small portion of woodland extends onto the northeast corner of the Property.

The objective of the wetland determination and delineation was to provide an estimate of the extent and spatial arrangement of wetlands within the Property. Three separate wetland areas were identified. Wetland 1 (W-1) is an excavated linear shaped pond that is confined within the ordinary high water mark. Wetland 2 (W-2) is a small farmed wetland depression situated at the edge of a wooded fence line. Wetland 3 (W-3) is a relatively large farmed wetland depression that has been historically excavated. The wetland boundaries are identified on Figure 3.

Most wetlands are considered waters of the U.S. and are therefore subject to regulation under the Clean Water Act (CWA). Specifically, non-isolated wetlands are regulated under Section 404 of the CWA and the jurisdictional regulatory authority lies with the United States Army Corps of Engineers (USACE). Additionally, the Wisconsin Department of Natural Resources (WDNR) has regulatory authority over wetlands, navigable waters, and adjacent lands under Chapter 30 Wisconsin State Statutes, Act 6, and NR 103 Wisconsin Administrative Code. NRC recommends this report be submitted to the U.S. Army Corps of Engineers and the Wisconsin Department of Natural Resources for final jurisdictional review and concurrence.

METHODS

The initial steps in the wetland determination and delineation process included a review of the following documents:

- Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service (SCS), excerpts from the *Soil Survey of Dane County, Wisconsin*;
- NRCS list of hydric soils for Dane County;
- U.S. Geological Survey 7.5-minute Wisconsin quadrangle maps;
- The Wisconsin Wetland Inventory (WWI) maps for the area;
- Natural Resources Conservation Service (NRCS) draft wetland mapping for the area;
- USDA Farm Service Agency (FSA) historical crop compliance slides for the area; and

These documents provide information on where wetlands have been previously identified or areas that possess a high likelihood of wetlands occurring. These initially identified areas were then visited to make on-site determinations, and where necessary, complete delineations of the uppermost wetland boundary.

Wetland determinations were made using the criteria and methods outlined in the USACE Manual (USACE 1987), subsequent guidance documents (USACE 1991, 1992), Guidelines for Submitting Wetland Delineations in Wisconsin to the St. Paul District Corps of Engineers (USACE 1996), and the *Basic Guide to Wisconsin's Wetlands and their Boundaries* (Wisconsin Department of Administration Coastal Management Program 1995). The U.S. Army Corps of Engineers and U.S. Environmental Protection Agency wetland definition is included below.

“Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions.”

The State of Wisconsin wetland definition differs slightly; however, the Wisconsin Administrative Code also cites the usage of the 1987 Manual.

Wetland determinations were made using the three criteria of assessment approach defined in the 1987 Manual. According to procedures described in this Manual, areas that under normal circumstances reflect a predominance of hydrophytes (water-loving vegetation), hydric soils, and wetland hydrology (e.g., inundated or saturated soils) are considered wetlands.

A preliminary reconnaissance of the Property was used to determine the general topography and plant communities within the Property, and to identify suitable locations for sampling transects. In general, transects are linear features aligned perpendicular to site contours such that they cross representative locations of wetlands and adjacent uplands. The three criteria were evaluated by placing an observation point within a representative location of each plant community encountered along the transect.

At each observation point:

1. The presence or absence of normal circumstances was determined.
2. The plant community was characterized by identifying dominant plant species using the "50/20" rule. For each stratum in the plant community, dominant species are the most abundant (when ranked in descending order of abundance and cumulatively totaled) that immediately exceed 50% of the total dominance measure for the stratum, plus any additional species comprising 20% or more of the total dominance measure for the stratum.

Wetland indicator status is ranked by percent probability of the species occurrence in wetlands as follows:

OBL = Obligate Wetland, occurs with an estimated 99 percent probability of occurrence in wetlands

FACW = Facultative Wetland, estimated 67 to 99 percent probability of occurrence in wetlands

FAC = Facultative, equally likely to occur in wetlands and non-wetlands (34 to 66 percent probability)

FACU = Facultative Upland, 67 to 99 percent probability in non-wetlands, 1 to 33 percent in wetlands

UPL = Obligate Upland, greater than 99 percent probability in non-wetlands in this region

NI = No indicator, insufficient information available to determine an indicator status

Wetland indicator status can be modified with a positive sign (+) to indicate a frequency toward the higher end of the category, while a minus sign (-) indicates a frequency toward the lower end of the category (Resource Management Group, 1995);

3. Soil pits were typically dug to a depth of 18 inches and the soil was evaluated for hydric soil characteristics; and
4. Hydrology was assessed by observing for primary (i.e., inundation, saturation within the root zone, water marks, etc.) and secondary (i.e., oxidized pore linings, water-stained leaves, etc.) indicators of wetland hydrology.

A transect was initiated at a representative location within each wetland for the wetland determination. The uppermost wetland boundary was identified once an upland site was encountered along the transect. The uppermost wetland boundary was mapped using a Trimble GeoExplorer handheld GPS. The wetland boundaries were not marked with surveyor flagging due to the on-going agricultural activities.

FSA Slide Review

An aerial photograph review of FSA crop slides was conducted for the Property to assist in the wetland determination since poorly drained and somewhat poorly drained soils are present on the Property. These slides were reviewed for the appearance of wetland signatures. A wetland signature is the indication left in a field, recorded by a photograph, of ponding, flooding, or impacts of saturation for sufficient duration that meets wetland hydrology and possibly wetland vegetation criteria. Wetland signatures in cropland for Wisconsin are as follows (NRCS 1998):

1. Hydrophytic vegetation (seen as a different color of green)
2. Surface water (usually black or white)
3. Drowned-out crops (bare soil or mud flats)
4. Differences in color due to different planting dates or isolated areas not farmed with the rest of the field
5. Inclusions of wet areas in set-aside program
6. Patches of greener color in “dry” years
7. Crop stress (yellow) or sparse canopy (light green)
8. Saturated soil visible on infrared (IR) slides or photos

Areas within agricultural fields are delineated as wetland if they contained hydric soils or soils with hydric inclusions and 50% or more of the slides show any of the wetland signatures described above (1-8). Wetland determinations and wetland boundaries are identified based on the slide year having the largest wetland boundary during a “normal” rainfall year if signatures were apparent in 50% of the years (NRCS 1998).

RESULTS

The topography of the Property is a distinct feature as it lies primarily on the southern down slope edge of a glacial moraine feature. The topography slopes predominately to the southeast across most of the Property and slopes northwest from a small moraine located in the southeast corner. The highest elevations are located in the northern portion of the site at approximately 960 feet above mean sea level (msl) and the lowest elevations occur within W-3 at approximately 860 feet above msl (Figure 1). Slopes range from approximately 1 to 12 percent.

The Wisconsin Wetland Inventory map does not identify any wetland areas within the Property (Figure 3). Wetlands associated with Swan Creek and Lake Waubesa are located southeast of the Par Fore Property as identified on the WWI mapping.

Soils identified within the Property by the NRCS Soil Survey of Dane County include Dodge silt loam (DnB & DnC2), and McHenry silt loam (MdC2), Military loam (MhC2), Radford silt loam (RaA), St. Charles silt loam (ScB & ScC2), Troxel silt loam (TrB), and Virgil silt loam (VrB) (Figure 2). The Radford, Troxel, and Virgil series are identified to contain hydric inclusions on the NRCS List of Hydric Soils for Dane County.

An on-site wetland delineation was completed on October 29, 2007 by Jeff Kraemer of NRC and preliminary field evaluations were conducted in May 2007. USACE data sheets were completed for 9 sample points and are included in Appendix A. The sample point locations were chosen within representative plant communities and at various landscape positions. Photos were taken at various locations on the Property and are included in Appendix C. Written descriptions of the wetland, wetland boundaries, and adjacent uplands follow.

Wetlands

Table 1. Summary of Water Resources Present within the Property.

Water Resource ID	Water Resource Description	Acreage (on-site)
Wetland 1 (W-1)	Excavated Pond	0.12 acre
Wetland 2 (W-2)	Farmed wetland	0.25 acre
Wetland 3 (W-3)	Farmed wetland	7.49 acres

Wetland 1

Wetland 1 (W-1) is associated with an excavated linear-shaped pond within an agricultural field and is 0.12 acre in size. The wetland extent is limited to the ordinary high water mark of the open water pond. Vegetation is sparse and confined to the edge of the open water comprised primarily of sandbar willow (*Salix exigua*) and reed canary grass (*Phalaris arundinacea*). The pond is an agricultural feature that was recently excavated, likely for additional surface water drainage within the adjacent, active agricultural

fields.

W-1 generally contains permanently inundated soils and is influenced primarily by surface water runoff from the adjacent upland areas which is perched above fine textured, low permeability soils. Water depths within the wetland pond approached approximately 2 feet during both the May and October 2007 field investigations. The OHWM lies approximately 3 feet below the upper banks of the pond. Primary wetland hydrology indicators observed included inundated soils and saturation within the upper 12 inches of the ground surface. Secondary indicators included positive FAC-neutral tests and local soil survey data.

The soils within W-1 are mapped primarily as Radford silt loam (Figure 2). The Radford series consists of very deep, somewhat poorly drained, moderately permeable soils on floodplains. These soils formed in recent silt loam alluvium underlain by buried soils. The Radford series may contain hydric inclusions of the Sable and Otter soils series. Verification of the Radford soil series within the wetland and adjacent upland soil pits were not confirmed due to the disturbed nature of the soils as a result of the pond excavation. Field indicators of hydric soils were observed within the wetland, which included the presence of a depleted matrix near the surface (F3).

Wetland 2

Wetland 2 (W-2) is a 0.25 acre farmed wetland located in the west-central portion of the Property. The wetland lies within an active agricultural field and extends into an unfarmed segment of tree line. Although there was little crop damage observed during the 2007 growing season within the wetland, review of Farm Service Agency (FSA) crop history slides confirm the presence of a consistent wetland signature within this area (Appendix B). Additionally, inundated soils (+2 inches) were observed within the wetland during a preliminary field assessment in May 2007. The wetland was most recently planted with corn. Unfarmed portions of the wetland within the tree line are dominated by hydrophytic vegetation primarily reed canary grass and silver maple (*Acer saccharinum*). Upslope from the identified wetland boundary the vegetation composition within the tree line transitions to upland species such as black cherry (*Prunus serotina*) burdock (*Arctium minus*), and common buckthorn (*Rhamnus cathartica*).

W-2 generally contains a seasonally saturated and inundated hydroperiod that is influenced primarily by surface water runoff from the adjacent upland areas. The wetland was identified as a problem area due to the seasonal occurrence of wetland hydrology. Primary wetland hydrology indicators observed included inundated soils which were observed in May 2007. Secondary indicators included a positive FAC-neutral test and wetland signatures observed on FSA crop history slides.

The soils within W-2 are mapped as Troxel and Plano silt loam (Figure 2). The Troxel series consists of very deep, well drained soils formed in silty colluvium and in the underlying loamy drift. They are in slight depressions on outwash plains, stream terraces, and till plains. The Plano series consists of very deep, well drained soils on outwash plains, stream terraces, or till plains. These soils formed in loess or other silty material and in the underlying loamy stratified outwash or sandy loam till. The Troxel series is listed on the NRCS Hydric Soil List to contain wet hydric inclusions and the Plano series is not listed as hydric. The field evaluated soils within W-2 confirmed the presence of a hydric inclusion and did not match the typical profile of the Plano series. A field indicator of hydric soil, thick dark surface overlying a depleted matrix (A12), was observed at the profile within W-2.

Wetland 3

Wetland 3 (W-2) is a 7.49 acre farmed wetland located in the east-central portion of the Property. The wetland lies within an active agricultural field most recently planted with a soybean crop. Minor amounts, but observable crop stress was noted in scattered pockets throughout the wetland. Although crop stress and crop damage observed during the 2007 growing season within the wetland was relatively minor, review of Farm Service Agency (FSA) crop history slides confirm the presence of consistent and distinct wetland signatures within this area (Appendix B). Inundated and saturated soils (+2" - 4") were observed throughout the wetland during a preliminary field assessment in May 2007 and scattered pockets of inundated soils were observed during the October wetland delineation. Vegetation within the wetland was comprised mostly of the soybean crop, however hydrophytic agricultural weeds were also common and included barnyard grass (*Echinochloa crus-galli*), field sedge (*Cyperus esculentus*), and winter-cress (*Barbarea vulgaris*).

W-3 generally contains a seasonally saturated and inundated hydroperiod that is influenced primarily by surface water runoff from the adjacent upland areas which becomes perched within the less permeable soils of the wetland. The wetland was identified as a problem area due to the seasonal occurrence of wetland hydrology. Primary wetland hydrology indicators observed included inundated and saturated soils observed in May 2007 and October 2007 and sediment deposits resulting from recent ponding conditions. Secondary indicators of wetland hydrology included wetland signatures observed on FSA crop history slides and local soil survey data.

The soils within W-3 are mapped primarily as Radford and Virgil silt loam (Figure 2). The Virgil series consists of very deep, somewhat poorly drained soils on outwash plains, stream terraces, or till plains. These soils formed in loess or other silty material and in the underlying loamy outwash or sandy loam till. The Radford soil series was described previously. Both the Radford and the Virgil series are listed on the NRCS Hydric Soil List to contain hydric inclusions. The field evaluated soils within W-2 confirmed the presence of a hydric inclusion and a field indicator of hydric soil, redoximorphic features within a dark surface (F6), was observed at the soil profiles within W-3. The dark soil surface is comprised of thick alluvial sediment, up to a thickness of 24 inches, deposited from upslope erosional activities. The underlying buried A-horizon is comprised of black, organically rich soil but is relatively thin, ranging from 6 to 12 inches thick. It is evident that this area was excavated historically and the surface horizon was partially removed. Examination of the FSA crop history slides reveal a signature that is consistent with excavation and grading activities especially pronounced in 1981.

Preliminary Waters of the U.S. Evaluation

W-1 is an excavated pond within a depressional area (Photos 16 & 17). A relatively undefined, upland grass swale is located adjacent to the southern edge of the pond that drains south under Goodland Park Road via a culvert. The swale is dominated by brome grass. The grass swale becomes more defined approximately 200 feet south of Goodland Park Road where it transitions into wetland and discharges into a larger wetland complex adjacent to Swan Creek. The upland grass swale adjacent to the pond is elevated approximately 3 feet above the OHWM of the pond, limiting any surface water flow out of the wetland pond to substantial precipitation events. The upland drainage swale does not contain a defined bed or bank and there were no noticeable drainage patterns observed.

W-2 lies within a subtle depression and is not adjacent to any defined surface water inlet or outlet drainage feature (Photos 11 & 12). Surface water runoff sheet flows from the surrounding landscape into this low lying area. A culvert lying under CTH MM is located approximately 50 feet north of the wetland, however the culvert is elevated at least 1 to 2 feet above the wetland elevation and there are no surface water drainage features associated with the culvert.

W-3 is also located within a low lying depressional area. There are no surface water drainage feature inlets to the wetland and the wetland is fed primarily by surface water sheet flow. Water within the wetland drains to the east to a culvert lying under Larson Road located within the eastern edge of the wetland and is elevated approximately one foot above the wetland (Photos 01 & 09). Water passes through the culvert to the eastside of Larson Road into an excavated area (Photo 07). *Surface water features east of Larson Road were only evaluated from the road since we did not have permission to access this property. Visibility east of Larson Road is limited by dense tree and shrub cover.* There does not appear to be a continuous ditch east of Larson Road, but rather just an excavated pit. When water levels exceed the banks, water sheet flows through a mesic woodland, eastward into a larger wetland complex. Based on what could be observed from the roadside there does not appear to be a defined surface water connection between the culvert at Larson Road and the larger wetland complex east of Larson Road and the mesic woodland appears to be an upland woodland. The wetland complex east of Larson Road appears to have a surface water connection via an agricultural ditch to wetlands adjacent to Swan Creek.

The descriptions of surface water adjacency were evaluated by field observations and by review of the NRCS soil survey, WWI, USGS quadrangle maps, and recent aerial photography. The final jurisdictional determination for these wetlands rests with the USACE.

Uplands

The uplands within the Property are comprised mostly of active agricultural fields most recently planted with soybeans and corn. A community garden area exists in the southeastern corner of the site near the intersection of Goodland Park and Larson Roads. A mixed upland hardwood/pine forest extends into the northeastern corner of the site. Additionally, there are several large, mature open grown oak trees present within the agricultural fields especially in the northwestern portion of the Property.

Indicators of wetland hydrology were generally not observed within upland areas. Review of the FSA crop history slides did not reveal any consistent or reoccurring wetland signatures outside of the areas identified as wetland. Soil evaluations completed in upland areas generally did not meet hydric soil criteria.

Other Environmental Considerations

This report is limited to the identification of state and/or federally regulated wetlands. In addition, there may be other regulated environmental features with the Property. These environmental features may include but are not limited to historical or archeological features, endangered or threatened species, floodplains, and/or navigable waters. The federal, state, local unit of government and regional planning organization may restrict land use within or in close proximity to these features.

Wisconsin Administrative Code NR 151.12 requires that a “protective area” or buffer be determined from

the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands. NR 151.12 determines the width of the “protective buffer” for less susceptible wetlands by using 10% of the average wetland width, no less than 10 feet nor more than 30 feet. Lakes, perennial and intermittent streams, and highly susceptible wetlands and wetlands in areas of special natural resource interest may require buffers of 50 and 75 feet, respectively. The wetlands identified within the Property contain invasive species and/or the vegetation has been removed through on-going farming activities and therefore all three wetlands meet the criteria for less susceptible wetlands. Based on the “protective buffer” widths/standards provided by NR 151.12, it is NRC’s professional opinion that the buffers around W-1, W-2, and W-3 will be no greater than 30 feet. The jurisdictional authority on wetland buffers under NR 151.12 rests with the WDNR. However, based on the City of Fitchburg’s adopted Northeast Neighborhood Plan which encompass’s the Par Fore Property, wetland buffers greater than those necessary under state standards will be required. Specifically, all of the wetlands identified on the Property meet the criteria for Category 3 wetlands and will require a 75 foot buffer.

Prior to beginning work at this site or disturbing or altering wetlands, waterways, or adjacent lands in any way, NRC strongly recommends that the owner obtain the necessary permits or other agency regulatory review and concurrence with regard to the proposed work in order to comply with applicable regulations. NRC would be happy to assist with any additional resources inventory or identification work at your request, to the extent that the work is within our range of expertise.

CONCLUSIONS

NRC performed a wetland determination and delineation within the Par Fore Property located in Sections 1 and 12 of Township 6 North, Range 9 East, City of Fitchburg, Dane County, Wisconsin. The Property lies within Fitchburg's Northeast Neighborhood, northwest of the intersection of CTH MM and Goodland Park Road (Figure 1). The Property is approximately 250 acres and is comprised primarily of active agricultural fields. A small portion of woodland extends onto the northeast corner of the Property.

Three wetland areas were identified within the Property. Wetland 1 (W-1) is an excavated linear shaped pond that is confined within the ordinary high water mark. Wetland 2 (W-2) is a small farmed wetland depression situated at the edge of a wooded fence line. Wetland 3 (W-3) is a relatively large farmed wetland depression that has been historically excavated and now contains up to two feet of alluvium material covering the surface from upslope erosion. Protective buffers from the wetland boundaries will extent 75 feet based on the protective area standards adopted by the City of Fitchburg within the Northeast Neighborhood Plan.

It is important to note that this delineation identified the wetland boundary per current federal and state guidelines. The USACE has regulatory authority over waters of the U.S. including adjacent wetlands, and the WDNR has regulatory authority over wetlands, navigable waters, and adjacent lands under Chapter 30 Wisconsin State Statutes, Act 6, and NR 103 Wisconsin Administrative Code. Local jurisdictions may have additional regulatory authority through shoreland or wetland zoning ordinances.

REGULATORY REVIEW AND CONCURRENCE

The individual who was the lead field delineator and report author of this wetland delineation has been assured through the Wisconsin Department of Natural Resources - Wetland Delineation Professional Assurance Program. The goal of this program is to provide a high level of certainty about wetland boundaries for project planning, and save time in state review of wetland boundaries, while enhancing protection for Wisconsin's wetlands through more accurate identification of wetland boundaries overall. Therefore, concurrence from the WDNR for this wetland delineation is not required for purposes of waterway and wetland permit applications, shoreland-wetland zoning, and/or other state-mandated local wetland programs. Wetland delineations conducted by an assured delineator does not eliminate the need to obtain concurrence and jurisdiction determinations from the USACE. This is a key component of the program and benefit to the Client. However, assurance does not change the need for or decisions about wetland fill permits from the appropriate regulatory agencies. NRC believes this program provides an important tool to streamline the approval process at the state and local levels. NRC cautions the Client that with the limited review and approval necessary from regulatory agencies and with the infancy of the assurance program, no improvements, filling, and/or construction activities should take place until the Client has fully evaluated the risk.

The information provided regarding wetland boundaries is an estimate of the wetland boundary and the opinions presented are best estimates of the conditions at the time the wetlands were viewed. The ultimate decision on the boundaries defining regulatory jurisdiction over wetlands rests with the USACE and, in some cases, the WDNR, or a local unit of government. As a result, there may be adjustments to boundaries based upon review of a regulatory agency. An agency determination can vary from time to time depending on various factors including, but not limited to, precipitation and the season of the year. In addition, the physical characteristics of the site can change with time, depending on the weather, vegetation patterns, drainage, activities on adjacent parcels, or other events. Any of these factors can change the nature and extent of wetlands on the site. It is recommended the Client obtain an opinion and authority from regulating government agencies before proceeding with any development or utilization of the property. If the Client proceeds to change, modify or utilize the property in question without obtaining authorization from the regulating governmental agency, it will be done at the Client's own risk and Natural Resources Consulting, Inc. will not be responsible or liable for any resulting damages.

REFERENCES

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FIGURES

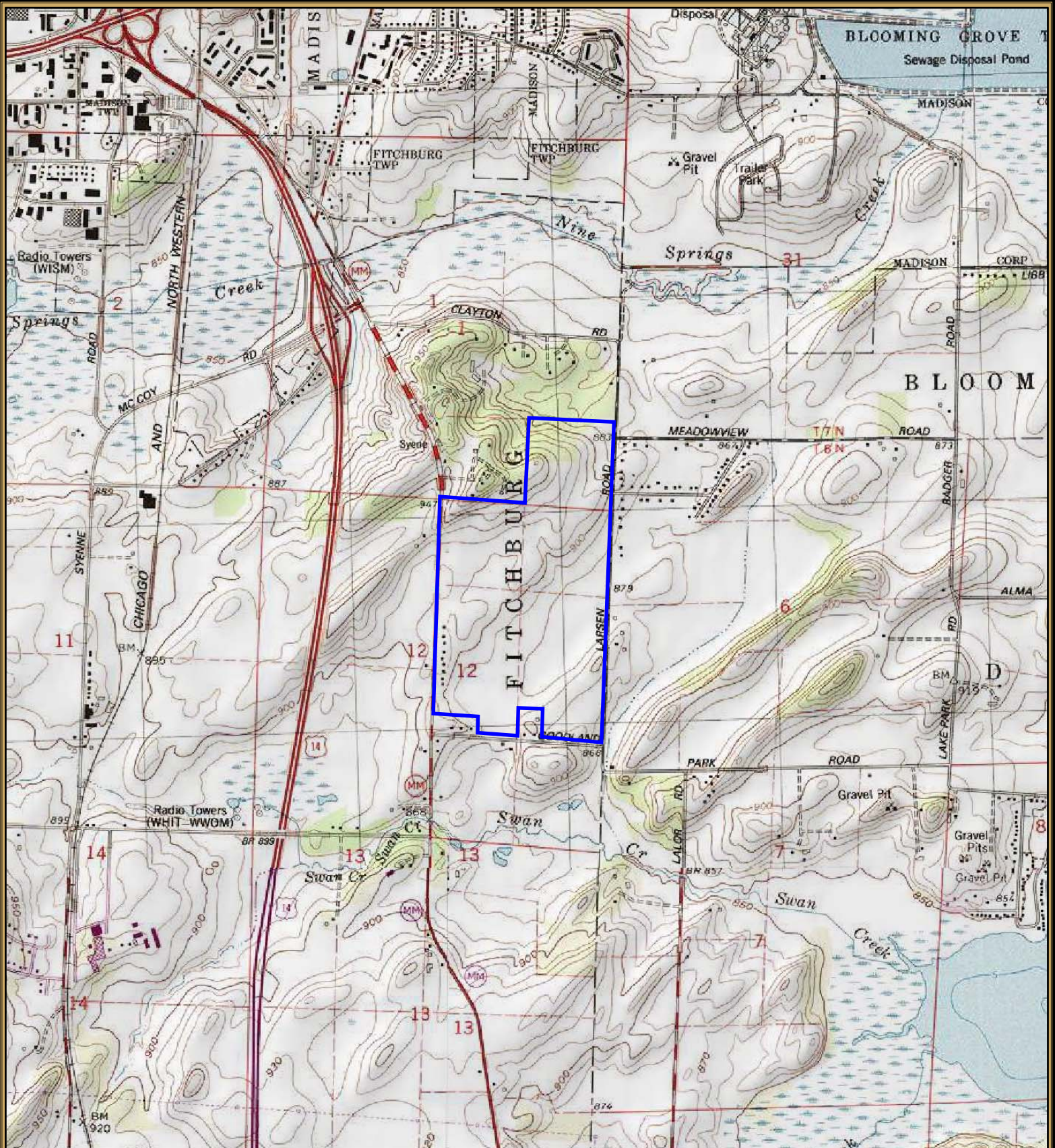
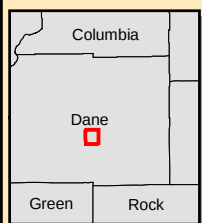


FIGURE 1. PROJECT LOCATION & TOPOGRAPHY
Par 4 Property - Sveum Enterprises



Location

Sections 1 & 12, T6N, R9E,
 City of Fitchburg, Dane Co., WI

Project Information

NRC Project Number #: 007-0275-01
 Modified December 3, 2007

0 1,000 2,000 Feet

Legend

 Project Location

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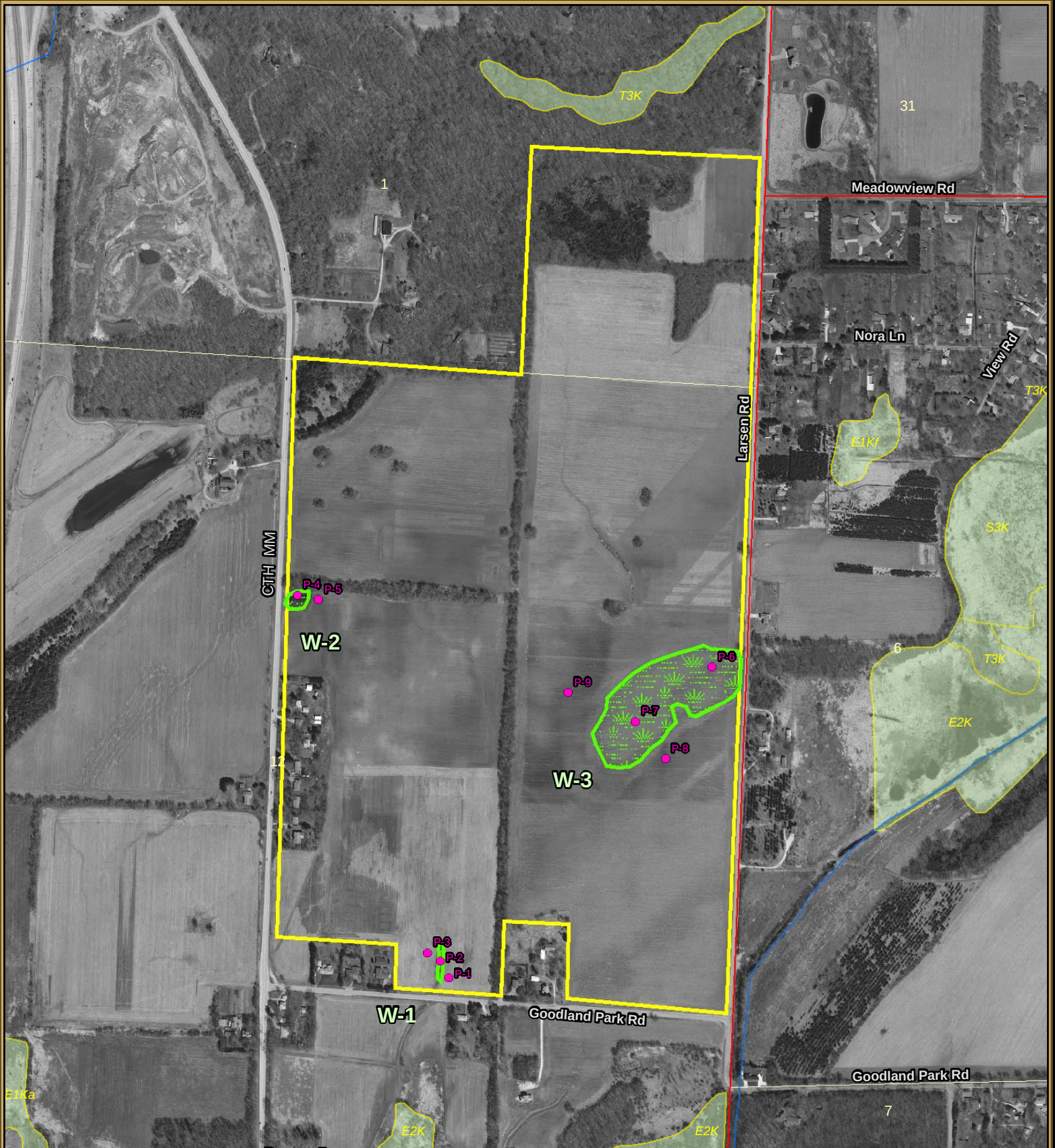


FIGURE 3. FIELD DELINEATED WETLAND DATA & WWI DATA
Par 4 Property - Sveum Enterprises



Location

Sections 1 & 12, T6N, R9E,
 City of Fitchburg, Dane Co., WI

Project Information

NRC Project Number #: 007-0275-01
 Modified December 21, 2007

0 375 750 Feet

Legend

- Project Location
- Field Delineated Wetlands
- Sample Points
- WWI Dane County
- 24K Hydro Layer
- Town Line
- Section Line

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APPENDIX A

US ARMY CORPS OF ENGINEERS DATA SHEETS



Data Form

Routine Wetland Determination

Job Number: **007-0275-01**
Town/Village/City: **Fitchburg**
Wetland Data Point: **P-1**

Project/Site: **Par 4 Property**

Applicant/Owner: **Sveum Enterprises**

Investigator: **J. Kraemer**

Date: **October 29, 2007**

County: **Dane**

State: **WI**

[Yes] Do normal circumstances exist on the site?

Community ID: **Upland Pond Edge**

[No] Is the site significantly disturbed (Atypical Situation)?

Station ID:

[No] Is the area a potential problem area?

Plot ID: **P-1**

Vegetation

Dominant	Species	Common Name / CofC	% Cover	Indicator
<u>Herbaceous</u>				
	<i>DAUCUS CAROTA</i>	Queen Anne's-lace	10	UPL
	<i>Solidago canadensis</i>	common goldenrod / 1	5	FACU
	<i>ABUTILON THEOPHRASTI</i>	Piemarket	2	FACU-
X	<i>TARAXACUM OFFICINALE</i>	common dandelion	50	FACU
X	<i>POA PRATENSIS</i>	Kentucky bluegrass	20	FAC-
X	<i>BROMUS INERMIS</i>	smooth brome	20	UPL

% Species that are OBL, FACW, or FAC (except FAC-): **0**

NOTE: Species in capital letters denote non-native species.

Remarks

Sample point on unfarmed edge between pond and ag. field.

Hydrology

- [] Recorded Data (describe in remarks)
- [] Stream, Lake, or Tide Gage
- [] Aerial Photograph
- [] Other (describe in remarks)

Primary Wetland Hydrology Indicators

- [] Inundated
- [] Saturated in upper 12 inches
- [] Water marks
- [] Drift lines
- [] Sediment deposits
- [] Drainage patterns in wetlands

Secondary Hydrology Indicators

- [] Oxidized root channels
- [] Water-stained leaves
- [] Local soil survey data
- [] FAC-Neutral test
- [] Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): -----

Depth to Free Water in Pit(in.): **>26**

Depth to Saturated Soils(in.): **>26**

Remarks

Soils

Unit Name: **Radford silt loam**

Taxonomy: **Fluvaqueptic Hapludolls**

Drainage Class: **somewhat poorly**

[] Field Observations match map

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Texture, Structure, etc.
0-26	1	10YR 2/1		Silt Loam

Hydric Soils Indicators

- [] Histosol
- [] Histic Epipedon
- [] Sulfidic Odor
- [] Probable Aquatic Moist Regime
- [] Reducing Conditions
- [] Gleyed or Low-Chroma Colors
- [] Concretions
- [] High Organic % in Surface Layer in Sandy Soils
- [] Organic Streaking in Sandy Soils
- [] Listed on Local Hydric Soils List
- [] Listed on National Hydric Soils List
- [] Other (explain in remarks)

Remarks

Soils are disturbed from the pond excavation. B-horizon not observed. Soils likely contain a depleted matrix below the upper horizon and may meet NRCS Hydric Indicator A12. Thick Dark Surface.

Wetland Determination

[No] Hydrophytic Vegetation Present

[No] This Data Point is a Wetland

[No] Hydric Soils Present

[No] Wetland Hydrology Present

Remarks



Data Form

Routine Wetland Determination

Job Number: **007-0275-01**

Town/Village/City: **Fitchburg**

Wetland Data Point: **P-2**

Project/Site: **Par 4 Property**

Applicant/Owner: **Sveum Enterprises**

Investigator: **J. Kraemer**

Date: **October 29, 2007**

County: **Dane**

State: **WI**

[Yes] Do normal circumstances exist on the site?

Community ID: **W-1 Pond**

[No] Is the site significantly disturbed (Atypical Situation)?

Station ID:

[No] Is the area a potential problem area?

Plot ID: **P-2**

Vegetation

Dominant	Species	Common Name / CofC	% Cover	Indicator
Herbaceous				
X	PHALARIS ARUNDINACEA	reed canary grass	10	FACW+
Shrub				
X	Salix exigua subsp. interior	sandbar willow / 2	10	OBL
% Species that are OBL, FACW, or FAC (except FAC-): 100			NOTE: Species in capital letters denote non-native species.	

Remarks

Pond is primarily open water with a narrow fringe of vegetation around the perimeter.

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
[] Recorded Data (describe in remarks)	[] Inundated	[] Oxidized root channels
[] Stream, Lake, or Tide Gage	[X] Saturated in upper 12 inches	[] Water-stained leaves
[] Aerial Photograph	[] Water marks	[] Local soil survey data
[] Other (describe in remarks)	[] Drift lines	[X] FAC-Neutral test
Field Observations:	[] Sediment deposits	[] Other (explain in remarks)
Depth of Surface Water(in.): -----	[] Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 4		
Depth to Saturated Soils(in.): 0		

Remarks

Sample point near OHWM of pond. The pond is approximately 12 feet wide, depth of water is about 2 feet and is excavated approximately 5 feet. There is no inlet or outlet connected to the pond.

Soils

Unit Name: **Radford silt loam**

Taxonomy: **Fluvaqueptic Hapludolls**

Drainage Class: **somewhat poorly**

[] Field Observations match map

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-4	1	10YR 3/1				SiCL
4-16	2	10YR 4/1	10YR 5/6	common	distinct	SiCL

Hydric Soils Indicators

[] Histosol	[] Concretions
[] Histic Epipedon	[] High Organic % in Surface Layer in Sandy Soils
[] Sulfidic Odor	[] Organic Streaking in Sandy Soils
[] Probable Aquatic Moist Regime	[] Listed on Local Hydric Soils List
[] Reducing Conditions	[] Listed on National Hydric Soils List
[X] Gleyed or Low-Chroma Colors	[] Other (explain in remarks)

Remarks

F3. Depleted matrix. Soils disturbed due to pond excavation.

Wetland Determination

[Yes] Hydrophytic Vegetation Present

[Yes] This Data Point is a Wetland

[Yes] Hydric Soils Present

[Yes] Wetland Hydrology Present

Remarks



Data Form

Routine Wetland Determination

Job Number: **007-0275-01**
Town/Village/City: **Fitchburg**
Wetland Data Point: **P-3**

Project/Site: **Par 4 Property**
Applicant/Owner: **Sveum Enterprises**
Investigator: **J. Kraemer**
[Yes] Do normal circumstances exist on the site?
[No] Is the site significantly disturbed (Atypical Situation)?
[No] Is the area a potential problem area?

Date: **October 29, 2007**
County: **Dane**
State: **WI**
Community ID: **Upland Field Edge**
Station ID:
Plot ID: P-3

Vegetation

Dominant	Species	Common Name / CofC	% Cover	Indicator
Herbaceous				
	<i>TARAXACUM OFFICINALE</i>	common dandelion	10	FACU
	<i>Aster pilosus</i>	awl aster / 1	10	FACU+
	<i>CIRSIUM ARVENSE</i>	Canada thistle	5	FACU
X	<i>POA PRATENSIS</i>	Kentucky bluegrass	70	FAC-
X	<i>Solidago canadensis</i>	common goldenrod / 1	40	FACU

% Species that are OBL, FACW, or FAC (except FAC-): **0**

NOTE: Species in capital letters denote non-native species.

Remarks

Sample point located at unfarmed field edge.

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
☐ Recorded Data (describe in remarks)	☐ Inundated	☐ Oxidized root channels
☐ Stream, Lake, or Tide Gage	☐ Saturated in upper 12 inches	☐ Water-stained leaves
☐ Aerial Photograph	☐ Water marks	☐ Local soil survey data
☐ Other (describe in remarks)	☐ Drift lines	☐ FAC-Neutral test
Field Observations:	☐ Sediment deposits	☐ Other (explain in remarks)
Depth of Surface Water(in.): ---	☐ Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): >24		

Remarks

Soils

Unit Name: Radford silt loam	Taxonomy: Fluvaquentic Hapludolls
Drainage Class: somewhat poorly	☐ Field Observations match map
Depth Hor. Matrix	Mottle / 2nd Mottle
(in.) Color	Color Abundance Contrast
0-24 1 10YR 2/1	Texture, Structure, etc. SiL

Hydric Soils Indicators

☐ Histosol	☐ Concretions
☐ Histic Epipedon	☐ High Organic % in Surface Layer in Sandy Soils
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils
☐ Probable Aquatic Moist Regime	☐ Listed on Local Hydric Soils List
☐ Reducing Conditions	☐ Listed on National Hydric Soils List
☐ Gleyed or Low-Chroma Colors	☐ Other (explain in remarks)

Remarks

Soils are disturbed from the pond excavation. B-horizon not observed. Soils likely contain a depleted matrix below the upper horizon and may meet NRCS Hydric Indicator A12. Thick Dark Surface.

Wetland Determination

[No] Hydrophytic Vegetation Present
[No] Hydric Soils Present
[No] Wetland Hydrology Present

[No] This Data Point is a Wetland

Remarks



Data Form

Routine Wetland Determination

Job Number: **007-0275-01**
Town/Village/City: **Fitchburg**
Wetland Data Point: **P-4**

Project/Site: **Par 4 Property**
Applicant/Owner: **Sveum Enterprises**
Investigator: **J. Kraemer**
[No] Do normal circumstances exist on the site?
[No] Is the site significantly disturbed (Atypical Situation)?
[Yes] Is the area a potential problem area?

Date: **October 29, 2007**
County: **Dane**
State: **WI**
Community ID: **W-2 Farmed Wetland**
Station ID:
Plot ID: **P-4**

Vegetation

Dominant	Species	Common Name / CofC	% Cover	Indicator
Herbaceous				
X	<i>ECHINOCHLOA CRUSGALLI</i>	barnyard grass	2	FACW
X	<i>PHALARIS ARUNDINACEA</i>	reed canary grass	20	FACW+
Shrub				
X	<i>Acer saccharinum</i>	silver maple / 2	10	FACW
Tree				
	<i>Acer negundo</i>	box elder / 0	10	FACW-
X	<i>Acer saccharinum</i>	silver maple / 2	50	FACW

% Species that are OBL, FACW, or FAC (except FAC-): **100**

NOTE: Species in capital letters denote non-native species.

Remarks

Sample point located between ag field and fence line in unfarmed area.

Hydrology

- [] Recorded Data (describe in remarks)
[] Stream, Lake, or Tide Gage
[] Aerial Photograph
[X] Other (describe in remarks)

Field Observations:

Depth of Surface Water(in.): -----
Depth to Free Water in Pit(in.): **>22**
Depth to Saturated Soils(in.): **>22**

Primary Wetland Hydrology Indicators

- [] Inundated
[] Saturated in upper 12 inches
[] Water marks
[] Drift lines
[] Sediment deposits
[] Drainage patterns in wetlands

Secondary Hydrology Indicators

- [] Oxidized root channels
[] Water-stained leaves
[] Local soil survey data
[X] FAC-Neutral test
[X] Other (explain in remarks)

Remarks

Some crop damage/stress was observed during the field investigation due to lack of crop stubble. FSA slide review also identified a consistent wetland signature within this location. Inundated soils (2") were observed during a preliminar. evaluation in May 2007. Wetland identified as problem area due to seasonal occurrence of wetland hydrology.

Soils

Unit Name: **Plano silt loam**

Taxonomy: **Typic Argiudolls**

Drainage Class: **moderately well to well**

[] Field Observations match map

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-8	1	10YR 2/1				SiL
8-16	2	10YR 2/1	10YR 4/2	common	distinct	SiL
16-22	3	10YR 4/2	10YR 4/4	common	distinct	SiL

Hydric Soils Indicators

- [] Histosol
[] Histic Epipedon
[] Sulfidic Odor
[] Probable Aquatic Moist Regime
[] Reducing Conditions
[X] Gleyed or Low-Chroma Colors
- [] Concretions
[] High Organic % in Surface Layer in Sandy Soils
[] Organic Streaking in Sandy Soils
[] Listed on Local Hydric Soils List
[] Listed on National Hydric Soils List
[] Other (explain in remarks)

Remarks

A12. Thick dark surface.

Wetland Determination

[Yes] Hydrophytic Vegetation Present
[Yes] Hydric Soils Present
[Yes] Wetland Hydrology Present

[Yes] This Data Point is a Wetland

Remarks



Data Form

Routine Wetland Determination

Job Number: **007-0275-01**
Town/Village/City: **Fitchburg**
Wetland Data Point: **P-5**

Project/Site: **Par 4 Property**
Applicant/Owner: **Sveum Enterprises**
Investigator: **J. Kraemer**
[Yes] Do normal circumstances exist on the site?
[No] Is the site significantly disturbed (Atypical Situation)?
[No] Is the area a potential problem area?

Date: **October 29, 2007**
County: **Dane**
State: **WI**
Community ID: **Upland Field Edge**
Station ID:
Plot ID: **P-5**

Vegetation

Dominant	Species	Common Name / CofC	% Cover	Indicator
<u>Herbaceous</u>				
	<i>CIRSIIUM ARVENSE</i>	Canada thistle	10	FACU
	<i>PHALARIS ARUNDINACEA</i>	reed canary grass	2	FACW+
	<i>Ambrosia trifida</i>	giant ragweed / 0	5	FAC+
	<i>LEONURUS CARDIACA</i>	motherwort	2	[UPL]
	<i>TARAXACUM OFFICINALE</i>	common dandelion	2	FACU
X	<i>ARCTIUM MINUS</i>	common burdock	40	UPL
<u>Shrub</u>				
X	<i>RHAMNUS CATHARTICA</i>	common buckthorn	15	FACU
<u>Tree</u>				
	<i>Prunus serotina</i>	wild black cherry / 3	5	FACU
	<i>Acer saccharinum</i>	silver maple / 2	2	FACW
X	<i>Acer negundo</i>	box elder / 0	40	FACW-

% Species that are OBL, FACW, or FAC (except FAC-): **33**

NOTE: Species in capital letters denote non-native species.

Remarks

Sample point located along field edge and fence line.

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
☐ Recorded Data (describe in remarks)	☐ Inundated	☐ Oxidized root channels
☐ Stream, Lake, or Tide Gage	☐ Saturated in upper 12 inches	☐ Water-stained leaves
☐ Aerial Photograph	☐ Water marks	☐ Local soil survey data
☐ Other (describe in remarks)	☐ Drift lines	☐ FAC-Neutral test
Field Observations:	☐ Sediment deposits	☐ Other (explain in remarks)
Depth of Surface Water(in.): -----	☐ Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >20		
Depth to Saturated Soils(in.): >20		

Remarks

Soils

Unit Name: **St. Charles silt loam**

Taxonomy: **Typic Hapludalfs**

Drainage Class: **moderately well to well**

☒ Field Observations match map

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-14	1	10YR 2/1				SiL
14-20	2	10YR 4/4				SiL

Hydric Soils Indicators

☐ Histosol	☐ Concretions
☐ Histic Epipedon	☐ High Organic % in Surface Layer in Sandy Soils
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils
☐ Probable Aquatic Moist Regime	☐ Listed on Local Hydric Soils List
☐ Reducing Conditions	☐ Listed on National Hydric Soils List
☐ Gleyed or Low-Chroma Colors	☐ Other (explain in remarks)

Remarks

Wetland Determination

[No] Hydrophytic Vegetation Present

[No] This Data Point is a Wetland

[No] Hydric Soils Present

[No] Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: **007-0275-01**
Town/Village/City: **Fitchburg**
Wetland Data Point: **P-6**

Project/Site: **Par 4 Property**

Applicant/Owner: **Sveum Enterprises**

Investigator: **J. Kraemer**

[No] Do normal circumstances exist on the site?

[No] Is the site significantly disturbed (Atypical Situation)?

[Yes] Is the area a potential problem area?

Date: **October 29, 2007**

County: **Dane**

State: **WI**

Community ID: **W-3 Farmed Wetland**

Station ID:

Plot ID: P-6

Vegetation

Dominant	Species	Common Name / CofC	% Cover	Indicator
X		Soy beans	40	UPL
<u>Herbaceous</u>				
	<i>ECHINOCHLOA CRUSGALLI</i>	barnyard grass	5	FACW
	<i>PHALARIS ARUNDINACEA</i>	reed canary grass	2	FACW+
	<i>Cyperus esculentus</i>	field nut sedge / 0	5	FACW
	<i>BARBAREA VULGARIS</i>	winter-cress	2	FAC

% Species that are OBL, FACW, or FAC (except FAC-): **0**

NOTE: Species in capital letters denote non-native species.

Remarks

Wetland denoted as atypical situation due to on-going agricultural use of the wetland leading to alterations of vegetation. Hydrophytic vegetation would dominate this wetland area if agricultural use ceased. This is demonstrated near the eastern margin of the wetland where no recent tillage has occurred and reed canary grass is a near monoculture.

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
[] Recorded Data (describe in remarks)	[] Inundated	[] Oxidized root channels
[] Stream, Lake, or Tide Gage	[] Saturated in upper 12 inches	[] Water-stained leaves
[] Aerial Photograph	[] Water marks	[X] Local soil survey data
[X] Other (describe in remarks)	[] Drift lines	[] FAC-Neutral test
Field Observations:	[X] Sediment deposits	[X] Other (explain in remarks)
Depth of Surface Water(in.): -----	[] Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): >24		
Depth to Saturated Soils(in.): 17		

Remarks

Site was evaluated in May 2007 and standing water was observed (2-4") throughout much of the wetland. FSA slides indicate the presence of a wetland signature through most years. Wetland denoted as problem area due to seasonal occurrence of wetland hydrology.

Soils

Unit Name: **Virgil silt loam**

Taxonomy: **Udolic Endoaqualfs**

Drainage Class: **somewhat poorly**

[X] Field Observations match map

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-20	1	10YR 3/1	10YR 5/6	common	distinct	SiL
20-24	2	10YR 2/1	10YR 4/2	common	distinct	SiL
24-26	3	10YR 4/1	10YR 5/6	many	prominent	SiCL

Hydric Soils Indicators

[] Histosol	[] Concretions
[] Histic Epipedon	[] High Organic % in Surface Layer in Sandy Soils
[] Sulfidic Odor	[] Organic Streaking in Sandy Soils
[] Probable Aquatic Moist Regime	[] Listed on Local Hydric Soils List
[] Reducing Conditions	[] Listed on National Hydric Soils List
[X] Gleyed or Low-Chroma Colors	[] Other (explain in remarks)

Remarks

F6. Redox dark surface. Upper horizon is alluvial deposited sediment with a thin underlying buried A horizon. It appears that the A-horizon may have been historically excavated, which corresponds with the distinct signature apparent on the FSA slides.



Data Form

Routine Wetland Determination

Job Number: **007-0275-01**

Town/Village/City: **Fitchburg**

Wetland Data Point: **P-6**

Wetland Determination

[No] Hydrophytic Vegetation Present

[Yes] This Data Point is a Wetland

[Yes] Hydric Soils Present

[Yes] Wetland Hydrology Present

Remarks

Hydrophytic vegetation is not present due to agricultural activities.



Data Form Routine Wetland Determination

Job Number: **007-0275-01**
Town/Village/City: **Fitchburg**
Wetland Data Point: **P-7**

Project/Site: **Par 4 Property**
Applicant/Owner: **Sveum Enterprises**
Investigator: **J. Kraemer**
[No] Do normal circumstances exist on the site?
[No] Is the site significantly disturbed (Atypical Situation)?
[Yes] Is the area a potential problem area?

Date: **October 29, 2007**
County: **Dane**
State: **WI**
Community ID: **W-3 Farmed Wetland**
Station ID:
Plot ID: P-7

Vegetation

Dominant	Species	Common Name / CofC	% Cover	Indicator
X		Soy beans	40	UPL
<u>Herbaceous</u>	<i>Cyperus esculentus</i>	field nut sedge / 0	5	FACW
	<i>ECHINOCHLOA CRUSGALLI</i>	barnyard grass	5	FACW

% Species that are OBL, FACW, or FAC (except FAC-): **0**

NOTE: Species in capital letters denote non-native species.

Remarks

Wetland denoted as atypical situation due to on-going agricultural use of the wetland leading to alterations of vegetation. Hydrophytic vegetation would dominate this wetland area if agricultural use ceased. This is demonstrated near the eastern margin of the wetland where no recent tillage has occurred and reed canary grass is a near monoculture.

Hydrology

	Primary Wetland Hydrology Indicators	Secondary Hydrology Indicators
[] Recorded Data (describe in remarks)	[X] Inundated	[] Oxidized root channels
[] Stream, Lake, or Tide Gage	[X] Saturated in upper 12 inches	[] Water-stained leaves
[] Aerial Photograph	[] Water marks	[X] Local soil survey data
[X] Other (describe in remarks)	[] Drift lines	[] FAC-Neutral test
Field Observations:	[X] Sediment deposits	[X] Other (explain in remarks)
Depth of Surface Water(in.): +1	[] Drainage patterns in wetlands	
Depth to Free Water in Pit(in.): 0		
Depth to Saturated Soils(in.): 0		

Remarks

Sample point is located in a small pocket with ponding water. Site was evaluated in May 2007 and standing water was observed (2-4") throughout much of the wetland. FSA slides indicate the presence of a wetland signature through most years. Wetland denoted as problem area due to seasonal occurrence of wetland hydrology.

Soils

Unit Name: **Radford silt loam** Taxonomy: **Fluvaquentic Hapludolls**
Drainage Class: **somewhat poorly** [X] Field Observations match map

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-18	1	10YR 3/1	10YR 5/6	common	prominent	SiL
18-25	2	10YR 2/1				SiL
25-28	3	2.5Y 4/1	10YR 5/6	many	prominent	SiCL

Hydric Soils Indicators

[] Histosol	[] Concretions
[] Histic Epipedon	[] High Organic % in Surface Layer in Sandy Soils
[] Sulfidic Odor	[] Organic Streaking in Sandy Soils
[] Probable Aquatic Moist Regime	[X] Listed on Local Hydric Soils List
[] Reducing Conditions	[] Listed on National Hydric Soils List
[X] Gleyed or Low-Chroma Colors	[] Other (explain in remarks)

Remarks

F6. Redox dark surface. Upper horizon is alluvial deposited sediment with a thin underlying buried A horizon. It appears that the A-horizon may have been historically excavated, which corresponds with the distinct signature apparent on the FSA slides.



Data Form

Routine Wetland Determination

Job Number: **007-0275-01**

Town/Village/City: **Fitchburg**

Wetland Data Point: **P-7**

Wetland Determination

[No] Hydrophytic Vegetation Present

[Yes] This Data Point is a Wetland

[Yes] Hydric Soils Present

[Yes] Wetland Hydrology Present

Remarks

Hydrophytic vegetation is not present due to agricultural activities.



Data Form

Routine Wetland Determination

Job Number: **007-0275-01**

Town/Village/City: **Fitchburg**

Wetland Data Point: **P-8**

Project/Site: **Par 4 Property**

Applicant/Owner: **Sveum Enterprises**

Investigator: **J. Kraemer**

Date: **October 29, 2007**

County: **Dane**

State: **WI**

[Yes] Do normal circumstances exist on the site?

Community ID: **Upland Ag Field**

[No] Is the site significantly disturbed (Atypical Situation)?

Station ID:

[No] Is the area a potential problem area?

Plot ID: **P-8**

Vegetation

Dominant	Species	Common Name / CofC	% Cover	Indicator
<u>Herbaceous</u>				
X		Soy bean	75	UPL

% Species that are OBL, FACW, or FAC (except FAC-): **0**

NOTE: Species in capital letters denote non-native species.

Remarks

Sample point is located in upland agricultural field. Soy beans have not yet been harvested and no crop damage was observed.

Hydrology

Primary Wetland Hydrology Indicators

Secondary Hydrology Indicators

- ☐ Recorded Data (describe in remarks)
- ☐ Stream, Lake, or Tide Gage
- ☒ Aerial Photograph
- ☒ Other (describe in remarks)

- ☐ Inundated
- ☐ Saturated in upper 12 inches
- ☐ Water marks
- ☐ Drift lines
- ☐ Sediment deposits
- ☐ Drainage patterns in wetlands

- ☐ Oxidized root channels
- ☐ Water-stained leaves
- ☐ Local soil survey data
- ☐ FAC-Neutral test
- ☐ Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): ---

Depth to Free Water in Pit(in.): **>20**

Depth to Saturated Soils(in.): **>20**

Remarks

Wetland signature was not observed to this extent based on FSA review.

Soils

Unit Name: **Radford silt loam**

Taxonomy: **Fluvaqueptic Hapludolls**

Drainage Class: **somewhat poorly**

☒ Field Observations match map

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-18	1	10YR 3/2				SiL
18-20	2	10YR 4/2	10YR 5/6	common	distinct	SiL

Hydric Soils Indicators

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Probable Aquatic Moist Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic % in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (explain in remarks)

Remarks

Wetland Determination

[No] Hydrophytic Vegetation Present

[No] This Data Point is a Wetland

[No] Hydric Soils Present

[No] Wetland Hydrology Present

Remarks



Data Form

Routine Wetland Determination

Job Number: **007-0275-01**

Town/Village/City: **Fitchburg**

Wetland Data Point: **P-9**

Project/Site: **Par 4 Property**

Applicant/Owner: **Sveum Enterprises**

Investigator: **J. Kraemer**

Date: **October 29, 2007**

County: **Dane**

State: **WI**

[Yes] Do normal circumstances exist on the site?

Community ID: **Upland Ag Field**

[No] Is the site significantly disturbed (Atypical Situation)?

Station ID:

[No] Is the area a potential problem area?

Plot ID: **P-9**

Vegetation

Dominant	Species	Common Name / CofC	% Cover	Indicator
<u>Herbaceous</u>				
X		Soy bean	75	UPL

% Species that are OBL, FACW, or FAC (except FAC-): **0**

NOTE: Species in capital letters denote non-native species.

Remarks

Sample point is located in upland agricultural field. Soy beans have not yet been harvested and no crop damage was observed.

Hydrology

- [] Recorded Data (describe in remarks)
[] Stream, Lake, or Tide Gage
[X] Aerial Photograph
[X] Other (describe in remarks)

Primary Wetland Hydrology Indicators

- [] Inundated
[] Saturated in upper 12 inches
[] Water marks
[] Drift lines
[] Sediment deposits
[] Drainage patterns in wetlands

Secondary Hydrology Indicators

- [] Oxidized root channels
[] Water-stained leaves
[] Local soil survey data
[] FAC-Neutral test
[] Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): -----

Depth to Free Water in Pit(in.): **>20**

Depth to Saturated Soils(in.): **>20**

Remarks

Wetland signature was not observed to this extent based on FSA review.

Soils

Unit Name: **Virgil silt loam**

Taxonomy: **Udolic Endoaqualfs**

Drainage Class: **somewhat poorly**

[X] Field Observations match map

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Contrast	Texture, Structure, etc.
0-20	1	10YR 3/2				SiL
20-22	2	10YR 4/2	10YR 5/6	common	distinct	SiCL

Hydric Soils Indicators

- | | |
|-----------------------------------|--|
| [] Histosol | [] Concretions |
| [] Histic Epipedon | [] High Organic % in Surface Layer in Sandy Soils |
| [] Sulfidic Odor | [] Organic Streaking in Sandy Soils |
| [] Probable Aquatic Moist Regime | [] Listed on Local Hydric Soils List |
| [] Reducing Conditions | [] Listed on National Hydric Soils List |
| [] Gleyed or Low-Chroma Colors | [] Other (explain in remarks) |

Remarks

Wetland Determination

[No] Hydrophytic Vegetation Present

[No] This Data Point is a Wetland

[No] Hydric Soils Present

[No] Wetland Hydrology Present

Remarks

APPENDIX B
FARM SERVICE AGENCY CROP HISTORY SLIDES



1981 section01.jpg



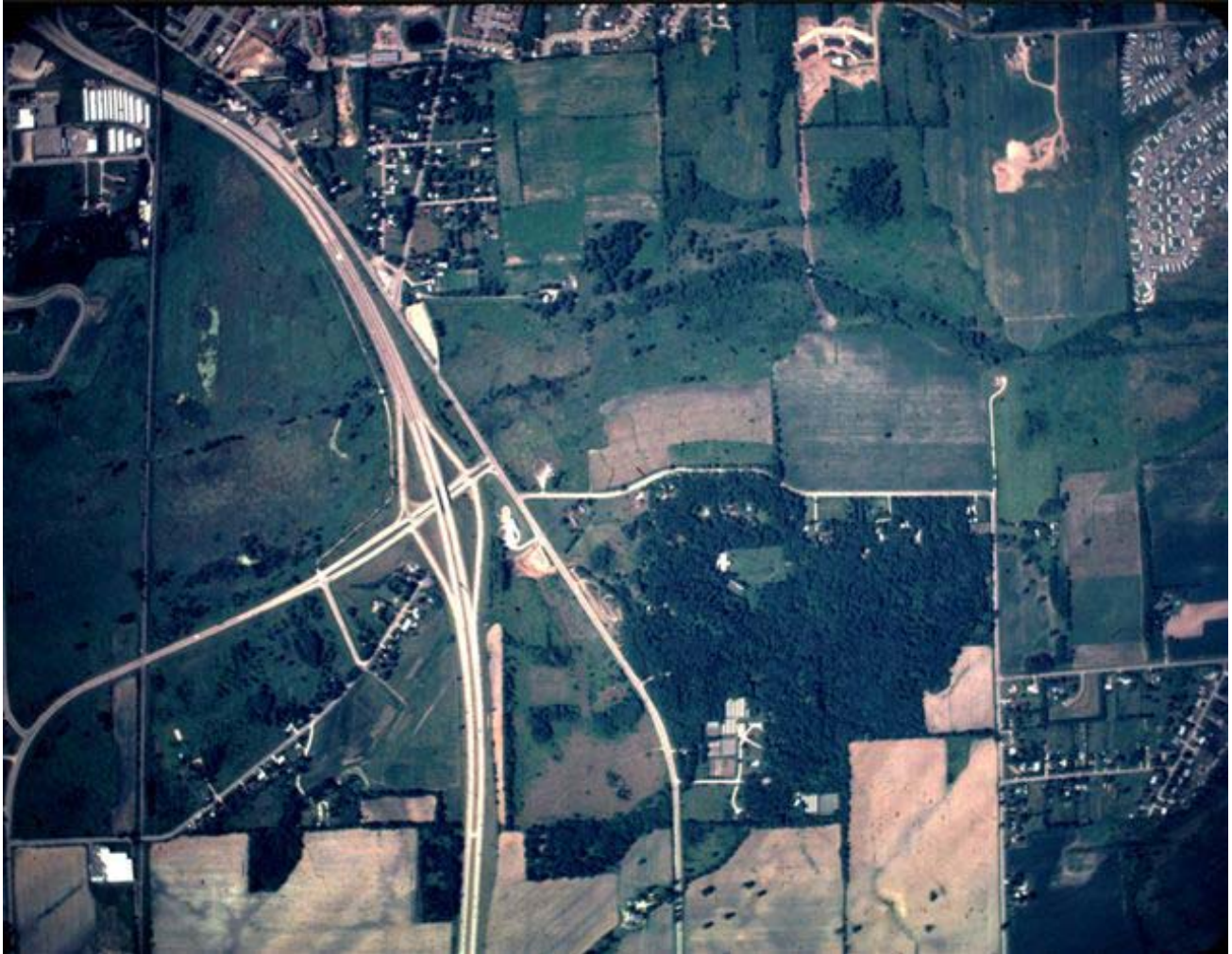
1981 section12.jpg



1982 section01.jpg



1982 section12.jpg



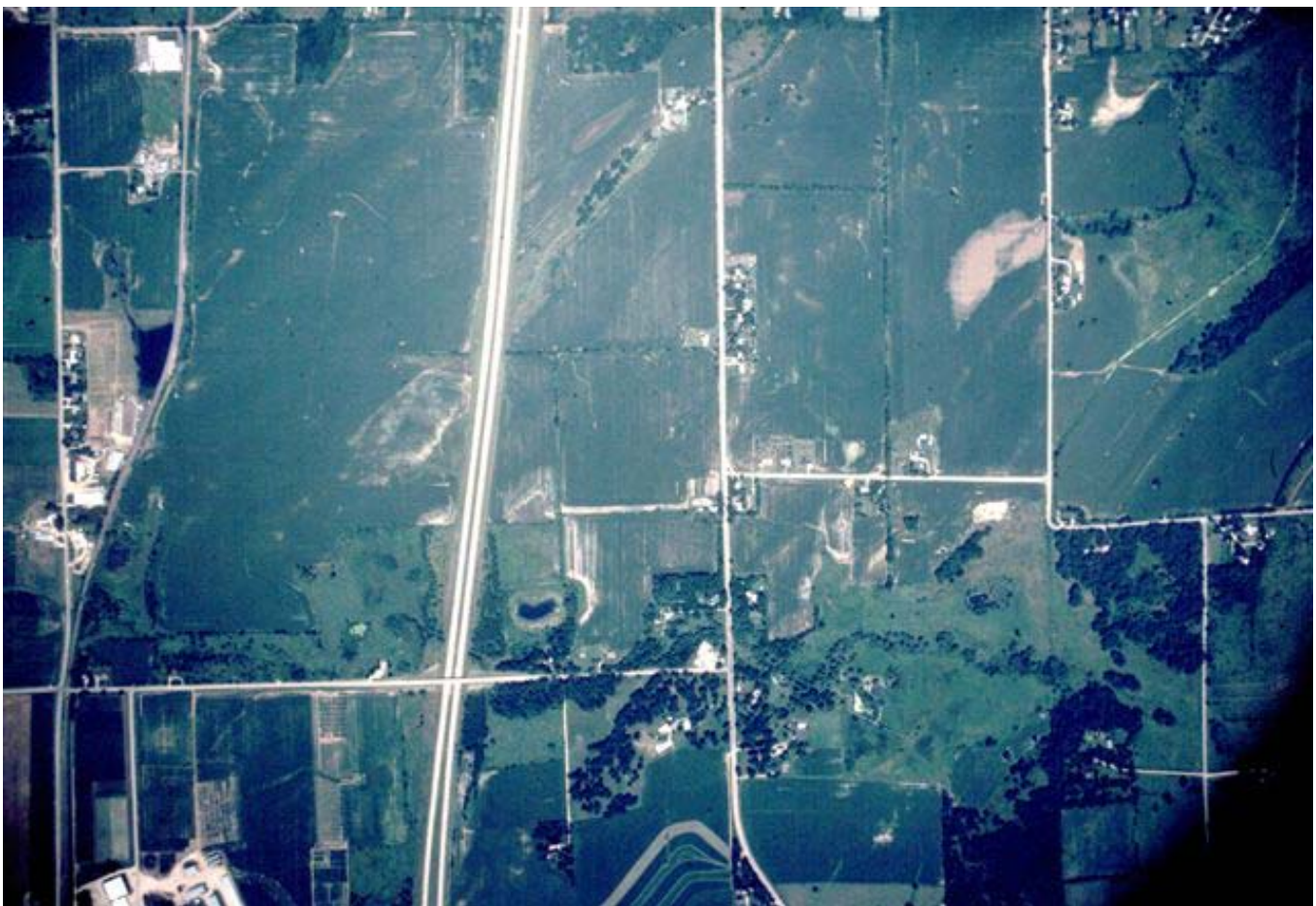
1983 section01.jpg



1983 section12.jpg



1984 Section01.jpg



1984 Section12.jpg



1985 Section01.jpg



1985 Section12.jpg



1993 section01.jpg



1993 section12.jpg



1994 sec 1,2.jpg



1994 sec 11,12.jpg



1995 section01.jpg



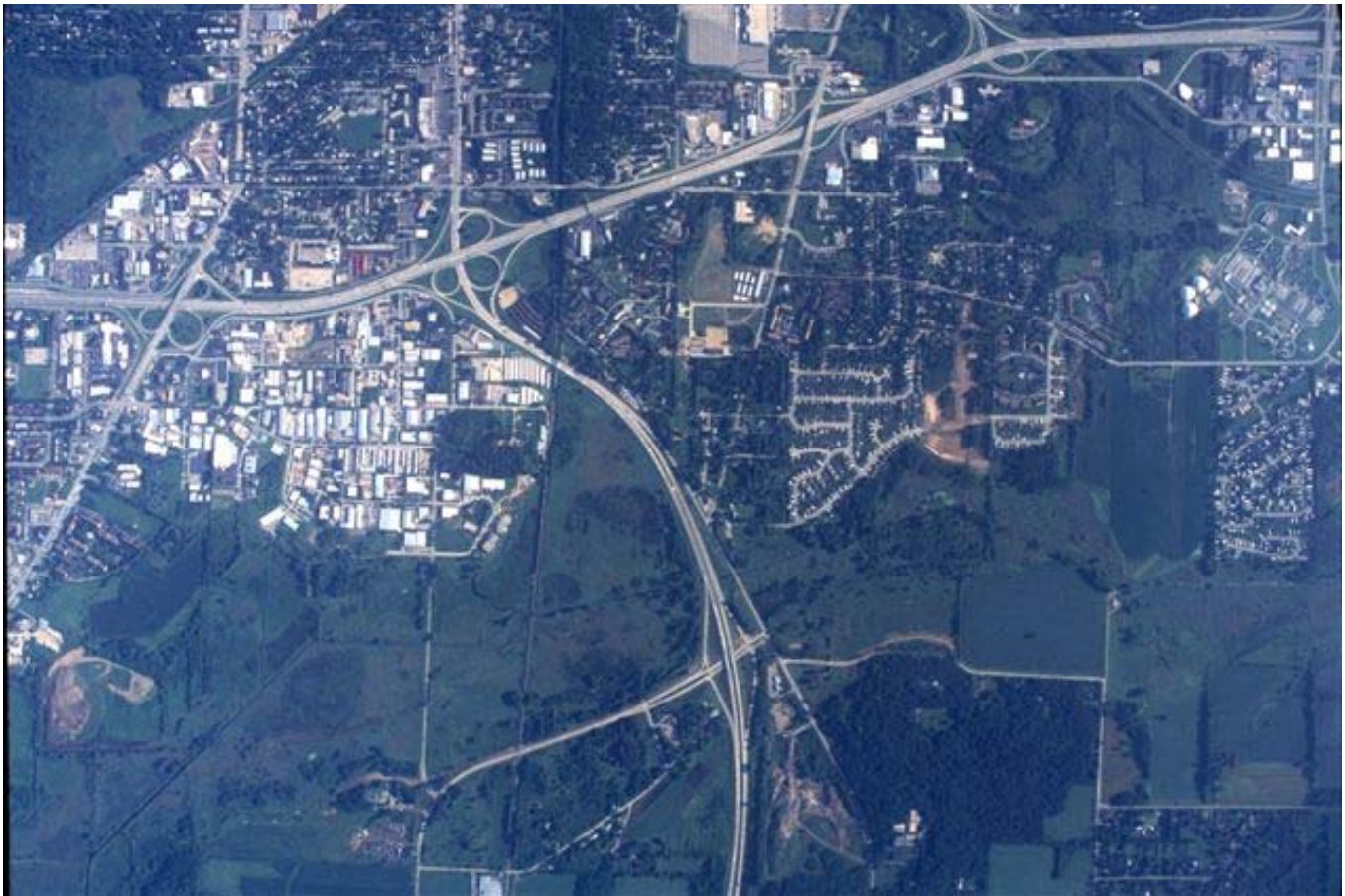
1995 section12.jpg



1996 section01.jpg



1996 section12.jpg



1997 sec 1,2.jpg



1997 sec 11,12.jpg



1998 sec 1,2.jpg



1998 sec 11,12.jpg



1999 sec 1,2.jpg



1999 sec 11,12.jpg



2000 sec 1,2.jpg



2000 sec 11,12.jpg



2001 sec 1,2.jpg



2001 sec 11,12.jpg



2002 sec 1,2.jpg



2002 sec 11,12.jpg



2003 section01.jpg



2003 section12.jpg

APPENDIX C
SITE PHOTOGRAPHS

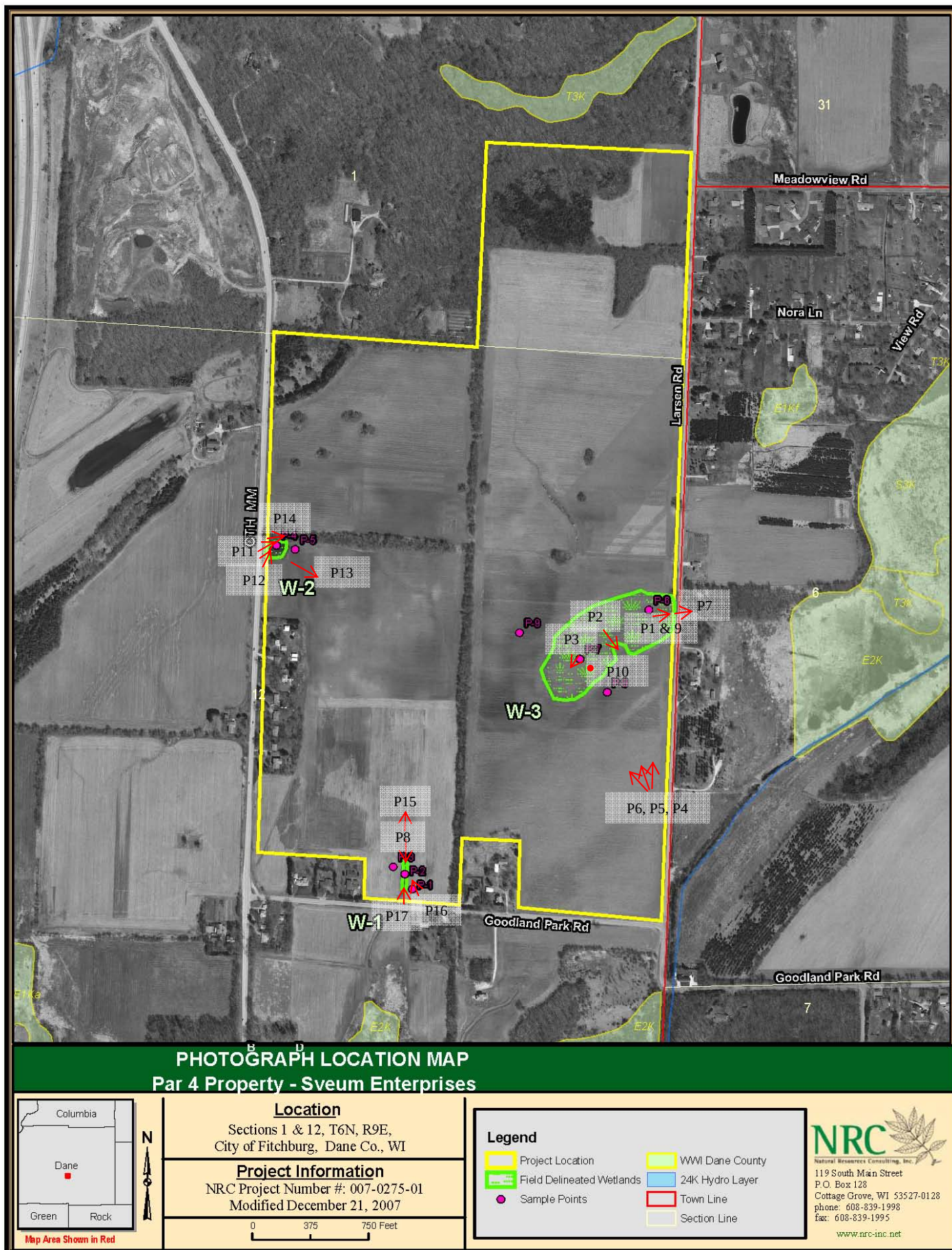


Figure 3.mxd Map Created by C. Pekar



Photo 01. Culvert at W-3.JPG



Photo 02. W-3 View SE.JPG



Photo 03. W-3 Standing water View SW.JPG



Photo 04. W-3 View North.JPG



Photo 05. W-3 View NW.JPG



Photo 06. W-3 View NW.JPG



Photo 07. Discharge Point of W-3.JPG



Photo 08. W-1 Pond View South.JPG



Photo 09. W-3 Culvert at Larson Rd.JPG



Photo 10. W-3 Sediment Deposits.JPG



Photo 11. W-2 Tree line.JPG



Photo 12. W-2 FW.JPG



Photo 13. Upland Ag field.JPG



Photo 14. W-2 Tree line.JPG



Photo 15. Upland Ag field.JPG



Photo 16. W-1 Pond Edge.JPG



Photo 17. W-1 View North.JPG