February 28, 2021

Rodney Scheel, Director of Planning & Development
City of Stoughton
207 S. Forrest St
Stoughton, WI 53589

Re: 51 West Urban Service Area Amendment

Dear Rodney:

MSA is pleased to submit the enclosed draft Urban Service Area Amendment Application for 51 West development and adjacent residential parcels in the Towns of Dunn and Dunkirk. This submittal is on behalf of the landowner, RHD Properties, LLC. The application materials follow the Capitol Area Regional Planning Commission's (CARPC's) Urban Service Area Amendment Checklist and has been modified in response to preliminary review feedback from CARPC and City staff, including the City request to control stormwater rate and volume up to and including the 200-year storm event. We are asking the City to discuss and take action to submit the Urban Service Area Amendment Application.

If you have any questions regarding this application, please contact me at (608) 242-6629 or jvalerius@msa-ps.com.

Sincerely,
MSA Professional Services, Inc.

Jason Valerius, AICP
Senior Planner

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City of Stoughton

2021 URBAN SERVICE AREA AMENDMENT

51 West Addition

February 28, 2021

Prepared for the Capital Area Regional Plan Commission and the Wisconsin Department of Natural Resources
By the City of Stoughton and MSA Professional Services

CITY OF STOUGHTON 2020 URBAN SERVICE AREA AMENDMENT

51 WEST ADDITION

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INTRODUCTION

The City of Stoughton is seeking an urban service area amendment to add approximately 90 total acres to its urban service area (70 acres of privately-owned, undeveloped land, 12 acres of privately-owned residential parcels and approximately 8 acres of existing public right of way). The amendment area is located east and west of USH 51 and south of Rutland-Dunn Townline Rd. See Map 3.1.

Of the 69.8 acres of privately-owned, undeveloped land, approximately 35 acres are expected to be developable when future rights of way (estimated 10.3 acres) and green space (estimated 24.5 acres) are excluded. The proposed green space includes stormwater facilities and parks. Proposed green space will occur mostly on public outlots, plus a public-access easement for a future trail connection through Lot 2.

The proposed amendment area has no mapped environmental corridors per Dane County or Wisconsin Department of Natural Resources (WDNR) data. MSA Professional Services performed a wetland delineation in October 2020 that identified four small, low quality wetland areas. Based on these findings WDNR approved a Nonfederal Wetland Exemption Determination enabling the modification or removal of the wetland areas.

All of the undeveloped lands proposed for inclusion in the amendment have been annexed into the City of Stoughton, as of 2018. The existing residential parcels remain in the Town of Dunn (west of Hwy 51) and the Town of Dunkirk (east of Hwy 51).

The City of Stoughton's most recent urban service area expansion requests were in 2008 (50 developable acres, residential use) and 2011 (75 developable acres, mixed residential and commercial use).

1.0 PLAN CONSISTENCY

1.1 Consistency with the Comprehensive Plan

The City of Stoughton Comprehensive Plan, as most recently amended in July 2017, can be found on the City's website at the following link: https://www.ci.stoughton.wi.us/vertical/sites/%7B801AC7AB-1155-4D50-B8C6-60A370EC007F%7D/uploads/Stoughton_Comprehensive_Plan_-_Final_Adopted_Plan_(with_maps_and_Apps)_-_7.11.17.pdf.

The Comprehensive Plan includes specific recommendations for the proposed amendment area, which it calls out as a Planned Mixed Use Area (see Map 1.1). Per the plan, this area is:

> *planned to contain a mixture of commercial uses designed to supply the day-to-day goods and services for residents living in both Stoughton and surrounding areas. Senior housing and smaller-scale office development would also be appropriate for this area. Potential commercial uses might include a deli, coffee shop, specialty retail, dry cleaners, drug store, restaurant, and grocery store. Development in this mixed-use center could include first floor retail, accented by upper story office space and residential units, and/or a mix of uses and buildings within the same development. Overall, it is recommended that, to the extent possible, this mixed use center be planned to create compact, pedestrian-friendly clusters of complementary businesses, housing, and civic uses.*

More generally, regarding the Planned Mixed Use land use designation:

> *The Planned Mixed Use category is intended to allow consideration of a range of uses and zoning districts, with the understanding that the appropriate combination and arrangement of uses and zoning districts will be approved on a case-by-case basis.*

The proposed development is consistent with this description.

City Council action to affirm support for this USAA is anticipated in March 2021.

Zoning and plat review processes are expected to occur in the second quarter of 2021.

1.2 Neighborhood Plan

There is not a neighborhood plan for the proposed amendment area.

1.3 Describe the Need for the Addition to the Urban Service Area

The City of Stoughton's most recent urban service area amendments were in 2008 and 2011.

The 2008 amendment was for an area at the southwest corner of the City for 50 developable acres of predominantly single-family residential development and one multi-family site. This area is now platted as Nordic Ridge Park; the multi-family site is now fully developed and the single-family sites are roughly 40% developed.

The 2011 amendment was for an area west of USH 51 for 75 developable acres to be a mix of single-family, townhome, multifamily and commercial development. This area is now platted as Kettle Park West; a majority of the commercial space is now built out (Walmart, Tru by Hilton hotel, Kwik Trip, McFarland State Bank, etc.) and the one multifamily sites is now developed as a senior living complex. The remainder of the development, including a handful of twinhome lots and the rest small and mid-size single-family lots, is in early stages of construction and lot development.

Census data show a 2010 population of 12,611 in 5,133 households (2.46 people/household). The July 2019 Census population estimate of 13,114 indicates an increase of 500 people and demand for about 200 additional housing units since 2010. The 2017 Comprehensive Plan cites Department of Administration population and household projections, estimating a continued decline in average household size, about 5,000 new residents by 2040, and demand for about 2,400 housing units.

The experience of the developments enabled by the 2008 and 2011 USA amendments, reinforced by broader market trends and developer feedback, is that there is continuing strong demand for multifamily housing, including senior housing. Regarding commercial use, there are now only a few available sites in the USH 51 corridor in the City for new commercial development.

The proposed development in this amendment area includes about 13.4 acres for commercial use, 19.6 acres for multifamily use, 3.6 acres for single-family use, and 24.5 acres for green space/open space/stormwater management.

2.0 INTERGOVERNMENTAL COOPERATION

2.1 Notification of Adjacent Local Governmental Units

There are three adjacent units of government: the Towns of Dunkirk, Dunn, and Rutland.

There have been informal communications with each town. Upon approval of this application by City Council, a copy will be sent to each town requesting their formal comments on the proposed amendment. Copies of the transmittal letters are attached as Appendix C.

2.2 Adjacent Local Governmental Unit(s) Objections or Support of the Proposal

As noted in Section 2.1, a copy of the proposed amendment application will have been sent to the adjacent towns for their comments following City Council approval of the application. Upon receipt of those comments they will be forwarded to CARPC staff. At present we are aware of no objections to the proposed amendment.

3.0 LAND USE

3.1 Map of the Proposed USAA Boundary and Existing Rights of Way (ROW)

The proposed amendment area includes 82 acres of existing private parcels and 7.9 acres of public rights-of-way. See Map 3.1

3.2 Tables of Land Use Acreage and Number of Housing Units

The concept plans for the proposed amendment areas are shown in Map 4.2. It is possible that some details of the plans (such as precise road alignments, lot configurations, and precise sizes and locations of stormwater management features) will change as the proposals go through the plat approval process. However, the mix of land uses and the general layouts are not anticipated to change substantially.

Table 3.2: Urban Service Amendment Area Data

Proposed Land Use	Number of Acres			Number of Housing Units
	New Development	Existing Development	Environmental Corridor	
Single Family Residential	2.6	12.0	-	9
Duplex Residential	1.5	0	-	10
Multi-Family Residential	18.1	0	-	338
Residential Total	22.2	12.0		357
Commercial	13.3	0	-	-
Industrial	0	0	-	-
Institutional	0	0	-	-
Street ROW	9.9	7.9	-	-
Parks	9.6	0	-	-
Stormwater Management	14.9	0	-	-
Other Open Space	0	0	-	-
TOTAL	69.9	19.9	0	357

3.3 Map of Existing Land Uses

Existing land uses are accurately depicted in the Existing Land Use Map from the 2017 Comprehensive Plan. An Excerpt of this map is provided, see Map 3.3.

3.4 Quantity and Type of Housing Units

A total of 357 new housing units are proposed in the amendment area, including single-family, duplex, and multifamily units. See Table 3.2. The multifamily designation tentatively includes 30 twinhome zero-entry condo units (lots 1-3), 16 units in 4 lower-density buildings (lot 6), and 292 units in 6 higher-density buildings (lots 4, 5, 18).

4.0 NATURAL RESOURCES

4.1 Natural Resource Areas

The proposed amendment area includes none of the following resources, and no map is provided: water bodies, floodplains, areas of unique vegetation or geology, highly erodible soils, drainageways or groundwater recharge areas.

Wetlands

The amendment area has one “USDA Wet Spot” identified in the Surface Water Data Viewer. A wetland delineation in October 2020 identified a total of four wetland areas, totaling 0.53 acres. See Map 4.1A. The wetland findings were submitted for review by the Army Corp of Engineers, which confirmed that they do not qualify as federal wetlands. The wetland delineation and ACOE determination were then provided to

WDNR with a request for a Nonfederal Wetland Exemption Determination, which was granted by WDNR on January 5, 2021. A copy of this exemption determination is attached in the appendix. The wetlands may be modified or filled during development.

Woodlands

County woodland data on the amendment area is out of date. A recent aerial photograph is provided, Map 4.1B

Contours and Steep Slopes

See Map 4.1C

Soils Types

See Map 4.1D

4.2 Public Outlots for Parks and Stormwater Management Facilities

There are 7 public outlots proposed in the development, addressing the need for stormwater management and park space tied to new residential uses. Map 4.2 shows these outlots and the stormwater ponds within them, including 9.6 acres of park space and 14.9 acres of stormwater management facilities. Outlots 7 and 8 include both park and stormwater management uses.

4.3 Existing Environmental Corridors

There are no existing environmental corridors mapped in the proposed USAA, per the CARPC online mapping tool.

4.4 Proposed Environmental Corridors

The proposed Environmental Corridors are shown on Map 4.4. Included are all of the outlots, to be used for stormwater management and public park purposes.

4.5 Minimum Environmental Corridors Criteria Requirements

The proposed Environmental Corridors meet the minimum requirements.

5.0 UTILITIES & STORMWATER MANAGEMENT

5.1 Proposed Sanitary Sewer Extension for the USAA

The land within the proposed urban service area amendment (USAA) will be served from an existing 8-inch sewer interceptor connected to the plat edge from Virgin Lake Drive. A 750-foot segment of 8-inch sewer interceptor in Roby Road (Kings Lynn Rd. to Virgin Lake Dr.) will be upgraded to 10-inch to accommodate the proposed 51 West service area. All sanitary sewer service lines within the proposed USAA will be 8-inch gravity lines and will extend to the plat edges wherever streets extend to the plat edge, as indicated in Map 5.1. The developer will be responsible for installation of all sewer facilities based on the final plat approval and development agreement, including the Roby Rd interceptor upsizing.

5.2 Estimate of the Average Daily and Peak Wastewater Flow for the USAA

The estimated flow rate is based on the expected flow rates of 1,500 gallons per day for commercial use and 100 gallons per person per day for residential use. A peaking factor of 2.5 for commercial development and 4.0 for residential development results in an estimated peak flow of 0.478 cfs from the USAA.

Table 5.2 - Average and Peak Wastewater Flow Rates for the Proposed USAA

Land Use	Metrics			Average Flows (GPD)	Average Flows (cfs)	Peaking Factor	Peak Flow (cfs)
Commercial	1,500 GPD/acre	13.25 acres		19,875	0.031	2.5	0.078
SF Residential	100 GPD/person	9 units	2.5 people/unit	2,250	0.003	4	0.012
MF/Duplex Residential	100 GPD/person	338 units	1.8 people/unit	60,500	0.094	4	0.376
Total				82,625	0.101		0.466

5.3 Current Average Daily Flow for the Interceptor Sewer and the Wastewater Plant

All areas of the proposed USAA flow to existing sanitary sewers on Virgin Lake Drive and Roby Road. These 8-inch sanitary sewers are laid at a slope of 0.4% and have a calculated pipe capacity of 0.76 cubic feet per second (cfs) (flowing full). Based on existing development served, City of Stoughton Public Works staff estimate that the existing sanitary sewer on Virgin Lake Drive conveys an existing peak flow rate of 0.101 cfs and the existing sanitary sewer on Roby Road conveys an existing peak flow rate of 0.272 cfs. This results in available pipe capacities of 0.659 cfs in the Virgin Lake Drive sewer and 0.488 cfs in the Roby Road sewer.

The Stoughton wastewater treatment plant has a total design average flow capacity of 1.65 mgd. The current average daily flow is approximately 1.29 mgd, per the 2019 CMAR.

5.4 Wastewater Treatment Plant / Interceptor Sewer Capacity to Serve the USAA

Full development of the USAA is expected to generate an additional peak wastewater flow rate of 0.466 cfs in the existing sewers (see Table 5.2). In addition, existing developed but unsewered areas within the existing USA are expected to generate an additional peak wastewater flow rate of 0.145 cfs in the existing sewers in the future. Combined, these two areas will generate an additional flow rate of 0.611 cfs in the existing sewers.

The estimated total future peak flow rate in the existing sewer on Virgin Lake Drive is 0.712 cfs, below the maximum pipe capacity. The estimated total future peak flow rate in the existing sewer on Roby Road is 0.883 cfs, which is more than the maximum pipe capacity of the current 8-inch pipe. Stoughton Utilities requires that sewers operate at no more than 80 percent of the maximum pipe capacity at peak flow. Therefore, the Roby Road pipe is to be upgraded to a 10-inch pipe.

No other existing sewers or interceptors were evaluated.

The difference in design capacity and current flows for the Stoughton wastewater treatment plant is approximately 0.36 mgd. The estimated flows from the proposed USAA would use about 23% of this remaining capacity.

5.5 Proposed Public Water Supply/Distribution System Extension for the Proposed USAA

The amendment area will be served by connecting to a 10-inch watermain currently stubbed out at the north end of Nygaard St. Watermains under Nygaard, Oak Opening Dr. and the connector between them will be 10-inch, as indicated in Map 5.1. All others will be 8-inch. Development of the west side of USH 51 within this area will be contingent on extension of a water main down Oak Opening Drive to the Kettle Park West development to establish a loop. The developer will be responsible for installation of all watermain facilities within the plat and down Oak Opening Drive to the edge of Kettle Park West (~1,335'), based on the final plat approval and development agreement.

5.6 Estimate of the Average Daily and Peak Hourly Water Demand for the USAA

The estimated flow rate is based on a typical expected commercial flow rate of 1,750 gallons per acre per day and a typical expected residential flow rate of 100 gpd. Using these figures, the 13.25 acres of commercial use will require average daily water of 23,188 gpd and a peak of 2,415 gallons per hour (peaking factor of 2.5). The 347 new residential units and 16 existing residential units (if/when served with City water) will require average daily water of 67,090 gpd and a peak of 11,182 gallons per hour (peaking factor of 4). Combined, the average daily water demand is estimated for the proposed development to be 90,278 gpd.

Table 5.6 - Average and Peak Water Demand for the Proposed USAA

Land Use	Metrics			Average Flows (GPD)	Peaking Factor	Peak Flow (gallons per hour)
Commercial	1,750 GPD/acre	13.25 acres		23,188	2.5	2,415
New SF Residential	100 GPD/person	9 units	2.5 people/unit	2,250	4	375
Existing SF Residential	100 GPD/person	16 units	2.5 people/unit	4,000	4	667
MF/Duplex Residential	100 GPD/person	338 units	1.8 people/unit	60,840	4	10,140
Total				90,278		13,596

5.7 Current Average Daily and Peak Hourly Water Demand

The existing average water use is approximately 1.512 million gallons per day (MGD), or 1,050 gallons per minute (gpm), with a maximum day usage of 2.752 MGD or 1,911 gpm (Stoughton Utilities data). The water model-predicted available fire flow at the 10-inch connection point on Nygaard Street is approximately 4,000 gpm at a 20 psi residual pressure, which can be considered adequate to support this type of development. The water model was operated with no well or booster pumps operating and all elevated storage water levels set to 10 feet below overflow elevation.

5.8 Current Capacity of the Water System

The nearest elevated tank that would serve this proposed development is Tower 2, located on Furseth Road, just east of Sundt Lane. Tower 2 has a capacity of 300,000 gallons and an overflow elevation of 1,081 feet above mean sea level. Assuming the water level in Tower 2 is 10 feet below overflow, or 1,071 ft, pressures in the proposed development would range from 45 to 71 psi. This is based on ground level elevations in the proposed development that range from 906 to 966 ft.

The City of Stoughton is supplied by four groundwater wells, Nos. 4, 5, 6, and 7. Well Nos. 4, 6, and 7 pump direction into the distribution system while Well No. 5 pumps into a ground-level reservoir, where two 1,000 gpm booster pumps are used to pump into the distribution system. The reported capacities of the four wells are listed below in gpm and MGD.

Well No.	Capacity (gpm)	Capacity (MGD)
4	1,220	1.757
5	950	1.368
6	1,050	1.512
7	1,080	1.555
Total Capacity	4,300	6.192
Firm Capacity*	3,220	4.435

*Assumes Well No. 7 well pump out of service

System storage consists of two steel spheroid elevated tanks and a concrete ground-level reservoir at Well No. 5. A summary of these storage facilities is listed below.

Storage Facility	Year Constructed	Capacity (gallons)	Overflow Elevation (ft)
Tower 2	1977	300,000	1,081.0
Tower 3	2010	600,000	1,081.0
Well No. 5 Reservoir	1989	400,000	N/A
Total Storage	--	1,300,000	--

5.9 Proposed Stormwater Management Standards and Best Management Practices

The stormwater management system is intended to control post-development peak runoff rates to levels no higher than existing conditions for events ranging from the 1-yr through the 200-yr event. Post-development runoff volumes will also be controlled to levels no higher than existing for events ranging from the 1-yr through the 200-yr event. This higher than ordinance-required level of stormwater management is necessary to prevent volume related flood elevation increases in landlocked basins which lie downstream from the proposed site. In addition to these event-based runoff control measures, the post-development site will also achieve 90% of pre-development stay-on (infiltration) on an annual average basis per current Dane County requirements. These requirements will need to be met regardless of on-site development density and potential changes in drainage patterns within the site.

The preliminary stormwater management plan for the amendment area consists of 4 pairs of stormwater basins, each pair comprising a wet pond 'fore-bay' to provide water quality treatment and

a downstream infiltration basin to meet the 90% predevelopment stay-on and event-based volume control requirements. Both facility types will provide additional pollutant reduction from stormwater discharge, such as Total Phosphorus. The paired basins are designed to provide rate attenuation for the 1-, 2-, 10-, 25-, 50-, 100-, and 200-yr storm events based on MSE4 intensity distribution. Maximum pre-developed runoff curve numbers are limited according to on City of Stoughton & Dane County requirements. As illustrated in Map 4.2, the basins are located in Outlot 2 (west end, drains to the west), Outlots 4 and 5 (southwest, drains to the south), Outlot 6 (northeast, drains to the north) and Outlot 7 (southeast, drains to the south).

A system of storm sewer will convey stormwater within the amendment area along proposed roadways to the proposed basins. The combination of on-site volume and peak flow control up the 200-yr event will greatly reduce discharges to downstream properties since peak flow rates, even under extreme events, are roughly 60% less than existing conditions. Additionally, since runoff rates and volumes during small events will be zero, or near zero, where there are currently predicted to be discharges, there will be no increase in the frequency of discharge to off-site drainage ways. As a result, there should be no impacts to off-site conveyance from this development.

The stormwater basins will function appropriately in order to meet all performance standards from regulatory agencies such as the WDNR, Dane County, and City of Stoughton.

<u>Performance Standards</u>

Applicable stormwater management performance measures for this site will meet or exceed standards required by the State of Wisconsin (NR 151), Dane County (Chapter 14), and City of Stoughton (Chapter 10, Article IV, Section 10) Erosion Control and Stormwater Management, which are summarized below. In addition to those existing standards, the City is requesting that this development result in no increase in stormwater runoff peak flows and volume for all design storm events up to and including a 200-year, 24-hour event, consistent with anticipated changes to the Dane County ordinance.

The performance standards summarized in the first paragraph of this section meet or greatly exceed all current effective state, county, and local standard for stormwater management in terms of water quality treatment, peak discharge rate control, and infiltration (volume control).

Current published standards per applicable regulations are itemized below.

1. Water Quality:

   Require Post-Construction sediment control sufficient to reduce total suspended solids leaving the site by at least 80%

   The City's Consulting Engineer's requirement to control runoff volumes to pre-development levels for events up to and including the 100-yr event will require high levels of on-site infiltration which are expected to result in 100% (or nearly so) TSS (and TP) reduction for the developed site.

2. Runoff rate control*:

   A. Maintain predevelopment peak runoff rates for the one-year, twenty-four-hour storm event (2.549 inches in 24 hours).

B. Maintain predevelopment peak runoff rates for the two-year, twenty-four-hour storm event (2.984 inches in 24 hours).

C. Maintain predevelopment peak runoff rates for the ten-year, twenty-four-hour storm event (4.209 inches in 24 hours).

D. Safely pass the one-hundred-year, twenty-four-hour storm event (6.66 inches in 24 hours).

* Rainfall depths reported are the higher of that required by the City's ordinance or the County's ordinance for each respective event

The City's request to control peak flow rates and volumes to pre-development levels for events up to and including the 200-yr event will supersede the rate control standards described above.

3. Thermal Control:

   The amendment area is not part of any thermally sensitive areas and thus will not be required.

4. Infiltration:

   Requirement for both residential and nonresidential developments to infiltrate sufficient runoff volume so that post-development infiltration volume shall be at least 90% of the pre-development infiltration volume based on average annual rainfall.

   The City's request to control runoff volumes to pre-development levels for events up to and including the 200-yr event will greatly supersede this condition, requiring 100% pre-development stay-on for not just the annual average rainfall, but also all events up to the 200-yr event.

5. Oil and Grease Control:

   For all commercial or industrial developments, the first 0.5" of runoff shall be treated using the best oil and grease removal technology available. This requirement will be handled on a lot-by-lot basis with on-site controls.

5.10 Stormwater Facility Management

The City of Stoughton will accept and maintain the stormwater facilities in public outlots. Any facilities on private lots will be maintained by the property owners, and will be subject to a maintenance agreement in perpetuity, per Ch. 14.49(3)(d) and 14.51(1)(i) of Dane Co ordinance.

APPENDIX A

City of Stoughton Resolution 2021-XX

CITY OF STOUGHTON, 207 S. FORREST STREET, STOUGHTON, WISCONSIN

RESOLUTION OF THE COMMON COUNCIL

A Resolution finding that the expansion of the Stoughton Urban Service Area to include approximately 90 acres of land on the west edge of the City is consistent with the City of Stoughton Comprehensive Plan and directing staff to submit a request for expanding the Stoughton Urban Service Area to include said lands.

Committee Action:	Plan Commission recommends Common Council approval – 0	
Fiscal Impact:	None.	
File Number:	R- -2021	**Date Introduced:**

The City of Stoughton, Wisconsin, Common Council does proclaim as follows:

WHEREAS, the City's Urban Service Area is the area in which denser, urban development is permitted and utilities such as sewer and water are allowed; and

WHEREAS, the City expects urban development to occur within an area as shown on Exhibit A as the Proposed "51 West Addition Urban Service Area Amendment" generally north of Roby Road, along both sides of US Highway 51; and

WHEREAS, the amendment area adds approximately 70 acres of privately owned undeveloped land; 12 acres of privately owned residential parcels and approximately 8 acres of existing rights-of-way; and

WHEREAS, the City has planned for expected urban growth within the proposed urban service expansion area; and

WHEREAS, the City's Comprehensive Plan has designated the "51 West Addition" area as part of the "Northwest Planned Mixed Use Area" and the development planned for this area is consistent with this Plan; and

WHEREAS, the development of the "51 West Addition - Urban Service Area Amendment" will be consistent with all applicable land-use and environmental protection regulations and requirements; and

WHEREAS, Plan Commission recommended approval of expanding the Stoughton Urban Service Area to include the "51 West Neighborhood Urban Service Area Amendment" at its March 8, 2021 meeting;

NOW, THEREFORE, BE IT RESOLVED that the City of Stoughton Common Council finds that the expansion of the Urban Service Area to include the approximately 90 acres "51 West Addition - Urban Service Area Amendment" is consistent with the adopted Comprehensive Plan and furthermore directs staff to submit a request to expand the Stoughton Urban Service Area to include said property as shown on Map 3.1 – Proposed Amendment Area.

BE IT FURTHER RESOLVED that the City of Stoughton hereby formally request that the Capital Area Regional Planning Commission consider and approve the requested amendment to the Urban Service Area.

Council Action: ☐ **Adopted** ☐ **Failed** **Vote** _____

Mayoral Action: ☐ **Accept** ☐ **Veto**

_____

Tim Swadley, Mayor Date

Council Action: _____ ☐ **Override** **Vote** _____

APPENDIX B

Adjacent Government Notice Letter

CITY OF STOUGHTON
DEPARTMENT OF
PLANNING & DEVELOPMENT
207 S. Forrest, Stoughton, WI. 53589

(608) 873-6619 www.ci.stoughton.wi.us

RODNEY J. SCHEEL
DIRECTOR

March __, 2021

Peter Loughrin, Town Chairperson
Town of Rutland
4177 Old Stage Rd.
Brooklyn, WI 53521

Dear Mr. Loughrin:

The City of Stoughton has submitted an application to the Capital Area Reginal Planning Commission (CARPC) for an amendment to the Stoughton Urban Service Area. The attached document is a copy of the March XX submittal.

The proposed amendment would add approximately 90 acres of land to the Urban Service Area, including 8 acres of public right-of-way, 1.6 acres of residential lots (1) in the Town of Rutland, 10.4 acres of residential lots (16) in the Town of Dunkirk, and 70 acres in the City of Stoughton. Those 70 acres are the subject of a mixed-use development proposal known as 51 West. The 1 lot in the Town of Rutland is not currently planned for annexation in connection with or as a result of the proposed development or this Urban Service Area Amendment. It is included in the amendment as a best practice, to avoid the creation of gaps in the Urban Service Area boundaries and to allow the option of connection to public utilities in the future.

Please review the attached application materials. We would be happy to receive any comments you have. You may also copy your comments to Mike Rupiper at CARPC (miker@capitalarearpc.org).

Thank you for your consideration.

Sincerely,
CITY OF STOUGHTON

Rodney Scheel
Director of Planning & Development

CITY OF STOUGHTON
DEPARTMENT OF
PLANNING & DEVELOPMENT
207 S. Forrest, Stoughton, WI. 53589

(608) 873-6619 www.ci.stoughton.wi.us

RODNEY J. SCHEEL
DIRECTOR

March __, 2021

Norman Monsen, Town Chairperson
Town of Dunkirk
654 County Road N
Stoughton, WI 53589

Dear Mr. Monsen:

The City of Stoughton has submitted an application to the Capital Area Reginal Planning Commission (CARPC) for an amendment to the Stoughton Urban Service Area. The attached document is a copy of the March XX submittal.

The proposed amendment would add approximately 90 acres of land to the Urban Service Area, including 8 acres of public right-of-way, 1.6 acres of residential lots (1) in the Town of Rutland, 10.4 acres of residential lots (16) in the Town of Dunkirk, and 70 acres in the City of Stoughton. Those 70 acres are the subject of a mixed-use development proposal known as 51 West. The 16 lots in the Town of Dunkirk are not planned for annexation in connection with or as a result of the proposed development or this Urban Service Area Amendment. They are included in the amendment as a best practice, to avoid the creation of gaps in the Urban Service Area boundaries and to allow the option of connection to public utilities in the future.

Please review the attached application materials. We would be happy to receive any comments you have. You may also copy your comments to Mike Rupiper at CARPC (miker@capitalarearpc.org).

Thank you for your consideration.

Sincerely,
CITY OF STOUGHTON

Rodney Scheel
Director of Planning & Development

CITY OF STOUGHTON
DEPARTMENT OF
PLANNING & DEVELOPMENT
207 S. Forrest, Stoughton, WI. 53589

(608) 873-6619 www.ci.stoughton.wi.us

RODNEY J. SCHEEL
DIRECTOR

March __, 2021

Ed Minihan, Town Chairperson
Town of Dunn
4156 County Road B
McFarland, WI 53558

Dear Mr. Minihan:

The City of Stoughton has submitted an application to the Capital Area Reginal Planning Commission (CARPC) for an amendment to the Stoughton Urban Service Area. The attached document is a copy of the March XX submittal.

The proposed amendment would add approximately 90 acres of land to the Urban Service Area, including 8 acres of public right-of-way, 1.6 acres of residential lots (1) in the Town of Rutland, 10.4 acres of residential lots (16) in the Town of Dunkirk, and 70 acres in the City of Stoughton. Those 70 acres are the subject of a mixed-use development proposal known as 51 West. No land in the Town of Dunn is included; we are contacting you as an adjacent jurisdiction.

Please review the attached application materials. We would be happy to receive any comments you have. You may also copy your comments to Mike Rupiper at CARPC (miker@capitalarearpc.org).

Thank you for your consideration.

Sincerely,
CITY OF STOUGHTON

Rodney Scheel
Director of Planning & Development

APPENDIX C

Wetland Delineation Report

STH 51 Development
Wetland Delineation Report

City of Stoughton & Town of Rutland
Dane County, Wisconsin

Project No. 19091001

November 2020

MSA

STH 51 Development
Wetland Delineation Report

City of Stoughton & Town of Rutland
Dane County, Wisconsin

Project No. 19091001

Prepared by:

MSA Professional Services, Inc.
1702 Pankratz Street
Madison, WI 53704
Phone: (608) 242-6610

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APPENDIX B | PRECIPITATION DATA
APPENDIX C | FIELD DATA SHEETS
APPENDIX D | SITE PHOTOGRAPHS

QUALIFICATIONS

Jeff Felland graduated with Bachelor's of Science degrees in Civil Engineering, and Zoology and Conservation, from the University of Wisconsin – Madison in 2007 and 1997, respectively. Jeff's additional training for wetland delineations includes the following courses:

- Critical Methods in Wetland Delineation - WDNR – Annually since 2018
- Basic Wetland Delineation – UW La Crosse - 2017
- Advanced Wetland Delineation – UW La Crosse - 2017
- Basic Plant Identification for Wetland Delineation – UW La Crosse - 2016
- Hydric Soils Identification – UW La Crosse - 2016

Sarah Morrison graduated with a Bachelor's of Science degree in Geography and a minor in Environmental Science, from the University of Wisconsin – La Crosse in 2014. Sarah has completed several delineations under the guidance of other wetland delineators including Jeff Felland.

I. INTRODUCTION

On October 15 & 20, 2020 site visits were conducted for a wetland delineation by MSA Professional Services, Inc. (MSA) for the STH 51 Development. The project proposes residential and commercial development and associated roadways in areas currently being utilized for agricultural and as open space. The delineation was performed on behalf of RDH Properties, LLC. Jeff Felland and Sarah Morrison of MSA Professional Services were the field investigators and report authors.

The approximately 73-acre project area includes an area west of STH 51 and south of Rutland Dunn Town Line Road, and an eastern area east of STH 51 extending to Black Oak Drive encompassing both sides of Velkommen Way. The area includes portions of six (6) parcels, 051001180412, 051001185012, 051106222310, 051106224752, 051106286012 and 051106286522, in the City of Stoughton and the Town of Rutland, and is generally described as being within the NW ¼ of the NW ¼ of Section 6, Township 05 North, Range 11 East and NE ¼ of the NE ¼ of Section 01, Township 05 North, Range 10 East, Dane County, Wisconsin. Figure 1 shows the general location of the site.

Wetlands were delineated at four (4) locations within the investigated area, totaling approximately 0.53 acres (23,186 sq. ft.). The wetlands are described here.

- Wetland 1 is located just east of STH 51 in the middle of the site in a roadside ditch and an open area. The wetland is approximately 0.20 acres (8,616 sq. ft.)
- Wetland 2 is approximately 0.002 acres (95 sq. ft.) and located just west of STH 51 in the middle of the site in a roadside ditch.
- Wetland 3 is approximately 0.28 acres (12,053 sq. ft.) and located north of Velkommen Way in the eastern portion of the site.
- Wetland 4 is approximately 0.06 acres (2,422 sq. ft.) and located near the south boundary of the western portion of the site.

II. METHODS

The methods used for the wetland delineation were based on the US Army Corps of Engineers *Wetlands Delineation Manual* (Technical Report Y-87-1) and the January 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0). Vegetation was classified based on the Cowardin and Wisconsin Wetland Inventory classification systems. Plant names and hydrophytic status were determined by using the most recent version of the U.S. Army Corps of Engineers 2016 *Northcentral and Northeast Regional Wetland Plant List*). Hydric soils were classified according to the USDA-NRCS 2018 *Field Indicators of Hydric Soils in the United States; A Guide for Identifying and Delineating Hydric Soils*, (Version 8.2).

The vegetation, hydrology, and soil were documented at each Sample Plot, and assessed to determine if wetland criteria were met. The wetland boundary was considered the highest extent of the wetland. Areas below the boundary met the conditions suitable for a wetland environment, while areas above the boundary lacked one or more of the three criteria and

were considered upland areas. The wetland boundary along each transect was determined based on changes in the vegetation, hydrology, soil and topography. The wetland boundary was surveyed using a mapping grade Trimble R2 GPS unit utilizing WISDOT's WISCORS Network real-time GNSS correction services. The data was then brought into a GIS (Geographic Information System) to produce Figure 5 and calculate data such as Sample Plot locations, wetland areas and potential wetland disturbance areas.

OFFSITE REVIEW

Several sources of background information were obtained and reviewed prior to the on-site field verification. These sources include the following:

- USGS 1982 7.5-Minute Rutland Topographic Map (Figure 1)
- USDA Soil Resources Report, City of Stoughton, Wisconsin (Figure 2)
- Wisconsin Wetlands Inventory (WWI) Map, City of Stoughton, Wisconsin (Figure 3)
- National Wetlands Inventory Map (NWI), City of Stoughton, Wisconsin (Figure 4)
- Aerial photo review. Historic photos from 1937, 1979-2006, 2008, 2010, 2015, 2017 and 2018 (Appendix A)
- USDA precipitation tables from the City of Stoughton, WI WETS station (Appendix B)
- Palmer Drought Index

FSA SLIDE REVIEW

FSA slides and NAIP aerial photos were used to identify areas of the project exhibiting wet signatures or showing other evidence of wetlands. Areas A, B and C were identified based on examination of aerial images. None of the areas has hydric soils and no wetlands identified on WWI or NWI mapping were present. Per 1998 NRCS FSA Wetland Determination on Cropland by Aerial Slide Review methodology, no areas have wetlands present, and a field investigation confirmed this. Figure 7 shows the FSA slide review areas. FSA slide review calculations and photos are in Appendix A.

III. RESULTS AND DISCUSSION

ANTECEDENT HYDROLOGIC CONDITION ANALYSIS

Antecedent precipitation was calculated prior to the October 15, 2020 site visit. Upon reviewing the WETS station in Stoughton, WI the precipitation for September was greater than the high average, August was considerably less than the low average, and July was between the low and normal average. As detailed in Table 1 on the following page, a score of 13 for the three prior month method for evaluating antecedent precipitation shows that the climactic/hydrologic conditions preceding the time of the October 15 site visit were normal. Approximately 0.36 inches of precipitation fell between October 1-14 with 0.13 inches falling on October 13.

Antecedent precipitation was also calculated prior to the October 20, 2020 site visit. As detailed in Table 2 on the following page, a score of 10 for the three prior month method for evaluating antecedent precipitation shows that the climactic/hydrologic conditions preceding the time of the October 20 site visit were normal (see Appendix B).

Table 1 – Antecedent Precipitation

Field Investigated Date(s):		October 15, 2020						
Weather Station:		City of Stoughton, WI						
County:		Dane						
Antecedent Precipitation								
		WETS Long-Term Rainfall Records						
Prior Month	**Month**	**3 years in 10 Precipitation Less Than (in)**	**Normal (in)**	**3 years in 10 Precipitation More Than (in)**	**Rainfall (in)**	**Condition Value**	**Month Weight Value**	**Product of Previous Two Columns**
1st	September	1.71	3.54	4.32	4.72	3	3	9
2nd	August	3.01	4.12	4.84	0.85	1	2	2
3rd	July	2.74	3.82	4.52	3.23	2	1	2
				Total	**8.80**		**Sum**	**13**

Table 2 – Antecedent Precipitation

Field Investigated Date(s):		October 20, 2020						
Weather Station:		City of Stoughton, WI						
County:		Dane						
Antecedent Precipitation								
		WETS Long-Term Rainfall Records						
Prior Month	**Month**	**3 years in 10 Precipitation Less Than (in)**	**Normal (in)**	**3 years in 10 Precipitation More Than (in)**	**Rainfall (in)**	**Condition Value**	**Month Weight Value**	**Product of Previous Two Columns**
1st	October	1.32	2.26	2.75	0.49*	1	3	3
2nd	September	1.71	3.54	4.32	4.72	3	2	6
3rd	August	3.01	4.12	4.84	0.85	1	1	1
				Total	**6.06**		**Sum**	**10**

**Rainfall total through October 19.*

WISCONSIN AND NATIONAL WETLANDS INVENTORY MAPS

Figure 3 shows the WWI Map of the area. No mapped wetlands or hydric indicators are present within the project area; however, one NRCS wet spot exists to the west of Highway 51 in the middle of the site.

Figure 4 shows the NWI Map of the area. This map shows that there are no wetlands mapped within the project boundary.

SOILS MAP

Eleven (11) soil types are mapped within the investigated area and are detailed in Table 3 on the following page. Figure 2 shows a soil map of the project area.

Hydric soil is soil formed under prolonged saturated conditions and is one of the three criteria assessed when considering an area to be a wetland. Soils are listed as wetland indicator soils based on being hydric or having hydric inclusions. No soils on the site are mapped as having hydric soil indicators.

Table 3 - Soils

Map Unit Symbol	Map Unit Name	Parent Material	Landform Type	Hydric Soil Status
BbB	Batavia silt loam, gravelly substratum, 2 to 6 percent slopes	Deep Loess over loamy outwash	Outwash Plains	No
BoD2	Boyer sandy loam, 12 to 20 percent slopes, eroded	Loamy outwash over sandy and gravelly outwash	Outwash Plains	No
DnB	Dodge silt loam, 2 to 6 percent slopes	Loess over calcareous loamy till	Drumlins	No
DnC2	Dodge silt loam, 6 to 12 percent slopes, eroded	Loess over calcareous loamy till	Drumlins	No
DrD2	Dresden loam, 12 to 20 percent slopes, eroded	Loamy drift over calcareous sandy and gravelly outwash	Plains	No
DsC2	Dresden silt loam, 6 to 12 percent slopes, eroded	Loamy glaciofluvial deposits over calcareous sandy and gravelly outwash	Plains	No
KdB	Kidder loam, 2 to 6 percent slopes	Loamy till	Plains	No
KdC2	Kidder loam, 6 to 12 percent slopes, eroded	Loamy till	Drumlins	No
KeB	Kegonsa silt loam, 2 to 6 percent slopes	Loess over sandy and gravelly outwash	Outwash Plains	No
SeB	Salter sandy loam, 2 to 6 percent slopes	Loamy alluvium over stratified silt and fine sand lacustrine deposits	Lake Plains	No
TrB	Troxel silt loam, 1 to 3 percent slopes	Silty colluvium	Moraines, Depressions	No

SITE SUMMARY

The approximately 73-acre project area includes an area west of STH 51 and south of Rutland Dunn Town Line Road, and an area east of STH 51 extending to Black Oak Drive encompassing both sides of Velkommen Way. The dominant existing land uses in the general area are agriculture to the north, and residential development along with limited industrial and commercial development to the south. The project area was historically used for agricultural production. In 1992 is appears the land was left fallow, and remained out of agricultural production until 2009 or 2010 when most of the western portion was put into agricultural production. In 2018 the northern half of the eastern portion north of Velkommen Way was put back into agricultural production.

The site has varied topography. West of STH 51, a ridge extends from the northwest corner to the middle of the east boundary. Areas north of this ridge drain east to a STH 51 ditch and the portion south of the ridge drains southeast. A small portion of the far west side drains west.

The portion of the project area east of STH 51 has a large fill stockpile in the western portion or the area north of Velkommen Way. The stockpile slopes downward from the stockpile in all directions. There is a roadway ditch running north/south along STH 51 and a depression just north of Velkommen Way with a culvert running north/south underneath Velkommen Way. The eastern portion of the site north of Velkommen Way drains to the north. The south side of Velkommen Way generally slopes west to east, with fill placed in 2018 in the western portion.

WETLAND CHARACTERISTICS

Wetlands were delineated at four (4) locations within the project area. Figure 5 shows the delineated wetlands and the wetland characteristics are detailed in Table 4 below. The field data sheets are in Appendix C and photos are in Appendix D.

Wetland 1 is located just east of STH 51 in the middle of the site in the roadside ditch and an adjacent open area. The emergent/wet meadow wetland is associated with the outfall of a culvert in STH 51. Hydrology is provided by runoff from the agricultural area west of STH 51 passing through the culvert, and the surrounding area east of STH 51. The upland area was characterized by a change in topography, soils and vegetation.

Wetland 2 is located just west of STH 51 in the middle of the site in the roadside ditch. The emergent/wet meadow wetland is associated with the upstream side of a culvert in STH 51 where water likely ponds prior to passing through the culvert. Hydrology is provided by runoff from the agricultural area to the west. The upland area was characterized by a change in topography, soils and vegetation.

Wetland 3 is located north of Velkommen Way in the eastern portion of the site. The emergent/wet meadow wetland is associated with the upstream side of a culvert in Velkommen Way where water likely ponds prior to passing through the culvert. Hydrology is provided by runoff from the adjacent areas to the west and east. The upland area was characterized by a change in topography, soils and vegetation.

Wetland 4 is located near the south boundary of the western portion of the site. The emergent/wet meadow wetland is in a localized depression in an agricultural field. Hydrology is provided by runoff from the agricultural area to the north and west. The upland area was characterized by a change in topography, soils and vegetation.

Table 4 – Wetland Characteristics

Wetland ID and Sample Plots	Primary Hydrology Indicator(s)	Secondary Hydrology Indicator(s)	Dominant Species in Wetland	Hydric Soil Indicators
Wetland 1 – 1A	N/A	Geomorphic Position (D2) FAC-Neutral Test (D5)	*Phalaris arundinacea (FACW)*	Redox Dark Surface (F6)

Table 4 – Wetland Characteristics

Wetland ID and Sample Plots	Primary Hydrology Indicator(s)	Secondary Hydrology Indicator(s)	Dominant Species in Wetland	Hydric Soil Indicators
Wetland 2 – 2A	N/A	Geomorphic Position (D2)	*Poa palustris (FACW)*	Redox Dark Surface (F6)
		FAC-Neutral Test (D5)	*Rosa multiflora (FACU)*	
			Phalaris arundinacea (FACW)	
			Setaria pumila (FAC)	
			Rhamnus cathartica (FAC)	
Wetland 3 – 3A	N/A	Geomorphic Position (D2)	*Echinochloa crus-galli (FAC)*	Redox Dark Surface (F6)
		FAC-Neutral Test (D5)		
Wetland 4 – 4A	N/A	Stunted or Stressed Plants (D1)	*Zea mays (UPL)*	Redox Dark Surface (F6)
		Geomorphic Position (D2)		

IV. SUMMARY AND CONCLUSION

Site visits were made on October 15 & 20, 2020 during the dry climatic season to delineate any wetlands that are present within the project area. Vegetation, hydrology, and soils were documented at that time. Antecedent precipitation, aerial photos and the Palmer Drought Index were taken into consideration when making the site visits. Normal Circumstances were not present at the time of the site visits for some of the project area due to disturbance to soils and vegetation resulting from mowing practices along roadways, and agricultural practices. Climactic/hydrologic conditions were considered normal during both visits.

Wetlands were delineated at four (4) locations within the investigated area, totaling approximately 0.53 acres (23,186 sq. ft).

Should a body of water and/or associated wetlands be considered a water outlined in Section 404 of the Clean Water Act, then USACE may have jurisdiction of these wetlands under Section 404 of the Clean Water Act. WDNR may have jurisdiction over all waters of the state, and the final decision of jurisdiction over the delineated wetlands rests within these regulatory agencies.

This report and findings should be submitted to WDNR and/or the United States Army Corps of Engineers prior to any disturbance of this wetland. Additional state and local restrictions such as shore land zoning and other ordinances may apply to wetlands, lakes and other waterways. Wetlands can change over time via natural or human-made causes. This report represents the conditions of the site and the wetland boundaries at the time of the site visits.

V. REFERENCES

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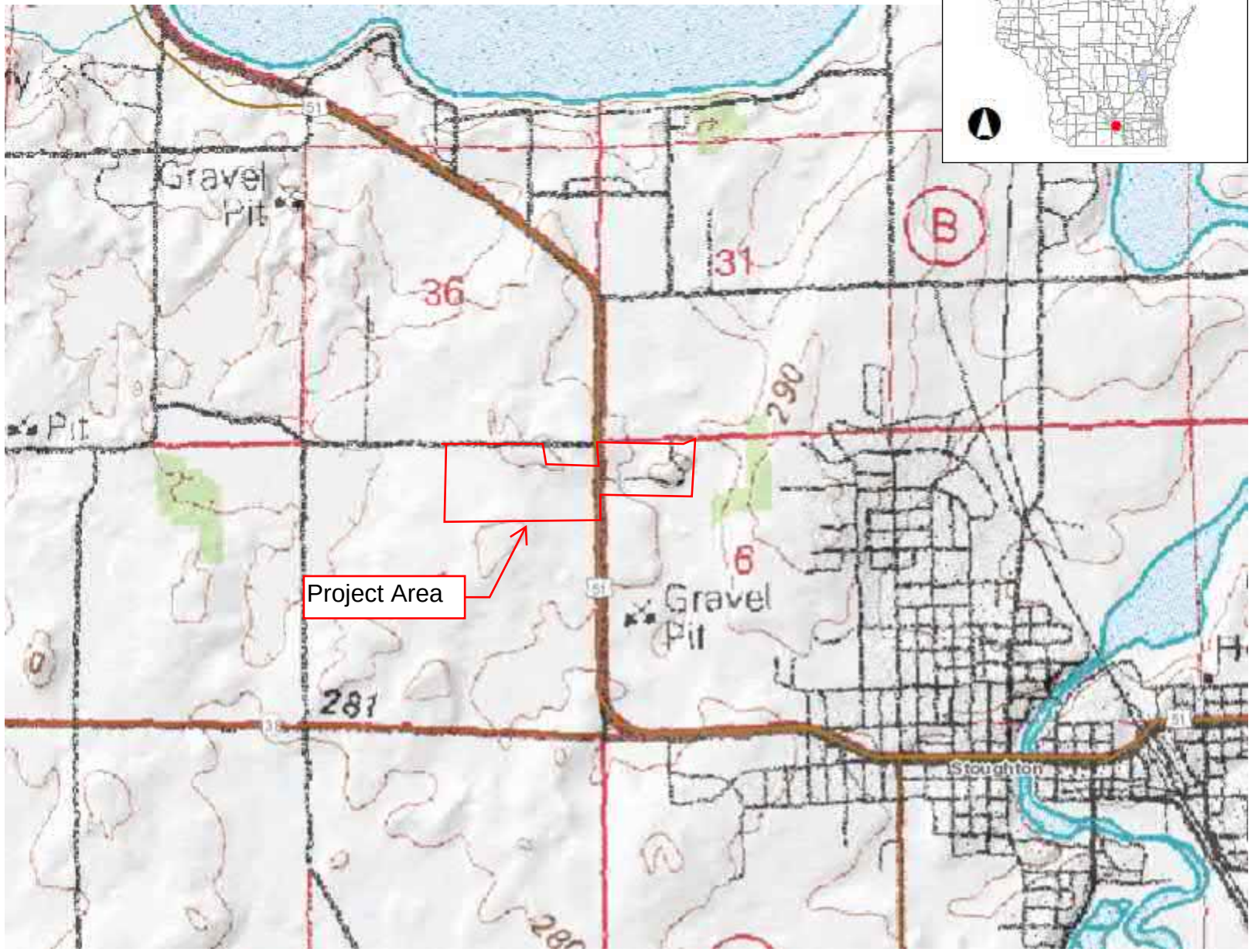
FIGURES

Location Map



Legend

- 24K USGS Quad Index - Level 7 - 16

Notes

1.0 0 0.50 1.0 Miles

NAD_1983_HARN_Wisconsin_TM

1: 31,680

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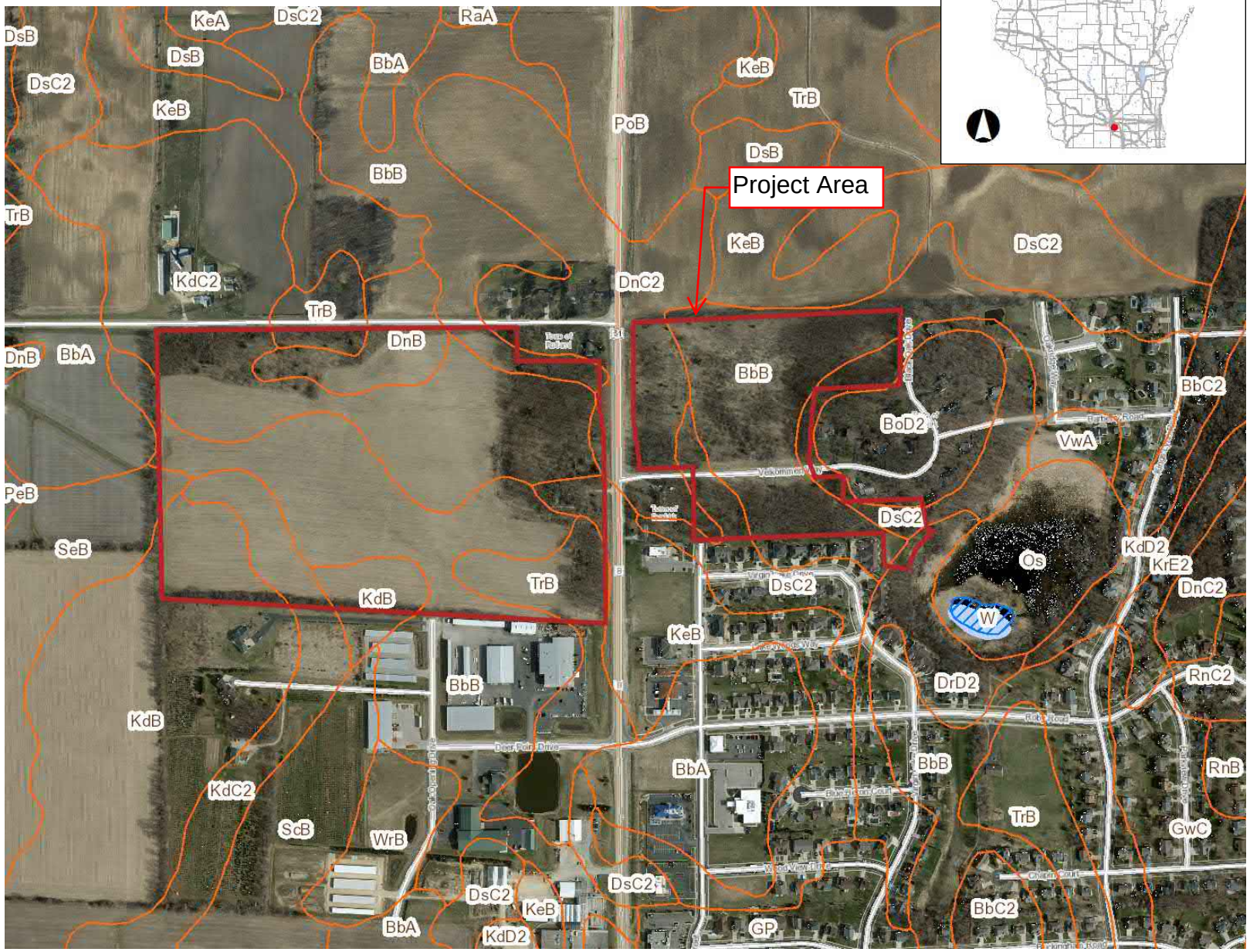
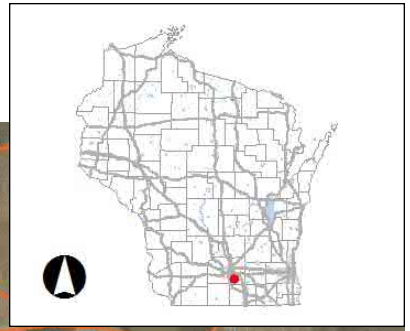
Figure 2 - NRCS Soils





Legend

- NRCS Wisconsin Soils
  - Soil Mapping Unit
  - Water
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

0.2 0 0.12 0.2 Miles

NAD_1983_HARN_Wisconsin_TM

1: 7,613

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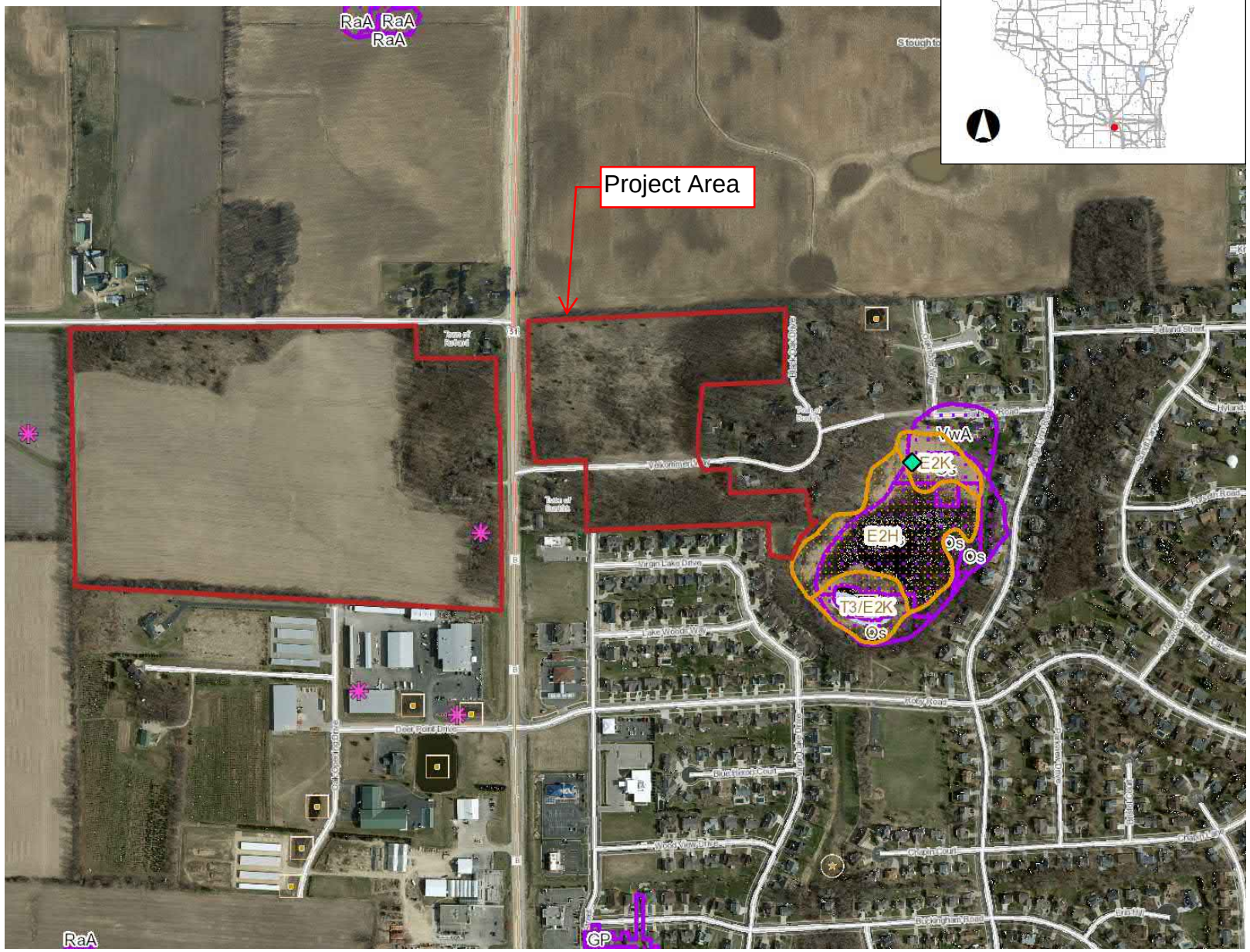
Notes

NRCS Soil Types

Figure 3 - WWI Map



Legend

- Wetland Identifications and Confirmations
- Wetland Class Points
  - Dammed pond
  - Excavated pond
  - Filled excavated pond
  - Filled/drained wetland
  - Wetland too small to delineate
- Filled Points
- Wetland Class Areas
  - Wetland
  - Upland
- Filled Areas
- Wetland Class Points
  - Dammed pond
  - Excavated pond
  - Filled excavated pond
  - Filled/drained wetland
  - Wetland too small to delineate
- Filled Points
- Wetland Class Areas
  - Wetland
  - Upland
- Filled Areas
- NRCS Wetspots
- Maximum Extent Wetland Indicators
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads

0.3 0 0.13 0.3 Miles

NAD_1983_HARN_Wisconsin_TM

1: 7,920

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Notes

Existing mapped wetlands and NRCS Wetland Indicators

U.S. Fish and Wildlife Service
National Wetlands Inventory

Figure 4 - NWI Map

October 19, 2020

Wetlands

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

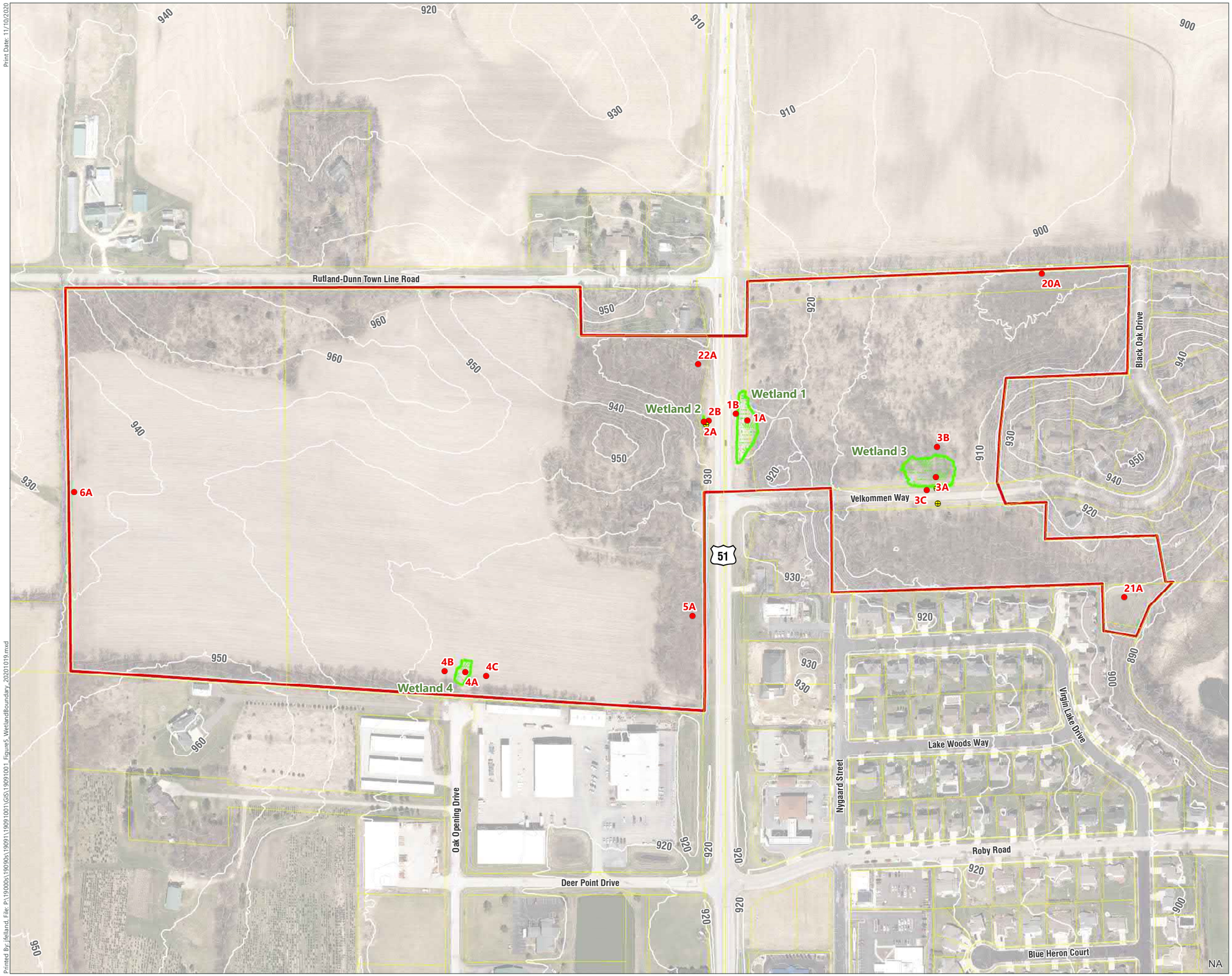
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Figure 5: Wetland Boundary

STH 51 Wetland Delineation

City of Stoughton & Town of Rutland
Dane County, WI



- Sample Plot
- Culvert
- Wetland Boundary
- Project Area
- Parcel Boundary
- 2-ft Contour
- 10-ft Contour

Data Sources:
Parcels, Roads: Dane County (2020)
Aerial: Dane County (2017)
Sample Points, Wetland Boundary: Field investigation Oct 2020

MSA

0 150 300 Feet

N

NA

Print Date: 11/10/2020

Printed By: jfelland, File: P:\19000s\19090s\19091\19091001\GIS\19091001_Figure5_WetlandBoundary_20201019.mxd

Figure 6 - Dane County Topography

October 19, 2020

Dane County Mask

- Dane County Mask
- Road Names
- Private Road Names

10 foot Intervals

- Index
- Index Depression

2 foot Intervals

- Intermediate
- Intermediate Depression
- Parcels

Rivers and Streams

- Perennial Stream; Hidden Perennial Stream
- Intermittent Stream; Hidden Intermittent Stream
- Constructed Drainage

0 155 310 620 Feet

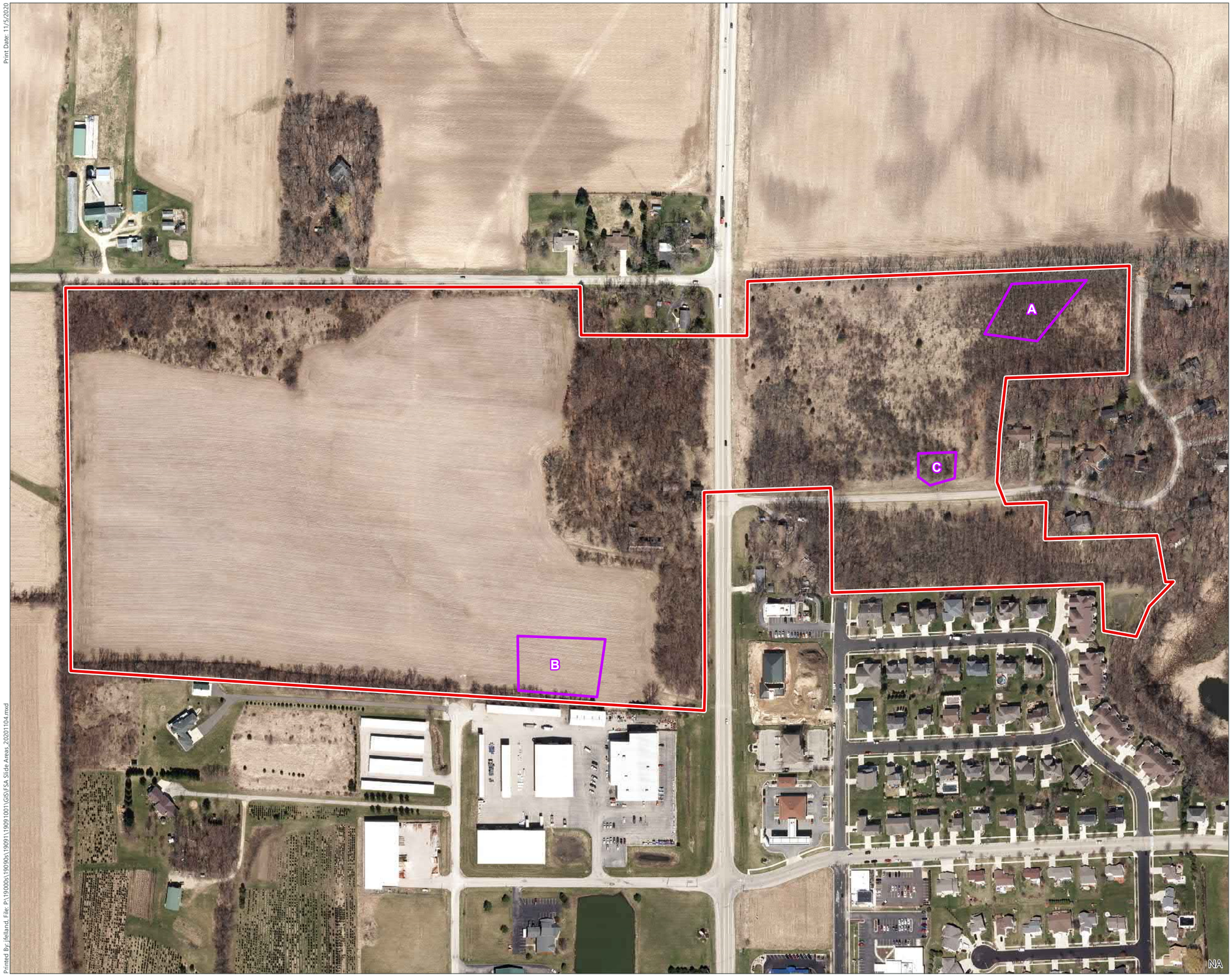
N

APPENDIX A | FSA SLIDE REVIEW ANALYSIS AND PHOTOGRAPHS

Figure 7: FSA Slide Areas

STH 51 Wetland Delineation

City of Stoughton & Town of Rutland
Dane County, WI



FSA Slide Areas
Parcel Boundary
Project Area

Data Sources:
Parcels, Roads: Dane County (2020)
Aerial: Dane County (2017)
Sample Points, Wetland Boundary: Field investigation Oct 2020

MSA

0 150 300 Feet

N

Print Date: 11/5/2020

Printed By: jfelland, File: P:\19000s\19090s\19091\19091001\GIS\FSA Slide Areas_20201104.mxd

Wetland Hydrology from Aerial Imagery Data Summary Form			
Project Name:	STH 51 Development	**Date:**	10/15/2020
Investigator:	Jeff Felland	**County:**	Dane
WETS Station:	Stoughton, WI	**Legal Description:**	S1 T05N, R10 E & S6 T05N, R11 E
Months FSA (unless noted):	April-May-June	**Months NAIP (unless noted):**	April-May-June

Summary Table

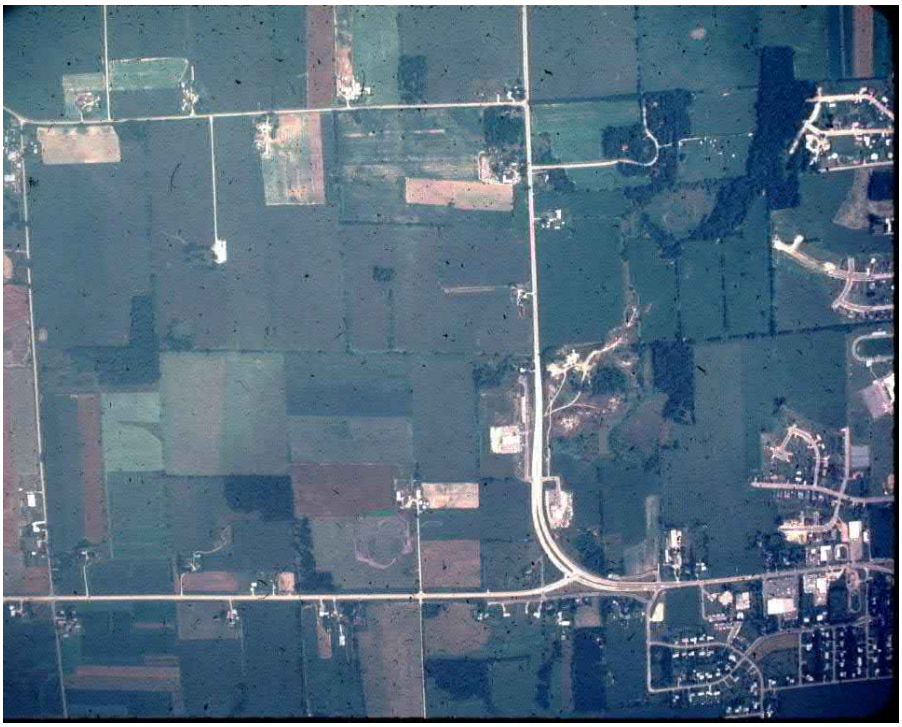
Date Image Taken (M-Y)	Image Source	Climate Condition (dry, normal, wet)	Image Interpretation(s)					
			Area: A	Area: B	Area: C	Area: D	Area: E	NOTES
1979	FSA		WS	NV	NV			Missing precip data
1980	FSA	N	WS	NV	NV			
1981	FSA	N	NV	NV	NV			
1982	FSA	N	SS	SS	SS			
1983	FSA	D	NV	NV	NV			
1984	FSA	W	WS	SS	WS			
1985	FSA	N	NV	NV	NV			
1986	FSA	N	NV	NV	NV			
1987	FSA		CS	NV	CS			Missing precip data
1988	FSA	D	WS	NV	NV			
1989	FSA	D	NV	NV	NV			
1990	FSA	N	NV	CS	NV			
1991	FSA	N	WS	NSS	NV			B-appears cleared
1992	FSA	D	NV	NV	NV			not cropped
1993	FSA	W	NV	SS	NV			not cropped
1994	FSA		NV	NV	NV			not cropped
1995	FSA		NV	NV	NV			not cropped
1996	FSA		NV	NV	NV			not cropped
1997	FSA		NV	NV	NV			not cropped
1998	FSA	W	NV	NV	NV			not cropped
1999	FSA	W	NV	SS	NV			not cropped
2000	FSA	W	NV	NV	NV			not cropped
2001	FSA	W	NV	NV	NV			not cropped
2002	FSA	N	NV	NV	NV			not cropped
2003	FSA	N	NV	NV	NV			not cropped
Jun-04	NAIP	N	NV	NV	NV			not cropped
Jun-05	NAIP	N	NV	NV	NV			not cropped
Jul-06	NAIP	W	NV	NV	NV			not cropped
Jul-08	NAIP	W	NV	NV	NV			not cropped
Jul-10	NAIP	W	NV	NV	NV			
Oct-15	NAIP	W	NV	NV	NV			
2017	NAIP	W	NV	NV	NV			
2018	NAIP	W	DO	NV	DO			
Normal Climate Conditions			**Area: A**	**Area: B**	**Area: C**	**Area: D**	**Area: D**	**NOTES**
Number of years normal			7	7	7	0	0	
Number with wet signatures			3	2	1	0	0	
Percent with wet signatures			43%	29%	14%	#DIV/0!	#DIV/0!	
Hydric Soils Present?			N	N	N			
Identified on NWI or other Wetland map?			N	N	N			
Other hydrology indicators present			N	N	N			
Wetland?			N	N	N			

KEY

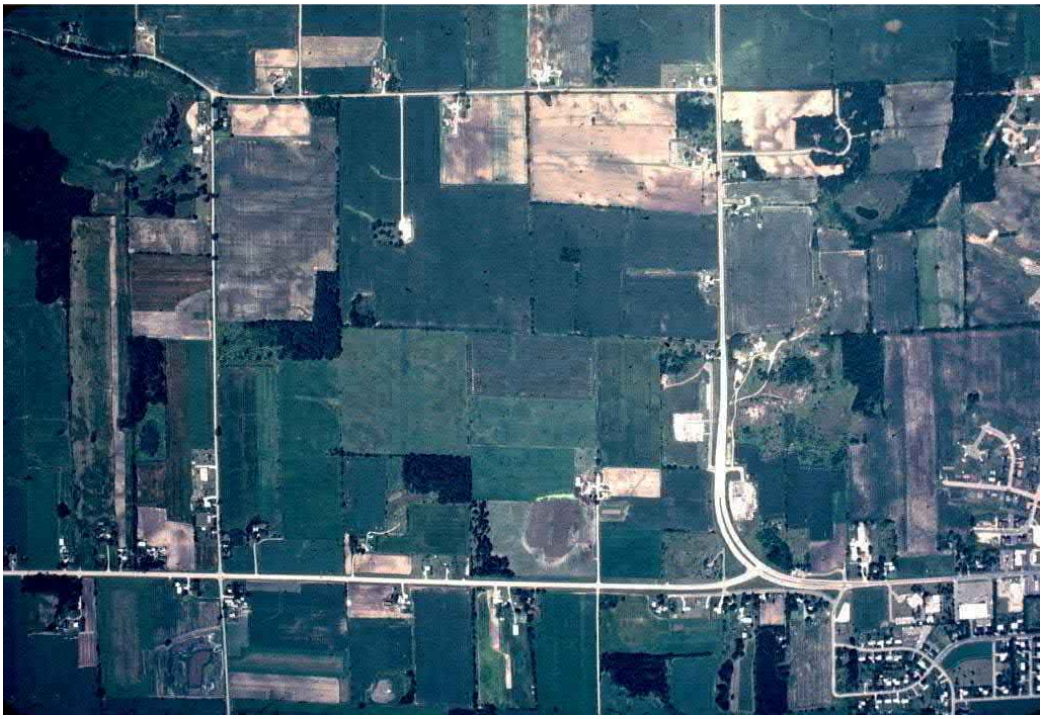
WS - wetland signatures	SS - soil wetness signature	CS - crop stress
NC - not cropped	AP - altered pattern	NV - normal healthy crop
DO - drowned out	SW - standing water	NSS - no soil wetness signature

1979

1980



1981



1982

1983

1984

1985

1986

1987

1988

1989

1990

1991

1992

1993

1994

1995

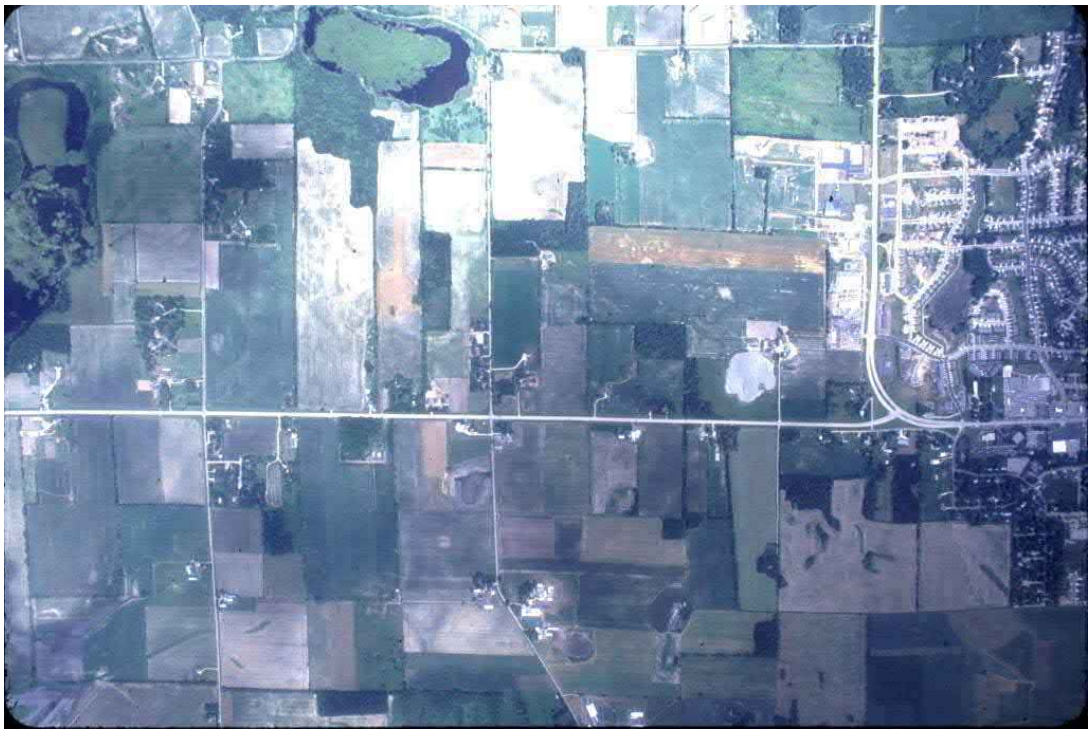
1996

1997

1998

1999

2000



2001

2002

2003

June 2004

June 2005

July 2006

July 2008

July 2010

Oct 2015

July 2017

July 2018

APPENDIX B | PRECIPITATION DATA

WETS Table

WETS Station: STOUGHTON, WI								
Requested years: 1971 - 2000								
Month	Avg Max Temp	Avg Min Temp	Avg Mean Temp	Avg Precip	30% chance precip less than	30% chance precip more than	Avg number days precip 0.10 or more	Avg Snowfall
Jan	26.8	8.4	17.6	1.29	0.77	1.57	4	10.4
Feb	31.5	12.6	22.0	1.33	0.59	1.63	3	7.2
Mar	43.2	23.6	33.4	2.06	1.30	2.49	5	4.5
Apr	56.6	34.5	45.6	3.57	2.55	4.22	7	1.3
May	69.8	46.4	58.1	3.37	2.15	4.05	7	0.0
Jun	79.0	55.4	67.2	3.86	2.61	4.61	7	0.0
Jul	82.8	60.3	71.5	3.82	2.74	4.52	6	0.0
Aug	80.4	57.7	69.1	4.12	3.01	4.84	7	0.0
Sep	73.0	48.7	60.8	3.54	1.71	4.32	6	0.0
Oct	61.5	37.4	49.4	2.26	1.32	2.75	5	0.2
Nov	45.5	26.8	36.2	2.53	1.52	3.07	6	1.9
Dec	31.1	13.7	22.4	1.67	1.07	2.01	4	9.5
Annual:					-	-		
Average	56.8	35.5	46.1	-	-	-	-	-
Total	-	-	-	33.41			66	34.9

GROWING SEASON DATES			
Years with missing data:	24 deg = 10	28 deg = 8	32 deg = 8
Years with no occurrence:	24 deg = 0	28 deg = 0	32 deg = 0
Data years used:	24 deg = 20	28 deg = 22	32 deg = 22
Probability	24 F or higher	28 F or higher	32 F or higher
50 percent *	4/8 to 10/28: 203 days	4/18 to 10/12: 177 days	4/30 to 10/3: 156 days
70 percent *	4/4 to 11/2: 212 days	4/13 to 10/17: 187 days	4/25 to 10/8: 166 days
* Percent chance of the growing season occurring between the Beginning and Ending dates.			

STATS TABLE - total precipitation (inches)													
Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annl
1931		0.39	2.02	1.15	2.62	M4.26	2.46	M2.67	6.07	M3.57	5.36	0.92	31.49
1932	1.04	0.81	1.73	0.95	2.04	2.90	3.41	M1.96	0.04	3.58	1.09	1.56	21.11
1933	0.47	0.86	3.25	M3.24	8.91	1.52	2.94	1.97	3.48	1.80	0.31	0.92	29.67
1934	0.68	0.13	0.78	1.41	0.55	2.65	3.95	1.69	5.15	1.93	7.26	1.05	27.23
1935	1.40	1.37	1.11	1.73	2.65	6.02	3.80	3.05	1.09	1.30	3.29	0.59	27.40
1936	1.60	1.77	0.49	1.10	0.78	2.41	1.50	9.11	4.30	3.14	0.38	2.57	29.15
1937	3.05	2.25	1.40	4.09	1.59	4.05	1.26	1.37	2.02	2.65	0.87	1.07	25.67
1938	2.22	M2.30	2.01	M1.85	3.65	5.62	3.90	4.96	10.35	0.97	2.37	0.88	41.08
1939	2.67	1.84	1.56	3.27	0.97	2.91	2.37	1.74	1.	2.	0.33	0.40	21.

									31	13			50
1940	1.39	1.21	0.89	2.38	2.92	4.35	3.78	M7.68	0.71	2.26	2.69	1.03	31.29
1941	1.87	0.72	1.61	2.10	6.05	3.48	3.74	0.91	6.34	3.67	0.74	1.60	32.83
1942	1.11	0.47	0.93	0.82	5.42	2.81	2.19	2.33	5.39	2.01	3.40	2.40	29.28
1943	1.93	0.57	3.44	2.58	2.50	2.59	2.29	3.15	1.98	1.52	1.37	0.73	24.65
1944	1.66	2.00	2.62	2.85	3.64	7.59	2.16	3.72	2.74	0.24	3.00	M1.45	33.67
1945	0.54	1.28	1.36	3.03	6.18	2.31	2.02	5.30	5.44	0.49	2.68	1.28	31.91
1946	2.59	0.86	2.98	0.83	1.85	3.95	0.38	3.48	3.40	1.29	2.35	2.13	26.09
1947	2.46	0.17	1.69	5.43	4.23	4.95	3.76	3.99	4.86	1.24	M2.49	1.67	36.94
1948	M0.58	2.30	3.77	3.02	4.73	3.67	1.25	2.34	2.57	1.30	2.99	2.07	30.59
1949	2.56	1.65	2.15	1.08	2.03	6.35	3.81	1.54	1.45	1.98	1.04	1.94	27.58
1950	2.73	1.31	1.96	3.71	3.82	4.36	7.58	1.36	2.78	0.81	1.00	1.98	33.40
1951	1.50	2.13	2.55	5.12	3.79	3.90	2.63	3.74	2.59	6.42	2.04	1.29	37.70
1952	2.12	0.54	2.96	1.42	2.49	3.64	5.47	5.64	0.56	0.08	3.79	2.05	30.76
1953	0.95	2.35	1.87	2.77	1.90	2.36	4.84	2.12	2.84	0.96	0.37	2.17	25.50
1954	0.62	0.48	1.18	4.99	2.39	7.66	3.81	3.15	3.27	5.17	0.83	1.33	34.88
1955	0.78	1.33	1.13	2.95	2.67	M4.33	5.75	3.45	1.37	3.09	0.49	0.82	28.16
1956	0.29	0.84	1.45	3.97	2.34	2.17	2.72	5.51	1.36	0.50	2.22	1.25	24.62
1957	0.43	0.41	1.14	2.89	5.38	4.07	2.38	3.81	0.80	1.29	3.44	2.06	28.10
1958	0.71	0.05	0.53	2.87	1.27	2.87	2.69	1.01	3.76	2.80	2.40	0.29	21.25
1959	1.23	1.42	2.81	3.88	1.77	2.85	6.05	5.06	4.75	6.08	2.00	2.56	40.46
1960	3.00	0.81	1.11	3.70	6.10	3.31	5.00	8.30	4.59	2.77	1.94	0.23	40.86
1961	0.15	0.93	4.14	2.32	1.64	2.28	6.25	0.67	10.67	4.69	2.81	1.14	37.69
1962	1.55	1.74	1.74	1.85	2.97	2.87	4.74	M0.77	1.49	1.89	0.43	0.80	22.84
1963	0.77	0.42	2.27	2.31	2.00	5.18	4.62	3.29	2.50	0.34	2.40	0.58	26.68
1964	1.05	0.22	3.46	3.61	3.59	3.97	3.86	3.27	1.31	0.24	1.83	0.41	26.82
1965	2.33	1.13	2.41	5.22	3.65	1.09	4.32	4.33	9.63	1.81	1.61	2.25	39.78
1966	1.12	1.33	2.57	2.18	4.89	3.73	3.65	4.79	1.53	2.74	1.45	2.16	32.14
1967	1.43	1.22	1.50	2.31	3.86	8.39	2.41	2.73	2.81	5.42	1.72	0.94	34.74
1968	0.63	0.67	0.48		2.51	8.66	2.88	2.12	5.73	0.80	1.63	3.17	29.28
1969	1.80	0.24	1.48	3.07	2.13	7.50	3.16	0.76	1.14	3.01	0.81	1.02	26.12
1970	0.44	0.27	0.79	2.52	6.26	3.37	3.82	1.34	7.82	3.28	1.16	0.84	31.91
1971	1.23	2.75	1.32	1.83	1.12	4.06	3.20	4.32	2.68	1.32	3.09	3.63	30.55
1972	0.57	0.51	1.73	2.84	3.97	1.59	6.80	4.99	4.75	3.09	0.85	2.04	33.73
1973	1.70	1.50	3.35	7.40	6.38	2.58	1.43	2.61	5.	2.	1.78	2.05	38.

									10	42			30
1974	2.60	1.57	3.70	4.31	4.90	4.68	3.75	3.56	0.54	1.81	1.59	1.67	34.68
1975	1.60	1.51	4.19	2.72	3.61	4.14	5.10	4.03	0.81	0.35	M1.45	M0.23	29.74
1976	0.79	2.09	M1.15	M3.04	M2.92	1.87	M0.99	3.85	0.71	1.65	0.17	0.44	19.67
1977	M0.34	1.06	3.40	2.85	M2.49	2.08	4.71	3.15	M1.00	M2.24	M1.81	1.60	26.73
1978	M0.52			3.34	3.79	6.19	6.35	1.23	5.65	1.36	M2.32	M1.60	32.35
1979	2.67	0.54	2.77		1.07	3.68	3.95	7.39	0.11	2.90	3.07	1.97	30.12
1980	1.36	0.37	0.38	2.57	1.68	5.94	3.35	6.37	7.09	1.10	0.90	1.38	32.49
1981	0.33	2.58	0.56	4.46	0.88	4.88	2.35	8.50	7.91	3.93	1.78	0.96	39.12
1982	M2.19	0.03	2.12	3.78	3.58	3.36	7.36	3.19	0.48	2.54	5.19	3.34	37.16
1983	0.34	1.67	1.48	1.83	3.52	2.02	1.72	3.69	2.57	1.61	2.20	2.16	24.81
1984	0.43	0.49	1.45	4.86	5.38	4.31	3.57	1.96	3.42	5.91	2.62	M2.55	36.95
1985	1.23	2.07	2.68	1.70	3.65	2.67	2.90	3.03	3.48	5.38	6.63	1.32	36.74
1986	M0.76	2.06	1.26	2.54	2.98	2.62	3.44	3.53	8.86				28.05
1987							5.27	7.81	4.56	1.17	3.38	M2.35	24.54
1988		M0.23	1.25	4.68	1.15	1.72	M1.72	3.82	2.74	1.95	3.97	2.55	25.78
1989	0.40	0.92	M1.43	M1.51	1.25	1.55	6.67		2.51	1.64		0.55	18.43
1990	1.55	M1.15	3.68	2.74	4.88	4.09	2.47	3.95	0.91	3.09	1.73	2.11	32.35
1991	M0.84	0.28	1.85	1.55	3.97	4.04	2.58	2.79	4.92	5.77	5.39	1.28	35.26
1992	0.70	1.53	2.13	2.80	0.87	0.62	5.57	M2.05	5.89	1.12	4.88	M2.63	30.79
1993	2.03	1.51	2.69	6.88	3.99	7.56	4.02	2.56	5.08	0.78	1.73	0.67	39.50
1994	M1.44	2.64	0.61	1.69	1.75	5.26	2.47	7.42	4.42	0.70	2.72	0.73	31.85
1995	1.86	0.03	2.18	4.55	M4.45								13.07
1996													
1997									0.90	1.36	1.44	1.11	4.81
1998	M1.95	1.68	3.72	5.39	M4.88	6.85	2.04	5.19	2.47	4.23	1.50	M0.59	40.49
1999	M3.15	1.11	M0.55	7.85	6.84	5.07	4.69	2.51	2.38	0.90	1.65	1.39	38.09
2000	M0.98	2.79	1.01	3.03	6.01	6.92	2.63	3.58	4.61	0.69	1.79	2.11	36.15
2001	2.34	M3.23	0.44	4.51	5.61	3.74	1.86	7.46	7.26	3.07	2.13	1.68	43.33
2002	M0.41	M1.90	4.01	4.08	3.71	3.91	2.39	3.82	4.47	3.46	0.62	M0.88	33.66
2003	0.22	0.27	1.66	1.72	5.23	3.59	6.26	1.17	3.67	1.72	6.06	2.12	33.69
2004	0.58	1.02	4.37	2.15	11.19	4.19	4.65	3.80	1.28	2.72	2.24	1.56	39.75
2005	3.14	1.53	1.31	2.06	3.26	4.06	4.85	2.43	1.59	0.51	3.77	0.93	29.44
2006	2.27	1.02	3.11	5.20	M4.34	4.99	5.29	6.29	3.10	3.66	3.46	1.24	43.97
2007	1.24	2.45	2.81	4.98	M1.37	4.12	2.03	16.40	2.05	2.93	0.44	4.75	45.57

2008	1.79	3.34	1.90	7.00	2.81	9.57	4.42	1.86	3.89	2.19	1.58	3.16	43.51
2009	M0.87	1.77	6.91	5.05	2.61	4.30	2.06	3.64	2.84	4.36	1.73	3.89	40.03
2010	0.84	M0.56	1.39	M3.34	3.84	6.73	8.91	2.55	2.62	3.23	1.91	1.35	37.27
2011	0.90	M0.87	3.05	M3.06	2.26	M2.92	M2.34	2.05	M2.33	1.38	M1.63	M2.01	24.80
2012	M0.41	1.10	M2.20	M0.72	M2.44	M0.17	M3.84	M2.12	M1.81	4.49	1.04	M2.71	23.05
2013	2.80	M3.00	2.11	7.07	5.27	M11.90	3.88	1.74	2.75	2.50	3.42	1.38	47.82
2014	1.12	1.36	1.17	4.89	3.39	6.47	4.04	4.21	3.16	3.80	M1.66	1.04	36.31
2015	0.72	0.70	0.47	3.00	4.61	4.09	3.61	3.04	5.39	1.74	5.64	3.51	36.52
2016	0.55	0.64	4.07	2.08	3.04	5.64	4.77	5.80	4.34	3.72	2.80	1.97	39.42
2017	2.43	1.34	2.69	6.80	3.62	7.55	6.60	3.99	0.70	4.82	1.16	0.67	42.37
2018	2.17	3.54	0.75	1.87	8.12	10.50	2.68	9.45	7.00	7.09	M1.55	1.86	56.58
2019	3.10	3.19	M0.96	3.24	6.33	3.19	4.35	5.72	5.19	5.98	3.16	1.75	46.16
2020	1.92	1.18	3.00	M2.81	4.60	4.34	3.23	0.85	4.72	2.67	M0.00		29.32

Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.

Data missing for all days in a month or year is blank.

Creation date: 2016-07-22

Climatological Data for STOUGHTON, WI - October 2020

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2020-10-01	60	43	51.5	12	2	0.05	M	M
2020-10-02	57	35	46.0	6	0	0.11	M	M
2020-10-03	53	35	44.0	4	0	0.00	M	M
2020-10-04	55	33	44.0	4	0	0.07	M	M
2020-10-05	53	31	42.0	2	0	0.00	M	M
2020-10-06	63	31	47.0	7	0	0.00	M	M
2020-10-07	73	46	59.5	20	10	0.00	M	M
2020-10-08	70	39	54.5	15	5	0.00	M	M
2020-10-09	70	47	58.5	19	9	0.00	M	M
2020-10-10	80	45	62.5	23	13	0.00	M	M
2020-10-11	74	45	59.5	20	10	0.00	M	M
2020-10-12	69	45	57.0	17	7	0.00	M	M
2020-10-13	M	37	M	M	M	0.13	M	M
2020-10-14	66	38	52.0	12	2	0.00	M	M
2020-10-15	71	44	57.5	18	8	0.00	M	M
2020-10-16	52	32	42.0	2	0	0.00	M	M
2020-10-17	53	31	42.0	2	0	0.00	M	M
2020-10-18	62	33	47.5	8	0	0.00	M	M
2020-10-19	56	29	42.5	3	0	0.13	M	M
2020-10-20	M	M	M	M	M	M	M	M
2020-10-21	M	M	M	M	M	M	M	M
2020-10-22	M	M	M	M	M	M	M	M
2020-10-23	M	M	M	M	M	M	M	M
2020-10-24	M	M	M	M	M	M	M	M
2020-10-25	M	M	M	M	M	M	M	M
2020-10-26	M	M	M	M	M	M	M	M
2020-10-27	M	M	M	M	M	M	M	M
2020-10-28	M	M	M	M	M	M	M	M
2020-10-29	M	M	M	M	M	M	M	M
2020-10-30	M	M	M	M	M	M	M	M
2020-10-31	M	M	M	M	M	M	M	M
Average|Sum	63.2	37.8	50.5	194	66	0.49	M	M

APPENDIX C | FIELD DATA SHEETS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 1A

Investigator(s): Sarah Morrison Section, Township, Range: Sec 06 Twnshp 05N Rng 11E

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 0-2

Subregion (LRR or MLRA): LRR K Lat: 42.93111 Long: -89.250164 Datum: NAD 83

Soil Map Unit Name: Dodge silt loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes X	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of July, August and September precipitation was found to be normal. Sample plot located in depression north of Velkommen Way on east side of Highway 51. Surrounding areas have been used for stockpiling fill but the depression containing sample point has been unaffected by the fill placement.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were present at the Sample Plot during the time of the site visit. No water table to 24 inches after 30 mins.

VEGETATION – Use scientific names of plants. Sampling Point: 1A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5')			
1. *Phalaris arundinacea*	80	Yes	FACW
2. *Rosa multiflora*	8	No	FACU
3. *Daucus carota*	5	No	UPL
4. *Galium aparine*	2	No	FACU
5. *Cirsium arvense*	2	No	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	97	=Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	12	x 4 =	48
UPL species	5	x 5 =	25
Column Totals:	97 (A)		233 (B)

Prevalence Index = B/A = 2.40

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was dominant at the Sample Plot during the time of the site visit.

SOIL

Sampling Point 1A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					Loamy/Clayey	
4-12	10YR 3/2	78	10YR 4/6	2	C	M	Loamy/Clayey	Prominent redox concentrations
			10YR 3/4	20	C	M		Distinct redox concentrations
12-18	10YR 3/3	78	10YR 4/4	20	C	M	Loamy/Clayey	Faint redox concentrations
	10YR 2/1	2						
18-24	10YR 3/3	85	10YR 8/4	5	C	M	Loamy/Clayey	Prominent redox concentrations
	10YR 2/2	10						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Hydric soils were present at the Sample Plot during the time of the site visit. Soil layer textures from top of the observed soil profile to bottom were SiL throughout.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 1B

Investigator(s): Sarah Morrison Section, Township, Range: Sec 06 Twnshp 05N Rng 11E

Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): linear Slope %: 2-5

Subregion (LRR or MLRA): LRR K Lat: 42.931165 Long: -89.250293 Datum: NAD 83

Soil Map Unit Name: Dodge Silt Loam NWI classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of July, August and September precipitation was found to be normal. Sample point located on hillslope east of Northbound Highway 51, approximately 20 feet from road shoulder.Vegetation does not appear to be mowed but may be sprayed for roadside maintenance. Soils are disturbed due to presence of gravel within soil sample.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No water table to 12 inches after 20 mins.

VEGETATION – Use scientific names of plants.

Sampling Point: 1B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5')			
1. *Poa pratensis*	50	Yes	FACU
2. *Setaria pumila*	30	Yes	FAC
3. *Phalaris arundinacea*	10	No	FACW
4. *Asclepias syriaca*	5	No	UPL
5. *Anthemis cotula*	5	No	FACU
6. *Pastinaca sativa*	5	No	UPL
7. *Daucus carota*	5	No	UPL
8. *Lotus corniculatus*	2	No	FACU
9. *Ambrosia artemisiifolia*	1	No	FACU
10.			
11.			
12.			
	113	=Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	30	x 3 =	90
FACU species	58	x 4 =	232
UPL species	15	x 5 =	75
Column Totals:	113 (A)		417 (B)

Prevalence Index = B/A = 3.69

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit.

SOIL

Sampling Point: 1B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					Loamy/Clayey	gravel
6-9	10YR 3/2	98	10YR 5/6	2	C	M	Loamy/Clayey	Prominent redox concentrations
9-12	10YR 3/2	88	10YR 4/6	12	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel/Compacted

Depth (inches): 12

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Soils appear to be disturbed due to presence of gravel throughout the soil sample. A layer of refusal was encountered at 12". This is likely due to previous road construction and road maintence near Highway 51. Soil layer textures from top of the observed soil profile to bottom were SiL throughout.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 2A

Investigator(s): Sarah Morrison & Jeff Felland Section, Township, Range: Sec 01 Twnshp 05N Rng 10E

Landform (hillside, terrace, etc.): ditch Local relief (concave, convex, none): concave/linear Slope %: 0-2

Subregion (LRR or MLRA): LRR K Lat: 42.931101 Long: -89.25065 Datum: NAD 83

Soil Map Unit Name: Dodge silt loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes X	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of August, September and October precipitation was found to be normal. Sample point is located approximately 50 feet from west side of southbound Highway 51, north of Velkommen Way, and south of Rutland Dunn Townline Road. Sample point located in roadside ditch approximately 8' from culvert inlet at edge of agricultureal field. Hillslope is very rocky and contains unmaintained vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were present at the Sample Plot during the time of the site visit. No water table to 14 inches after 30 mins.

VEGETATION – Use scientific names of plants. Sampling Point: 2A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Rhamnus cathartica*	5	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	5	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Rosa multiflora*	20	Yes	FACU
2. *Poa palustris*	20	Yes	FACW
3. *Phalaris arundinacea*	15	Yes	FACW
4. *Setaria pumila*	15	Yes	FAC
5. *Solidago canadensis*	5	No	FACU
6. *Helianthus annuus*	5	No	FACU
7. *Glechoma hederacea*	2	No	FACU
8. *Ambrosia artemisiifolia*	2	No	FACU
9.			
10.			
11.			
12.			
	84	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	20	x 3 =	60
FACU species	34	x 4 =	136
UPL species	0	x 5 =	0
Column Totals:	89 (A)		266 (B)

Prevalence Index = B/A = 2.99

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was dominant at the Sample Plot during the time of the site visit. Vegetation does not appear to be disturbed

SOIL

Sampling Point 2A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
6-9	10YR 3/2	85	10YR 4/6	15	C	M	Loamy/Clayey	Prominent redox concentrations
9-14	10YR 3/2	20					Loamy/Clayey	
	10YR 4/6	80						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rocks

Depth (inches): 14

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Hydric soils were present at the Sample Plot during the time of the site visit. Area surrounding sample plot is layered with riprap. Location of riprap prevented a deeper sample plot, as soil became rockier with depth.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 2B

Investigator(s): Jeff Felland Section, Township, Range: Sec 01 Twnshp 05N Rng 10E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): linear/lienar Slope %: 30

Subregion (LRR or MLRA): LRR K Lat: 42.931108 Long: -89.250596 Datum: NAD 83

Soil Map Unit Name: Dodge silt loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of August, September and October precipitation was found to be normal. Sample Plot on west side of STH 51 on ditch side slope, approx 10 ft east of and approx 4 ft higher than SP 2A.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No water table to 24 inches after 15 mins.

VEGETATION – Use scientific names of plants.

Sampling Point: 2B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Juglans nigra*	2	No	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	2	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Setaria viridis*	50	Yes	UPL
2. *Securigera varia*	5	No	UPL
3. *Daucus carota*	20	No	UPL
4. *Solidago canadensis*	8	No	FACU
5. *Poa pratensis*	25	Yes	FACU
6. *Cirsium altissimum*	2	No	UPL
7.			
8.			
9.			
10.			
11.			
12.			
	110	=Total Cover	
Woody Vine Stratum (Plot size: 30' R)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	35	x 4 =	140
UPL species	77	x 5 =	385
Column Totals:	112 (A)		525 (B)

Prevalence Index = B/A = 4.69

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. Disturbed veg due to mowing of ditch side slope.

SOIL

Sampling Point: 2B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					Loamy/Clayey	
8-18	10YR 3/2	10					Loamy/Clayey	
	10YR 4/4	90						
18-24	10YR 4/3	80					Loamy/Clayey	Gravel present
	10YR 3/2	20						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Historically disturbed soils evident by presence of gravel likely from road construction. Soil layer textures from top of the observed soil profile to bottom were L, C and C respectively.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/15/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 3A

Investigator(s): Sarah Morrison Section, Township, Range: Sec 06 Twnshp 05N Rng 11E

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 0-2

Subregion (LRR or MLRA): LRR K Lat: 42.930642 Long: -89.248057 Datum: NAD 83

Soil Map Unit Name: Batavia silt loam NWI classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes X	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of July, August and September precipitation was found to be normal. Sample point located on north side of Velkommen Way, east of Highway 51, on north side of culvert crossing, which flows from north to south under Velkommen Way. Both ends are guarded by rip rap, possibly placed due to construction. Area around sample point does not appear to be disturbed by construction or fill present to the west.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 22

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
SP located in FSA slide area C where 1 of 7 (14%) most recent years with normal climate conditions had wet signatures present (soil saturation).

Remarks:
Hydrology indicators were present at the Sample Plot during the time of the site visit. No water table to 24 inches after 20 mins.

VEGETATION – Use scientific names of plants.

Sampling Point: 3A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5')			
1. *Echinochloa crus-galli*	75	Yes	FAC
2. *Panicum dichotomiflorum*	10	No	FACW
3. *Anthemis cotula*	8	No	FACU
4. *Persicaria pensylvanica*	2	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95	=Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	12	x 2 =	24
FAC species	75	x 3 =	225
FACU species	8	x 4 =	32
UPL species	0	x 5 =	0
Column Totals:	95 (A)		281 (B)

Prevalence Index = B/A = 2.96

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was dominant at the Sample Plot during the time of the site visit. Vegetation does not appear to be disturbed

SOIL

Sampling Point 3A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	85	10YR 5/4	15	C	M	Loamy/clayey	Distinct redox concentrations
4-10	10YR 3/1	95	10YR 3/4	5	C	M	Loamy/clayey	Distinct redox concentrations
10-18	10YR 3/1	94	10YR 6/6	2	C	M	Loamy/clayey	Prominent redox concentrations
			5YR 4/6	4	C	M		Prominent redox concentrations
18-24	10YR 3/3	98	5YR 4/6	2	C	M	Loamy/clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Hydric soils were present at the Sample Plot during the time of the site visit. Soils on site are not disturbed. Soil layer textures from top of the observed soil profile to bottom were L, SiL, SiL and SiL, respectively.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/15/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 3B

Investigator(s): Sarah Morrison Section, Township, Range: Sec 06 Twnshp 05N Rng 11E

Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): linear Slope %: 2-4

Subregion (LRR or MLRA): LRR K Lat: 42.93089 Long: -89.248042 Datum: NAD 83

Soil Map Unit Name: Batavia silt loam NWI classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of July, August and September precipitation was found to be normal. Sample plot located north of Velkommen Way, approximately 100-ft north and up slope of Sample Point 3A, where a clear vegetation change was observed. Sample point located east of existing fill site.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No water table to 20 inches after 30 mins.

VEGETATION – Use scientific names of plants.

Sampling Point: 3B

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5')			
1. *Daucus carota*	60	Yes	UPL
2. *Solidago gigantea*	20	Yes	FACW
3. *Solidago canadensis*	15	No	FACU
4. *Setaria pumila*	10	No	FAC
5. *Stellaria media*	10	No	FACU
6. *Potentilla simplex*	8	No	FACU
7. *Glechoma hederacea*	3	No	FACU
8.			
9.			
10.			
11.			
12.			
	126	=Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	10	x 3 =	30
FACU species	36	x 4 =	144
UPL species	60	x 5 =	300
Column Totals:	126 (A)		514 (B)

Prevalence Index = B/A = 4.08

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. The vegetation around the sample point is undisturbed.

SOIL

Sampling Point 3B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/3	98	10YR 6/8	2	C	M	Loamy/Clayey	Prominent redox concentrations
6-10	10YR 3/4	98	10YR 5/6	2	C	M	Loamy/Clayey	Distinct redox concentrations
10-14	10YR 3/3	90	10YR 4/6	10	C	M	Loamy/Clayey	Distinct redox concentrations
14-20	10YR 4/6	92					Loamy/Clayey	
	10YR 3/2	8						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Soil layer textures from top of the observed soil profile to bottom were SiL, SiL, and SiC, respectively.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/15/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 3C

Investigator(s): Sarah Morrison Section, Township, Range: Sec 06 Twnshp 05N Rng 11E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex/linear Slope %: 2-4

Subregion (LRR or MLRA): LRR K Lat: 42.930536 Long: -89.24816 Datum: NAD 83

Soil Map Unit Name: Batavia silt loam, gravelly substratum NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of July, August and September precipitation was found to be normal. Sample plot located on north side of Velkommen on road side slope, approximately 20 ft west of culvert inlet.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No water table to 15 inches after 30 mins.

VEGETATION – Use scientific names of plants.

Sampling Point: 3C

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5')			
1.			
2. *Poa pratensis*	80	Yes	FACU
3. *Glechoma hederacea*	5	No	FACU
4. *Plantago lanceolata*	2	No	FACU
5. *Digitaria ischaemum*	20	No	FACU
6. *Pastinaca sativa*	10	No	UPL
7. *Impatiens capensis*	5	No	FACW
8. *Stellaria media*	2	No	FACU
9.			
10.			
11.			
12.			
	124	=Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	109	x 4 =	436
UPL species	10	x 5 =	50
Column Totals:	124 (A)		496 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. Disturbed veg due to roadside mowing.

SOIL

Sampling Point 3C

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/3	95	10YR 3/4	5	C	M	Loamy/Clayey	Faint redox concentrations
8-12	10YR 3/3	85	10YR 4/6	5	C	M	Loamy/Clayey	Distinct redox concentrations
	10YR 3/2	10						
12-15	10YR 3/4	85	10YR 4/6	5	C	M	Loamy/Clayey	Distinct redox concentrations
	10YR 3/2	10						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
___ High Chroma Sands (S11) (**LRR K, L)**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
___ Coast Prairie Redox (A16) (**LRR K, L, R**)
___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
___ Polyvalue Below Surface (S8) (**LRR K, L**)
___ Thin Dark Surface (S9) (**LRR K, L**)
___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: gravel

Depth (inches): 15

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Disturbed soils evident by presence of gravel in profile, likely due to road construction. Soil layer textures from top of the observed soil profile to bottom were SiL throughout.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 4A

Investigator(s): Sarah Morrison & Jeff Felland Section, Township, Range: Sec 01 Twnshp 05N Rng 10E

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 2-4

Subregion (LRR or MLRA): LRR K Lat: 42.929049 Long: -89.253322 Datum: NAD 83

Soil Map Unit Name: Batavia silt loam NWI classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes ___ No X

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** **Yes** X **No** ___
Hydric Soil Present?	Yes X	No ___	If yes, optional Wetland Site ID: ___
Wetland Hydrology Present?	Yes X	No ___	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of August, September and October precipitation was found to be normal. Sample point located north of Oak Opening Road, west of Highway 51 near the Ace Lumber Yard. Sample point is located approximately 100' north of pavement edge. Corn is observed to be shorter in this area than surroudning areas. Soils are vegetation are disturbed via cropping.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were present at the Sample Plot during the time of the site visit. No water table to 18 inches after 20 mins.

VEGETATION – Use scientific names of plants. Sampling Point: 4A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5')			
1. *Zea mays*	60	Yes	UPL
2. *Taraxacum officinale*	2	No	FACU
3. *Digitaria sanguinalis*	3	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	65	=Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	60	x 5 =	300
Column Totals:	65 (A)		320 (B)

Prevalence Index = B/A = 4.92

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. Disturbed veg in plowed and planted corn field. Because hydric soils and hydrology indicators were present along with disturbed vegetation at the sample plot, it is believed that undisturbed vegetation in a similar landscape position would have hydrophytic vegetation present. Therefore, the sample plot is considered to be in a wetland.

SOIL

Sampling Point 4A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	95	10YR 4/4	5	C	M	Loamy/Clayey	Distinct redox concentrations
6-10	10YR 3/2	85	10YR 3/4	10	C	M	Loamy/Clayey	Distinct redox concentrations
	10YR 2/1	5						
10-14	10YR 3/4	80					Loamy/Clayey	
	10YR 3/3	20						
14-18	10YR 4/4	83	5YR 3/4	2	C	M	Loamy/Clayey	Distinct redox concentrations
	10YR 3/3	15						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Hydric soils were present at the Sample Plot during the time of the site visit. Historically disturbed soils due tilling. Soil layer textures from top of the observed soil profile to bottom were SiL throughout.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 4B

Investigator(s): Sarah Morrison & Jeff Felland Section, Township, Range: Sec 01 Twnshp 05N Rng 10E

Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): linear/linear Slope %: 2-4

Subregion (LRR or MLRA): LRR K Lat: 42.929057 Long: -89.253553 Datum: NAD 83

Soil Map Unit Name: Kidder loam NWI classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of August, September and October precipitation was found to be normal. Sample point is located within an agricultural field. The sample point is located approximately 50-ft upslope of Sample Point 4A and north of Oak Opening Drive on the west side of Highway 51 near the Ace Hardware Lumber.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No water table to 22 inches after 20 mins.

VEGETATION – Use scientific names of plants.

Sampling Point: 4B

Tree Stratum (Plot size: 30' R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15' R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5' R)			
1. *Zea mays*	70	Yes	UPL
2. *Setaria pumila*	5	No	FAC
3. *Taraxacum officinale*	2	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	77	=Total Cover	

Woody Vine Stratum (Plot size: 30' R)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	2	x 4 =	8
UPL species	70	x 5 =	350
Column Totals:	77 (A)		373 (B)

Prevalence Index = B/A = 4.84

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. Disturbed veg in plowed and planted corn field.

SOIL

Sampling Point 4B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	10					Loamy/Clayey	
	10YR 3/3	90						
12-15	10YR 3/3	98	10YR 4/4	2	C	M	Loamy/Clayey	Faint redox concentrations
15-22	10YR 3/3	93	10YR 4/4	5	C	M	Loamy/Clayey	Faint redox concentrations
			10YR 5/4	2	C	M		Faint redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Historically disturbed soils due tilling. Soil layer textures from top of the observed soil profile to bottom were SiL throughout.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 4C

Investigator(s): Sarah Morrison & Jeff Felland Section, Township, Range: Sec 01 Twnshp 05N Rng 10E

Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): linear/ linear Slope %: 2-4

Subregion (LRR or MLRA): LRR K Lat: 42.929016 Long: -89.25309 Datum: NAD 83

Soil Map Unit Name: Batavia silt loam NWI classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of August, September and October precipitation was found to be normal. Sample point is located within an agricultural field. The sample point is located on a hillslope, approximately 50-ft upslope and east of Sample Point 4A and north of Oak Opening Drive on the west side of Highway 51 near the Ace Hardware Lumber.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No water table to 22 inches after 20 mins.

VEGETATION – Use scientific names of plants.

Sampling Point: 4C

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5')			
1. *Zea mays*	70	Yes	UPL
2. *Daucus carota*	1	No	UPL
3. *Taraxacum officinale*	2	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	73	=Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	2	x 4 =	8
UPL species	71	x 5 =	355
Column Totals:	73 (A)		363 (B)

Prevalence Index = B/A = 4.97

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. Disturbed veg in plowed and planted corn field.

SOIL

Sampling Point 4C

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	95					Loamy/Clayey	
	10YR 3/3	5						
10-14	10YR 3/3	100					Loamy/Clayey	
14-18	10YR 4/4	85					Loamy/Clayey	
	10YR 3/4	15						
18-22	10YR 3/4	75					Loamy/Clayey	
	10YR 4/4	25						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Historically disturbed soils due tilling. Soil layer textures from top of the observed soil profile to bottom were SiL throughout.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 5A

Investigator(s): Jeff Felland Section, Township, Range: Sec 01 Twnshp 05N Rng 10E

Landform (hillside, terrace, etc.): Hillslope/Toeslope Local relief (concave, convex, none): Linear/Concave Slope %: 0-2

Subregion (LRR or MLRA): LRR K Lat: 42.929506 Long: -89.25078 Datum: NAD 83

Soil Map Unit Name: Troxel silt loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes ___ No X

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** **Yes** ___ **No** X
Hydric Soil Present?	Yes ___	No X	If yes, optional Wetland Site ID: ___
Wetland Hydrology Present?	Yes ___	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of August, September and October precipitation was found to be normal. Sample plot in corn field west of STH 51 near the south end of the project site.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 22

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No water table to 24 inches after 15 mins.

VEGETATION – Use scientific names of plants. Sampling Point: 5A

Tree Stratum (Plot size: 30' R)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15' R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5' R)			
1. *Zea mays*	10	Yes	UPL
2.			
3. *Cirsium arvense*	5	Yes	FACU
4. *Elymus repens*	2	No	FACU
5. *Chenopodium album*	2	No	FACU
6. *Taraxacum officinale*	2	No	FACU
7. *Morus rubra*	2	No	FACU
8.			
9.			
10.			
11.			
12.			
	23	=Total Cover	

Woody Vine Stratum (Plot size: 30' R)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	13	x 4 =	52
UPL species	10	x 5 =	50
Column Totals:	23 (A)		102 (B)

Prevalence Index = B/A = 4.43

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. Disturbed vegetation in plowed and planted corn field.

SOIL

Sampling Point 5A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/3	100					Loamy/Clayey	
10-18	10YR 3/3	98	10YR 3/4	2	C	M	Loamy/Clayey	Faint redox concentrations
18-24	10YR 3/3	95	10YR 3/4	5	C	M	Loamy/Clayey	Faint redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Historically disturbed soils due tilling. Soil layer textures from top of the observed soil profile to bottom were L, SiCL and SiCL, respectively.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 6A

Investigator(s): Jeff Felland Section, Township, Range: Sec 01 Twnshp 05N Rng 10E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Linear/linear Slope %: 2-5

Subregion (LRR or MLRA): LRR K Lat: 42.930534 Long: -89.257692 Datum: NAD 83

Soil Map Unit Name: Salter sandy loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes ___ No X

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** **Yes** ___ **No** X
Hydric Soil Present?	Yes ___	No X	If yes, optional Wetland Site ID: ___
Wetland Hydrology Present?	Yes ___	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of August, September and October precipitation was found to be normal. Sample plot on edge of corn field at west edge of project area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No water table to 24 inches after 15 mins.

VEGETATION – Use scientific names of plants. Sampling Point: 6A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	25	Yes	FAC
2. *Prunus serotina*	10	Yes	FACU
3.			
4.			
5.			
6.			
7.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Rhamnus cathartica*	20	Yes	FAC
2. *Lonicera morrowii*	10	Yes	FACU
3.			
4.			
5.			
6.			
7.			
	30	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Zea mays*	15	Yes	UPL
2. *Setaria faberi*	20	Yes	FACU
3. *Digitaria sanguinalis*	15	Yes	FACU
4. *Taraxacum officinale*	2	No	FACU
5. *Daucus carota*	2	No	UPL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	54	=Total Cover	
Woody Vine Stratum (Plot size: 30' R)			
1. *Vitis riparia*	5	Yes	FAC
2.			
3.			
4.			
	5	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 37.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	57	x 4 =	228
UPL species	17	x 5 =	85
Column Totals:	124 (A)		463 (B)

Prevalence Index = B/A = 3.73

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. Disturbed veg on edge of plowed and planted corn field.

SOIL

Sampling Point 6A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/2	100					Loamy/Clayey	
20-24	10YR 3/3	90					Loamy/Clayey	
	10YR 2/2	10						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Historically disturbed soils due tilling. Soil layer textures from top of the observed soil profile to bottom were SiL and SiL respectively.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 20A

Investigator(s): Jeff Felland Section, Township, Range: Sec 06 Twnshp 05N Rng 11E

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): linear/linear Slope %: 2-5

Subregion (LRR or MLRA): LRR K Lat: 42.932311 Long: -89.246867 Datum: NAD 83

Soil Map Unit Name: Batavia silt loam, gravelly substratum NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes ___ No X

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** **Yes** ___ **No** X
Hydric Soil Present?	Yes ___	No X	If yes, optional Wetland Site ID: ___
Wetland Hydrology Present?	Yes ___	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of August, September and October precipitation was found to be normal. Sample Plot in northeast corner of project area, east of STH 51 and west of Black Oak Dr in corn field.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
SP located in FSA slide area A where 3 of 7 (43%) most recent years with normal climate conditions had wet signatures present (wetland signature, soil saturation).

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No water table to 24 inches after 15 mins.

VEGETATION – Use scientific names of plants.

Sampling Point: 20A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Lonicera X bella*	2	No	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	2	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Zea mays*	40	Yes	UPL
2. *Taraxacum officinale*	2	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	42	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	4	x 4 =	16
UPL species	40	x 5 =	200
Column Totals:	54 (A)		236 (B)

Prevalence Index = B/A = 4.37

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. Disturbed veg in plowed and planted corn field.

SOIL

Sampling Point 20A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/2	100					Loamy/Clayey	
18-24	10YR 3/2	95	10YR 5/3	5	C	M	Loamy/Clayey	Faint redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Historically disturbed soils due tilling. Soil layer textures from top of the observed soil profile to bottom were L throughout.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 21A

Investigator(s): Jeff Felland Section, Township, Range: Sec 06 Twnshp 05N Rng 11E

Landform (hillside, terrace, etc.): Basin Local relief (concave, convex, none): concave Slope %: 0

Subregion (LRR or MLRA): LRR K Lat: 42.929652 Long: -89.245954 Datum: NAD 83

Soil Map Unit Name: Batavia silt loam, gravelly substratum NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of August, September and October precipitation was found to be normal. Sample Plot located in stormwater management infiltration basin in southeast corner of site on east side of STH 51. Infiltration basins are filled with imported sandy fill to facilitate infiltration of runoff in the basin.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No hydrology to 24 inches after 15 mins.

VEGETATION – Use scientific names of plants. Sampling Point: 21A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5')			
1. *Taraxacum officinale*	25	Yes	FACU
2. *Trifolium repens*	10	No	FACU
3. *Chamaesyce glyptosperma*	50	Yes	UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85	=Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	35	x 4 =	140
UPL species	50	x 5 =	250
Column Totals:	85 (A)		390 (B)

Prevalence Index = B/A = 4.59

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. Disturbed veg due to mowed infiltration basin.

SOIL

Sampling Point 21A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-24	2.5Y 5/4	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Historically disturbed soils due tilling. Soil layer textures from top of the observed soil profile to bottom were sand throughout.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: STH 51 - RDH Properties City/County: Stoughton, Dane Co Sampling Date: 10/20/20

Applicant/Owner: Robert Dvorak State: WI Sampling Point: 22A

Investigator(s): Jeff Felland Section, Township, Range: Sec 01 Twnshp 05N Rng 10E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): linear/linear Slope %: 2

Subregion (LRR or MLRA): LRR K Lat: 42.931573 Long: -89.250712 Datum: NAD 83

Soil Map Unit Name: Batavia silt loam, gravelly substratum NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Based on the Natural Resource Conservation Service weighted month method of evaluating antecedent precipitation for the months of August, September and October precipitation was found to be normal. Sample plot located in corn field west of STH 51 near north project boundary.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ____	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
none

Remarks:
Hydrology indicators were not present at the Sample Plot during the time of the site visit. No water table to 24 inches after 15 mins.

VEGETATION – Use scientific names of plants.

Sampling Point: 22A

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	

Herb Stratum (Plot size: 5')			
1. *Zea mays*	40	Yes	UPL
2. *Poa pratensis*	2	No	FACU
3. *Chenopodium album*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	47	=Total Cover	

Woody Vine Stratum (Plot size: 30' R)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	7	x 4 =	28
UPL species	40	x 5 =	200
Column Totals:	47 (A)		228 (B)

Prevalence Index = B/A = 4.85

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation was not dominant at the Sample Plot during the time of the site visit. Disturbed veg in plowed and planted corn field.

SOIL

Sampling Point 22A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/2	100					Loamy/Clayey	
2-8	10YR 2/2	20					Loamy/Clayey	
	10YR 3/4	80						
8-24	10YR 3/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not present at the Sample Plot during the time of the site visit. Historically disturbed soils due tilling. Soil layer textures from top of the observed soil profile to bottom were L, SL and SL respectively.

APPENDIX D | SITE PHOTOGRAPHS

Facing south – shows the location and surrounding vegetation at Sample Plot 1A.

Facing south - shows the location of Sample Point 1B and the slope from the road shoulder.

Shows the vegetation and ground condition at Sample Point 2A.

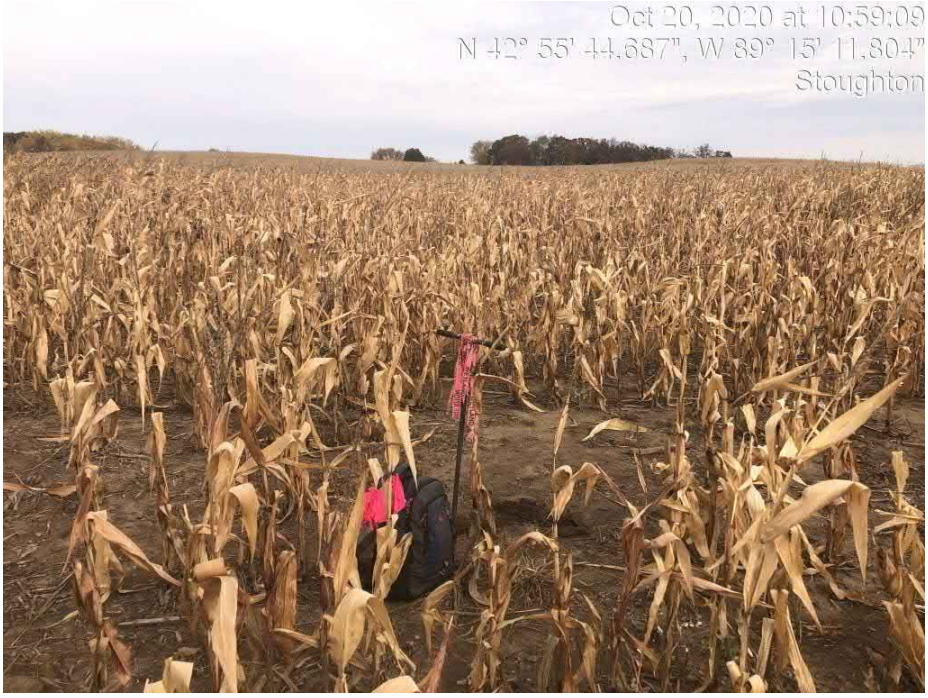
Facing west - shows Sample Plot 2B with Sample Plot 2A in background

Facing south toward Velkommen Way – shows the surrounding vegetation at Sample Plot 3A.

Facing south - shows the location of Sample Plot 3B and Wetland 3 in the distance.

Facing west - shows the location of Sample Plot 3C and some of the existing earthwork on site.

Shows rocks at culvert outlet in Velkommen Way



Facing west at sample point 4A showing underdeveloped crops

Facing east at sample point 4B toward sample point 4A and wetland 4

Sample Point 4C facing west toward 4A

Sample Point 5A facing south

Facing north – shows Sample Plot 20A

Facing southeast. Shows Sample Plot 21A

Facing south - shows infiltration basin and location of Sample Plot 21A

Facing east - Shows Sample Plot 22A

APPENDIX D

Nonfederal Wetland Exemption Determination

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
3911 Fish Hatchery Road
Fitchburg, WI 53711-5397

Tony Evers, Governor
Preston D. Cole, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

January 5, 2021 WIC-SC-2020-13-04262

Bob Dvorak
1081 Eagle Court
Edgerton, WI 53534

RE: Nonfederal Wetland Exemption Determination for an area described as Wetland 1, 2, 3, and 4 located in the NE1/4 of the NE1/4 of Section 1 Township 05 North, Range 10 East also in NW1/4 NW1/4 of Section 06, Township 05 North, Range 11 East, City of Stoughton, Dane County.

Dear Mr. Dvorak:

This letter is in response to your request for a nonfederal wetland exemption determination for the above mentioned wetlands.

According to 281.36 (4n), State Stat., a nonfederal wetland is a wetland that is not federally jurisdictional. Projects impacting nonfederal wetlands in urban areas must be less than 1 acre of total impact, and must be done in compliance with applicable stormwater management zoning ordinances or stormwater Wisconsin Pollution Discharge Elimination System (WPDES) permits to qualify for this exemption (s. 281.36(4n)(b)3, Wis. Stat.). In addition, DNR must also consider whether the nonfederal wetland is a rare and high quality wetland as defined in s 281.36(4n)(a)3, Wis. Stat.

The Department reviewed the following materials to aid in our exemption determination:

- The request narrative.
- Site location map and photographs that show different angles and views of the wetland.
- Botanical survey results within the delineation report.
- Wetland delineation information.
- ACOE determination as nonfederal wetlands.

Below is a summary of our findings:

Request Narrative
According to the request narrative the total wetland impacts will be .53 acres. The purpose of this project is for commercial/residential development.

Site Location and Photographs
The site location confirms that the wetland is located in an urban area. Wetland photographs also shows wetland within farm fields.

Botanical Survey
The botanical survey demonstrations that the wetland are not a rare and high quality wetland.

Wetland Delineation Information

The wetland delineation shows Wetlands were delineated at four (4) locations within the investigated area, totaling approximately 0.53 acres (23,186 sq. ft.). The wetlands are described here.

Wetland 1 is located just east of STH 51 in the middle of the site in a roadside ditch and an open area. The wetland is approximately 0.20 acres (8,616 sq. ft.)

Wetland 2 is approximately 0.002 acres (95 sq. ft.) and located just west of STH 51 in the middle of the site in a roadside ditch.

Wetland 3 is approximately 0.28 acres (12,053 sq. ft.) and located north of Velkommen Way in the eastern portion of the site.

Wetland 4 is approximately 0.06 acres (2,422 sq. ft.) and located near the south boundary of the western portion of the site.

Stormwater Compliance Information

This project will be completed in compliance with applicable WPDES stormwater permits and stormwater ordinances adopted under s. 59.693, 60.627, 61.354, or 62.234, Wis. Stats.

Conclusion:

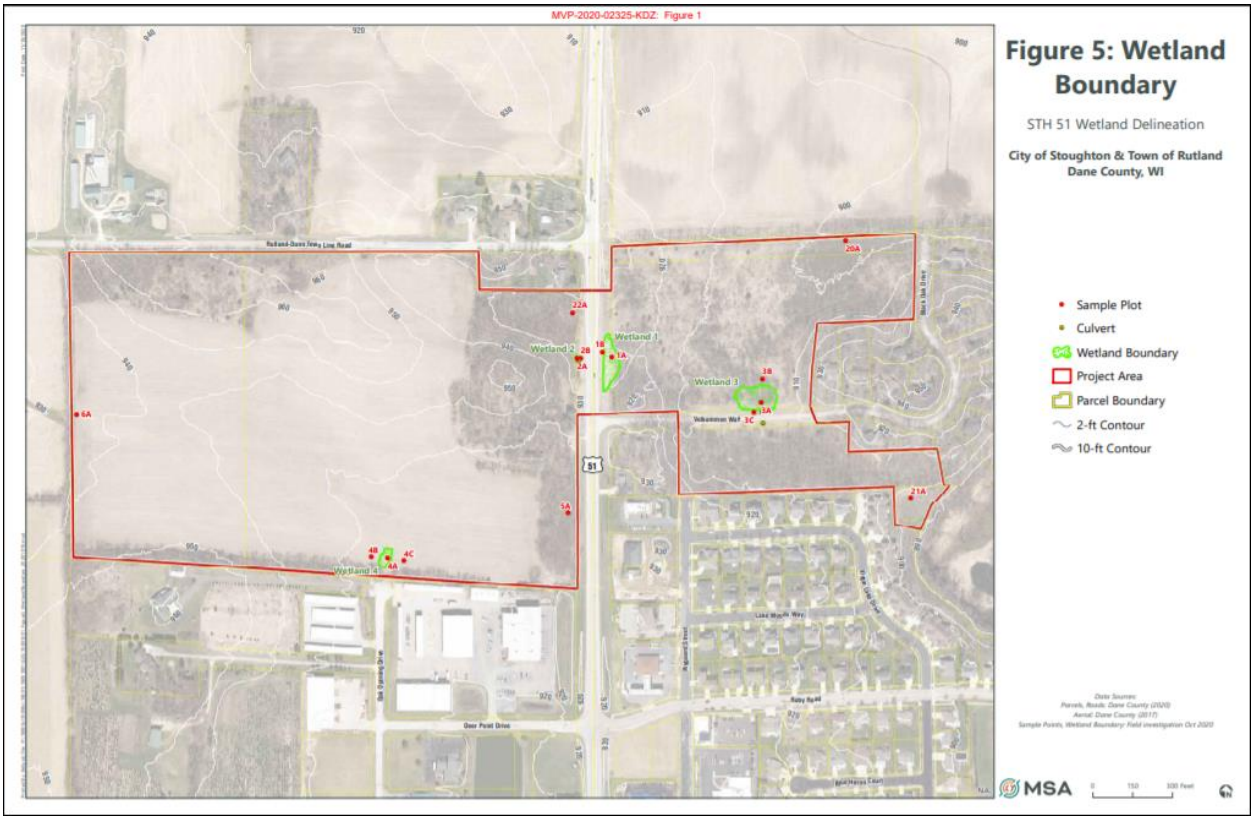
ELIGIBLE

Based upon the documentation provided above, the project meets the eligibility criteria pursuant to s. 281.36 (4n), State Stat. You are able to proceed with this project. If you have any questions or would like to schedule a meeting to discuss this approval, please call me at (608) 228-4067 or email Allen.Ramminger@wisconsin.gov

Sincerely,

Allen Ramminger
Wetland Exemption Specialist

cc: USACErequestwi@usace.army.mil U.S. Army Corps of Engineers
Travis Schroeder, DNR SC Region Wetland and Waterway Supervisor
Jeff Felland, MSA Professional Services, Consultant
Hans Hilbert, Assistant Zoning Administrator
File


MVP-2020-02325-KDZ: Figure 1
Figure 5: Wetland Boundary
STH 51 Wetland Delineation
City of Stoughton & Town of Rutland
Dane County, WI
Sample Plot
Culvert
Wetland Boundary
Project Area
Parcel Boundary
2-ft Contour
10-ft Contour
Data Sources:
Parcels, Roads: Dane County (2020)
Aerial: Dane County (2017)
Sample Points, Wetland Boundary: Field investigation Oct 2020
MSA
0
150
300 Feet
Rutland-Dane Town Line Road
Wetland 1
Wetland 2
Wetland 3
Wetland 4
Volkommer Wolf
51
Lake Mendota Way
Gear Post Drive
Ski Chalet Drive
Ridge Rd
Black Oak Drive
East Oak Street
Rutland Harmony Court
6A
5A
4B
4C
4A
22A
2B
2A
1B
1A
3B
3A
3C
20A
21A