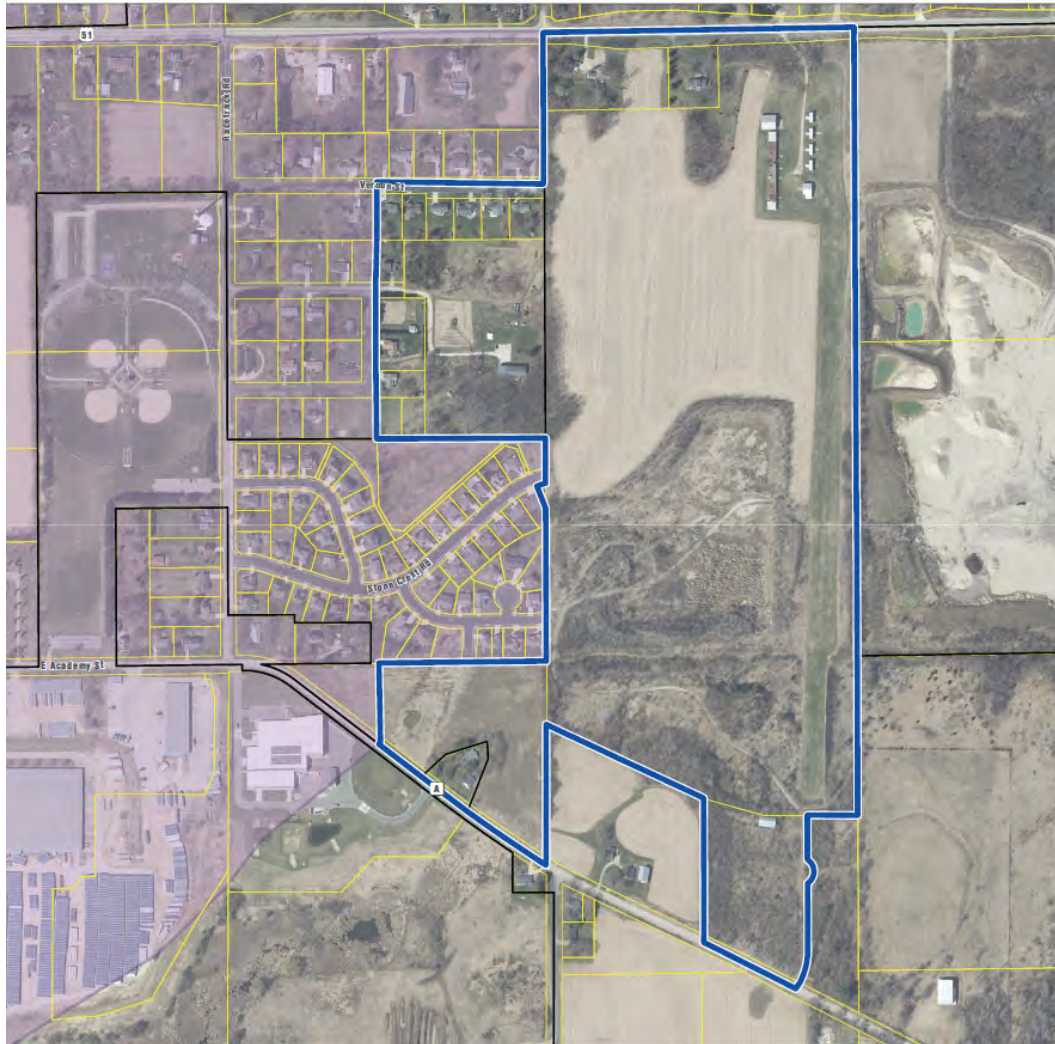


City of Stoughton

2023 URBAN SERVICE AREA AMENDMENT

Stone Crest Subdivision (Full Buildout)

April 14, 2023



Stoughton *Wisconsin*



Prepared for the Capital Area Regional Plan Commission and the Wisconsin Dept. of Natural Resources

By the City of Stoughton and MSA Professional Services, Inc.

Table of Contents

INTRODUCTION	4
1. PLAN CONSISTENCY	5
1.1. Consistency with the Comprehensive Plan.....	5
1.2. Neighborhood Plan	6
1.3. Describe the Need for the Addition to the Urban Service Area	6
2. INTERGOVERNMENTAL COOPERATION	7
2.1. Notification of Adjacent Local Governmental Units	7
2.2. Adjacent Local Government Unit(s) Objections/Support of Proposal	7
3. LAND USE	7
3.1. Map of Proposed USAA Boundary and Existing Right-of-Ways	7
3.2. Tables of Land Use Acreage and Number of Housing Units	8
3.3. Map of Existing Land Uses	8
3.4. Quantity and Type of Housing Units	8
3.5. Staging.....	8
4. NATURAL RESOURCES	10
4.1. Natural Resource Areas	10
4.2. Public Outlots for Parks and Stormwater Management Facilities.....	10
4.3. Existing Environmental Corridors	11
4.4. Minimum Environmental Corridor Criteria Requirements	11
5. UTILITIES & STORMWATER MANAGEMENT	11
5.1. Proposed Sanitary Sewer Extensions for the USAA	11
5.2. Estimate of the Average Daily and Peak Wastewater Flow for USAA	11
5.3. Current Average Daily Flow for the Interceptor Sewer and the Wastewater Plant	12
5.4. Wastewater Treatment Plant/Interceptor Sewer Capacity to Serve USAA.....	12
5.5. Proposed Public Water Supply/Distribution System Extension for the Proposed USAA.....	12
5.6. Estimate of the Average Daily and Peak Hourly Water Demand for the USAA	13
5.7. Current Average Daily and Peak Hourly Water Demand.....	13
5.8. Current Capacity of the Water System	13
5.9. Proposed Stormwater Management Standards and Best Management Practices.....	14
X. APPENDICES	
A: City of Stoughton Resolution R-__-2023	
B: Maps	
C: Adjacent Government Notice Letter	
D: Wetland Delineation Report	
E: Nonfederal Wetland Exemption Determination	

INTRODUCTION

The City of Stoughton is seeking an urban service area amendment to add approximately 127.5 acres to its urban service area comprised of 16 privately owned parcels and two Town park properties on the far east side of Stoughton located between County Highway A and US Highway 51. **See Map 3.1.** This amendment is the remaining phases of the Stone Crest Subdivision, which currently includes 55 single-family homes and one duplex lot. Approximately 1.65 acres of Stone Crest subdivision expansion is already in Stoughton's Urban Service Area (USA). This parcel is located in the southwest corner of the subdivision on the north side of County Highway A.

Thirteen of the parcels, totaling approximately 17.16 acres, are in the Town of Dunkirk along Vernon Street (6 parcels), Elm Street (6 parcels) and CTH A (1 parcel). Of these, two parcels are park and 11 are single-family residential lots. These lots are included in this amendment with impending sanitary sewer extension along Vernon Street required to service the lands in the northern portion of the Stone Crest subdivision (as well as future development to the east). This amendment also includes the final phase of the Stone Crest Subdivision with the current land use, as follows:

- two single-family rural residential lots;
- a private airfield with remaining lands either being farmed or open and wooded (previously quarried lands);
- one parcel mostly farmed outside of existing wetland; and,
- one property mostly wooded.

All properties in the City of Stoughton are in rural holding zoning district, except for one single-family lot is in Exurban Residential zoning district.

Of the 109.3 acres of privately-owned undeveloped land, approximately 56.4 acres (51.6%) are expected to be developed into single-family, duplex, and multi-family housing along with a small area of general business and mixed-use. The remaining area, 52.9 acre (48.4%) will be dedicated to a neighborhood park, street right-of-way, and stormwater management areas.

The proposed amendment area has no mapped environmental corridors per the Wisconsin Department of Natural Resources (WDNR) or Capital Area Regional Planning Commission (CARPC) data. In August 2020, Heartland Ecological Group delineated two wetlands in this amendment area. Wetland 1 is a 1.55-acre disturbed wet meadow located within a low-lying draw/swale that the Army Corps of Engineers designated as non-federal. WDNR will approve the non-federal exemption filling 0.99 acres of said wetland once wetland credits are purchased. Wetland 2 is a 0.11-acre artificial wetland and has been approved by WDNR for fill per non-federal exemption.

The City of Stoughton's most recent urban service area expansion requests were in 2021 (36 developable acres, residential and commercial use), and 2022 (17.2 developable acres for planned industrial use, and a separate development with 32.5 acres of mixed-density residential use).

Due to the size of the development area, the plan includes a three-phase staging plan for 10-year periods of development (**See Map 3.5**).

1. 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: [City of Stoughton Comprehensive Plan Link](#)

The Comprehensive Plan Future Land Use Map (see **Map 1.1**) indicates the proposed urban service area is part of Stoughton's Eastside Planned Mixed Use Corridor and Southeast Planned Neighborhood. The plan describes land uses within these areas with the following guidelines:

***Southeast Planned Neighborhood** is approximately 290 acres in size. This neighborhood, which is an eastern extension of some recent platting (e.g., Stone Crest), is planned for predominantly Single Family residential development, however some higher density residential and Neighborhood Business uses would also be appropriate in this area. A larger Planned Mixed Use area is recommended to the north of this neighborhood adjacent to USH 51. Reclamation of an existing gravel pit will be an important component of the overall timing and build-out of this planned neighborhood. The southern edge of this neighborhood is adjacent to Heavy Industrial and General Industrial development. It will be critical to buffer these planned residential uses from industrial development. Buffering can be accomplished through a combination of distance, berming, extensive landscaping, and attractive fencing of loading docks, dumpsters, and any outdoor storage areas. There are some steeper slopes, woodlots, and wetlands that should be preserved as this neighborhood is platted and developed. Access into this neighborhood should be provided by an extended Vernon Street and new streets coming off of Race Track Road and Pleasant Hill Road, as well as internal streets and sidewalks. Access from USH 51 should be limited to a few future north-south collector streets. Residents in this future neighborhood will benefit from convenient walking distance to planned east side shopping areas, existing and planned park space (Racetrack Park), and nearby Kegonsa Elementary School, and biking or short-driving distance to a middle school, the downtown area, the riverfront, and employment opportunities in Industrial Park South.*

***Planned Mixed Use** is intended to be vibrant urban places containing a mix of quality commercial uses, office, light industrial, higher-intensity residential development, and community gathering spots. Unlike the Planned Neighborhood category, which is designed to achieve a certain percentage of dwelling unit types, the Planned Mixed Use category is not associated with a formula directing the balance of uses. The City should carefully monitor the development of multi-family housing within Planned Mixed Use areas in order to support the City's goal of maintaining its predominately single family character.*

The expansion of the Stone Crest subdivision is going to provide balance and density that is not present in the initially built phases of the subdivision. The planned neighborhood can be described in three sections (northern, central and southern).

- **Northern Section:** As discussed in the Comprehensive Plan, this area (nearest US Highway 51) will include commercial, mixed use and multi-family lots. Duplex lots are blended in within the single-family residential blocks.
- **Central Section:** A large 10-acre park will be a focal point of the neighborhood (formerly a quarry) with two major trail routes through the development and supplementary connecting

paths providing greater mobility in the neighborhood. This park provides a unique opportunity to preserve the woodland that is sustaining the hillside created by the quarry extraction with park activity and environment contrasting the community park directly west of the subdivision (i.e., Racetrack Park). A central townhome complex is envisioned across from this park.

providing opportunities for zero-entry style housing units for seniors and disabled persons.

- **Southern Section:** Low-density housing will extend from the existing phases of the subdivision, but transition to multi-family housing lots providing greater balance in housing options and overall subdivision density. Former quarry section will be filled to support planned development, removing steep slopes.

The overall mix of uses within the site includes 29.4 acres of single- and two family residential, 19.9 acres of multi-family residential, 7.1 acres of general business and mixed-use, and 33.1 acres of open space – including 12.7 acres of community parks and trails.

City Council action to affirm support for this USAA on April 11, 2023.

Zoning and land division review for the next phase is expected to occur in the mid-2023. The remaining lands will be subdivided and zoned over the next 5+ years – potentially sooner depending on market conditions.

1.2. Neighborhood Plan

There is no 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 2011, 2021, and 2022.

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 site 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.

The 2021 amendment brought in 90.2 acres into the urban service area adjacent to USH 51 and south of Rutland-Dun Townline Rd, inclusive of 70 acres of new development in the City of Stoughton and 12 acres of existing residential in the Towns of Rutland and Dunkirk. The new subdivision (51 West Subdivision) is a mixed-use neighborhood that includes 13 acres of commercial and approximately 40 acres of mixed residential lots (i.e., 4 multifamily lots, 5 duplex lots, 3 condo lots, and 9 single-family lots).

The first 2022 amendment brought in approximately 18.5 acres of land for planned industrial and commercial use, including approximately 0.5 acres of existing road right of way, and 0.8 acres of proposed environmental corridors for stormwater management.

The second 2022 amendment brought an additional of approximately 32 acres of land for single-family and two-family lots, including approximately six acres of proposed environmental corridors for a net of approximately 26 developable acres to the Stoughton Urban Service Area.

Census data show a 2010 population of 12,611 in 5,133 households (2.46 people/household). The 2020 Census population estimate of 13,173 indicates an increase of 562 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 2011, 2021, and 2022 USA amendments, reinforced by broader market trends and developer feedback, is there continues to be strong demand for new housing of all types in Dane County. The City of Stoughton supports developments that provide housing diversity supporting varying incomes and ages. While there is interest in expanding density within the City, it is also important to consider interests of citizens to live in an area within Dane County that has its own unique character separate from the City of Madison. We continue to balance this with the importance to provide sustainable development within the City of Stoughton.

2. INTERGOVERNMENTAL COOPERATION

2.1. Notification of Adjacent Local Governmental Units

There are lands around this USA amendment that are in the Town of Dunkirk, including eleven single-family lots and two park lots, proposed as part of the USA amendment. There have been informal communications with the towns. Upon approval of this application by City Council, a copy will be sent to the Town of Dunkirk requesting their formal comments on the proposed amendment. Copies of the transmittal letters are attached as Appendix C.

2.2. Adjacent Local Government Unit(s) Objections/Support of Proposal

As noted in Section 2.1, a copy of the proposed amendment application will have been sent to the adjacent town 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. LAND USE

3.1. Map of Proposed USAA Boundary and Existing Right-of-Ways

The proposed amendment area includes 16.35 acres of existing private parcels already developed as residential and 1.08 acres of public rights-of-way. The development area will add 109.3 acres to the Urban Service Area (USA). The development also includes 1.4 acres already within the USA. **See Map 3.1.**

The proposed new development in this amendment area includes the following mixture of land uses:

- General Business/Mixed-Use (incl. Multi-family Residential): 7.1 acres (6.5%)
- Single-family and Two-Family Residential: 29.4 acres (26.9%)
- Multi-Family (MF) Residential: 19.9 acres (18.2%)
- Community Park Open Space: 12.7 acres (11.6%)
- Conservation/Stormwater Management: 20.5 acres (18.7%)
- Street/Public Right-of-Way: 19.8 acres (18.1%)

3.2. Tables of Land Use Acreage and Number of Housing Units

The concept plans for the proposed amendment areas are shown in **Map 3.2**. It is possible that some details of the plans (such as road alignments, lot configurations, and sizes/locations of stormwater management areas) will change as the proposals go through the plat approval process. However, the mix of land uses and general lot layouts are not anticipated to change substantially.

Table 3.2: Urban Service Area Amendment Land Use Acreages					
Proposed Land Use	Acres in USA Amendment			Acres in USA	# of Housing Units
	New Development	Existing Development	Environmental Corridor	New Development	
Single Family Residential	22.5	16.35	-	0.40	90
Two-Family Residential	6.3	-	-	-	38
Multi-Family Residential	19.9	-	-	1.25	300
Residential Total	48.7	16.35	-	1.65	428
Commercial	7.1	-	-	-	
Industrial	-	-	-	-	
Institutional	-	-	-	-	
Street ROW	19.8	1.08	-	-	
Parks	12.7	0.81	12.7	-	
Stormwater Management (SWM)	20.5	-	20.5	-	
Other Open Space	0.6	-	0.6	-	
TOTAL	109.3	18.24	33.8	1.65	

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 428 new housing units are proposed in the amendment area, including single-family, two-family, and moderate to high density multi-family housing. See **Table 3.2**.

3.5. Staging

Due to the size of the proposed development area, a 20-year staging plan is included separated into 10-year increments. Since this project is an extension of an existing subdivision, the project begins with Phase 3 of Stone Crest Subdivision on the 10.22-acre parcel south of the existing Stone Crest subdivision, followed by a 10-year plan and a 20-year plan. The specific land uses are detailed in Table 3.5 and **Map 3.5**.

Table 3.5.1: Land Use and Housing by Stage					
Proposed Land Use	Acres in USA Amendment			Acres in USA	# of Housing Units
	New Development	Existing Development	Environmental Corridor	New Development	
PHASE 3					
Single Family Residential	-	16.4	-	0.4	12
Multi-Family Residential	0.6	-	-	1.25	45
Residential Tot.	0.6	-	0	1.65	57
Industrial	0.0	-	-	-	
Institutional	0.0	-	-	-	
Street ROW	0.0	1.1	-	-	
Parks	0.0	-	0.8	-	
SWM / Other Open Space	5.2	-	4.6	-	
TOTAL (Phase 3)	5.8	17.5	5.4	1.65	
10-YEAR (not including Phase 3)					
Single Family Residential	11.3	-	-	-	40
Duplex Residential	1.6	-	-	-	8
Multi-Family Residential	11.7	-	-	-	123
Residential Tot.	24.6	-	-	-	171
Street ROW	8.4	-	-	-	
Parks	11.5	-	11.5	-	
Stormwater Management	9.5	-	9.5	-	
TOTAL (10-year)	54.0	-	21		
20-YEAR (not including 10-year or Phase 3)					
Single Family Residential	11.9	-	-	-	48
Duplex Residential	4.7	-	-	-	30
Multi-Family Residential	7.9	-	-	-	131
Residential Tot.	24.5	-	-	-	209
Commercial	3.0	-	-	-	
Street ROW	11.2	-	-	-	
Parks	0.9	-	6.3	-	
Stormwater Management	6.3	-	0.9	-	
TOTAL (20-year)	46.0		7.2	0.0	
TOTAL (in development area)	105.8	17.5	33.6	1.65	

4. 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 wet spot identified in the National Wetlands Inventory (NWI), designated as a 0.10-acre Freshwater Emergent Wetland. A wetland delineation in August 2020 identified a total of two wetland areas, totaling approximately 1.65 acres (see Appendix D and **Map 4.1A**). Both are considered Less Susceptible according to NR151 regulations and require a 10- to 30- foot protective area. Neither were determined to be Waters of the United States. A quick summary is provided below.

- **Wetland 1:** This is a 1.55 acre, occasionally farmed wet meadow that is contiguous with wetlands south of the study area via a culvert. The 0.10-acre wetland indicated on the National Wetlands Inventory is located entirely within Wetland 1.
- **Wetland 2:** This is an isolated, 0.11-acre shallow marsh within a constructed stormwater basin. It meets the definition of artificial.

Woodlands: There are pockets of woodlands with the majority along the hillsides of the previously quarried lands and in the lot in the southeast corner of the amendment area. A recent aerial photograph is provided, **Map 4.1B**. Woodlands will be protected as much as possible within the trail corridors and park.

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 eight outlots proposed in the development addressing the need for stormwater management, park space and trail corridors. **Map 3.2** shows these outlots.

Table 4.2 Urban Service Area Proposed Stormwater Management and Parks	
Outlot Number	Land Area (Acres)
Outlot 1 (SWM)	6.3
Outlot 2 (Trail Corridor + SWM)	1.6
Outlot 3 (Trail Corridor + SWM)	3.1
Outlot 4 (Park + SWM)	10.2
Outlot 5 (Trail Corridor)	0.2
Outlot 6 (Trail Corridor + SWM)	4.6
Outlot 7 (SWM)	1.9
Outlot 8 (SWM)	1.8
Total (Acres)	29.7

4.3. Existing Environmental Corridors

There are no environmental corridors identified by Dane County or CARPC in the proposed development area. Some woodland sections will be preserved outside of road grading and stormwater management facilities within the proposed park. A portion of wetland #1 (approximately 0.56 acres) will be preserved. These elements, plus park and open spaces and trail corridor outline are included in the Proposed Environmental Corridors map.

4.4. Minimum Environmental Corridor Criteria Requirements

The proposed Environmental Corridors meet the minimum requirements. The minimum environmental corridor criteria requirements refer to major areas unsuitable for the installation of waste treatment systems because of physical or environmental constraints and should be

excluded from the service area. This includes wetlands, floodplains, waterways, and steep slopes. Approximately 12.63 acres of these environmental corridors is dedicated to park and recreation.

TABLE 4.4: PARK SPACE, EXCLUDES SWM

PARK SPACE PROVIDED	Total (Acres)
OUTLOT 2 (TRAIL)	0.94
OUTLOT 3 (TRAIL)	1.55
OUTLOT 4 (COMMUNITY PARK)	9.55
OUTLOT 5 (TRAIL)	0.21
OUTLOT 6 (TRAIL)	0.38
TOTAL	12.63



5. UTILITIES & STORMWATER MANAGEMENT

5.1. Proposed Sanitary Sewer Extensions for the USAA

The southern portion of the lands within the proposed urban service area amendment (USAA) will be served from an existing 8-inch sewer mains located along Stone Crest Road and Autumn Crest. The northern portion of the lands within the proposed USAA will be served by a proposed new interceptor from Race Track Road along Vernon Street. Currently, no improvements are expected to the current sewer interceptor that will serve the USAA. All sanitary sewer service lines within the southern portion of the proposed USAA will be 8-inch gravity lines that will service the lots within the subdivision. The sanitary sewer line proposed to serve the northern portion of the lands within the proposed USAA may be a larger interceptor in order to provide future service to the east of this immediate service area. The developer will be responsible for installation of all sewer facilities based on the final plat approval and development agreement, including all connections to interceptors serving the USAA. **See Map 5.1: Proposed Utilities.**

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

The estimated flow rate is based on the expected flow rates of 100 gallons per person per day for residential use and 1,500 gallons per acre for business/office/mixed use. A peaking factor of 4.0 for residential development and 2.5 for the commercial development results in an estimated peak flow of 0.68 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)
New SF Residential	100 GPD / person	90 units	2.8 people/unit	22,000	.03	4	0.14
New TF Residential	100 GPD / person	38 Units	2.1 People/Unit	7,980	.01	4	0.05
New MF Residential	100 GPD / person	300 Units	1.8 People/Unit	76,021	.12	4	0.47
NEW COM/MU	1,500 Gal/Acre	7.1 Acres	N/A	4,530	.01	2.5	0.02
Total				110,531	0.17		0.68

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

As depicted in Maps 5.1.1-5.1.3, the central and southern portions of the USAA will flow to an existing lift station in the southwest section of the existing subdivision to the Academy Street interceptor. Based on existing development, the estimated existing peak flow in the Stone Crest subdivision sanitary sewer is 0.04 cfs. Based on historical analysis (dating back to 2003), the northern section of this USAA area is to be served by a sewer extension along Vernon Street to Race Track Road. This analysis suggested 12-inch sanitary sewer on Vernon Road through the development to service future development to the east.

The Stoughton wastewater treatment plant has a total design average flow capacity of 1.65 mgd. The current average daily flow is approximately 1.15 mgd, per the 2021 CMAR.

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

Full development of the USAA is expected to generate an additional peak wastewater flow rate of 0.68 cfs in the existing sewers (**see Table 5.2**). Stoughton Utilities requires that sewers operate at no more than 80% of the maximum pipe capacity at peak flow. No other existing sewers or interceptors were evaluated.

The difference in design capacity and current flows for the Stoughton wastewater treatment plant is approximately 0.50 mgd. The estimated flows from the proposed USAA (including recently amendments for 51 West and Magnolia Springs) is anticipated to utilize 0.18 mgd of the capacity remaining (89% of the average flow capacity of 1.65 mgd). Stoughton Utilities recognizes the potential need to increase plant capacity as these new developments come on line and to support additional future development.

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

The amendment area will be served by connecting to an 10-inch watermain at the intersection of Stone Crest Road and Autumn Crest, looping through the Development, connecting to the existing watermain stub located on Race Track Road as indicated in **Map 5.1**. All mains within the Development are intended to be 8- and 10-inch watermains. The developer will be responsible for installation of all watermain facilities within the plat 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 residential flow rate of 80 gallons per day (gpd) per person and typical business/office/mixed-use at 800 gallons per acre. Using these figures, the 464 new residential units and 7.1 acres of business/office/mixed use will require average daily water demand of 78,672 gpd and a peak of 13,112 gallons per hour (peaking factor of 4).

Table 5.6 - Average and Peak Water Demand for the Proposed USAA						
Land Use	Metrics			Avg Flows (GPD)	Peaking Factor	Peak Flow (gallons per hour)
New SF Residential	80 GPD/person	90 units	2.8 people/unit	18,800	4	3,133
New TF Residential	80 GPD/person	38 units	2.1 people/unit	6,384	4	1,064
New MF Residential	80 GPD/person	300 units	1.8 people/unit	47,808	4	7,968
New Bus/Off/MU	800 GPD per Acre	7.1 acres	N/A	5,680	4	947
Total				78,672		13,112

5.7. Current Average Daily and Peak Hourly Water Demand

As of 2021, the existing average water use was approximately 1.125 million gallons per day (MGD), or approximately 781 gallons per minute (gpm), with a maximum day usage of 2.048 MGD or 1,422 gpm (Stoughton Utilities data). The water model-predicted critical fire flow for the hydrant on the 10-inch water main (dead end) at the intersection of “Proposed Road C” and Highway 51 is approximately 3,260 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 3, located on Racetrack Road just south of Main Street/US 51. Tower 3 has a capacity of 600,000 gallons and an overflow elevation of 1,081 feet above mean sea level. Assuming the water level in Tower 3 is 10 feet below overflow, or 1,071 ft, pressures in the proposed development would range from 79 to 90 psi. This is based on ground level elevations in the proposed development that range from 863 to 888 feet.

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.

Table 5.8A – Current Water System Capacity		
Well No.	Capacity (gpm)	Capacity (MGD)
4	1,131	1.529
5	1,321	1.902
6	1,084	1.561
7	988	1.423
Total Capacity	4,524	6.515
Firm Capacity*	3,536	5.092
*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.

Table 5.8B – Current Water Storage Capacity			
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

Stormwater management for the site will be provided for the site through the construction of eleven (11) new stormwater management ponds. These ponds will be established as paired systems, with upstream wet basins intended to provide water quality pre-treatment prior to discharging to downstream infiltration basins. Collectively these paired pond systems will also provide peak discharge rate control.

The existing site contains numerous landlocked basins; some of which are only landlocked under certain small-storm conditions, others which are landlocked to above 200-yr runoff conditions. The effect that these landlocked basins have on annual infiltration volumes and peak discharge rates have been included in the existing conditions runoff assessment and proposed conditions stormwater management practices were designed to account for this.

As illustrated in **Map 3.2**, the basins are located in Outlot 1 (drains to the north), Outlots 2 and 3 (drains to the south), Outlot 4 (drains to the southwest), Outlot 6 (drains to the south through CTH A culvert) and Outlot 7 (drains to the southeast).

The system of streets, storm inlets, and storm sewer pipes necessary to convey stormwater to the proposed stormwater ponds has not been designed as of the date of this memo. It is currently assumed that 200-yr peak flows will be delivered to the various ponds via storm sewer and overland street conveyance within the street ROW.

Performance Standards

Applicable stormwater management performance measures for this site will 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.

The performance standards summarized in the first paragraph of this section meet 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%
2. **Peak Discharge Rate Control:** Maintain predevelopment peak runoff rates for the 1-through 200-yr, 24-hour storm events, utilizing an MSE4 rainfall intensity distribution, as itemized below:
 - 1-yr, 24-hr event (2.49 inches).
 - 2-yr, 24-hr event (2.84 inches).
 - 10-yr, 24-hr event (4.09 inches).
 - 100-yr, 24-hr event (6.66 inches).
 - 200-yr, 24-hr event (7.53 inches).
3. **Thermal Control:** The amendment area is not part of any thermally sensitive areas and thus will not be required.
4. **Infiltration:** Requirement for any development type is 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.
5. **Oil and Grease Control:** Required for the commercial lots planned for the development

The stormwater management system proposed for this site will exceed all these standards.

- With the exception of proposed wet pond 400 which achieves only 78% annual TSS reduction, all the proposed wet ponds provide in excess of 80% TSS reduction. Because of the need for excess infiltration practices to mimic the effects of existing conditions landlocked basis, the infiltration basins which lie downstream from wet ponds provide additional TSS reduction such that the site as a whole is estimated to achieve over 99% TSS reduction annually.
- The existing site discharges runoff in 9 different directions. Under proposed conditions, discharges in all directions will be held to no more than existing conditions. In situations where existing on-site landlocked basins caused there to be zero discharge in a certain direction for certain rainfall conditions, these conditions were maintained under proposed conditions.
- Because of the high degree of infiltration required on the site and anticipated improvements necessary to ensure proposed infiltration basins perform as required, it is anticipated that the site will achieve in excess of 100% of predevelopment annual infiltration.

APPENDIX A:

City of Stoughton Resolution R--2023

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 127.5 acres located on the far east side of the City between CTH A and USH 51 is consistent with the City of Stoughton Comprehensive Plan and directs staff to submit a request for expanding the Stoughton Urban Service Area to include said lands.

Committee Action: Plan Commission recommends Common Council approval 7 – 0 on 3/13/2023

Fiscal Impact: None.

File Number: R-58-2023

Date Introduced: April 11, 2023

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 City sewer and water are allowed; and

WHEREAS, the City expects urban development to occur within an area located between CTH A and USH 51 on the far east side of Stoughton as outlined in City of Stoughton 2023 Urban Service Area Amendment – Stone Crest Subdivision (“Stone Crest Urban Service Area Amendment”); and

WHEREAS, the amendment area adds approximately 127.5 acres comprised of 18 parcels of land; and

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

WHEREAS, the City's Comprehensive Plan designates this area as part of the Eastside Planned Mixed Use Corridor and the Southeast Planned Neighborhood and the development planned for this area is consistent with this Plan; and

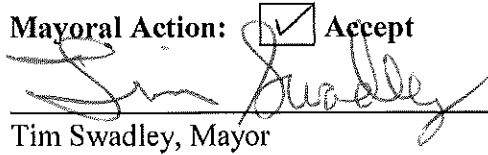
WHEREAS, the "Stone Crest Urban Service Area Amendment" will be consistent with all applicable land-use and environmental protection regulations and requirements; and

WHEREAS, the Plan Commission recommends approval of expanding the Stoughton Urban Service Area to include the Stone Crest Urban Service Area Amendment at its March 13, 2023 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 127.5 acres located on the far east side of the City between CTH A and USH 51 is consistent with the City of Stoughton Comprehensive Plan and furthermore directs staff to submit a request to expand the Stoughton Urban Service Area to include said property as outlined in City of Stoughton 2023 Urban Service Area Amendment – Stone Crest Subdivision.

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

Council Action: ☒ Adopted ☐ Failed Vote 11-0

Mayoral Action: ☒ Accept ☐ Veto
 4-11-2023
Tim Swadley, Mayor Date

Council Action: _____ ☐ Override Vote _____

APPENDIX B:

Maps

Map 1.1
FUTURE LAND USE

City of Stoughton
Comprehensive Plan

Future Land Use

- Planned Stoughton Urban Development Area**
- 2017 Urban Service Areas
- 2017 Limited Service Areas
- 2017 Municipal Boundaries
- Railroads

Future Land Use

- Agriculture/Rural/Vacant
 - Unsewered Residential
 - Single Family Residential
 - Two Family Residential
 - Multi-Family Residential
 - Planned Neighborhood
 - Central Business
 - Planned Mixed Use
 - Planned Office
 - Neighborhood Office
 - Planned Business
 - Neighborhood Business
 - Planned Industrial
 - General Industrial
 - Heavy Industrial
 - Landfill/Extraction
 - Institutional
 - Recreation or Public Open Space
 - Environmental Corridor (subject to confirmation)*
 - Surface Water
 - Right-of-Way
1. Single Family Residential
2. Two Family Residential
3. Multi-Family Residential
4. Institutional
5. Neighborhood Office
6. Neighborhood Business
7. Recreation or Public Open Space
1. Planned Business
2. Institutional
3. Recreation or Public Open Space
4. Multi-Family Residential
5. Planned Office
6. Planned Industrial

Shapes on map represent general recommendations for future land use. Actual boundaries between different land use types and associated zoning districts may vary somewhat from representations on this map. Existing (not future) land use pattern shown beyond Planned Development Area.

*Environmental corridors are a composite of the most important natural resources. Individual components consist of most of those elements seen on Map 2: Natural Resources. These include: DNR Wetlands, 100 Year Floodplain, Woodlands, Public Lands, Steep Slopes above 12%, and all other Environmental Corridors as defined by CARPC. Within the Stoughton Urban Service Area, only Corridors defined by CARPC are depicted.

** See Table 9 for Acreage Totals.

0 0.125 0.25 0.5 Miles

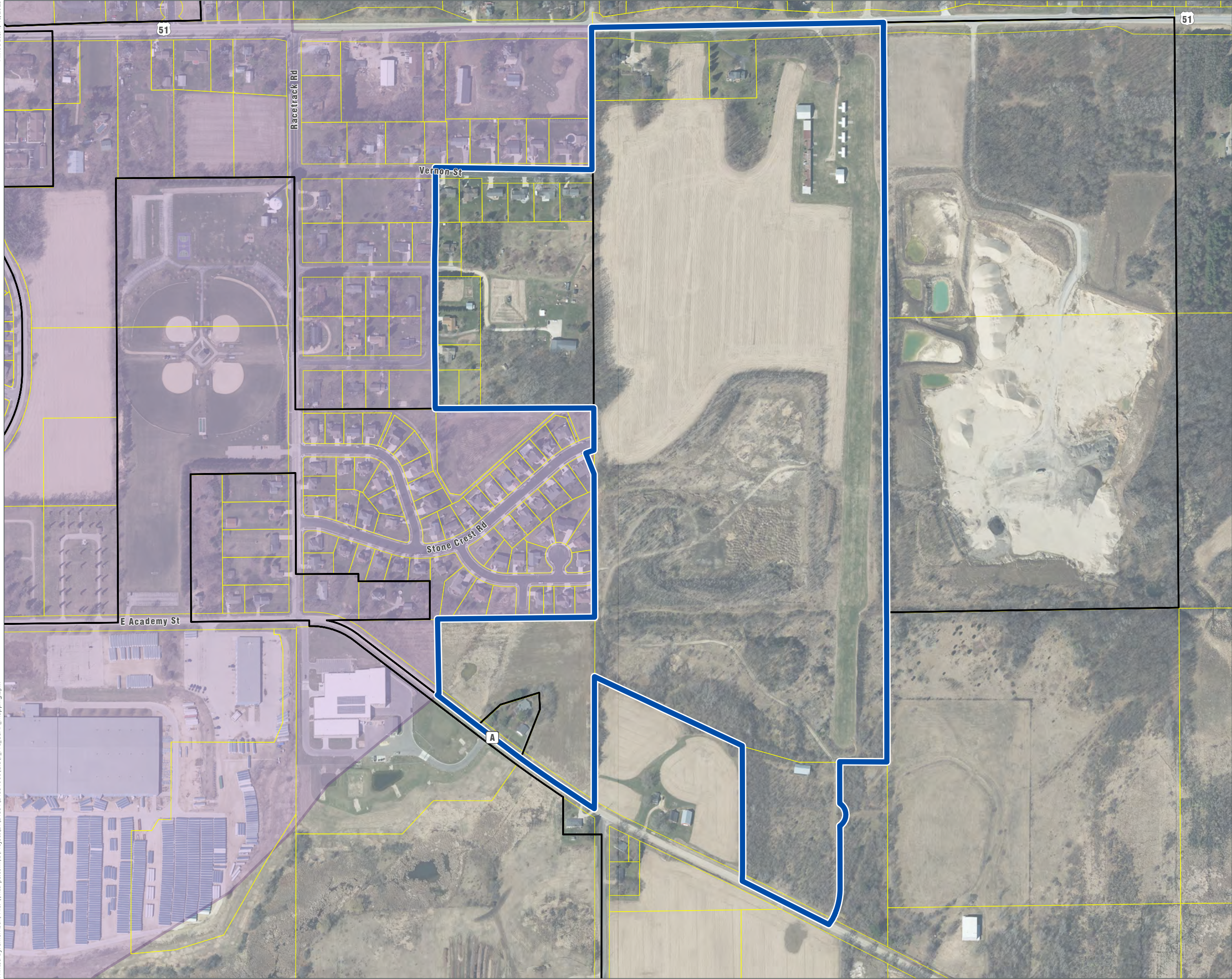
Adopted: July 11, 2017

Sources: Dane County LIO, City of Stoughton, CARPC, FEMA, WI DNR, Madison Area Transportation Planning Board

VANDEWALLE & ASSOCIATES INC.
Shaping places, shaping change







- Urban Service Area
- Amendment



Map 3.1 PROPOSED AMENDMENT AREA

Stonecrest Development

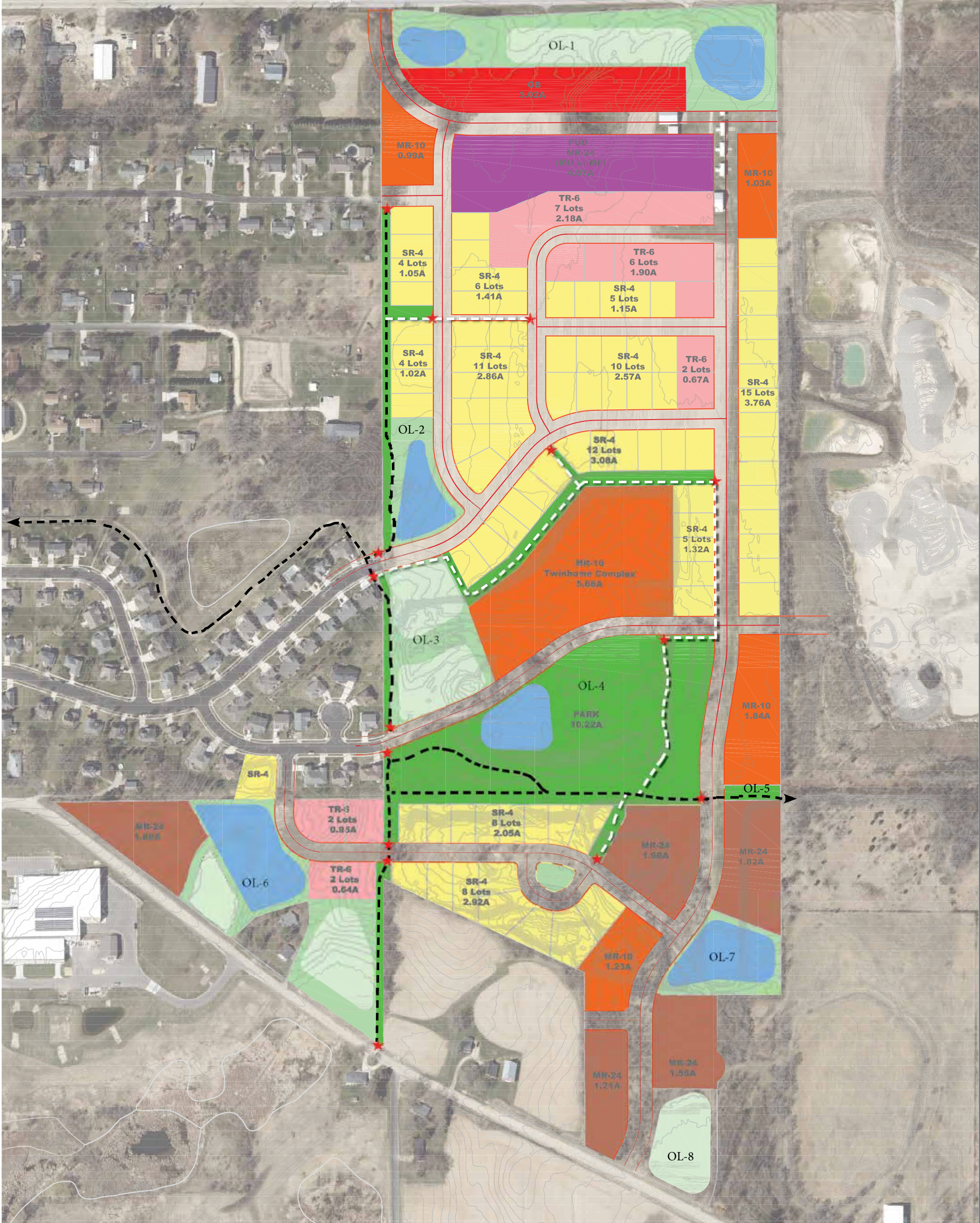
**City of Stoughton
Dane County, WI**

-  Urban Service Area Amendment Boundary
-  Existing Urban Service Area
-  Parcel Boundary
-  Municipal Boundary

*Data Sources:
Aerial: Dane County (2020)
Contours: Dane County LiDAR (2017)*



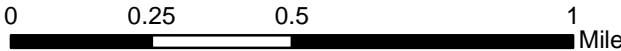
**Map 3.2
DEVELOPMENT
PLAN**



Map 3.3 **EXISTING LAND USE**

Existing Land Use

- 2017 Urban Service Areas
- 2017 Limited Service Areas
- 2017 Municipal Boundaries
- Railroads
- Agriculture/Rural/Vacant
- Unsewered Residential
- Single Family Residential
- Two Family Residential
- Multi-Family Residential
- Central Business
- Planned Office
- Neighborhood Office
- Planned Business
- Neighborhood Business
- Planned Industrial
- General Industrial
- Heavy Industrial
- Landfill/Extraction
- Institutional
- Recreation or Public Open Space
- Stormwater Management
- Surface Water
- Right-of-Way



Adopted: July 11, 2017
Sources: Dane County LIO, City of Stoughton.

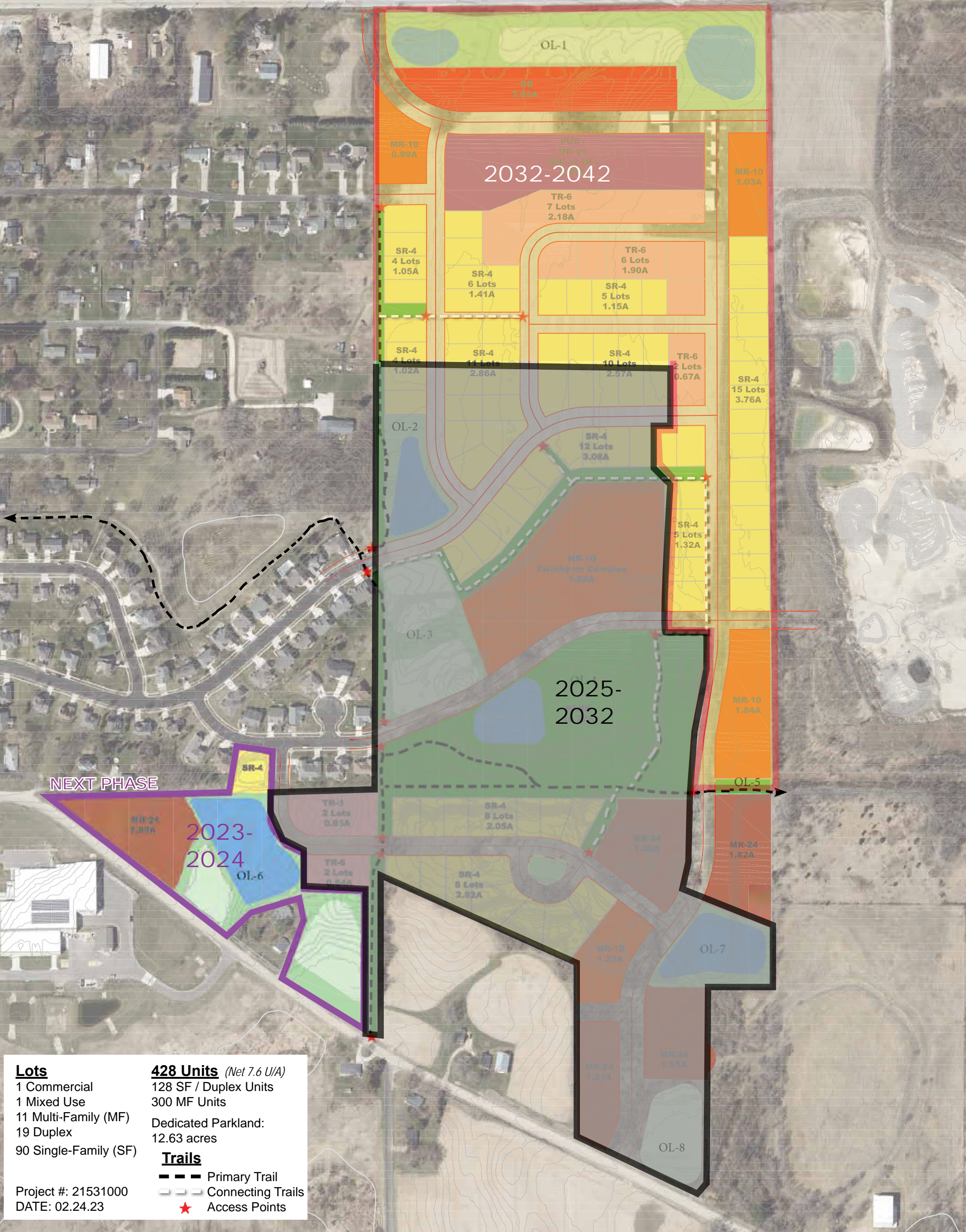


Urban Service Area
Amendment

STONE CREST SUB

Phase 3 (And Future Phases)

Map 3.5
PHASING
PLAN

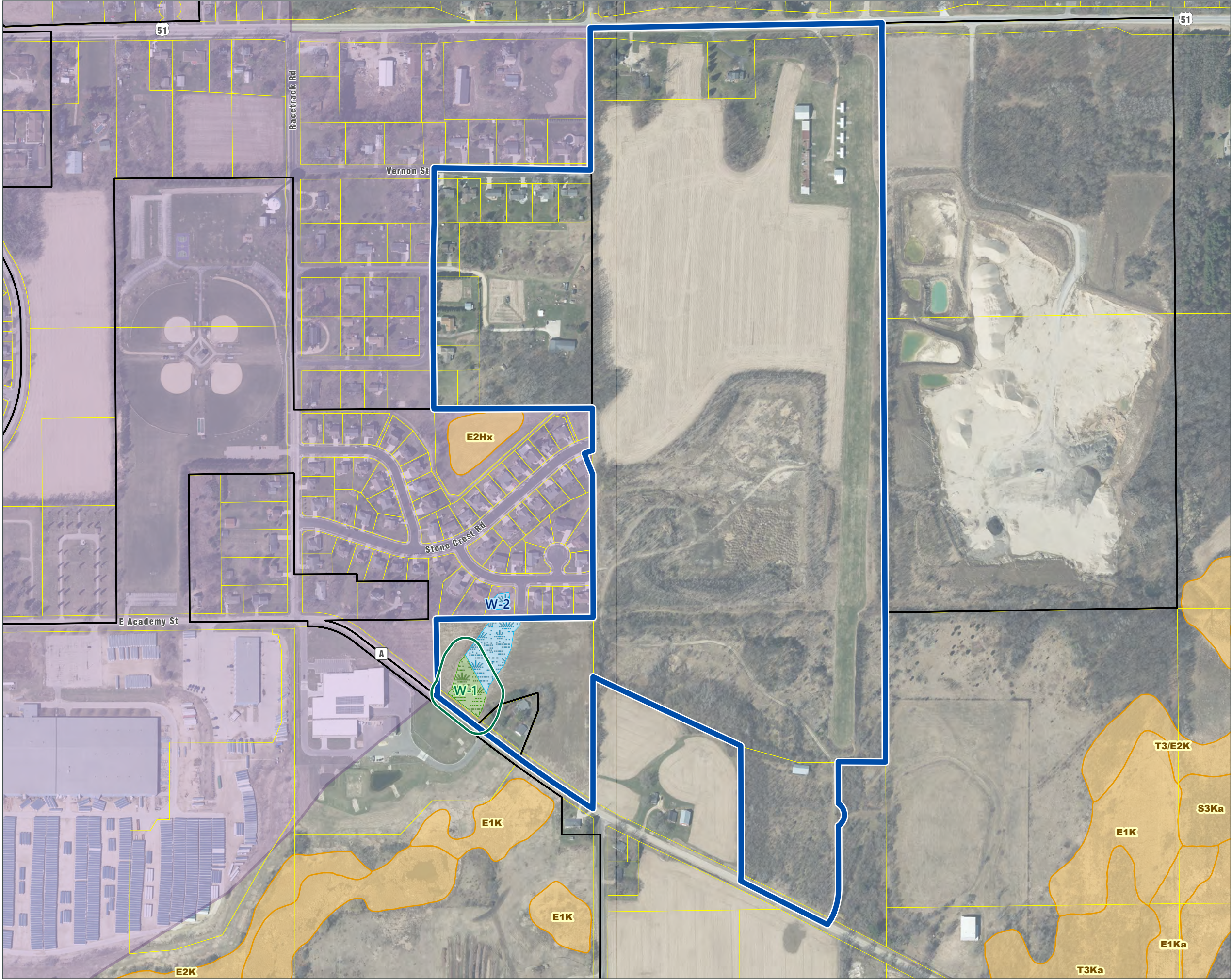


Lots
1 Commercial
1 Mixed Use
11 Multi-Family (MF)
19 Duplex
90 Single-Family (SF)

428 Units (Net 7.6 U/A)
128 SF / Duplex Units
300 MF Units

Dedicated Parkland:
12.63 acres









Project #: 21531000
DATE: 02.24.23



Map 4.1A WETLAND DATA

Stonecrest Development

City of Stoughton
Dane County, WI

-  Urban Service Area Amendment Boundary
-  Existing Delineated Wetland
-  Exempt Delineated Wetland*
-  75-ft Wetland Buffer
-  WNDR Wetland Areas
-  Existing Urban Service Area
-  Parcel Boundary
-  Municipal Boundary

Note:
* Delineated wetland has been determined by ACOE as nonfederal and by WDNR as low quality. They may be modified or filled.




Data Sources:
Aerial: Dane County (2020)
Contours: Dane County LiDAR (2017)



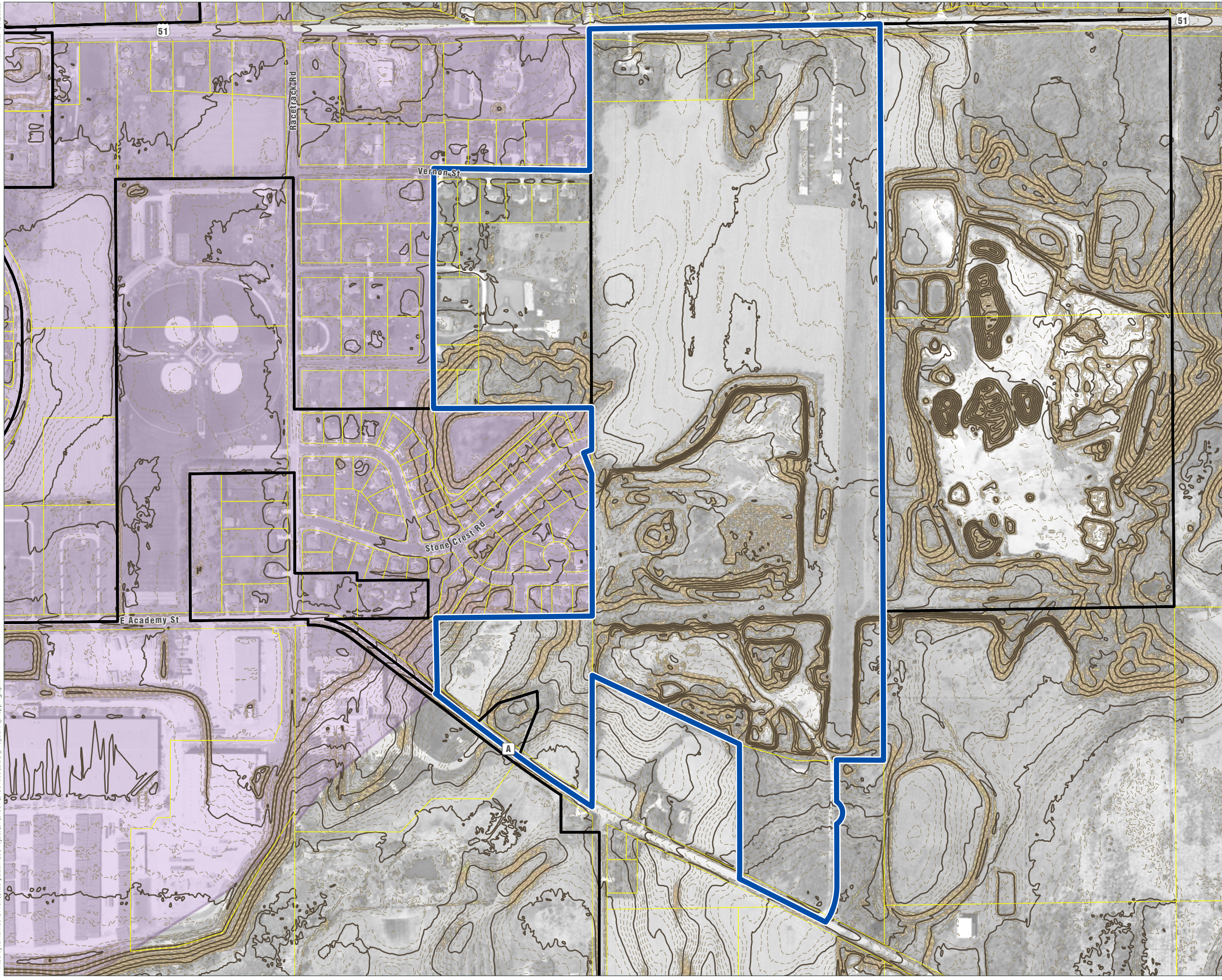
Map 4.1B WOODLANDS

Stonecrest Development

City of Stoughton
Dane County, WI

-  Urban Service Area
Amendment Boundary
-  Existing Urban Service Area
-  Parcel Boundary







Data Sources:
Aerial: Dane County (2020)
Contours: Dane County LiDAR (2017)



Map 4.1C CONTOURS AND STEEP SLOPES

Stonecrest Development

City of Stoughton
Dane County, WI

-  Intermediate Contour
-  Index Contour
-  Slopes Greater than 12%
-  Urban Service Area
Amendment Boundary
-  Existing Urban Service
Area
-  Parcel Boundary

Data Sources:
Aerial: Dane County (2020)
Contours: Dane County LiDAR (2017)



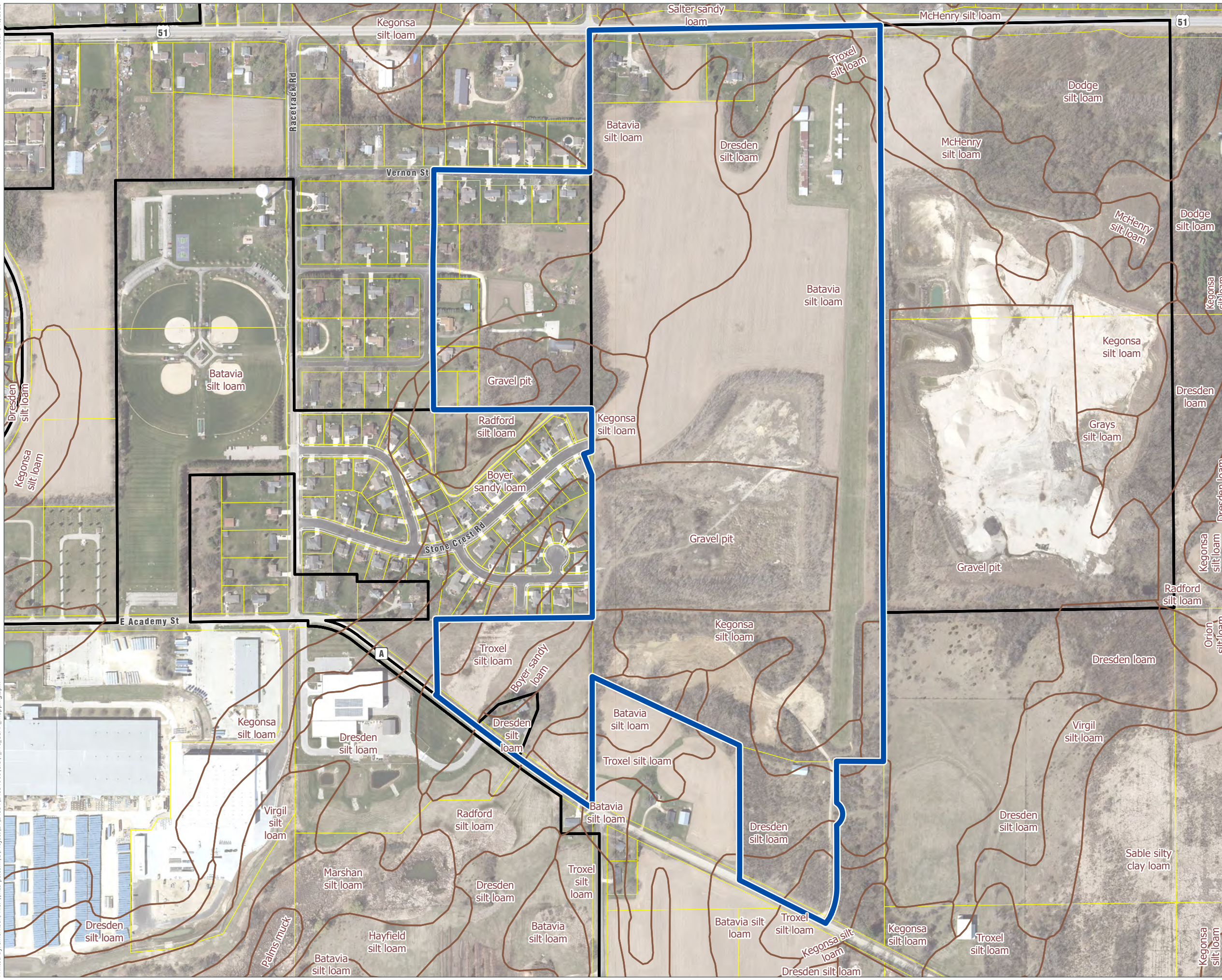
Map 4.1D SOIL TYPES

Stonecrest Development

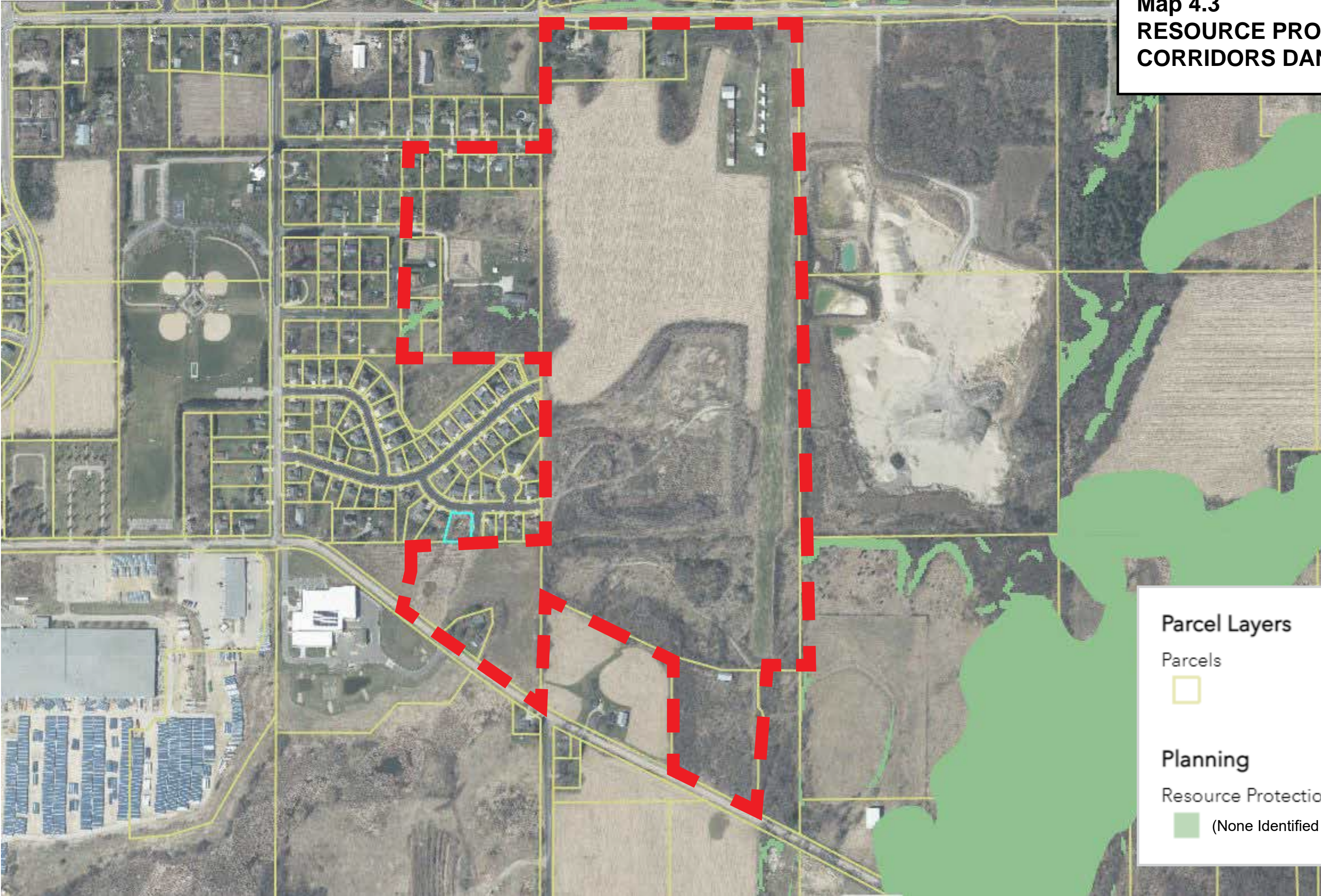
City of Stoughton
Dane County, WI

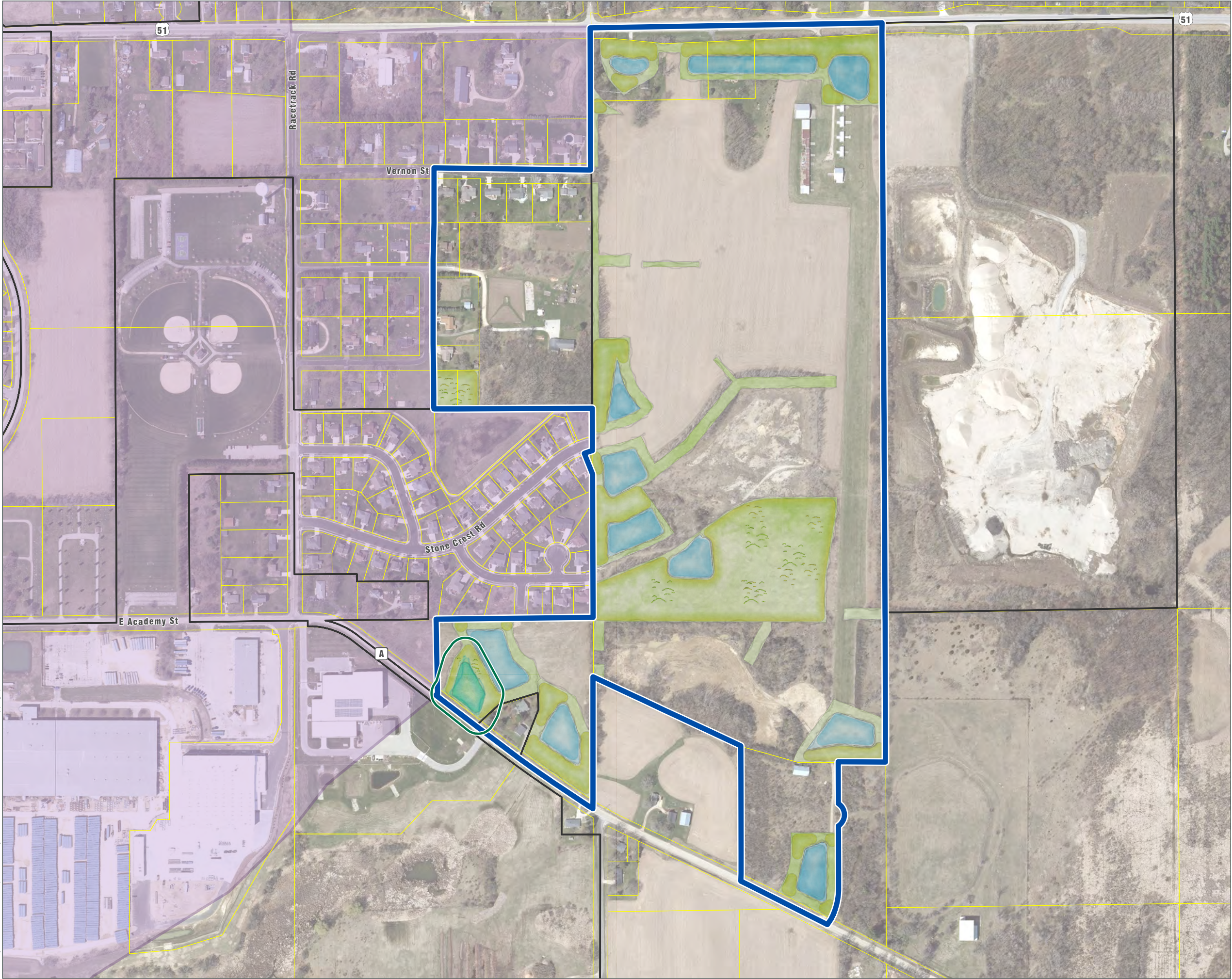
- Urban Service Area
Amendment Boundary
- NRCS Soil Type
- Municipal Boundary
- Parcel Boundary

Data Sources:
Aerial: Dane County (2020)
Contours: Dane County LiDAR (2017)



Map 4.3
RESOURCE PROTECTION
CORRIDORS DANE COUNTY





Map 4.4 PROPOSED ENVIRONMENTAL CORRIDORS

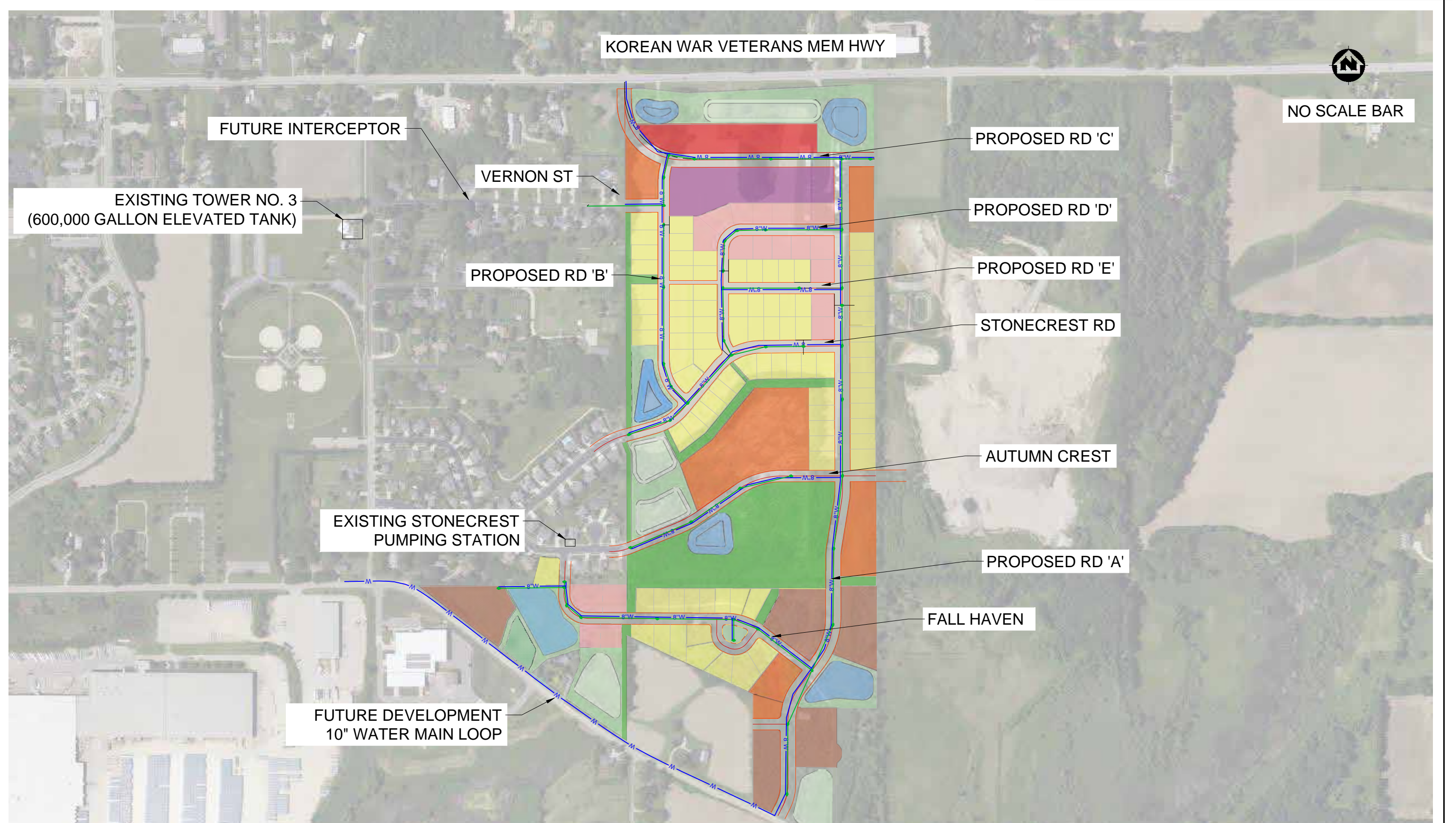
Stonecrest Development

City of Stoughton
Dane County, WI

- Urban Service Area Amendment Boundary
- Existing Urban Service Area
- Municipal Boundary
- Parcel Boundary
- 75-ft Wetland Buffer
- Delineated Wetlands
- Development Outlot
- Proposed Pond

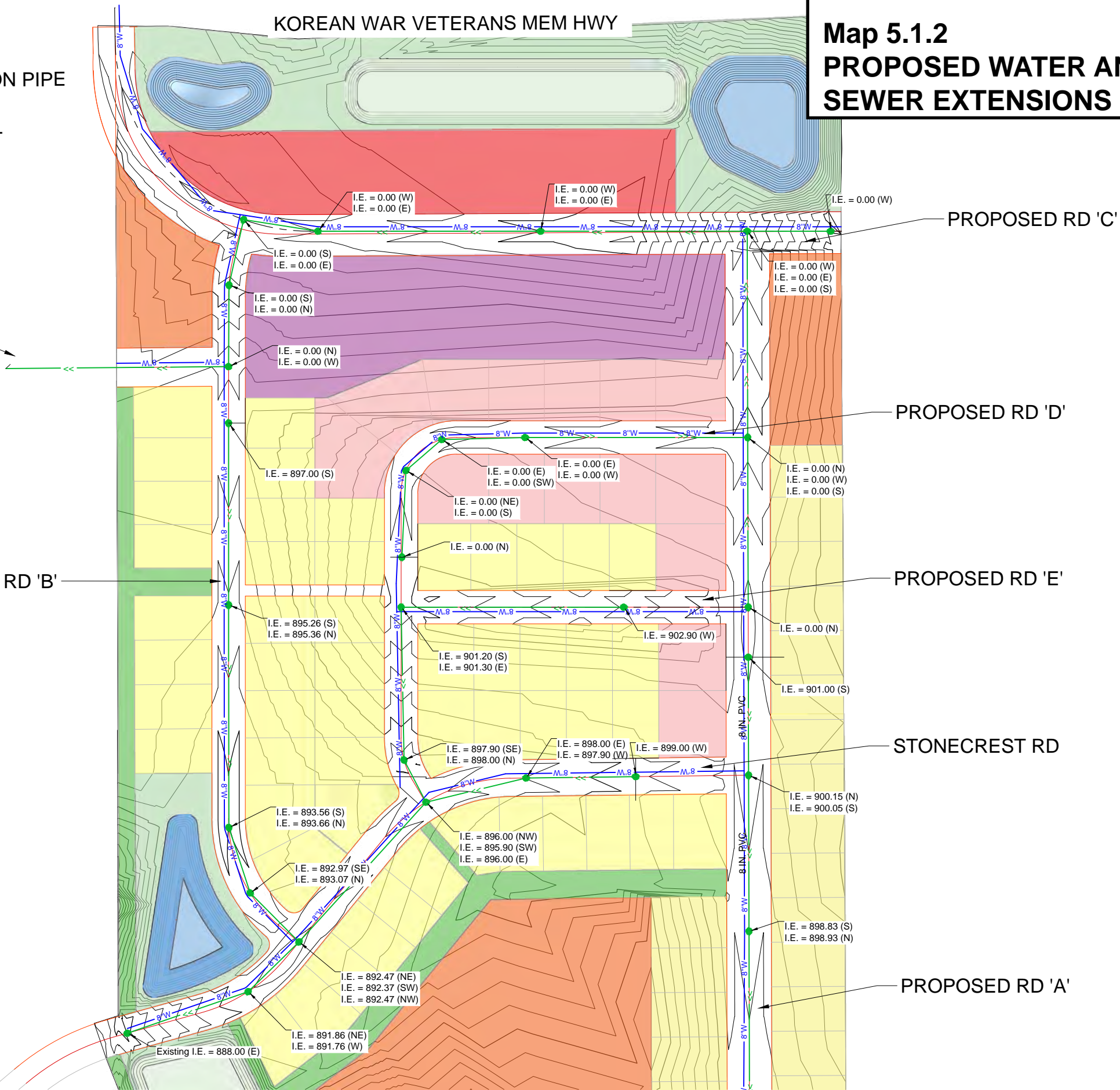
Data Sources:
Aerial: Dane County (2020)
Contours: Dane County LiDAR (2017)

**Map 5.1.1
PROPOSED WATER AND SANITARY
SEWER EXTENSIONS**



GENERAL NOTES:
ALL SANITARY IS 8" @ 0.4% UNLESS NOTED ON PIPE
INVERTS WITH 0.00 ELEVATION ARE TO BE DETERMINED BASED ON FUTURE VERNON ST CONNECTION

Map 5.1.2
PROPOSED WATER AND SANITARY
SEWER EXTENSIONS



PROJECT DATE: 2022	DRAWN BY: JN	NO.	DATE	REVISION	BY
DESIGNED BY: JN					
CHECKED BY: ST					

PLOT DATE: 4/14/2023 1:45 PM, G:\21\21531\21531000\CADD\Construction Documents\21531000 Urban Services Agreement Planset.dwg



ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
www.msa-ps.com
© MSA Professional Services, Inc.

STONECREST DEVELOPMENT
CITY OF STOUGHTON
DANE COUNTY, WISCONSIN

Stonecrest Proposed Utilities North

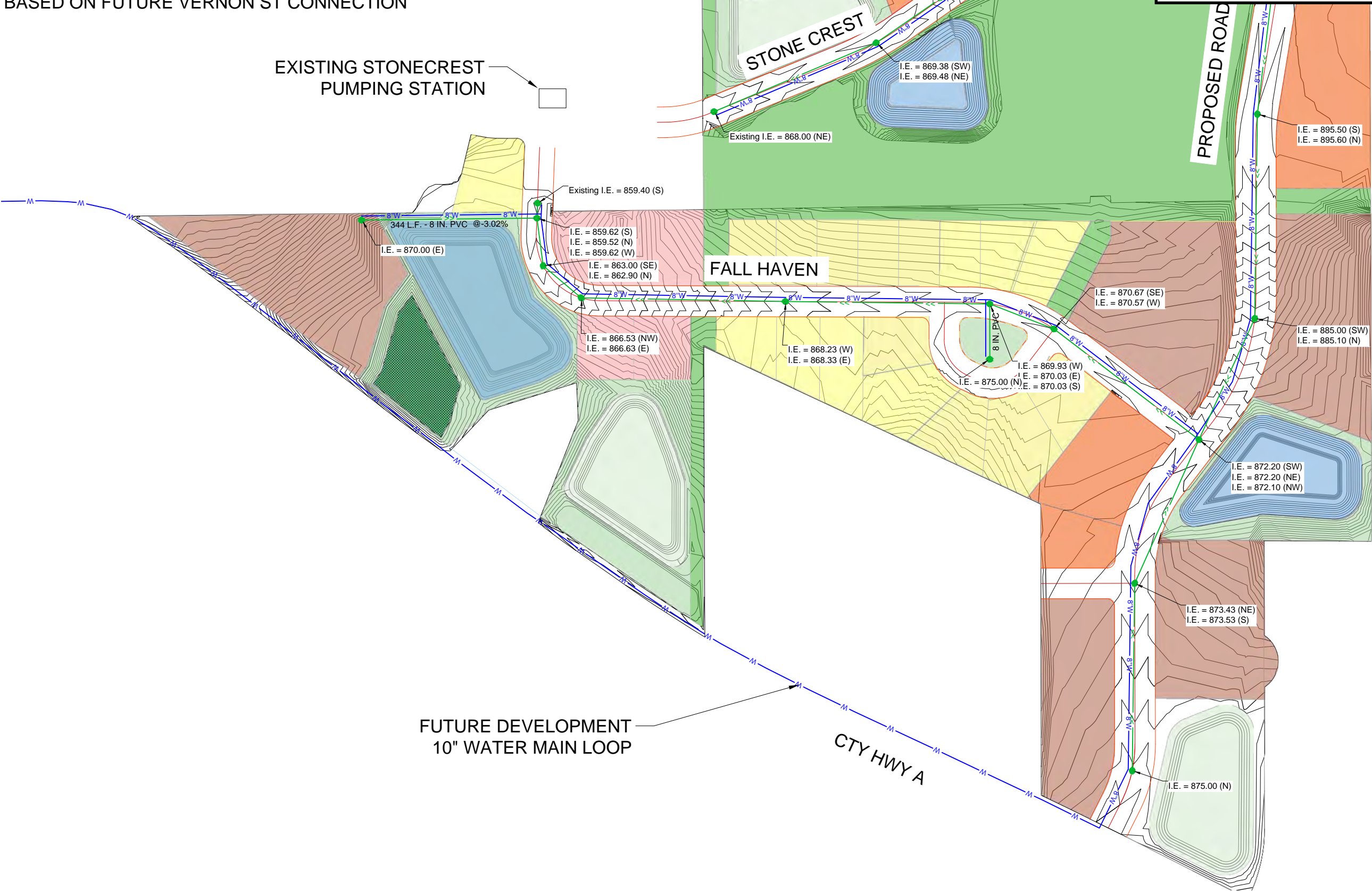
PROJECT NO.
21669000
SHEET
P2

General Notes:

ALL SANITARY MAIN IS 8" @ 0.4% UNLESS NOTED ON PIPE

INVERTS WITH 0.00 ELEVATION ARE TO BE DETERMINED
BASED ON FUTURE VERNON ST CONNECTION

Map 5.1.3
PROPOSED WATER AND SANITARY
SEWER EXTENSIONS



PROJECT DATE: 2022	DRAWN BY: JN	NO.	DATE	REVISION	BY
DESIGNED BY: JN	-	-	-	-	-
CHECKED BY: ST	-	-	-	-	-
PLOT DATE: 4/14/2023 1:45 PM, G:\21\21531\21531000\CADD\Construction Documents\21531000 Urban Services Agreement Planset.dwg					



ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1702 Pankratz St Madison, WI 53704
(608) 242-7779 www.msa-ps.com
© MSA Professional Services, Inc.

STONECREST DEVELOPMENT
CITY OF STOUTTOWN
DANE COUNTY, WISCONSIN

Stonecrest Proposed Utilities South

PROJECT NO.
21669000
SHEET
P3

APPENDIX C:

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 8, 2023

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

Dear Mr. Monsen:

The City of Stoughton is submitting an application to the Capital Area Regional Planning Commission (CARPC) for an amendment to the Stoughton Urban Service Area. The attached document is a copy of the draft submittal.

The proposed amendment would add approximately 127 acres of land to the Stoughton Urban Service Area on the east side of Stoughton. It includes area for the expansion of the Stone Crest Development as well as some properties in the Town that are adjacent to the Stone Crest Development.

Please review the attached application materials. We would be happy to receive any comments or discuss the proposal. 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

Rodney Scheel
Director of Planning & Development

APPENDIX D:
Wetland Delineation Report



Assured Wetland Delineation Report

Matson-Stoughton Parcel

City of Stoughton, Dane County, Wisconsin

August 12, 2020

Project Number: 20200346

Matson-Stoughton Parcel

City of Stoughton, Dane County, Wisconsin

August 12, 2020

Prepared for:

Mr. Tom Matson

Matson Developers Inc.

1601 E. Main Street

Stoughton, WI 53589

608-873-8700

tmatson@matsonhomes.com

Prepared by:

Heartland Ecological Group, Inc.

506 Springdale Street

Mount Horeb, WI 53572

608-490-2450

www.heartlandecological.com



Jeff Kraemer, Principal



Scott Fuchs, Environmental Technician

Table of Contents

1.0	Introduction	4
2.0	Methods.....	5
2.1	Wetlands	5
3.0	Results and Discussion	6
3.1	Desktop Review	6
	Table 1. Summary of NRCS Mapped Soils within the Study Area	7
3.2	Field Review	8
	Table 2. Summary of Wetlands Identified within the Study Area	9
3.3	Other Considerations	10
4.0	Conclusion	11
5.0	References	13

Appendix A | Figures

Appendix B | WETS Analysis

Appendix C | Wetland Determination Data Sheets

Appendix D | Site Photographs

Appendix E | Delineator Qualifications

Appendix F | NAIP Aerial Imagery



1.0 Introduction

Heartland Ecological Group, Inc. ("**Heartland**") completed an assured wetland determination and delineation on the Matson-Stoughton Parcel on July 30, 2020 at the request of Matson Developers Inc. Fieldwork was completed by Jeff Kraemer, an assured delineator qualified via the Wisconsin Department of Natural Resources (WDNR) Wetland Delineation Assurance Program (Appendix E, Qualifications). The 10.03-acre site (the "Study Area") is northwest of the intersection of County Highway A and Collins Road, in the southeast ¼ of Section 9, T5N, R11E, City of Stoughton, Dane County, WI (Figure 1, Appendix A). The purpose of the wetland delineation was to determine the location and extent of wetlands within the Study Area.

Two (2) wetland areas totaling approximately 1.65 acres were delineated and mapped within the Study Area (Figure 6, Appendix A). Wetlands discussed in this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corps of Engineers (USACE), state regulation under the jurisdiction of the WDNR, and local zoning authorities. Heartland recommends this report be submitted to local authorities, the WDNR, and USACE for final jurisdictional review and concurrence.



2.0 Methods

2.1 Wetlands

Wetlands were determined and delineated using the criteria and methods described in the USACE Wetlands Delineation Manual, T.R. Y-87-1 ("1987 Corps Manual") and the applicable *Regional Supplement to the Corps of Engineers Wetland Delineation Manual*. In addition, the *Guidance for Submittal of Delineation Reports to the St. Paul District USACE and the WDNR* (WDNR, 2015) was followed in completing the wetland delineation and report.

Determinations and delineations utilized available resources including the U.S. Geological Survey's (USGS) *WI 7.5 Minute Series (Topographic) Map* (Figure 2, Appendix A), the **Natural Resource Conservation Service's (NRCS)** Soil Survey Geographic Database (SSURGO), U.S. **Department of Agriculture's (USDA)** *Web Soil Survey* (Figure 3, Appendix A), the Wisconsin Department of Natural Resources' *Surface Water Data Viewer's* wetland indicator data **layer (Figure 4, Appendix A)**, the **WDNR's Wisconsin Wetland Inventory** data layer (Figure 5, Appendix A), and aerial imagery available through the **USDA Farm Service Agency's (FSA)** National Agriculture Imagery Program (NAIP). The USGS *National Hydrography Dataset* is included on Figures 2 and 5, Appendix A.

Wetland determinations were completed on-site at sample points, often along transects, using the three (3) criteria (vegetation, soil, and hydrology) approach per the 1987 Corps Manual and the Regional Supplement. Procedures in these sources were followed to demonstrate that, under normal circumstances, wetlands were present or not present based on a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology.

Recent weather conditions influence the visibility or presence of certain wetland hydrology indicators. An assessment of recent precipitation patterns helps to determine if climatic/hydrologic conditions were typical when the field investigation was completed. Therefore, a review of the antecedent precipitation in the three (3) months leading up to the field investigation was completed. Using a WETS analysis developed by the NRCS, the amounts of precipitation in these three (3) months were compared to averages and standard deviation thresholds over the past 30 years to generally represent if conditions encountered during the investigation were normal, wet, or dry. Recent precipitation events



in the week prior to the investigation were considered while interpreting wetland hydrology indicators. In some cases, the Palmer Drought Index was checked for long-term drought or moist conditions (NOAA, 2018).

The uppermost wetland boundary and sample points were identified and marked with wetland flagging and located with a Global Positioning System (GPS) capable of sub-meter accuracy. In some cases, wetland flagging was not utilized to mark the boundary and the location was only recorded with a GPS unit, particularly in active agricultural areas. The GPS data was then used to map the wetlands using ESRI ArcMap™ 10.6 software.

3.0 Results and Discussion

3.1 Desktop Review

Climatic Conditions

According to the WETS analysis using the previous three (3) months of precipitation data, conditions encountered at the time of the fieldwork were expected to be normal for the time of year (Appendix B). In the two weeks prior to the field investigation there was 0.31 inches of precipitation, which is below average for the month of July. Conditions on-site were interpreted to be approximately normal for the time of year. The Palmer Drought Index was checked on line and the long-term conditions at the time of the fieldwork were in the extremely moist range. Fieldwork was completed within the dry-season based on long-term regional hydrology data utilized in the WebWIMP Climatic Water Balance web site.

General Topography and Land Use

The topography within the Study Area was generally moderately sloping downhill towards a draw / swale present in the central portion of the Study Area and a low-lying area in the southeastern portion of the Study Area. A constructed stormwater basin is also present within the lobe extending north along the northern portion of the Study Area. A topographic high of approximately 900 feet above mean sea level (msl) is present in the northwestern corner of the Study Area, and a topographic low of approximately 863 feet above msl is present within the central draw / swale (Figures 2 and 6, Appendix A). Land uses within the Study Area and surrounding areas are primarily residential homes, woodlands and wetlands,



and the Stoughton Trailers industrial facility, located to the west. General drainage is to the south towards a culvert that runs underneath County Highway A.

Soil Mapping

Soils mapped by the NRCS Soil Survey within the Study Area and their hydric status are summarized in Table 1. Wetlands identified during the field investigation are located primarily within areas mapped as non-hydric soils (Figures 3 and 4, Appendix A).

Table 1. Summary of NRCS Mapped Soils within the Study Area

Soil symbol: Soil Unit Name	Soil Unit Component	Soil Unit Component Percentage	Landform	Hydric status
BbA: Batavia silt loam, gravelly substratum, 0 to 2 percent slopes	Batavia-Gravelly substratum	100	Outwash plains	No
BbB: Batavia silt loam, gravelly substratum, 2 to 6 percent slopes	Batavia-Gravelly substratum	100	Outwash plains	No
BoD2: Boyer sandy loam, 12 to 20 percent slopes, eroded	Boyer	100	Outwash plains	No
DsC2: Dresden silt loam, 6 to 12 percent slopes, eroded	Dresden-Eroded	85-95	Plains	No
	Casco-Eroded	3-8	Moraines	No
	Kegonsa	2-7	Plains	No
KeB: Kegonsa silt loam, 2 to 6 percent slopes	Kegonsa	100	Outwash plains	No
RaA: Radford silt loam, 0 to 3 percent slopes	Radford	80-95	Flood plains, drainageways	No
	Otter	2-8	Flood plains, drainageways	Yes
	Sable	2-5	Depressions	Yes
	Sebewa	1-4	Depressions	Yes
	Drummer	0-3	Depressions	Yes
TrB: Troxel silt loam, 0 to 3 percent slopes	Troxel-Wet substratum	80-90	Moraines, depressions	No
	Elburn	5-11	Drainageways	No
	Plano	5-9	Till plains	No



Wetland Mapping

The Wisconsin Wetlands Inventory (WWI) mapping (Figure 5, Appendix A) does not depict wetlands as being present within the Study Area.

Aerial Photography

A formal off-site analysis was not completed, however available NAIP imagery from 2004 through 2018 were reviewed to assist in understanding the recent history of the Study Area and to evaluate for general wetland signatures. This imagery showed that the Study Area is occasionally farmed, but most often left fallow. The Study Area was only farmed in two of the nine years of available NAIP imagery from the period of 2004-2018. Therefore, methods described in Chapter 5 of the Regional Supplement were not utilized during the wetland determination and delineation. Wetland signatures were consistently visible with the central draw / swale during the review of aerial photography.

3.2 Field Review

Two (2) wetlands were identified and delineated within the Study Area. Wetland determination data sheets (Appendix C) were completed at 6 sample points that were representative of the wetland and upland conditions near the boundary and where potential wetlands may be present based on the desktop review and field reconnaissance. Appendix D provides photographs, typically at the sample point locations of the wetlands and adjacent uplands. The wetland boundary and sample point locations are shown on Figure 6 (Appendix A) and the wetlands are summarized in Table 2 and detailed in the following sections.



Matson Developers Inc.
Matson-Stoughton Parcel
Project #: 20200346
August 12, 2020

Table 2. Summary of Wetlands Identified within the Study Area

Wetland ID	Wetland Description	*Surface Water Connections	*NR151 Protective Area	Acreage (on-site)
W-1	Wet Meadow	Contiguous with wetlands south of the Study Area. Potentially contiguous with Waters of the U.S.	Less susceptible, 10-30 feet	1.55
W-2	Shallow Marsh Stormwater Basin	Isolated	Less susceptible, 10-30 feet	0.11
*Classification based on Heartland's professional opinion. Jurisdictional authority of wetland and waterway protective areas under NR 151 lies with the WDNR. Local zoning authorities may have additional restrictions. USACE has authority for determining federal jurisdiction of wetlands and waterways.				1.66

Wetland 1 (W-1)

Wetland 1 (W-1) is a 1.55-acre disturbed wet meadow located within a low-lying draw / swale present in the central portion of the Study Area. The wetland is occasionally farmed (in 2 of the 9 recent NAIP images reviewed) but was most often observed to be left fallow, along with the remainder of the Study Area.

Dominant vegetation observed in W-1 included barnyard grass (*Echinochloa crus-galli*, FAC) and reed canary grass (*Phalaris arundinacea*, FACW).

The Depleted Matrix (F3) hydric soil indicator was observed at the sample point completed within W-1, which is inconsistent with the NRCS-mapped Troxel silt loam soil type.

No primary wetland hydrology indicators were observed at the sample point completed within W-1; however, the secondary wetland hydrology indicators of Geomorphic Position (D2) and a positive FAC-Neutral Test (D5) were observed.

Wetland W-1 is contiguous with additional wetlands located south of the Study Area via a culvert underneath County Highway A. These offsite wetlands may have a surface connection to a Water of the U.S., but such a connection is inconspicuous. The boundary of W-1 followed a moderately defined topographic break and transition between upland and wetland vegetation.



Wetland 2 (W-2)

Wetland W-2 is a 0.11-acre shallow marsh present within a constructed stormwater basin along the northern boundary of the Study Area. The stormwater basin appears to have been constructed in 2004 or 2005 based on the review of NAIP imagery (Appendix F). W-2 likely meets the definition of “artificial”.

Dominant vegetation observed in W-2 consisted entirely of hybrid cattail (*Typha x glauca*, OBL).

The Depleted Matrix (F3) hydric soil indicator was observed at the sample point completed within W-2. This is inconsistent with the NRCS-mapped Troxel silt loam; however, not unexpected due to the wetland’s artificial nature.

No primary wetland hydrology indicators were noted in W-2; however, the secondary wetland hydrology indicators of Geomorphic Position (D2) and a positive FAC-Neutral Test (D5) were observed.

The boundaries of W-2 followed a well-defined topographic break due to its constructed nature. W-2 was completely surrounded by a constructed berm.

3.3 Other Considerations

This report is limited to the identification and delineation of wetlands within the Study Area. Other regulated environmental resources that result in land use restrictions may be present within the Study Area that were not evaluated by Heartland (e.g. navigable waterways, floodplains, cultural resources, and threatened or endangered species).

Wisconsin Act 183 provides exemptions to permitting requirements for certain nonfederal wetlands. Nonfederal wetlands are wetlands that are not subject to federal jurisdiction. Exemptions apply to projects in urban areas with wetland impacts up to 1-acre per parcel. An urban area is defined as an incorporated area; an area within ½ mile of an incorporated area; or an area served by a sewerage system. Exemptions for nonfederal wetlands also apply to projects in rural areas with wetland impacts up to three (3) acres per parcel. Exemptions in rural areas only apply to structures with an agricultural purpose such as buildings, roads, and driveways. The determination of federal and nonfederal wetlands



MUST be made by the USACE through an Approved Jurisdictional Determination (AJD). This report may be submitted to the USACE to assist with their determination.

Wis. Adm. Code NR 151 ("**NR 151**") requires that a "**protective area**" (buffer) be determined from the Ordinary High-Water Mark (OHWM) of lakes, streams and rivers, or at the delineated boundary of wetlands. Per NR 151.12, the protective area width for "less susceptible" wetlands is determined by using 10% of the average wetland width, no less than 10 feet or more than 30 feet. "Moderately susceptible" wetlands, lakes, and perennial and intermittent streams identified on recent mapping require a protective area width of 50 feet; while "**highly susceptible wetlands**" **are associated with** outstanding or exceptional resource waters in areas of special natural resource interest and require protective area width of 75 feet. Table 2 above lists the potential wetland buffers per NR 151 for each wetland identified based on Heartland's professional opinion. Please note that jurisdictional authority on wetland and waterway protective areas under NR 151 lies with the WDNR. Local zoning authorities and regional planning organizations may have additional land use restrictions within or adjacent to wetlands.

4.0 Conclusion

Heartland completed an assured wetland determination and delineation within the Matson-Stoughton Parcel on July 30, 2020 at the request of Matson Developers Inc. Fieldwork was completed by Jeff Kraemer, an assured delineator qualified via the WDNR Wetland Delineation Assurance Program. The Study Area lies in Section 9, T5N, R11E, City of Stoughton, Dane County, WI.

Two (2) wetland areas were delineated and mapped within the 10.03-acre Study Area. The wetlands, which may be classified as a wet meadow and a shallow marsh within a constructed stormwater basin, total approximately 1.65 acres within the Study Area.

Wetlands and waterways discussed in this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corps of Engineers (USACE), state regulation under the jurisdiction of the WDNR, and the local zoning authority. Heartland recommends this report be submitted to the USACE for final jurisdictional review and concurrence. Review by local



authorities may be necessary for determination of any applicable zoning and setback restrictions.

Heartland recommends that all applicable regulatory agency reviews and permits are obtained prior to beginning work within the Study Area or within or adjacent to wetlands or waterways. Heartland can assist with evaluating the need for additional environmental reviews, surveys, or regulatory agency coordination in consideration of the proposed activity and land use as requested but is outside of the scope of the wetland delineation.

Experienced and qualified professionals completed the wetland determination and delineation using standard practices and professional judgment. Wetland boundaries may be affected by conditions present within the Study Area at the time of the fieldwork. All final decisions on wetlands and their boundaries are made by the USACE, the WDNR, and/or sometimes a local unit of government. Wetland determination and boundary reviews by regulatory agencies may result in modifications to the findings presented to the Client. These modifications may result from varying conditions between the time the wetland delineation was completed and the time of the review. Factors that may influence the findings may include but not limited to precipitation patterns, drainage modifications, changes or modification to vegetation, and the time of year.



Matson Developers Inc.
Matson-Stoughton Parcel
Project #: 20200346
August 12, 2020

5.0 References

Eggers, S. D., & D. M. Reed. (2014). *Wetland Plants and Plant Communities of Minnesota and Wisconsin* (V. 3.1). U.S. Army Corps of Engineers, Regulatory Branch, St. Paul, MN District. See: <http://www.mvp.usace.army.mil/>.

Environmental Laboratory (1987). *Corps of Engineers Wetlands Delineation Manual*, Tech. Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Lichvar, R.W., D. L. Banks, W. N. Kirchner, and N.C. Melvin. (2016). *The National Wetland Plant List: 2016 wetland ratings*. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X. See: <http://www.phytoneuron.net/>.

Midwestern Regional Climate Center. (2014). *cli-MATE* [climate data access tool]. See: <http://mrcc.isws.illinois.edu/CLIMATE/>.

National Oceanic and Atmospheric Administration (NOAA). (2015) Regional Climate Centers Applied Climate Information System. *WETS table*. See: <http://agacis.rcc-acis.org>.

NOAA National Center for Environmental Information. (2018) *Historic Palmer Drought Indices*. See: <https://www.ncdc.noaa.gov/temp-and-precip/drought/historical-palmers/psi/201512-201601>.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture ([USDA](http://www.usda.gov)). (2018). *Soil Survey Geographic (SSURGO) Database*. See: <http://websoilsurvey.nrcs.usda.gov/> or <http://datagateway.nrcs.usda.gov/>.

Soil Survey Staff, Natural Resources Conservation Service, USDA. (2018). *Web Soil Survey*. See: <http://websoilsurvey.nrcs.usda.gov/>.

U.S. Army Corps of Engineers (USACE) and Wisconsin Department of Natural Resources (WDNR). (March 2015). **"Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers and the Wisconsin Department of Natural Resources"**. See: <http://dnr.wi.gov/topic/wetlands/documents/FinalWisconsinDelineationGuidance.pdf>.



USACE. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*. (2011). ed. J.S. Wakely, R.W. Lichvar, C.V. Nobel, and J. F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

USACE St. Paul District & Minnesota Board of Water & Soil Resources. (July 2016). *Guidance for Offsite Hydrology/Wetland Determinations*. See:
<http://www.mvp.usace.army.mil/Missions/Regulatory/Delineation/>.

United States Department of Agriculture (USDA), Farm Service Agency (FSA). (2004, 2005, 2006, 2008, 2010, 2013, 2015, 2017, 2018) [Dane County, Wisconsin aerial photographs]. National Agriculture Imagery Program (NAIP). Salt Lake City, UT: Aerial Photography Field Office.

USDA, Natural Resource Conservation Service (NRCS). (2010). *Field Indicators of Hydric Soils in the United States*, Version 8.2. L.M. Vasilas, G.W. Hurt, and C.V. Noble (eds.). USDA, NRCS in cooperation with the National Technical Committee for Hydric Soils.

United States Department of the Interior (USDI), U.S. Geological Survey (USGS). *Wisconsin 7.5 Minute Series (Topographic) Maps*. 1:24,000. Reston, VA.

USDI, USGS. National Hydrography Dataset (NHD) 24K scale data. See:
<https://nhd.usgs.gov/>.

Wetland Training Institute, Inc (WTI). (2010). *Pocket guide to hydric soil field indicators*. (Robert J. Pierce, Ed.). (7th ed.). Glenwood, NM: Wetland Training Institute, Inc.

Willmott, C.J. and K. Matsuura. (2016). *Web-Based Water-Budget Interactive Modeling Program (WebWIMP)*. University of Delaware Department of Geography. Newark, DE. See: climate.geog.udel.edu/~wimp/.

WDNR, Surface Water Data Viewer Interactive Web-mapping Tool. (2018). See: <https://dnr.wi.gov/topic/surfacewater/swdv/>.



Matson Developers Inc.
Matson-Stoughton Parcel
Project #: 20200346
August 12, 2020

WDNR, Division of Water. (2010). [24k hydrography geospatial data layer]. See:
ftp://dnrftp01.wi.gov/geodata/hydro_24k/.

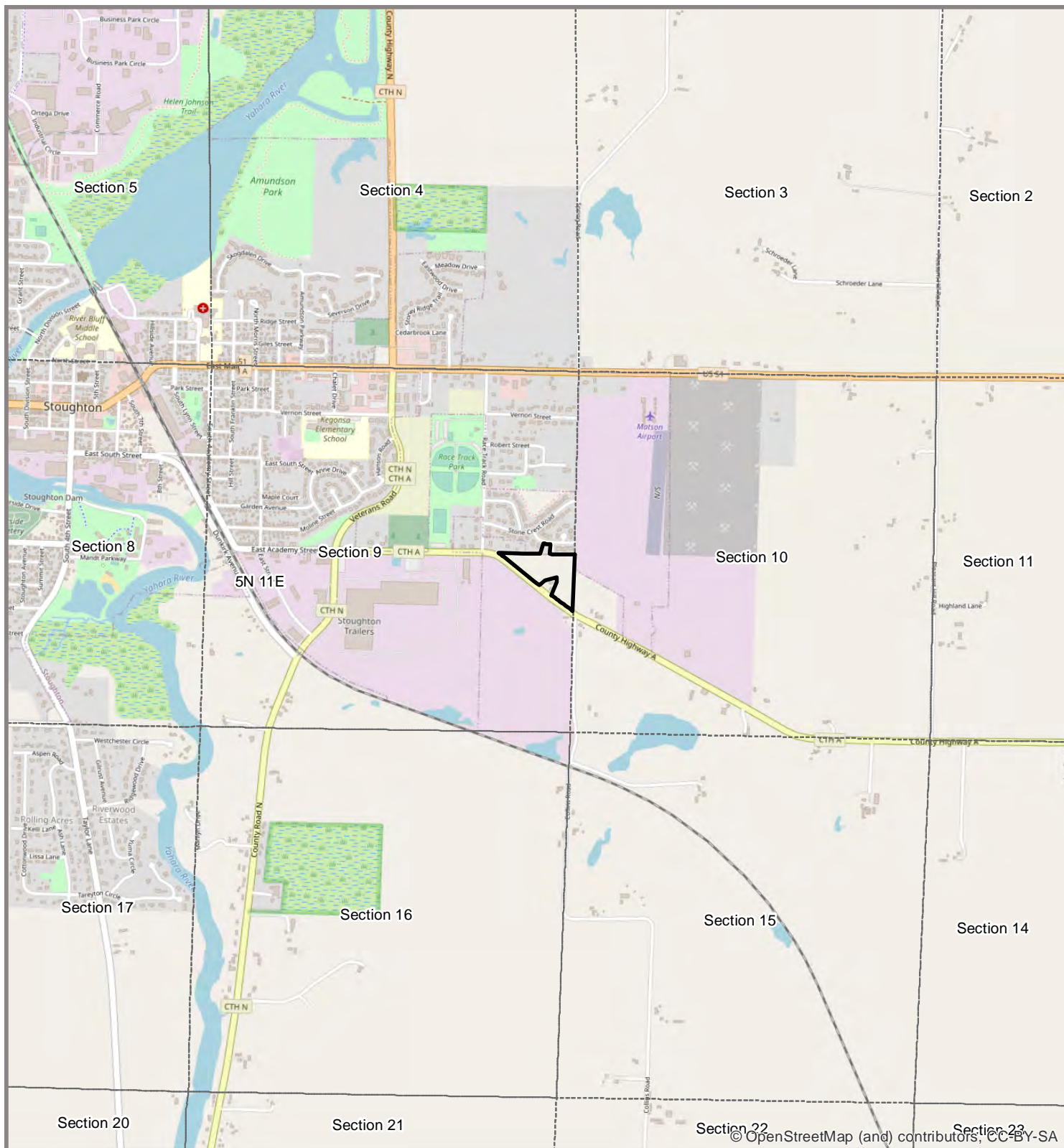
WDNR, WIDNR Open Data. (2019). [Wisconsin Wetland Inventory Geodatabase]. See:
<https://www.arcgis.com/home/item.html?id=16119ac2100c4286ab8219bf03377ebf>.

Woodward, D.E. ed. (1997). *Hydrology Tools for Wetland Determination*, WETS Analysis, Chapter 19. Engineering Field Handbook. USDA, NRCS, Fort Worth, TX.

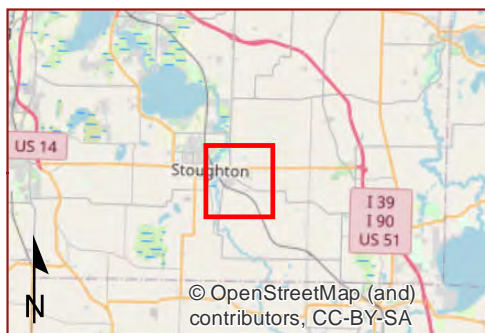


Matson Developers Inc.
Matson-Stoughton Parcel
Project #: 20200346
August 12, 2020

Appendix A | Figures



© OpenStreetMap (and) contributors, CC-BY-SA



© OpenStreetMap (and) contributors, CC-BY-SA

- Study Area (10.03 ac)
- Township
- Section

0 1,000 2,000
Ft

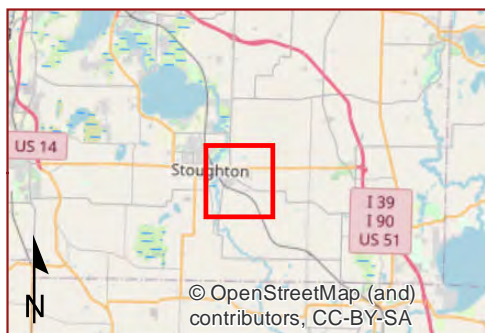
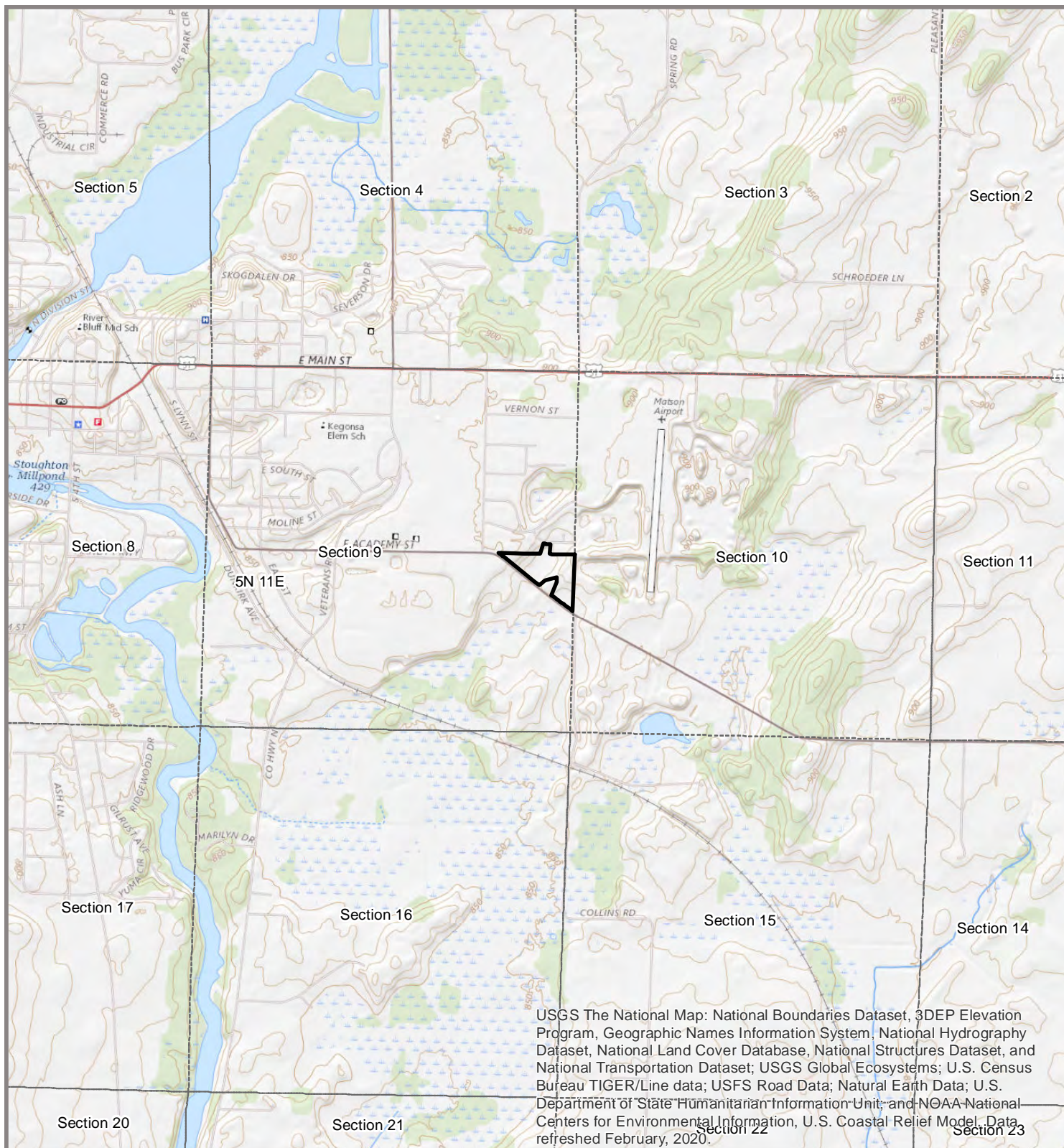
Heartland
ECOLOGICAL GROUP INC

Figure 1. Project Location

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

OpenStreetMap
Data: ESRI

8/12/2020



- Study Area (10.03 ac)
- Township
- Section

0 1,000 2,000
Ft

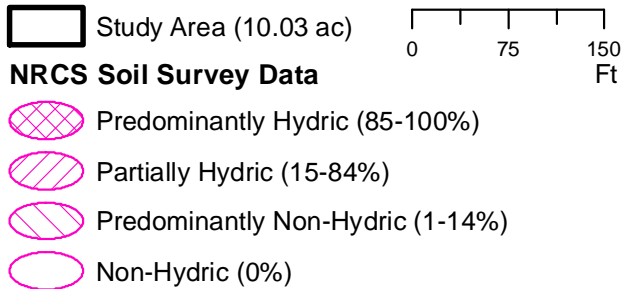
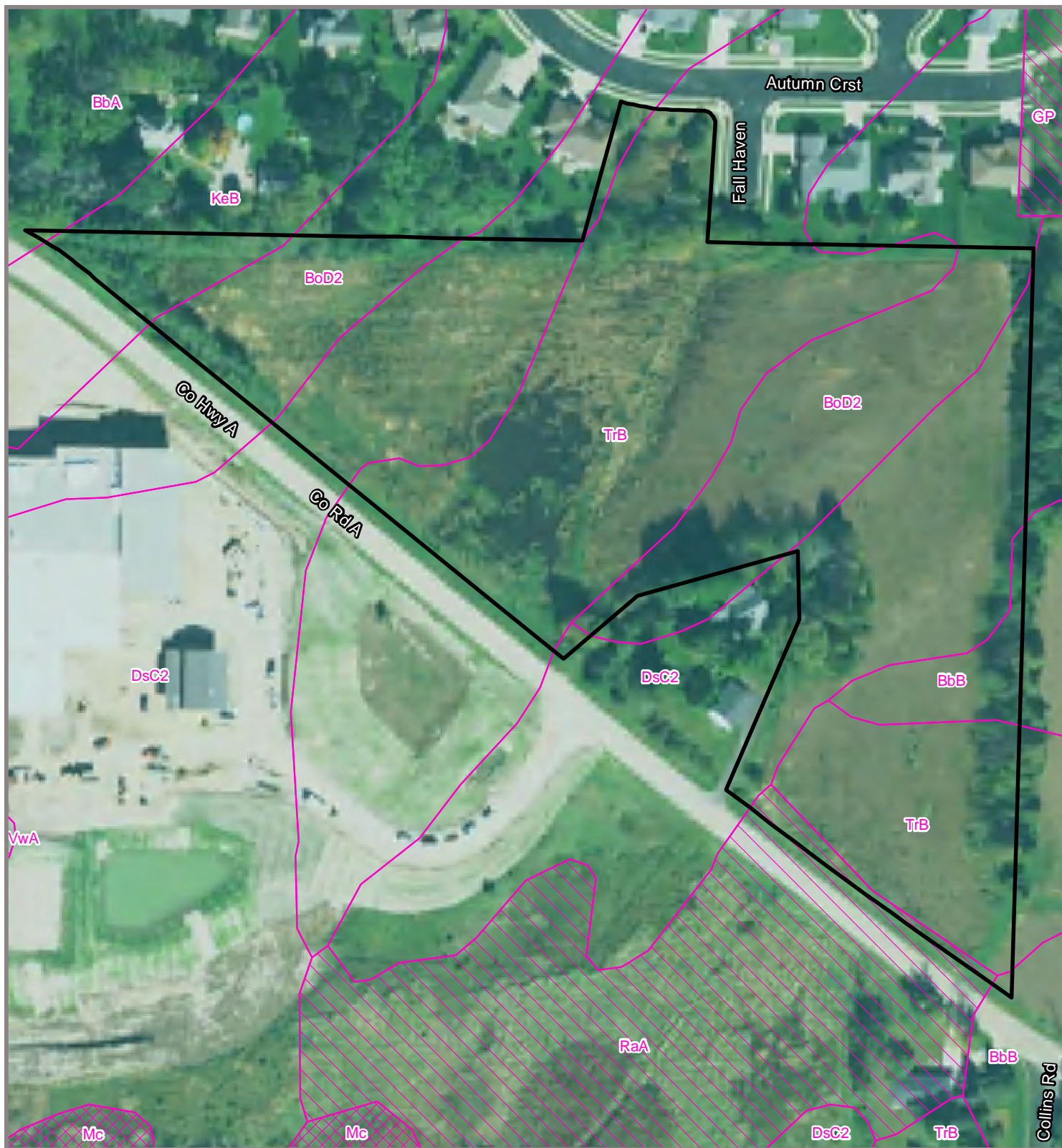
Heartland
ECOLOGICAL GROUP INC

Figure 2. USGS Topography

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

USGS Topo
Data: USGS

8/12/2020



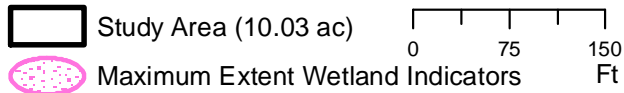
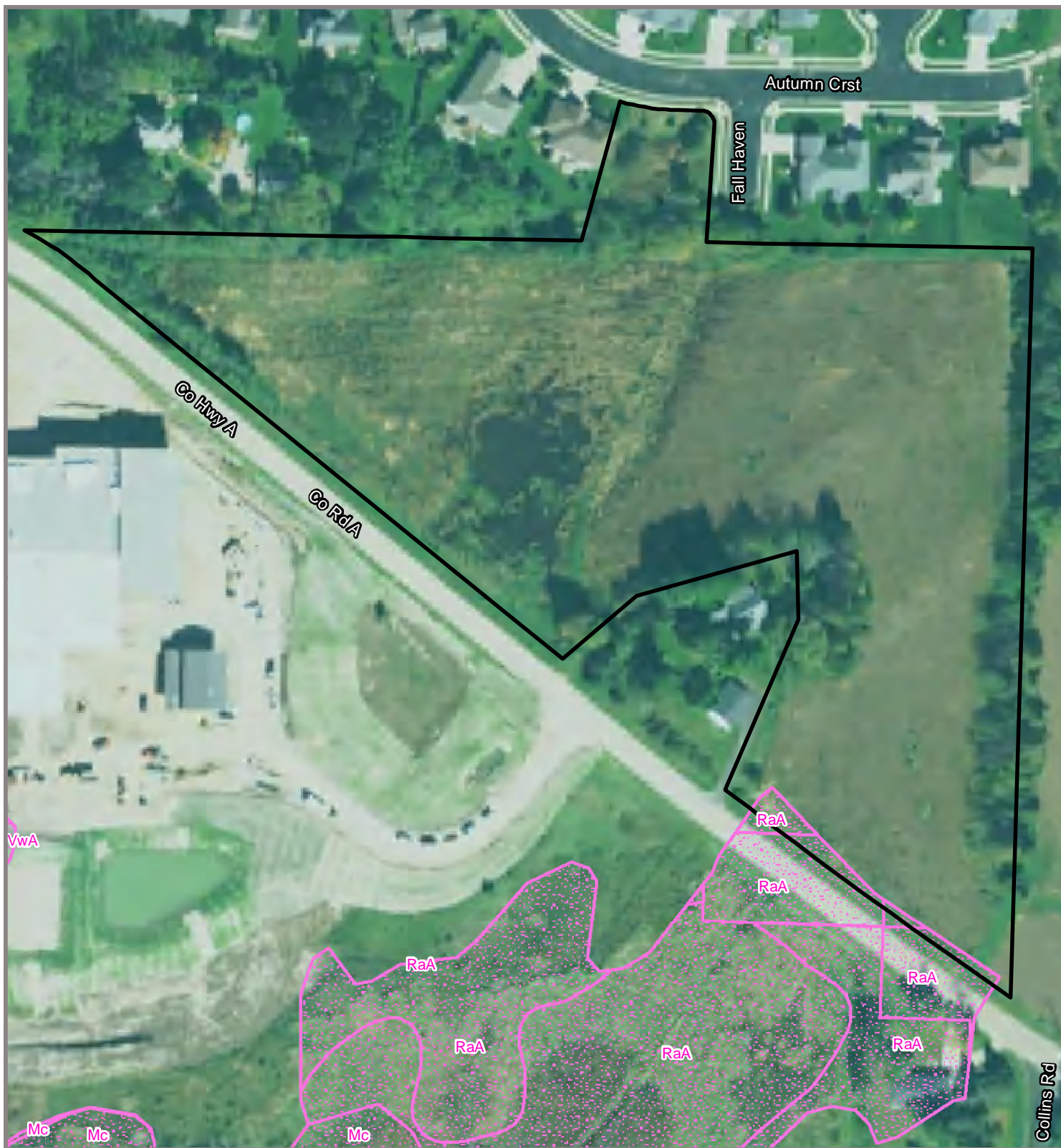
Heartland
ECOLOGICAL GROUP INC

**Figure 3. NRCS
Hydric Soils**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2018 NAIP
Data: NRCS

8/12/2020



Heartland
ECOLOGICAL GROUP INC

**Figure 4. SWDV
Wetland Indicators**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2018 NAIP
Data: WDNR

8/12/2020



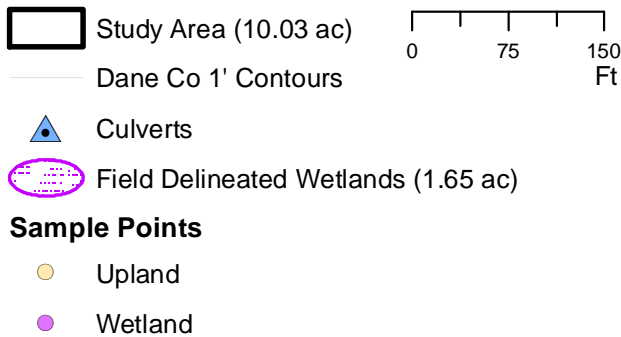
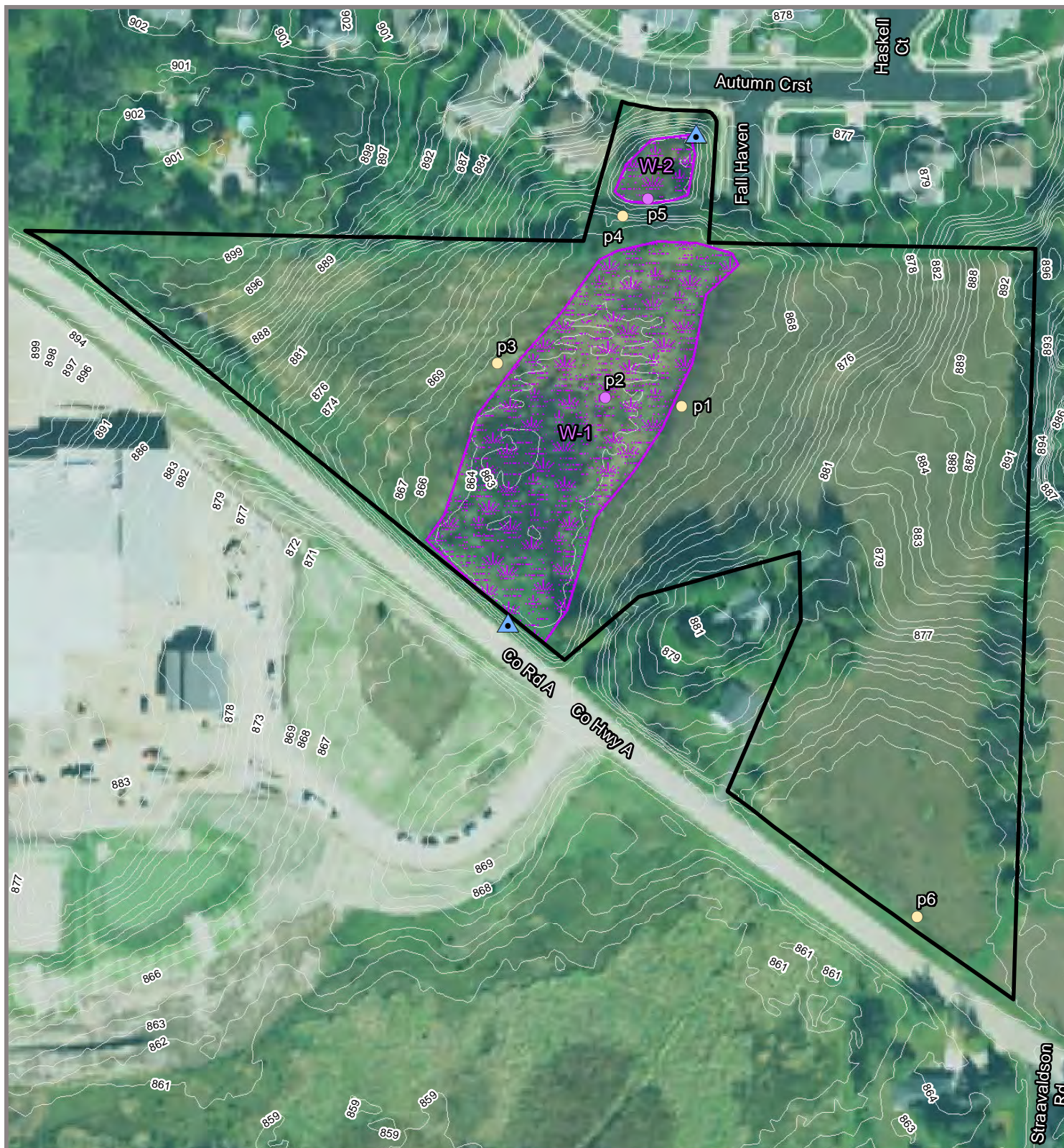
- Study Area (10.03 ac)
 - WWI Wetlands
 - ~ NHD Waterway (No Features in Map Extent)
- 0 75 150
Ft

Heartland
ECOLOGICAL GROUP INC

Figure 5. Wisconsin Wetland Inventory

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2018 NAIP
Data: WDNR, USGS 8/12/2020



Heartland
ECOLOGICAL GROUP INC

Figure 6. Field Delineated Wetlands

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2018 NAIP

Data: Dane Co

7/31/2020



Matson Developers Inc.
Matson-Stoughton Parcel
Project #: 20200346
August 12, 2020

Appendix B | WETS Analysis

WETS Analysis Worksheet

Project Name: Matson-Stoughton Parcel
 Project Number: 20200346
 Period of interest: May - July 2020
 Station: Stoughton
 County: Dane County

Long-term rainfall records (from WETS table)

	Month	3 years in 10 less than	Normal	3 years in 10 greater than
1st month prior:	July	3.03	3.99	4.65
2nd month prior:	June	3.20	5.27	6.39
3rd month prior:	May	2.98	4.29	5.11
Sum =		13.55		

Site determination

Site Rainfall (in)	Condition Dry/Normal*/Wet	Condition** Value	Month Weight	Product
3.23	Normal	2	3	6
4.34	Normal	2	2	4
4.60	Normal	2	1	2
Sum =	12.17		Sum*** =	12

*Normal precipitation with 30% to 70% probability of occurrence

Determination: ☐ Wet
☐ Dry
☒ Normal

**Condition value:

Dry = 1
 Normal = 2
 Wet = 3

***If sum is:

6 to 9 then period has been drier than normal
 10 to 14 then period has been normal
 15 to 18 then period has been wetter than normal

Precipitation data source: Midwest Regional Climate Center, cli-MATE: MRCC Application Tools Environment

Reference: Donald E. Woodward, ed. 1997. *Hydrology Tools for Wetland Determination*, Chapter 19. Engineering Field Handbook. U.S. Department of Agriculture, Natural Resources Conservation Service, Fort Worth, TX.

Date	PPT (inches)
07/17/20	0.00
07/18/20	0.00
07/19/20	0.05
07/20/20	0.00
07/21/20	0.00
07/22/20	0.00
07/23/20	0.00
07/24/20	0.00
07/25/20	0.00
07/26/20	0.00
07/27/20	0.26
07/28/20	0.00
07/29/20	0.00
07/30/20	0.00
Total	0.31



Matson Developers Inc.
Matson-Stoughton Parcel
Project #: 20200346
August 12, 2020

Appendix C | Wetland Determination Data Sheets

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Matson-Stoughton Parcel City/County: C Stoughton/Dane Co Sampling Date: 7/30/2020
 Applicant/Owner: Matson Homes State: WI Sampling Point: P1
 Investigator(s): Jeff Kraemer, Heartland Ecological Group Section, Township, Range: T5N, R11E, S09
 Landform (hillside, terrace, etc.): Sideslope Local relief (concave, convex, none): None/Linear Slope %: 5
 Subregion (LRR or MLRA): LRR K Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Troxel silt loam (TrB) NWI classification: N/A

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 <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) A WETS analysis was conducted and indicates that conditions are normal for the time of year. In the two weeks prior to the field investigation there was 0.31 inches of precipitation, which is below average for July. Site consists of old field that has only been farmed in two of the last nine years for which aerial imagery is available - interpreted to be normal circumstances. Sample point recorded east of the wet meadow draw/swale running through the central portion of the site.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ 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 <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No wetland hydrology indicators observed.		

VEGETATION – Use scientific names of plants.

 Sampling Point: P1

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: right;">Total % Cover of:</td> <td style="width:50%; text-align: left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>6</u></td> <td>x 2 = <u>12</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>83</u></td> <td>x 4 = <u>332</u></td> </tr> <tr> <td>UPL species <u>33</u></td> <td>x 5 = <u>165</u></td> </tr> <tr> <td>Column Totals: <u>127</u> (A)</td> <td><u>524</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.13</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>6</u>	x 2 = <u>12</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>83</u>	x 4 = <u>332</u>	UPL species <u>33</u>	x 5 = <u>165</u>	Column Totals: <u>127</u> (A)	<u>524</u> (B)	Prevalence Index = B/A = <u>4.13</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>6</u>	x 2 = <u>12</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>83</u>	x 4 = <u>332</u>																			
UPL species <u>33</u>	x 5 = <u>165</u>																			
Column Totals: <u>127</u> (A)	<u>524</u> (B)																			
Prevalence Index = B/A = <u>4.13</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15ft</u>)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5ft</u>)																				
1. <u>Solidago canadensis</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>	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 <u> </u> No <u>X</u>																
2. <u>Bromus inermis</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Poa pratensis</u>	<u>20</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Solidago gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Rumex crispus</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
7. <u>Rubus occidentalis</u>	<u>3</u>	<u>No</u>	<u>UPL</u>																	
8. <u>Erigeron strigosus</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
9. <u>Phalaris arundinacea</u>	<u>1</u>	<u>No</u>	<u>FACW</u>																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		127 =Total Cover																		
Woody Vine Stratum (Plot size: <u>30ft</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

 Remarks: (Include photo numbers here or on a separate sheet.)
 Weedy upland old field vegetation present.

SOIL

Sampling Point P1

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Matson-Stoughton Parcel City/County: C Stoughton/Dane Co Sampling Date: 7/30/2020
 Applicant/Owner: Matson Homes State: WI Sampling Point: P2
 Investigator(s): Jeff Kraemer, Heartland Ecological Group Section, Township, Range: T5N, R11E, S09
 Landform (hillside, terrace, etc.): Swale/Draw Local relief (concave, convex, none): Concave Slope %: 1 - 3
 Subregion (LRR or MLRA): LRR K Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Troxel silt loam (TrB) NWI classification: N/A

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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) A WETS analysis was conducted and indicates that conditions are normal for the time of year. In the two weeks prior to the field investigation there was 0.31 inches of precipitation, which is below average for July. Site consists of old field that has only been farmed in two of the last nine years for which aerial imagery is available - interpreted to be normal circumstances. Sample point recorded within a wet meadow draw/swale that runs though the central portion of the site.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No primary wetland hydrology indicators observed.		

Sampling Point: P2

Tree Stratum (Plot size: 30ft)		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		=Total Cover		
Herb Stratum (Plot size: 5ft)				
1.	<i>Echinochloa crus-galli</i>	50	Yes	FAC
2.	<i>Phalaris arundinacea</i>	25	Yes	FACW
3.	<i>Typha angustifolia</i>	20	No	OBL
4.	<i>Persicaria pensylvanica</i>	5	No	FACW
5.	<i>Scirpus cyperinus</i>	1	No	OBL
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		101	=Total Cover	
Woody Vine Stratum (Plot size: 30ft)				
1.				
2.				
3.				
4.				
		=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (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 21	x 1 = 21
FACW species 30	x 2 = 60
FAC species 50	x 3 = 150
FACU species 0	x 4 = 0
UPL species 0	x 5 = 0
Column Totals: 101 (A)	231 (B)
Prevalence Index = B/A = 2.29	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators 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.)
Disturbed wet meadow vegetation present within the draw/swale.

SOIL

Sampling Point P2

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Matson-Stoughton Parcel City/County: C Stoughton/Dane Co Sampling Date: 7/30/2020
 Applicant/Owner: Matson Homes State: WI Sampling Point: P3
 Investigator(s): Jeff Kraemer, Heartland Ecological Group Section, Township, Range: T5N, R11E, S09
 Landform (hillside, terrace, etc.): Sideslope Local relief (concave, convex, none): None/Linear Slope %: 7
 Subregion (LRR or MLRA): LRR K Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Dresden silt loam (DsC2) NWI classification: N/A

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 <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) A WETS analysis was conducted and indicates that conditions are normal for the time of year. In the two weeks prior to the field investigation there was 0.31 inches of precipitation, which is below average for July. Site consists of old field that has only been farmed in two of the last nine years for which aerial imagery is available - interpreted to be normal circumstances. Sample point recorded on a moderate sideslope west of the wet meadow draw/swale.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ 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 <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No wetland hydrology indicators observed.		

VEGETATION – Use scientific names of plants.

 Sampling Point: P3

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>62</u></td> <td>x 4 = <u>248</u></td> </tr> <tr> <td>UPL species <u>25</u></td> <td>x 5 = <u>125</u></td> </tr> <tr> <td>Column Totals: <u>97</u> (A)</td> <td><u>393</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.05</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>62</u>	x 4 = <u>248</u>	UPL species <u>25</u>	x 5 = <u>125</u>	Column Totals: <u>97</u> (A)	<u>393</u> (B)	Prevalence Index = B/A = <u>4.05</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>10</u>	x 2 = <u>20</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>62</u>	x 4 = <u>248</u>																			
UPL species <u>25</u>	x 5 = <u>125</u>																			
Column Totals: <u>97</u> (A)	<u>393</u> (B)																			
Prevalence Index = B/A = <u>4.05</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15ft</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
=Total Cover																				
Herb Stratum (Plot size: <u>5ft</u>)																				
1. <u>Daucus carota</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>																	
2. <u>Cirsium arvense</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Solidago canadensis</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Symphyotrichum lanceolatum</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Cirsium vulgare</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Oenothera biennis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Arctium minus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. <u>Poa pratensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. <u>Plantago major</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>97</u> =Total Cover				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.																
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30ft</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

 Remarks: (Include photo numbers here or on a separate sheet.)
 Weedy upland old field vegetation.

SOIL

Sampling Point P3

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Matson-Stoughton Parcel City/County: C Stoughton/Dane Co Sampling Date: 7/30/2020
 Applicant/Owner: Matson Homes State: WI Sampling Point: P4
 Investigator(s): Jeff Kraemer, Heartland Ecological Group Section, Township, Range: T5N, R11E, S09
 Landform (hillside, terrace, etc.): Embankment Local relief (concave, convex, none): Convex Slope %: 3 - 5
 Subregion (LRR or MLRA): LRR K Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Troxel silt loam (TrB) NWI classification: N/A

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 <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) A WETS analysis was conducted and indicates that conditions are normal for the time of year. In the two weeks prior to the field investigation there was 0.31 inches of precipitation, which is below average for July. Site consists of old field that has only been farmed in two of the last nine years for which aerial imagery is available - interpreted to be normal circumstances. Sample point recorded on an embankment separating a constructed basin from the wet meadow swale/draw to the south.		

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ 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 <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No wetland hydrology indicators observed.		

VEGETATION – Use scientific names of plants.

 Sampling Point: P4

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Juglans nigra</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																
2. <u>Ulmus americana</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>25</u>	=Total Cover																	
Sapling/Shrub Stratum (Plot size: <u>15ft</u>)																				
1. <u>Juglans nigra</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	Prevalence Index worksheet: <table style="width: 100%;"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>18</u></td> <td>x 3 = <u>54</u></td> </tr> <tr> <td>FACU species <u>60</u></td> <td>x 4 = <u>240</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>123</u> (A)</td> <td><u>444</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.61</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>18</u>	x 3 = <u>54</u>	FACU species <u>60</u>	x 4 = <u>240</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>123</u> (A)	<u>444</u> (B)	Prevalence Index = B/A = <u>3.61</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>25</u>	x 2 = <u>50</u>																			
FAC species <u>18</u>	x 3 = <u>54</u>																			
FACU species <u>60</u>	x 4 = <u>240</u>																			
UPL species <u>20</u>	x 5 = <u>100</u>																			
Column Totals: <u>123</u> (A)	<u>444</u> (B)																			
Prevalence Index = B/A = <u>3.61</u>																				
2. <u>Lonicera X bella</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Rhamnus cathartica</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>30</u>	=Total Cover																	
Herb Stratum (Plot size: <u>5ft</u>)																				
1. <u>Solidago gigantea</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Rubus occidentalis</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Geum canadense</u>	<u>8</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Ambrosia trifida</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Arctium minus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Solidago canadensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Hesperis matronalis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>68</u>	=Total Cover																	
Woody Vine Stratum (Plot size: <u>30ft</u>)																				
1. _____	_____	_____	_____	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.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		_____	=Total Cover																	
Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point P4

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Matson-Stoughton Parcel City/County: C Stoughton/Dane Co Sampling Date: 7/30/2020
 Applicant/Owner: Matson Homes State: WI Sampling Point: P5
 Investigator(s): Jeff Kraemer, Heartland Ecological Group Section, Township, Range: T5N, R11E, S09
 Landform (hillside, terrace, etc.): Toe of Embankment Slope Local relief (concave, convex, none): Concave Slope %: 3 - 5
 Subregion (LRR or MLRA): LRR K Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Troxel silt loam (TrB) NWI classification: N/A

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 <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) A WETS analysis was conducted and indicates that conditions are normal for the time of year. In the two weeks prior to the field investigation there was 0.31 inches of precipitation, which is below average for July. Site consists of old field that has only been farmed in two of the last nine years for which aerial imagery is available - interpreted to be normal circumstances. Sample point recorded at the toe of slope of the inside of the constructed basin embankment.		

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ 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) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: P5

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>100</u></td> <td>x 1 = <u>100</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>100</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>100</u>	x 1 = <u>100</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>100</u> (B)	Prevalence Index = B/A = <u>1.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>100</u>	x 1 = <u>100</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>100</u> (B)																			
Prevalence Index = B/A = <u>1.00</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15ft</u>)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>Problematic Hydrophytic Vegetation</u> ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5ft</u>)																				
1. <u>Typha X glauca</u>	<u>100</u>	<u>Yes</u>	<u>OBL</u>	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 <u>X</u> No _____																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30ft</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)
 Shallow marsh vegetation present within the basin.

SOIL

Sampling Point P5

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Matson-Stoughton Parcel City/County: C Stoughton/Dane Co Sampling Date: 7/30/2020
 Applicant/Owner: Matson Homes State: WI Sampling Point: P6
 Investigator(s): Jeff Kraemer, Heartland Ecological Group Section, Township, Range: T5N, R11E, S09
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 1 - 3
 Subregion (LRR or MLRA): LRR K Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Troxel silt loam (TrB) NWI classification: N/A

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 <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) A WETS analysis was conducted and indicates that conditions are normal for the time of year. In the two weeks prior to the field investigation there was 0.31 inches of precipitation, which is below average for July. Site consists of old field that has only been farmed in two of the last nine years for which aerial imagery is available - interpreted to be normal circumstances. Sample point recorded in a low lying portion in SE corner of the study area, adjacent to County Highway A.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ 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 <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No primary wetland hydrology indicators observed.	

VEGETATION – Use scientific names of plants.

 Sampling Point: P6

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____	=Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____	=Total Cover		
Herb Stratum (Plot size: <u>5ft</u>)				
1. <u>Solidago canadensis</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Daucus carota</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>	
3. <u>Pastinaca sativa</u>	<u>10</u>	<u>No</u>	<u>UPL</u>	
4. <u>Poa pratensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
5. <u>Sonchus arvensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
6. <u>Bromus inermis</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	
7. <u>Cirsium arvense</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
8. <u>Melilotus officinalis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
9. <u>Solidago gigantea</u>	<u>3</u>	<u>No</u>	<u>FACW</u>	
10. <u>Rumex crispus</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
	<u>104</u>	=Total Cover		
Woody Vine Stratum (Plot size: <u>30ft</u>)				
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 <u>0</u>	x 1 = <u>0</u>
FACW species <u>3</u>	x 2 = <u>6</u>
FAC species <u>1</u>	x 3 = <u>3</u>
FACU species <u>60</u>	x 4 = <u>240</u>
UPL species <u>40</u>	x 5 = <u>200</u>
Column Totals: <u>104</u> (A)	<u>449</u> (B)
Prevalence Index = B/A = <u>4.32</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators 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.)
 Upland weedy old field vegetation present.

SOIL

Sampling Point P6

[illegible]



Matson Developers Inc.
Matson-Stoughton Parcel
Project #: 20200346
August 12, 2020

Appendix D | Site Photographs



Photo #1 Sample point P1



Photo #2 Sample point P1



Photo #3 Sample point P1



Photo #4 Sample point P1



Photo #5 Sample point P2



Photo #6 Sample point P2



Photo # 7 Sample point P2

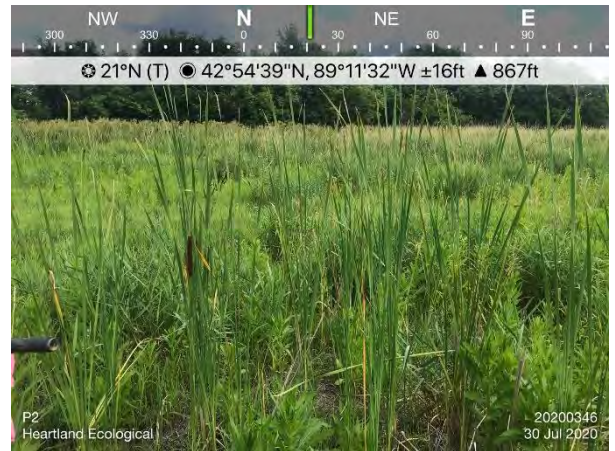


Photo #8 Sample point P2



Photo # 9 Sample point P3



Photo #10 Sample point P3



Photo # 11 Sample point P3



Photo #12 Sample point P3



Photo # 13 Sample point P4



Photo # 14 Sample point P4



Photo # 15 Sample point P4



Photo # 16 Sample point P4



Photo # 17 Sample point P5



Photo # 18 Sample point P5



Photo #19 Sample point P5



Photo #20 Sample point P6



Photo #21 Sample point P6



Photo #22 Sample point P6



Matson Developers Inc.
Matson-Stoughton Parcel
Project #: 20200346
August 12, 2020

Appendix E | Delineator Qualifications



Jeff Kraemer

Principal Scientist

506 Springdale Street
Mount Horeb, WI 53572
jeff@heartlandecological.com
(608) 490-2450



Jeff is the founder of Heartland Ecological Group, Inc. With over 16 years of experience as an environmental consultant, ecological and regulatory policy practitioner, and managing business leader, Jeff provides proven value to clients with his vast experience guiding often complex projects through environmental regulatory and technical challenges applied throughout a diversity of industry sectors. Jeff is recognized by the Wisconsin Department of Natural Resources Wetland Delineation Assurance Program and is the longest standing assured wetland delineator in the state of Wisconsin.

Jeff is a recognized expert in the field of wetland ecology and delineation; wetland restoration and mitigation banking; and regulatory policy and permitting associated with wetlands and waterways. His experience includes: Wetland Determination, Delineation & Functional Assessment; Wetland Restoration, Mitigation, Banking & Monitoring; Botanical / Biological Surveys & Natural Resource Inventories; Rare Species Surveys, Conservation Plans & Monitoring; Habitat Restoration, Wildlife Surveys, SCAT surveys, Environmental Assessments; Local, state, federal permit applications; Expert Witness testimony; and Regulatory permit compliance.

Education

MS, Biological Sciences (Emphasis in Wetland Ecology), University of Wisconsin – Milwaukee, WI, 2003

BS, Biological Sciences (Emphasis in Aquatic Biology) University of Wisconsin – La Crosse, WI, 1999

Regional Supplement Field Practicum
Wetland Training Institute (WTI)
Portage, WI, 2017

Basic and Advanced Wetland Delineation Training,
Continuing Education and Extension, UW-La Crosse,
WI, 2001

Identification of Sedges Workshop,
UW-Milwaukee, Saukville, WI, 2001

Vegetation of Wisconsin Workshop,
UW-Milwaukee, Saukville, WI 2000

Environmental Corridor Delineation Workshop,
Southeastern Wisconsin Regional Planning Commission
(SEWRPC), 2004

Wetland Soils and Hydrology Workshop,
Wetland Training Institute, Toledo, OH, 2003

Critical Methods in Wetland Delineation
University of Wisconsin - La Crosse Continuing
Education and Extension
Madison, WI, 2006 - 2018

Federal Wetland Regulatory Policy Course
Wetlands Training Institute (WTI)
Cottage Grove, WI, 2010

Registrations

Professionally Assured Wetland Delineator,
Wisconsin Department of Natural Resources
(2005-Present)

Wetland Professional in Training (WPIT),
Society of Wetland Scientists Certification
Programs



Project Experience

Energy

Ameren Corporation Transmission Line Projects: LaSalle-Ottawa, LaSalle Co., IL; Wood River Refinery, Madison Co., IL; Rockwood-Big River, Jefferson Co., MO; Saddle Creek 73, Franklin Co., MO.; Havana Rebuild, Mason Co., IL
Managed support for environmental and GIS services to gain regulatory approvals for various new transmission lines. Provided project support for: transmission line siting; critical issues analysis; route matrices; GIS data acquisition and mapping services, coordination of regulatory agency meetings, completion of field wetland delineations; threatened and endangered species; biological assessment and Section 404 permitting, CPCN approvals; community advisory and public workshop support, and expert witness testimony.

Alliant Energy, Nelson Dewey Power Generation Facility Expansion Project, Cassville, WI
Completed field evaluations and delineations of wetlands in preparation of the National Environmental Policy Act (NEPA) documentation for a proposed expansion of the facility.

Enbridge, Inc., Southern Access Expansion Project, Crude Petroleum Pipeline Project, WI
Completed wetland delineations and habitat assessments along a 343-mile proposed crude petroleum pipeline corridor through Wisconsin as part of Enbridge Energy's Southern Access Expansion Program.

American Transmission Company, Arrowhead to Weston, WI, 345 kV Transmission Line Project
Completed wetland delineations, threatened and endangered plant surveys, and habitat assessments along a 208-mile proposed new electric transmission line.

Midwest Generation, Waukegan Power Generation Facility Expansion Project, Lake County, IL
Completed field evaluations of wetlands and threatened and endangered species in coordination with Section 404 permitting requirements for expansion of the power generation facility.

Commonwealth Edison Co. (ComEd), Prairie Program, Greater Chicago Area, IL
Managed ComEd's Prairie Program for over 10 years that involved nearly 200 acres of prairie restoration and management within their transmission line rights-of-way throughout the greater Chicago area.

Alliant Energy, Hydroelectric Dam, Prairie Du Sac, WI
Conducted purple loosestrife surveys on Lake Wisconsin shorelines and wetlands to develop a purple loosestrife management plan in support of the hydroelectric facility FERC licensing.

Alliant Energy, Edgewater Generation Facility, Sheboygan, WI
Managed and coordinated environmental regulatory process for expansion of existing fly ash disposal facility which required approvals from the USACE and WDNR for wetland impacts associated with the project.

Guardian, Pipeline Wetland Mitigation, Winnebago County, WI
Managed and lead the site selection, design, construction oversight, and long-term monitoring and management of a 30-acre wetland mitigation project consisting of prairie, wetland, and forested wetland restoration. The mitigation successfully compensated for wetland impacts associated with the Guardian gas pipeline construction.

Transportation

Canadian National Railroad, Stanberry Subdivision, Douglas County, WI
Supported CN with gaining approval to construct an approximate 2.5-mile new railroad siding track in Douglas County, WI. Completed wetland delineations and threatened and endangered resources assessments. Completed permit applications and gained approval for approximately 2-acres of wetland impacts and construction of bridges over navigable waterways.

Wisconsin Department of Transportation (WisDOT), Neptune Wetland Mitigation Monitoring, Richland County WI
Completed annual comprehensive vegetation surveys, mapping, performance evaluations, and reporting of a 50-acre wetland mitigation site.



WisDOT, Threatened Plant Species Consultation, Port Wing, WI

Completed comprehensive study of a threatened plant species population in support of STH 13 Reconstruction project including preparation of relocation and monitoring plan, physical relocation of plants, and follow-up annual monitoring.

WisDOT, Wildcat Mountain Wetland Mitigation Monitoring, Vernon County, WI

Completed comprehensive vegetation surveys, mapping, performance evaluations, and reporting of 38-acre wetland mitigation site.

WisDOT, World Dairy Center Wetland Mitigation Bank, Madison, WI

Led the baseline studies, design and approval of an approximate 200-acre compensatory wetland mitigation bank on behalf of the WisDOT. The project involved lengthy stakeholder coordination, detailed hydrology evaluations and assessments, complex wetland determinations. The mitigation plan consisted of restoration of farmed and drained organic soils utilizing drain tile valves to wet meadow, sedge meadow, shallow marsh and mesic prairie.

City of Stoughton, Academy Street Reconstruction, Stoughton, WI

Completed wetland assessments and delineations within the study area of the Academy Street reconstruction project.

City of Tomah, Gopher Avenue Reconstruction, Tomah, WI

Completed wetland assessments and delineations within the project area of the Gopher Avenue reconstruction project.

Residential & Commercial Development

Veridian Homes, Smiths Crossing, Sun Prairie, WI

Completed wetland delineations on the approximate 50-acre portion of the proposed residential development project. Completed wetland permit applications and gained approval for impacts to jurisdictional wetlands. Completed and gained approval for artificial wetland exemptions per WI Act 183.

Hovde Properties, Sprecher Road Property, Madison, WI

Completed wetland delineations on the approximate 100-acre property proposed for residential and commercial development. Completed and gained approval for artificial wetland exemptions per WI Act 183.

Ruedeusch Development and Construction, Packers Avenue Parcel, Madison, WI

Completed wetland delineations on the approximate 30-acre property proposed for development. Completed and gained approval for artificial wetland exemptions per WI Act 183.

Newport Development Corp., Briarwoods Condominiums, Caledonia, WI

Completed wetland delineations on the approximate 10-acre property proposed for development. Completed and gained approval for artificial wetland exemptions per WI Act 183.

William Ryan Homes, West Prairie Village, Sun Prairie, WI

Completed wetland delineations throughout the approximate 80-acre property proposed for development. Completed and gained approval for artificial wetland exemptions per WI Act 183 and NR103.06.

Bielinski Homes, Chapman Property, Mukwonago, WI

Completed wetland delineations throughout the approximate 65-acre property proposed for residential development.

Logistics Property Company, Nelson-Heckel Properties, Kenosha County, WI

Completed wetland delineations throughout the approximate 105-acre property proposed for commercial development.

Country View Estates Development Project, DeForest, WI

Completed wetland delineation/evaluation, wetland permitting, and mitigation planning in support of a 400-acre mixed residential/commercial/recreational development project.

Industrial, Manufacturing & Institutional Facilities

Berlon Industries Expansion Project, Hustisford, WI

Completed wetland delineation/evaluation, wetland permitting, and wetland mitigation planning in support of the expansion of the industrial facility.



Ashley Furniture Industries Expansion Project, Arcadia, WI

Developed and gained WDNR/USACE approval for 35-acre wetland mitigation plan in support of wetland impact application for expansion of the manufacturing facility; Managed the construction of the wetland bank and completed over 10 years of monitoring and management through project close-out.

AllEnergy Proposed Sand Mine, Trempealeau County, WI

Completed wetland delineations, wetland permitting support, and wetland mitigation support for a proposed sand mine in Trempealeau County. The project consisted of over 500 acres of wetland delineation and wetland and waterway permitting associated with a rail spur expansion. Supported community engagement through presentations at various town hall meetings.

Conway Central Express Expansion Wetland Permitting, Franklin, WI

Completed wetland delineation/evaluation, wetland permitting, and wetland mitigation design for expansion of the trucking facility.

Morrison Creek Cranberry Company, Wetland Mitigation Bank Monitoring and Remediation, Oakdale, WI

Completed annual mitigation site monitoring, vegetation surveys, and performance evaluations of 60-acre mitigation bank site. Completed mitigation remediation management plan for compliance with USACE performance standards.

Northwestern Mutual Campus Facility, Native Landscape Management, Franklin, WI

Managed and coordinated the development of a native landscape plan for the 50 acres of open space surrounding Northwestern Mutual's campus facility. The plan consisted of wetland, woodland, and prairie restoration. Managed and coordinate the implementation of the native landscape installation and long-term management.

Daybreak Foods, Proposed Facility Expansion, Lake Mills, WI

Completed wetland assessment and delineations on over 175 acres of various properties of DayBreak Foods. Provided wetland regulatory guidance to support the expansion of the egg production and processing facilities.

Sinsinawa Dominican Sisters, Grant County, WI

Completed wetland delineations on the 57-acre Sinsinawa Dominican Sisters property in support of a land use planning study.

Government & Non-Government Organizations

City of Fitchburg, Fitchburg Northeast Neighborhood Plan, Fitchburg, WI

Completed wetland mapping and assessment and developed wetland protection standards for the City of Fitchburg's NE Neighborhood Plan.

Lake Koshkonong Wetlands Association, Lake Koshkonong Water Level and Wetland Studies, Lake Koshkonong, WI

Developed and conducted various scientific wetland studies for development of a water level management plan: E. prairie fringed orchid hydrology study; Floodplain forest/hydrology study; Floristic quality assessment/vegetation mapping within 4000 acres of wetlands on behalf of the Lake Koshkonong Wetlands Association.

Richland Center Utilities, New Force Main Project, Richland Center, WI

Supported the planning and approval of a new force main utility corridor on behalf of Richland Center Utilities. Completed wetland delineations and threatened and endangered species assessments along the approximate 3.5-mile project corridor. Completed wetland and waterway permit applications, wetland restoration plans, and completed annual monitoring of restored wetland areas.

Portage Parks Department, Samuelson Fen Restoration, Portage, IN

Developed a restoration plan to restore a degraded 30-acre fen, conducted vegetation surveys, floristic quality assessments and hydrology monitoring.

Badger Prairie Health Care Center Expansion, Verona, WI

Completed wetland delineation/evaluations and wetland permitting in support of the expansion of the healthcare facility.

City of Fitchburg, Native Restoration Support, Fitchburg, WI



Assisted the City of Fitchburg with restoration activities on multiple projects involving incorporating native restoration within various regional stormwater and outlot facilities.

City of Tomah, Proposed Bike Trail Project, Tomah, WI

Completed wetland delineations along an approximate 1-mile proposed bike trail path on behalf of the City of Tomah.

City of Sun Prairie, Sheehan Park, Sun Prairie, WI

Completed wetland delineations throughout the 50-acre Sheehan Park on behalf of the City of Sun Prairie.

City of Madison, Various Projects, Madison, WI

Completed numerous wetland delineations on behalf the City of Madison in support of stormwater improvement and other facility improvement projects.

Private Landowners & Recreational Properties

Erin Hills Golf Course, Washington County, WI

Completed wetland delineations throughout the approximate 200-acre golf course property. Provided wetland regulatory guidance in support of the renovation of Erin Hills in preparation for hosting the 2017 U.S. Open championships.

La Belle Golf Course, The Prestwick Group, Inc., Lac La Belle, WI

Completed wetland delineations throughout the approximate 250-acre golf course property. Provided wetland regulatory guidance in support of the renovation of the La Belle Golf Course.

Big Hollow Wetland Mitigation Bank, Spring Green, WI

Completed wetland delineations on the approximate 200-acre property and evaluated the potential for developing a private wetland mitigation bank. Coordinated detailed hydrology monitoring and modeling to address potential off-site water impacts and support the development of the hydrology restoration plan. Completed the prospectus documents and submittals to the Interagency Review Team. Organized and led public informational meetings, and various stakeholder meetings to address local concerns

The Farm Golf Course, Cottage Grove, WI

Completed wetland delineations throughout the approximate 100-acre golf course property. Provided wetland regulatory guidance in support of residential development adjacent to the golf course.



Matson Developers Inc.
Matson-Stoughton Parcel
Project #: 20200346
August 12, 2020

Appendix F | NAIP Aerial Imagery



© OpenStreetMap (and)
contributors, CC-BY-SA

 Study Area (10.03 ac)

0 75 150
Ft

Heartland
ECOLOGICAL GROUP INC

**Appendix: 2004-06-22
NAIP Aerial Imagery**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2004 NAIP
Data: USDA

8/12/2020



Study Area (10.03 ac)

0 75 150
Ft

Heartland
ECOLOGICAL GROUP INC

**Appendix: 2005-06-20
NAIP Aerial Imagery**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2005 NAIP
Data: USDA

8/12/2020

© OpenStreetMap (and)
contributors, CC-BY-SA



Study Area (10.03 ac)

0 75 150
Ft

Heartland
ECOLOGICAL GROUP INC

**Appendix: 2006-07-31
NAIP Aerial Imagery**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2006 NAIP
Data: USDA

8/12/2020



 Study Area (10.03 ac)

0 75 150
Ft

Heartland
ECOLOGICAL GROUP INC

**Appendix: 2008-07-23
NAIP Aerial Imagery**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2008 NAIP
Data: USDA

8/12/2020



Study Area (10.03 ac)

0 75 150
Ft

Heartland
ECOLOGICAL GROUP INC

**Appendix: 2010-07-02
NAIP Aerial Imagery**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2010 NAIP
Data: USDA

8/12/2020



© OpenStreetMap (and)
contributors, CC-BY-SA

 Study Area (10.03 ac)

0 75 150
Ft

Heartland
ECOLOGICAL GROUP INC

**Appendix: 2013-06-19
NAIP Aerial Imagery**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2013 NAIP
Data: USDA

8/12/2020



 Study Area (10.03 ac)

0 75 150
Ft

Heartland
ECOLOGICAL GROUP INC

**Appendix: 2015-10-11
NAIP Aerial Imagery**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2015 NAIP
Data: USDA

8/12/2020



© OpenStreetMap (and)
contributors, CC-BY-SA

 Study Area (10.03 ac)

0 75 150
Ft

Heartland
ECOLOGICAL GROUP INC

**Appendix: 2017-09-03
NAIP Aerial Imagery**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2017 NAIP
Data: USDA

8/12/2020



 Study Area (10.03 ac)

0 75 150
Ft

Heartland
ECOLOGICAL GROUP INC

**Appendix: 2018-10-04
NAIP Aerial Imagery**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2018 NAIP
Data: USDA

8/12/2020

APPENDIX E:

Nonfederal Wetland Exemption Determination



DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

August 31, 2020

Regulatory File No. MVP-2020-01475-SJW

Heartland Ecological Group
c/o Scott Fuchs
506 Springdale Street
Mount Horeb, Wisconsin

Dear Mr. Fuchs:

This letter regards an approved jurisdictional determination for Matson-Stoughton Parcel located in the City of Stoughton. The project site is in Section 9, Township 5 North, Range 11 East, Dane County, Wisconsin. The review area for our jurisdictional determination is identified on the enclosed figures labeled MVP-2020-01475-SJW: Page 1 of 3 through 3 of 3.

The review area consists of W-1 and W-2 which are not waters of the United States subject to Corps of Engineers (Corps) jurisdiction. Therefore, you are not required to obtain Department of the Army authorization to discharge dredged or fill material within this area. The rationale for this determination is provided in the enclosed Approved Jurisdictional Determination form. This determination is only valid for the review area described. You are also cautioned that the area of waters described on the enclosed Jurisdictional Determination form is approximate and is not based on a precise delineation of aquatic resources.

If you object to this approved jurisdictional determination, you may request an administrative appeal under Corps regulations at 33 CFR 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination, you must submit a completed RFA form to the Mississippi Valley Division Office at the address shown on the form.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the enclosed NAP. It is not necessary to submit an RFA form to the division office if you do not object to the determination in this letter.

This approved jurisdictional determination may be relied upon for five years from the date of this letter. However, the Corps reserves the right to review and revise the determination in response to changing site conditions, information that was not considered during our initial review, or off-site activities that could indirectly alter the extent of wetlands and other resources on-site. This determination may be renewed at the end of the five year period provided you submit a written request and our staff are able to verify that the limits established during the original determination are still accurate.

Regulatory Branch (File No. MVP-2020-01475-SJW)

If you have any questions, please contact me in our Stevens Point field office at (651) 290-5878 or by email at samuel.j.woboril@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,

A handwritten signature in black ink, appearing to read "Samuel J. Woboril". The signature is fluid and cursive, with the first name "Samuel" and last name "Woboril" clearly distinguishable.

Samuel J. Woboril
Project Manager

cc:
Weston Matthews, WDNR



**U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE**

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 8/31/2020

ORM Number: MVP-2020-01475-SJW

Associated JDs: N/A

Review Area Location¹: State/Territory: WI City: Stoughton County/Parish/Borough: Dane

Center Coordinates of Review Area: Latitude 42.911135 Longitude -89.20063

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- ☐ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³				
(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



**U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE**

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴				
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination
W-1 W-2	1.36 0.17	acre(s)	(b)(1) Non-adjacent wetland.	The wetlands labeled W-1 and W-2 on the attached project figures do not meet the definition of “adjacent wetlands”. These wetlands do not maintain a hydrologic connection to a downstream intermittent or perennial tributary. A review of available information including the WWI, Google Earth, USGS Topo Mapping, etc., confirmed that these wetlands are isolated features. There are no culverts or other type of feature associated with either of these wetlands which would create a hydrologic connection to a downstream tributary. W-1 and W-2 are surrounded entirely by uplands. Therefore, these wetlands are physically removed from the nearest A(1)-A(3) water. There is no evidence that W-1 or W-2 are directly abutting an A(1)-A(3) water. Based on this information, W-1 and W-2 are hydrologically isolated features and are therefore not regulated by the Corps under Section 404 of the Clean Water Act.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

☐ Information submitted by, or on behalf of, the applicant/consultant: [Wetland delineation map submitted along with AJD request on August 12, 2020.](#)

This information is sufficient for purposes of this AJD.

Rationale: [N/A](#)

☐ Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\).](#)

☒ Photographs: [Aerial: Submitted as part of the wetland delineation mapping along with the AJD request dated August 12, 2020.](#)

☐ Corps site visit(s) conducted on: [Date\(s\).](#)

☐ Previous Jurisdictional Determinations (AJDs or PJDs): [ORM Number\(s\) and date\(s\).](#)

☐ Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)

☒ USDA NRCS Soil Survey: [NRCS Web Soil Survey](#)

☐ USFWS NWI maps: [Title\(s\) and/or date\(s\).](#)

☒ USGS topographic maps: [1:24K Stoughton](#)

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



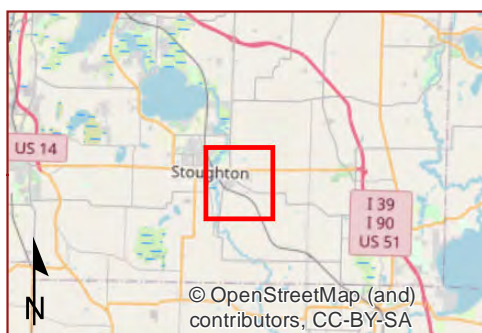
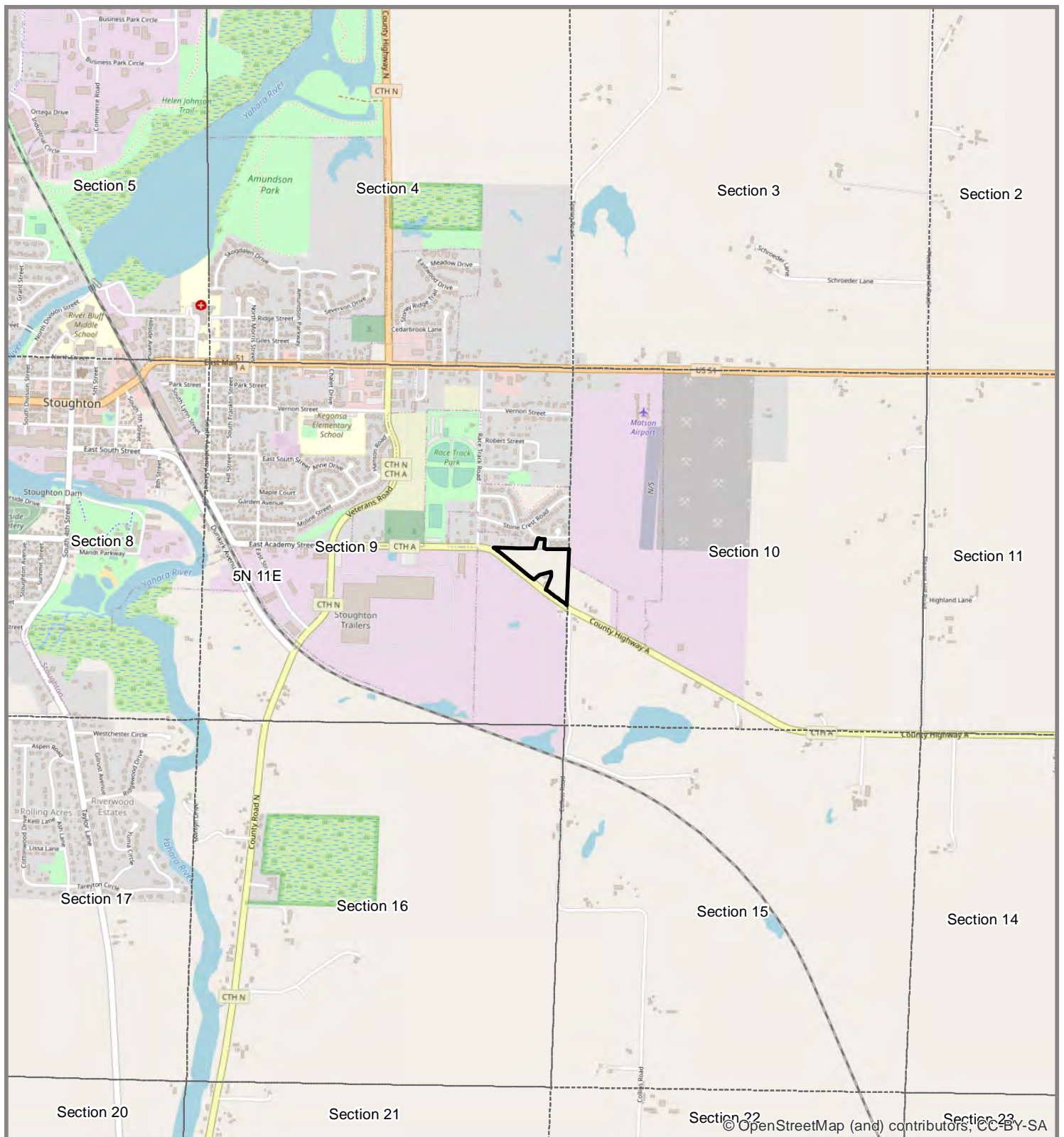
**U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE**

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	Wisconsin Wetland Inventory
Other Sources	Google Earth

B. Typical year assessment(s): [N/A](#)

C. Additional comments to support AJD: [N/A](#)



- Study Area (10.03 ac)
- Township
- Section

0 1,000 2,000
Ft

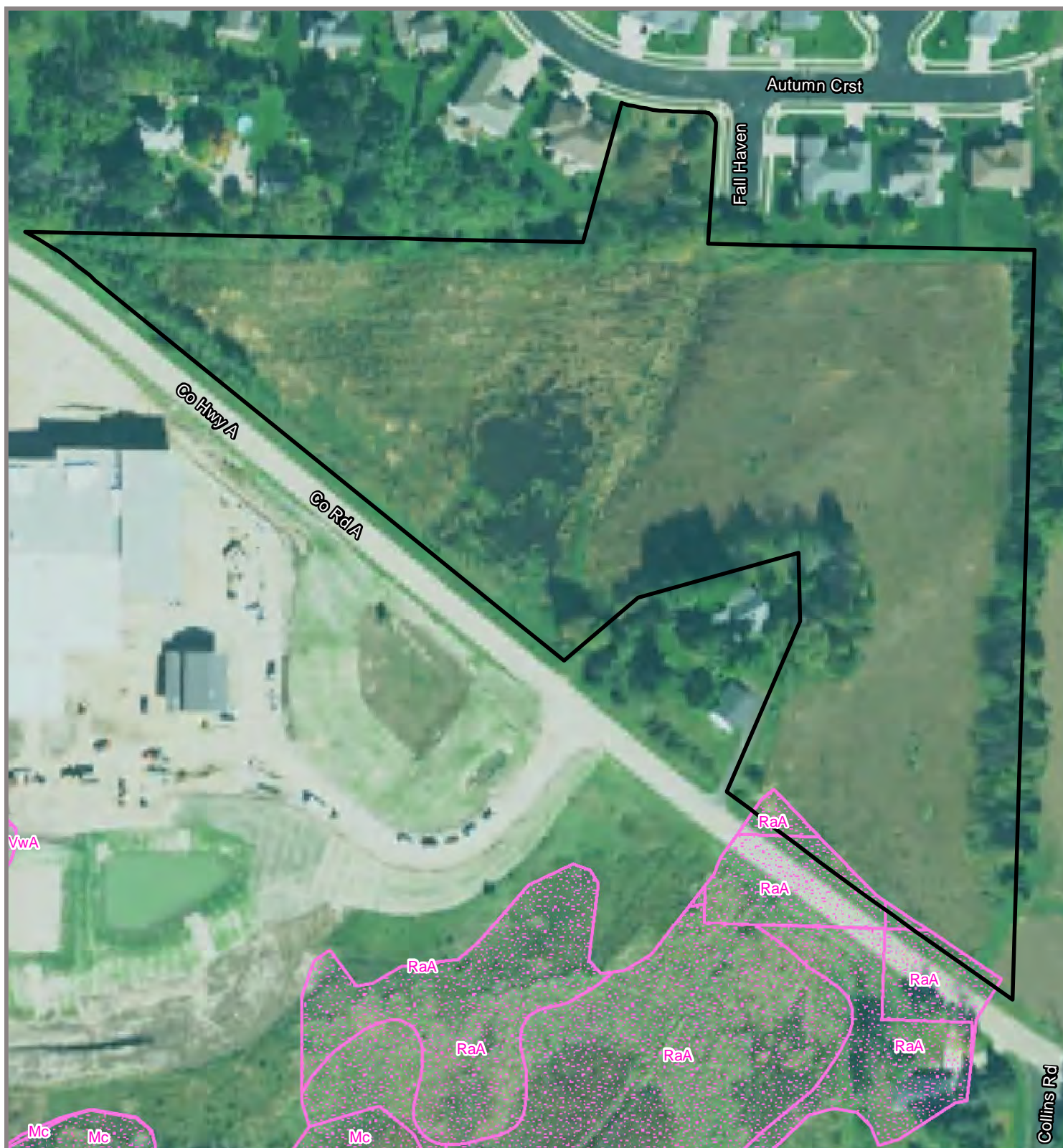
Heartland
ECOLOGICAL GROUP INC

Figure 1. Project Location

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

OpenStreetMap
Data: ESRI

8/12/2020



Study Area (10.03 ac)

Maximum Extent Wetland Indicators

0 75 150 Ft

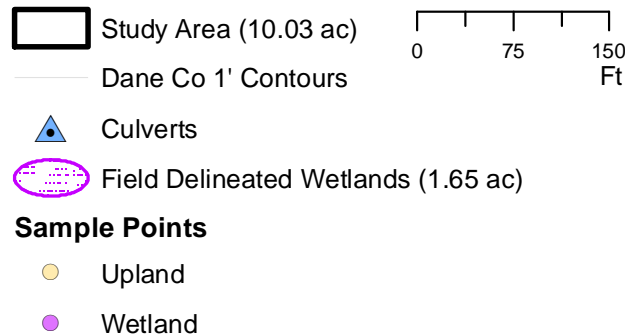
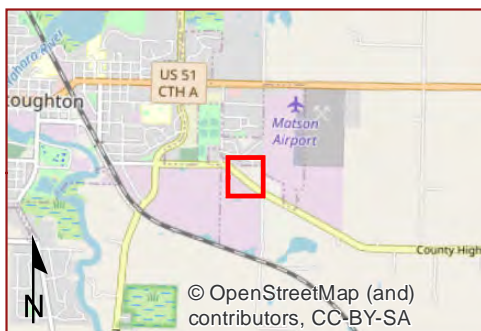
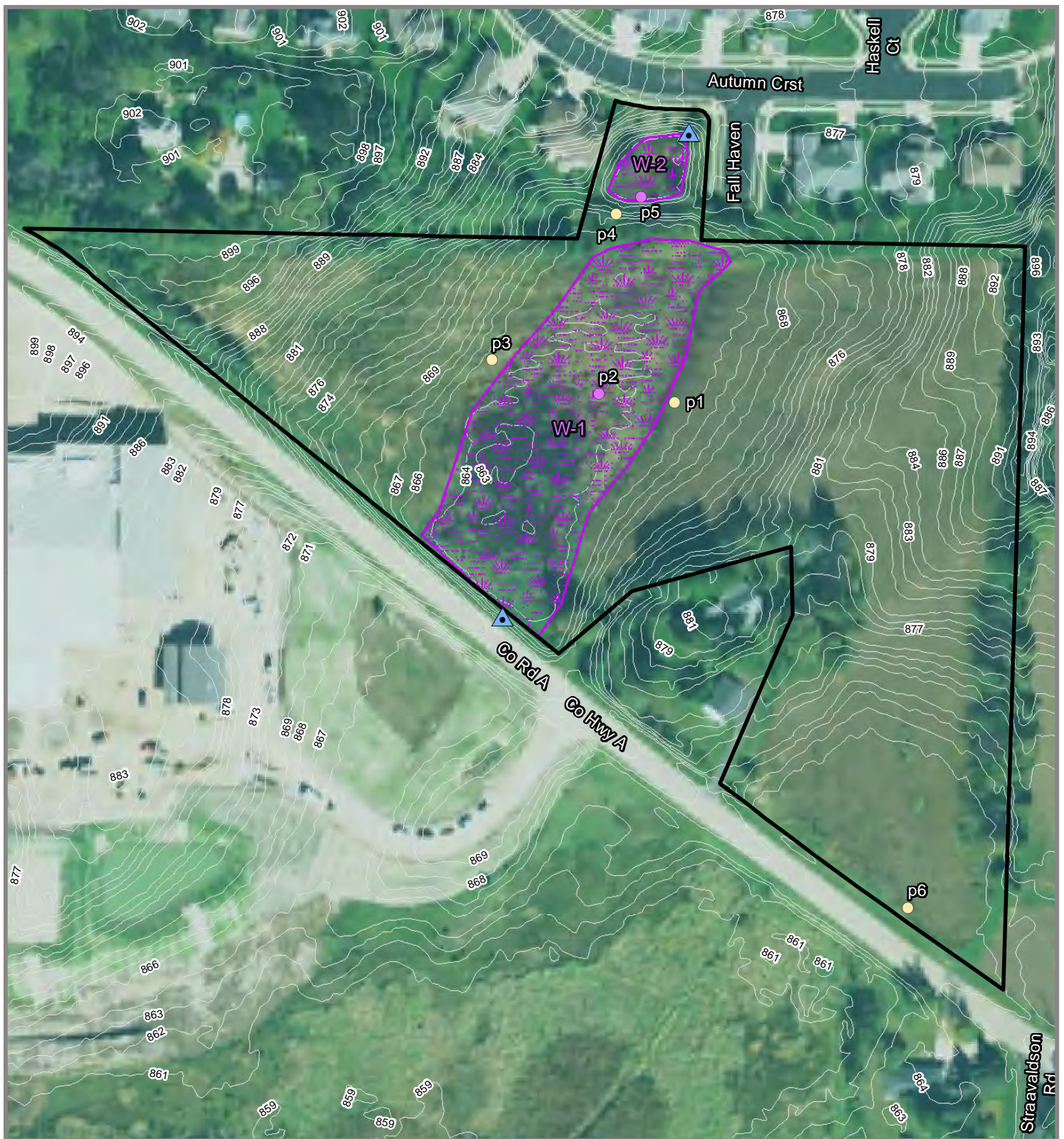
Heartland
ECOLOGICAL GROUP INC

**Figure 4. SWDV
Wetland Indicators**

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2018 NAIP
Data: WDNR

8/12/2020



Heartland
ECOLOGICAL GROUP INC

Figure 6. Field Delineated Wetlands

Matson-Stoughton Parcel
Project #20200346
T5N, R11E, S09
C Stoughton, Dane Co, WI

2018 NAIP
Data: Dane Co

7/31/2020

Appendix D: Wetland Fill Request

From: Ramminger, Allen J - DNR <Allen.Ramminger@wisconsin.gov>

Sent: Thursday, October 27, 2022 9:33 AM

To: Tom Matson <tmatson@matsonhomes.com>

Cc: jfeland@msa-ps.com; Ramminger, Allen J - DNR <Allen.Ramminger@wisconsin.gov>; Nedland, Thomas S - DNR <Thomas.Nedland@wisconsin.gov>

Subject: Mitigation requirements for parcel 281051109480022

Dear Mr. Matson;

Enclosed you will find your Wetland Mitigation Requirements for a project known as WP-WER-SC-2022-13-X10-11T10-05-48, located at NE SE T5N, R11E, S9, Dane County. DNR has determined the wetland mitigation requirements for the above-mentioned project.

Total impacts to Wetland 1 are 43,124 sq ft on parcel No. 281051109480022, requiring mitigation. Total impacts to Wetland 2 do not exceed 10,000 sq ft on parcel No. 281051109169212, therefore no mitigation requirements apply.

The project is proposed to permanently impact 0.99 acres of fresh wet meadow wetlands and will occur in the Middle Rock HUC 8 Watershed of the Rock mitigation service area. DNR understands you propose to complete the wetland mitigation requirements through the purchase of wetland mitigation credits. There is only one wetland mitigation bank located within the Middle Rock HUC 8 Watershed that has the appropriate wetland mitigation credits available. Please follow the directions below to fulfill the wetland mitigation requirements.

Credit Purchase Requirements

Willow Drive Mitigation Bank

Ann Key (ann@wetlandsandwater.com 715-892-4211)

Purchase the following credits:

- **Wet Meadow Impacts – purchase 0.91 credits of wet to wet mesic prairie** (43,124 -10,000 *1.2 /43,560= .91 credits)

Once you receive an affidavit of purchase from the above mentioned mitigation bank, please forward that information to myself, and Tom Nedland. Tom is copied on this email. Please note that DNR cannot issue our exempted determination until we receive the affidavit of credit purchase.

Please let me know if you have any questions about this email.

Sincerely,

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Allen Ramminger

Him/His

Wetland Specialist

Wisconsin Department of Natural Resources

3911 Fish Hatchery Road, Fitchburg, WI 53711

Cell Phone: 608-228-4067

Allen.Ramminger@wisconsin.gov



dnr.wi.gov

