

City of Sun Prairie

2026 URBAN SERVICE AREA AMENDMENT

Sun Prairie Business Park Expansion
June 8th, 2026

City of Sun Prairie 2026

URBAN SERVICE AREA AMENDMENT

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MAPS

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2. Natural Resources
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5. Soils
6. Groundwater
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9. Proposed Environmental Corridors
10. Watershed

APPENDICES (to be added)

- A – City of Sun Prairie Resolution 2026-XX
- B – Adjacent Government Notice Letter

INTRODUCTION

Map 1 (Study Area) indicates the proposed Urban Service Area (USA) amendment area, including existing public rights-of-way. For purposes of this application, the proposed amendment area is referred to as the “Amendment Area” or “the Land.” This land encompasses 440 acres and is situated northeast of the City, east of County Highway N and north of Highway 151. The amendment area includes sixteen (16) parcels and is divided into 437.2 acres of private real estate and 2.8 acres of existing rights-of-way.

This Land is ready for inclusion in the USA, as it’s adjacent to the existing USA boundary and will provide an opportunity for the City of Sun Prairie to accomplish multiple goals, as noted below.

- Allow for expansion of the existing business park to provide opportunities for business retention/expansion and attract new businesses. This will meet goals of the City to increase job opportunities, provide a diversified economy, and increase the local taxbase.
- Improve mobility through the community by facilitating the extension of Egge Road to a future interchange with US Highway 151.
- Manage stormwater and promote infiltration in accordance with the City’s stormwater management ordinances.

As outlined in Section 5 of this amendment, the City’s wastewater facility has capacity for the sanitary flows from the USA amendment area. The proposed development will increase current flows by 0.22 MGD (156 GPM) on an average daily flow basis. The total of these two values (3.60 MGD + 0.22 MGD) is 3.82 MGD, below the annual average rating of 4.62 MGD.

1.0 PLAN CONSISTENCY

1.1 Consistency with the Comprehensive Plan

As noted in the resolution ([appendix A – to be added once approved](#)), the City’s Plan Commission and City Council have determined that the immediate addition of this area to the existing urban service area is consistent with its Comprehensive Plan (2019 with updated elements in 2025). The existing land use is primarily agricultural.

The Comprehensive Plan (available on the [City’s website](#)) includes specific recommendations for the proposed amendment area, which is designated as “Employment” in the Future Land Use Map (see Map 4 – Future Land Use). The proposed amendment will expand the existing business park north, reinforcing the Comprehensive Plan’s intent. Per the comprehensive plan:

“Employment (E) areas include predominantly corporate and business offices, research facilities, laboratories, medical clinics/hospitals, and other similar uses. They generally do not include retail and consumer service uses for the wider community, but may include limited retail and service establishments that primarily serve employees and users of the area. Employment areas are not generally recommended for residential uses, though such uses may be considered as part of a conditional use under relevant zoning districts. Although generally used to identify relatively large, multi-establishment employment areas (e.g., Sun Prairie Business Park) the designation may also be applied to an individual property (e.g., clinic).”

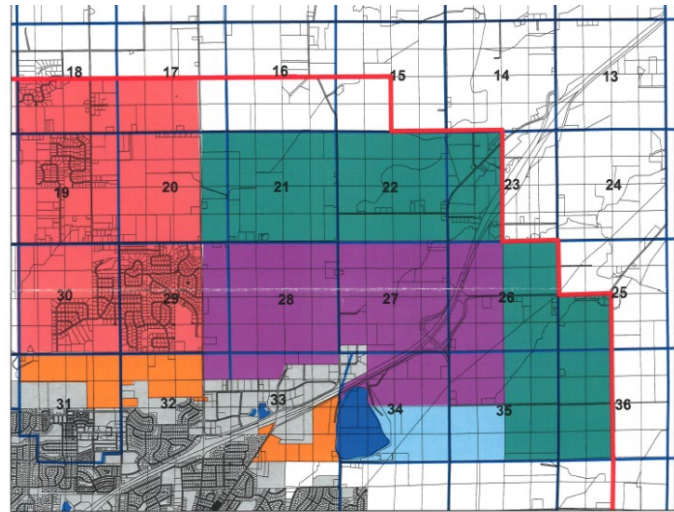
Inclusion of the proposed amendment area in the urban service area is also consistent with six (6) goals, policies, and/or actions of Sun Prairie Comprehensive Plan. Those six goals are detailed below, along with how this amendment is consistent with the Comprehensive Plan.

- **Utilities & Community Facilities: Goal 2, Policy 10:** Plan for the short and long term orderly extension of urban services to strategic City expansion areas. This should be based on the Residential Development Staging Plan when reviewing annexation petitions, land divisions, zoning map amendments, urban service area amendments and residential development proposals, and when the City considers the location and timing of capital improvement projects.
 - **Consistency:** The amendment area has been identified as a priority development in Economic Development element (Map 6-13) to guide planning, infrastructure investment, and real estate development activities. This location has been selected to support Citywide goals of expanding the tax base, using land and infrastructure efficiently, and supporting economic growth. Also, this area can be easily serviced by Technology Drive and Columbus Street.
- **Economic Development: Goal 1:** Economic growth is necessary for expanding the local tax base, increasing access to opportunity, and maintaining the vitality of the Sun Prairie community. With a strategic focus on business retention, expansion, and attracting new businesses, the City may facilitate job creation, a diversified economy, reduction in racial inequities, and a higher standard of living for all residents.
 - **Policy 2:** Facilitate the expansion of business parks by preparing land and infrastructure, collaborating with developers and employers, and promoting industrial growth.

- **Action 3:** Create a growth plan for the Sun Prairie Business Park, urban service area expansion, and future connection of Egge Road to US Highway 151.
 - **Consistency:** The City updated Chapter 6 Volume 2 in 2025. To support future expansion of the Business Park, planning and infrastructure investment are essential. The City addressed this need by purchasing 65-acres and partnered with a developer to create a pad ready development. It has also launched studies to improve stormwater management, extend sewer and water services, and upgrade road networks, including plans for a second highway access point at Egge Road and County Highway VV. The USA amendment will allow for future sanitary extension to serve and expand the Business Park, as well as consider a route for future extension of Egge Road to US Highway 151.

- **Intergovernmental Cooperation: Goal 2, Action 3:** Work with the Town of Bristol to extend or replace the current boundary agreement before it expires in 2025.

- **Consistency:** The City and Town agreed to extend the effective date of the Agreement to December 31, 2026, and are working towards a new agreement. The amendment area is located within the BPJPA of the current Intergovernmental Agreement with the Town of Bristol (see agreement map on the right). The City will continue to collaborate with the Town on proactive planning and coordinated infrastructure development.



TOWN OF BRISTOL INTERGOVERNMENTAL AGREEMENT MAP

LEGEND

- Urban Development Area
- Rural Development Area
- Business Park Joint Planning Area
- Community Separation Area
- Urban Reserve Area
- Extraterritorial Jurisdiction
- Section Lines
- City of Sun Prairie

12/14/04
2/8/05 rev.
2/18/05 rev.

1 inch equals 3,150 feet

- **Land Use: Goal 1, Action 1:** Pursue and advocate to WisDOT for a new interchange at US 151 and CTH V V, connecting to an extended Egge Road east from N. Bristol Street, which would improve access to the Sun Prairie Business Park. Prior to construction of this interchange, develop a detailed area plan that considers the desire for high-intensity development adjacent to the Sun Prairie Business Park that can support jobs and a potential Bus Rapid Transit link to Madison. Also consider the potential for a sports complex to support recreation for City residents (should there still be demand for such a facility).
 - **Consistency:** The USA amendment considers a route for future extension of Egge Road to US Highway 151.

- **Land Use: Goal 4:** Support the land use needs for employment growth.
 - **Consistency:** The USA amendment will allow for future sanitary extension to serve and expand the Business Park, as well as consider a route for future extension of Egge Road to US Highway 151 to increase marketability and access from the regional highway system.

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

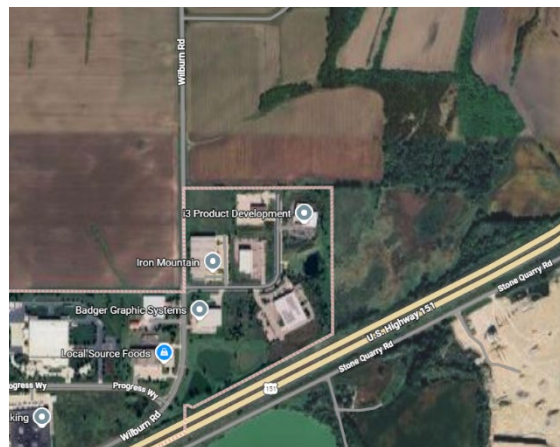
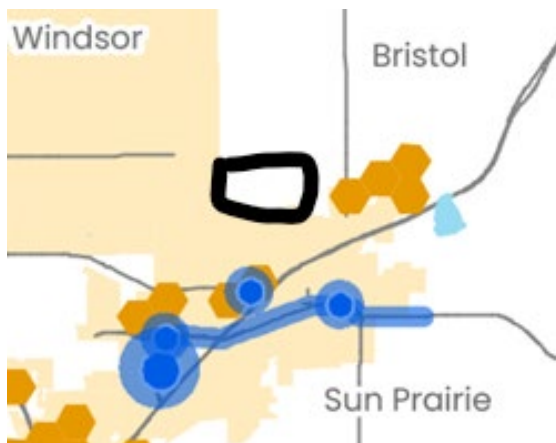
Development of industrial area has changed with developers often seeking parcels larger than 100 acres for projects. The Suburban Industrial zoning district is intended to serve development in the business park. Suburban Industrial zoning is primarily limited to two areas of the City- the Sun Prairie Business Park and Park 151 developed by Interstate Partners. Park 151 is completely built out and landlocked while the Sun Prairie Business Park has availability to continue to grow. Currently, the City does not have any lots between 50-100 acres within its boundaries that are suitable for development in the suburban industrial zoning district. The existing business park is approximately 500 acres, with 45 acres preparing for upcoming development this spring. This leaves 2 remaining parcels undeveloped (approximately 18 acres), both which need additional utility work to be viable for development. The business park is the primary non-service employment area of the City. The proposed amendment is the only area of the City where there is planned suburban industrial expansion.

Additionally, census data show a 2020 population of 35,967 and 13,596 households (2.49 persons per household). The Wisconsin Department of Administration population projection indicates the population will increase to 42,145 by 2030. The expected 17% population increase within the next five years reinforces the broader market trends and developer feedback that there continues to be a strong demand for new housing in the City. The expansion of the business park will offer more opportunities for jobs for the City's growing population. Along with creating new job opportunities, the amendment will generate revenue that will contribute to the tax base.

Alignment with Regional Planning Priorities

- i. **Contiguity to Existing Urban Infrastructure.** The potential development in this amendment will:
 - a. utilize existing roads (Bristol Street, Wilburn Road, and Haynes Drive);
 - b. include planned and necessary extensions of Egge Road and Columbus Street; and,
 - c. connect to nearby existing utilities just south of this amendment area.

- ii. **Regional Development Framework.** This amendment will:
 - a. increase access to jobs;
 - b. conserve/minimize impacts to steep slopes, wetlands, and woodlands in the eastern edge of the amendment area;
 - c. plan for quality business growth in the next tier beyond the 2050 urban growth and employment districts identified in the RDF document due to existing and planned development in areas identified in the framework (shown below). *Note: the business park between Progress Way and extension of Egge Road are currently being designed by a developer (shown in black below); and,*



- d. The BMPs, including stormwater basins and greenway, will improve stormwater control and runoff.

2.0 INTERGOVERNMENTAL COOPERATION

The City has made special effort to unify its Comprehensive Plan with those adjacent communities, Dane County, and the region. The City regularly engages with adjacent communities on its planning efforts.

2.1 Notification of Adjacent Local Governmental Units

There is one unit of government adjacent to the subject area: Town of Bristol

In the 2019 Comprehensive Plan, the City of Sun Prairie noted under Goal #2 – Policy #3 of its Intergovernmental Cooperation chapter: *“Work with the Town of Bristol to extend or replace the current boundary agreement before it expires in 2025”*. For that reason, the Town and City have extended their agreement to expire on December 31, 2026, and are actively working on a Cooperative Plan as a successor. The City staff has notified the Town of Bristol requesting formal comments on the proposed amendment. *Copy of the email are attached to Appendix B.*

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

As noted in Section 2.1, a copy of the proposed amendment application has been sent to the adjacent town for their comments following City Council approval of the application. Comments have been forwarded to CARPC staff for review. At present we are aware of no objections to the proposed amendment. *[To be completed as part of the process]*

3.0 LAND USE

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

Map 1 indicates the proposed Urban Service Area (USA) amendment area, including existing public right-of-ways.

3.2 Tables of Land Use Acreage and Number of Housing Units

There are no imminent development plans for this amendment area, but Map 7 identifies potential lot layout in the proposed amendment area. Table 1 dissects the map, providing the projected acreage of each of the proposed land uses and rights-of-way for the proposed amendment.

Table 1: Urban Service Amendment Area Data

Land Use	Total Area (ac)	Existing Development (ac)	New Development (ac)	Housing Units (count)
Business Park	321.2	0.0	321.2	0
Road Right of Way (ROW)	20.7	1.8	18.9	0
Parks and Open Space *	51.2	0.0	51.2	0
Water and Wetlands*	0.1	0.0	0.1	0
Stormwater Management*	46.9	0.0	46.9	0
Total Acreage	440.1	1.8	438.3	0

* The Environmental Corridor covers 98.2 acres within the USA amendment, including parks and open space, water and wetlands, and stormwater management categories in the table above.

3.3 Map of Existing Land Uses

Existing land uses are accurately depicted in the Existing Land Use Map from the 2019 Comprehensive Plan. An Excerpt of this map is provided, see Map 3. All the developable acreage of the proposed amendment is currently in agricultural use.

3.4 Quantity and Type of Housing Units

Not applicable.

3.5 10-year Staging Boundaries

All of the amendment area falls within a 10-year development plan.

4.0 NATURAL RESOURCES

4.1 Natural Resource Areas

The proposed amendment area does not include any unique vegetation or geology, water bodies, or floodplains.

Wetlands

The wetlands on site are too small to delineate. Prior to development, all areas identified as potential wetlands will be required to be delineated by the developer as part of the development review process. This delineation will be provided to CARPC for review prior to development.

There's larger wetland complex offsite to the east and a small area to the north.

Drainageways

There is no current storm sewer drainage, but there is constructed drainage channels highlighted in Map 2 (Natural Resources).

Groundwater recharge areas

In Map 6, the Soil-Water-Balance (SWB) Recharge layer indicates the groundwater recharge rate (inches/year) across the amendment area (9-10). The SWB recharge rate is influenced by land cover, slope, and soil type. These areas help identify where recharge is most effective and guide sustainable water resource planning.

Highly erodible soils and other limiting soil types.

The two primary soil types are loam and silt loam. Four areas have severe to very severe Potential Erosion Hazard. See Map 5.

Woodlands

Map 2 (Natural Resources) identifies five woodland areas located in different parts of the amendment area. The eastern tree canopy is old growth and should be prioritized for protection, and is presented as part of the environmental corridor / stormwater management area.

Steep Slopes

See Map (Natural Resources). Areas with steep slopes are located in the eastern and western sections of the amendment area.

4.2 Public Outlots for Parks and Stormwater Management Facilities

There are six outlots proposed in the development, addressing the need for stormwater management and open space. Map 7 shows these outlots and the stormwater management facilities within them.

4.3 Existing Environmental Corridors

There are currently no existing environmental corridors located on the subject properties.

4.4 Proposed Environmental Corridors

The proposed Environmental Corridors (EC) are shown on Map 9. Included are all the outlots to be used for stormwater management, public space, and wetland buffer needs. Protections for the EC areas can be found in the City's zoning ordinance and referenced plans below.

Zoning Ordinance

Environmental corridors are defined in the City's zoning ordinance as continuous systems of open space in urban and urbanizing areas, that include environmentally sensitive lands and natural resources requiring protection from disturbance and development, and lands needed for open space and recreational use. They are based mainly on drainageways and stream channels, floodplains, wetlands, steep slopes, and other resource features, and are part of a countywide system of continuous open space corridors. Buffer zones for each environmental resource as defined in Chapter 17.28 and are considered a part of that specific resource.

Protection of these corridors in the community helps the city to protect lands needed for drainage and recreation; avoid problems from development on steep slopes, problem soils or flood-prone areas; protect water resources and avoid pollution; and enhance scenic beauty and wildlife habitat. Once delineated and adopted, the corridors are used by the city and state and federal agencies in making decisions on the location of urban development and major facilities. The corridors are also used as a basis or starting point for open space and recreation planning and acquisition. An important use of the corridors is in CARPC/DNR review of sewer extensions and sewer service areas, to direct urban development to areas outside the corridors.

Chapter 17.28 of the City's zoning ordinance identifies requirements for the mandatory protection of natural and historic resources and permanently protected green space areas within the jurisdiction of this title. These include the following resources: Floodplains, Wetlands, Drainageways, Shorelands, Woodlands, and Steep Slopes. The provisions of Chapter 17.28 are designed to ensure the implementation of the City of Sun Prairie Comprehensive Plan, the environmental protection element of the Capital Area Regional Planning Commission, and the Wisconsin Statutes. The zoning ordinance also regulates provisions for ridge tops and prairies, though these are no longer identified under CARPC's criteria for environmental corridors. Environmental corridors shall remain in an undisturbed state except for the land uses permitted in Section 17.16.040 for the specific "Permanently Protected Green Space" type and per the requirements of Section 17.16.160 which states disruption to natural resource areas shall comply with the requirements of Sections 16.28.060, 16.28.080 and 16.32.120 of the land division regulations pertaining to drainage, grading and erosion control.

Comprehensive Plan

The City's 2019 Comprehensive Plan identifies several policies and actions in Chapter 3, Natural Resources, and Chapter 9, Land Use aimed at protecting and preserving natural resources in the city:

1. Preserve natural resource protection areas and environmental corridor features including waterways, floodplains, wetlands, ground water recharge areas, steep slopes (greater than 12%), wildlife habitat, scenic vistas, and mature woodlands through the enforcement of the City's adopted natural resource protection zoning standards and through the use of the City's Subdivision Ordinance and Official Map. As feasible, ensure natural areas are accessible to the public and allow for passive recreation.
2. Require all site plans and land divisions accurately depict all natural resource features located on the property proposed for development or division.
3. Keep sewered urban development from encroaching into environmental corridors through sewer

extension controls and discourage unsewered development.

4. Locate transportation system improvements to minimize impacts on environmental corridors.
5. Foster the protection of natural resource features from development by requiring those features to be accurately depicted on all site plans, certified survey maps, preliminary plats, and final plats.

Comprehensive Outdoor Recreation Plan (CORP)

The City's 2025 CORP references the goals, policies, and actions in the City's Comprehensive Plan and CARPC regulations for natural resource protection. Specific recommendations in the CORP include:

1. Collaborate with the Public Works Department to restore wetlands, waterways, and environmental corridors in and adjacent to City parks.
2. Preserve the maximum extent of environmental corridors and ensure continuity for ecosystem and recreational values.

In 2025, the city acquired 294 acres from Groundswell Conservancy to ensure long-term stewardship of the Patrick Marsh Natural Resource Area. Groundswell has retained a conservation easement to preserve the natural, scenic, and open space values and maintain or enhance water quality while assuring the availability of the property for recreational and open space use as an urban park.

4.5 Minimum Environmental Corridors Criteria Requirements

The proposed Environmental Corridors meet the minimum requirements including but not limited to:

1. Wetlands under WDNR jurisdiction;
2. Vegetative wetland and shoreland buffers;
3. 100-year floodplains and floodways;
4. Steep wooded slopes (12% or greater);
5. Navigable water bodies designated by WDNR;
6. Non-navigable streams designated by WDNR;
7. Open drainageways;
8. Public lands and conservancy areas, excluding isolated (small) neighborhood parks;
9. Proposed public parks and conservancy areas, excluding isolated (small) neighborhood parks;
10. Areas with problematic soils, unique geological features, and critical recharge areas;
11. Archaeological sites on the National Register;
12. Endangered and sensitive habitats as determined by WDNR;
13. Stormwater facilities;
14. Known and documented significant or sensitive groundwater recharge areas.

5.0 UTILITIES & STORMWATER MANAGEMENT

5.1 Proposed Sanitary Sewer Extension for the USAA

The amendment area will be served through a combination of gravity sewer and a new lift station. Approximately 58 acres of developable land can drain by gravity to the existing sewer at the terminus of Success Way. A new lift station is anticipated along the northern boundary of the service area to provide sanitary service to the remaining 273 acres (see green hatched area in **Map 8a**). Flow from the lift station will be conveyed via an 8-inch force main discharging the gravity main on N Bristol Street. The sanitary system mapping shown in **Map 8a** is from the City’s GIS system of May 18th, 2026.

The City maintains a PCSWMM sanitary system model to understand the existing system capacity and plan for future development. The model represents the sanitary gravity interceptors (main trunklines for their collection system) with sanitary flows added incrementally throughout the system. The model was constructed in 2018 and calibrated for dry and wet weather events to account for inflow and infiltration during rainfall events. The calibration was completed using flow meters installed in the sanitary system and using influent data from the wastewater treatment facility. Wet weather peaking factors for the 25-yr storm event ranged from 2.3 – 3.4.

The existing development in this part of the City had a peaking factor of 3.4. The peaking factor was increased to 4.0 for all existing development; this was done intentionally to be more conservative in planning efforts to ensure the downstream system had enough capacity. A peaking factor of 4.0 is consistent with standard design practices for lift station sizing in Sun Prairie.

Administrative code NR 110.13 states that sewers should be designed using a 2.5x peaking factor for interceptors and a 4x peaking factor for branching sewers. The modeled approach is more conservative, assuming a 4x peaking factor uniformly for all pipes

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

Wastewater generation from the USA amendment was estimated using a commercial development flow rate of 700 gallons/acre/day. This is likely conservative, as the recent development has been lower (~360 gallons/acre/day). A peaking factor of 4.0 was used, as described in Section 5.1. Based on these criteria, the total peak flow from the USA amendment is estimated to be 624 gallons per minute (GPM). Table 2 shows the assumptions used to derive this estimate and Table 3 breaks out the estimated sanitary flows for the areas to be serviced via the new Lift Station and via gravity to connect at Success Way.

Table 2 - Average and Peak Wastewater Flow Rates for the entire Proposed USAA

Flow Contribution	700 GPD/acre
Total Developable Area	321 acres
Average Flow	224,700 GPD / 156 GPM
Peaking Factor	4
Peak Flow	624 GPM

Table 3. Average and Peak Wastewater Flow Rates for the Proposed Lift Station and Gravity Service Areas

	Proposed USAA Lift Station Service Area	Proposed USAA Gravity Service Area
Flow Contribution	700 GPD/acre	700 GPD/acre
Sewershed Area	263 acres	58 acres
Average Flow	184,100 GPD / 128 GPM	40,600 GPD / 28 GPM
Peaking Factor	4	4
Peak Flow	512 GPM	112 GPM

5.3 Existing Sewer System and Lift Station Capacity

The estimated sanitary flows were added to the City’s PCSWMM model of their sanitary system. This was done to ensure that the Business Park Lift Station and downstream pipes have adequate capacity to support future development in the Study Area.

First, the model was updated to account for the existing flows upstream of the Business Park Lift Station. The original model was developed using standard land uses and estimated flows. The model was revised to match observed flows at the Business Park LS; the pumps run 30x per day on weekdays and 15x per day on weekends. Since the PCSWMM model was calibrated using the average dry weather flows per day (not specifically on a weekday or weekend) a weighted average (26x pump runs) was used.

The City also completed a draw down test at the Business Park LS to determine the current pumping capacity. One pump has a 525-gpm capacity and the second has a 540-gpm capacity. The pumps alternate running individually; if needed both pumps can turn on at once (uncommon). The wet well dimensions were confirmed to be 8’ x 28.5’, the off float is at a depth of 26.5’, the lead float is at 21.25’ and the lag float is at 18.75’. This information was incorporated into the PCSWMM model to support planning the capacity of the downstream system. The number of pump runs was converted to an existing inflow to the lift station: 29.2 GPM. Assuming a 4x peaking factor, results in an existing peak flow of 117 GPM.

The PCSWMM was then run for existing and proposed conditions, to determine if any pipes in the system would be above capacity. **Map 8b** shows the proposed sanitary connections and the pipe capacity downstream to the Wastewater Treatment Facility (WWTF). Pipes are color coded based on the Proposed Conditions, showing the depth of water in the pipe. For example, a 12” pipe that has a maximum water depth of 6” would be 50% full. Green indicates the pipe is 0-75% full, yellow is 75-100% full, and red indicates the pipe is surcharged. The map calls out the total pipe capacity, the existing flows and the proposed flows for pipe segments from the Study Area to the Wastewater Treatment Plant. Note that the modeling uses the units of cubic feet per second (cfs) and converted to gallons per minute (GPM) for mapping display. However, the mapped outputs have limited significant figures (0.01 cfs = 4.5 GPM) and rounding errors are therefore present in the mapping.

The piped system only has one segment in yellow after the proposed flows are added to the system. There are no surcharged pipes (red) under proposed conditions. Therefore, the piped system has adequate capacity, even using conservative peaking factors, to support development in USA amendment area.

The model was also run to determine the *maximum* flows that could be added upstream of the Business Park Lift Station. This was done to assist with planning services beyond this study, as those values can be used as a benchmark. The pipes immediately downstream of the lift station along Business Park Dr appear to have limited capacity when *both pumps* turn on and run simultaneously. This occurs when 380 GPM is added to the lift station, in addition to the existing flows. This value is well above the proposed 112 GPM proposed for the USA amendment area.

If the Business Park Lift Station pumps is upgraded in the future, the pipes along Business Park Dr could be upsized. This improvement would need to be reviewed at that time, updating the PCSWMM modeling to account for any development that occurred in the interim timeframe.

5.4 Interceptor Sewer and Wastewater Treatment Facility Capacity to Serve the USAA

As mentioned in the previous section, the available PCSWMM modeling indicated that the pipes downstream of the two connection points have adequate capacity to provide sanitary service without surcharging pipes. **Map 8b** shows the existing, proposed and maximum pipe capacity along the interceptor to the Wastewater Treatment Facility. Note the pipe capacity values are different from the capacity of the treatment plant itself.

The City’s Wisconsin Pollutant Discharge Elimination System (WPDES Permit No. WI-0020478-11-0) fact sheet lists the following design flows for the wastewater treatment facility:

- Daily Maximum:** 10.26 MGD
- Weekly Maximum:** 8.73 MGD
- Monthly Maximum:** 7.53 MGD
- Annual Average:** 4.62 MGD

The WPDES permit fact sheet also cites the average influent flow as 3.60 MGD based on a monitoring period between October 2018 – March 2024. The proposed development will increase current flows by 0.22 MGD (156 GPM) on an average daily flow basis. The total of these two values (3.60 MGD + 0.22 MGD) is 3.82 MGD, below the annual average rating of 4.62 MGD. This indicates the City’s wastewater facility has capacity for the sanitary flows from the USA amendment area.

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

The proposed amendment area will be entirely served by the Sun Prairie High Pressure Zone (HPZ). The portion of the amendment area on the western side of Wilburn Road will be served by connecting to an existing 12-inch watermain at the current Cul de sac at the north terminus of Success Way and extending it north, and east throughout the development. Connection to existing 10-inch watermain on Haynes Drive will also be made to serve the development area east of Wilburn Drive. The new watermain connecting Success Way to Wilburn Road will be 12-inch diameter, but all other water mains will be 10-inch diameter.

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

The estimated flow rate is based on a typical expected commercial flow rate of 700 gallons per acre per day. The expected commercial demand is estimated based on 5-year average commercial and industrial water use. Using these figures, the 321 acres of commercial use will require average daily water of 224,700 gpd and a peak of 23,410 gallons per hour (peaking factor of 2.5).

Table 4 - Average and Peak Water Demand for the Proposed USAA

Land Use	Metrics		Average Flows (GPD)	Peaking Factor	Peak Flow (gallons per hour)
Commercial	700 GPD/acre	321 acres	224,700	2.5	23,410

5.7 Current Average Daily and Peak Hourly Water Demand

Based on PSC records from 2020 through 2024, as well as Wisconsin DNR reported pumpage statistics in the same time period, the existing 5-year average water use was approximately 1.95 million gallons per day (MGD), or approximately 1,354 gallons per minute (gpm), with a maximum day usage of 3.03 MGD or 2,104 gpm (Sun Prairie Utilities data) for the Sun Prairie High Pressure Zone. Including the previously described water main improvements, the water system model-predicted fire flows throughout the development vary from 5,000 to 7,500 gpm at a 20 psi residual pressure, which can be considered adequate to support this type of development. The water model was operated with all wells and booster pumps out of service, 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 the Business Park Tower, located 600 feet north of the intersection of Progress Way and Columbus Street. Business Park Tower has a capacity of 500,000 gallons and an overflow elevation of 1,182 feet above mean sea level. Assuming the water level in the elevated storage tower is 10 feet below the overflow, or 1,172 ft, pressures in the proposed development would range from 64 to 92 psi. This is based on ground level elevations in the proposed development that range from approximately 960 to 1,025 feet.

Table 5 – Well Capacity

Well No.	Capacity (gpm)	Capacity (MGD)
4	1,200	1.73
5	1,350	1.94
6	1,200	1.73
7	1,400	2.02
9	1,100	1.58
Total Capacity	6,250	9.00
Firm Capacity*	4,850	6.98

The City of Sun Prairie’s High Pressure Zone is supplied by five groundwater wells, Nos. 4, 5, 6, 7, and 9. Well Nos. 4, and 9 pump directly into the distribution system while Wells No. 5, 6, and 7 pumps into respective ground-level reservoirs, where 1,200-1,500 gpm booster pumps are used to pump into the distribution system. The reported capacities of the five wells are listed below in gpm and MGD.

*Assumes Well No. 7 well pump out of service

System storage consists of two steel spheroid elevated tanks and three concrete ground-level reservoirs at Wells No. 5, 6, and 7. A summary of these storage facilities is listed below.

Table 6 – Storage Facilities

Storage Facility	Year Constructed	Capacity (gallons)	Overflow Elevation (ft)	Booster Pump Capacity (gpm)
Business Park Tower	2001	500,000	1182	N/A
Bird Street Tower	1962	200,000	1182	N/A
Musket Reservoir (Well #6)	1980	500,000	N/A	1,200
Colorado Reservoir (Well #5)	1967	500,000	N/A	1,200
St. Alberts Reservoir (Well #7)	2008	750,000	N/A	1,500
Total Storage		2,450,000		

5.9 Proposed Stormwater Management Standards and Best Management Practices

The land is in three watersheds with a majority of the amendment area draining north to the Maunasha River, the southern portion draining to Koshkonong Creek, and the southwestern portion draining to Token Creek. These three watersheds are all a part of Total Maximum Daily Load (TMDL) reaches with varying total suspended solids and total phosphorus requirements.

Stormwater runoff will flow through a network of grassed swales, storm sewers, wet detention basins, and infiltration basins. It is anticipated that regional stormwater management areas will be used to meet all requirements in five different locations across the amendment area. The combination of these stormwater best management practices will meet or exceed all applicable performance standards required by the State of Wisconsin (NR 151), Dane County (Chapter 14), and City of Sun Prairie Erosion Control and Stormwater Management (Chapter 15).

All the proposed Stormwater Best Management Practices will be owned and maintained by the City.

1. Water Quality

- a. The development is required to provide sufficient sediment control to reduce total suspended soils leaving the site by at least 80%.
- b. The development is in three TMDL reaches so any runoff draining to those reaches are required to provide the following total phosphorus reductions:
 - i. Maunasha River – 36.5%
 - ii. Token Creek – 61.3%
 - iii. Koshkonong Creek – 54.0%

2. Peak Discharge Rate Control

- a. The development shall maintain predevelopment peak runoff rates for the 1-, 2-, 10-, 100-, and 200-year, 24-hour storm events, utilizing MSE4 NRCS rainfall intensity distribution, as itemized below:
 - i. 1-yr, 24-hr event (2.49 inches).
 - ii. 2-yr, 24-hr event (2.84 inches).
 - iii. 10-yr, 24-hr event (4.09 inches).
 - iv. 100-yr, 24-hr event (6.66 inches).
 - v. 200-yr, 24-hr event (7.53 inches).

3. Infiltration

- a. 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.
- b. There are three closed depressions in the amendment area. Pre-development modeling must include closed watershed areas. Sites within the closed watersheds must be designed to achieve 90% stay-on, without exemption.
- c. When the City designs the regional BMPs, the intent will be to provide full infiltration for all developments with the USA amendment. However, if the design cannot do so, the requirement will be placed on the individual developer. As part of the satisfaction for that requirement, they will have to complete onsite investigations and required to infiltrate stormwater to maximum extent practical (MEP).

4. Thermal Control

- a. Portions of the USA amendment drain to Token Creek, a cold-water body. If regional BMPs are insufficient to provide infiltration for this portion of the developing area, the individual developers will be required to satisfy the City of Sun Prairie post construction stormwater management standards for infiltration.

5. Oil and Grease Control

- a. Oil and grease control will be required onsite to satisfy the City of Sun Prairie post construction stormwater management standards.

APPENDIX A

City of Sun Prairie Resolution No. XX

APPENDIX B

Adjacent Government Notice

City of Sun Prairie - Business Park Urban Service Area Amendment



Joshua Clements <jclements@cityofsun

To Brian Willison

Cc Town of Bristol - Clerk/Treasurer; Sarah Sauer; Taylor Brown

Reply

Reply All

Forward



Fri 5/29/2026 7:39 PM



00036387_Business Park Expansion_USAA_04.0.26.pdf
945 KB



00036387_Business Park Expansion_USAA_Maps_04.0.26.pdf
9 MB

Brian,

The City of Sun Prairie has initiated an Urban Service Area Amendment for business park expansion. I am reasonably certain that we discussed this during our cooperative plan meetings. I apologize for not following up in writing in a timelier manner.

As you may know, the Urban Service Area is the regulatory process identifies where sanitary sewer service already exists and adjacent lands most suitable for new development. This process, regulated by CARPC and the DNR, ensures natural resources protections are achieved, and utilities are provided in a responsible manner. www.capitalarearpc.org/water-quality/service-areas/

The city is taking this action to prepare for anticipated future expansion of the business park so that we can conduct this step in a measured manner rather than in response to a private proposal. No developments in the USA area are currently proposed. We believe that the amendment is consistent with the existing and draft Cooperative Plans.

Attached is the draft USA amendment application. Our consultant, MSA, is incorporating some feedback from CARPC and preparing the submittal.

The Plan Commission will receive a presentation on June 9th and the City Council will review the application on June 16th.

Please let me know if you have any questions or concerns.

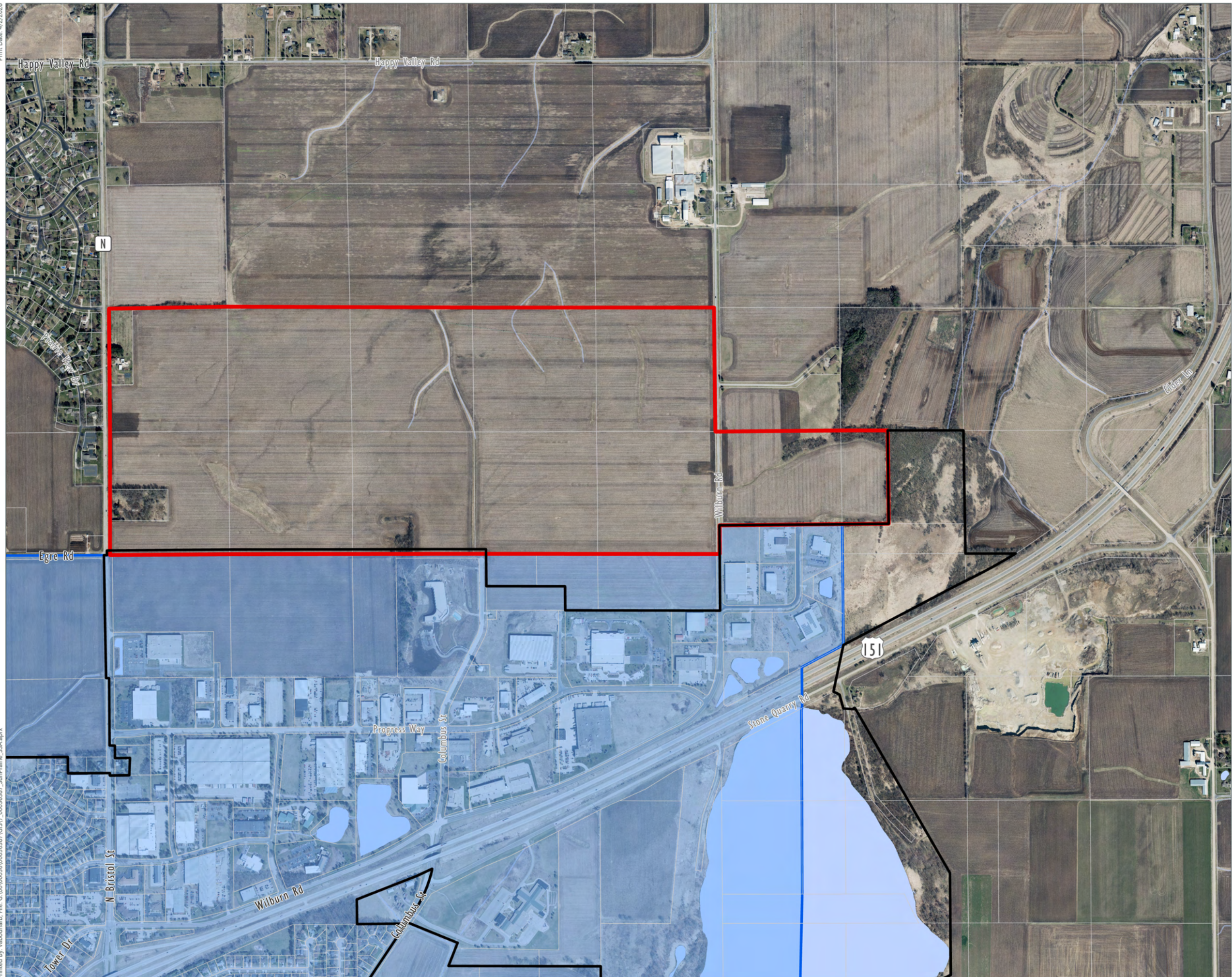
Have a great weekend,

Josh

Map1 Study Area

Urban Service Area
Amendment
City of Sun Prairie
Dane County, WI

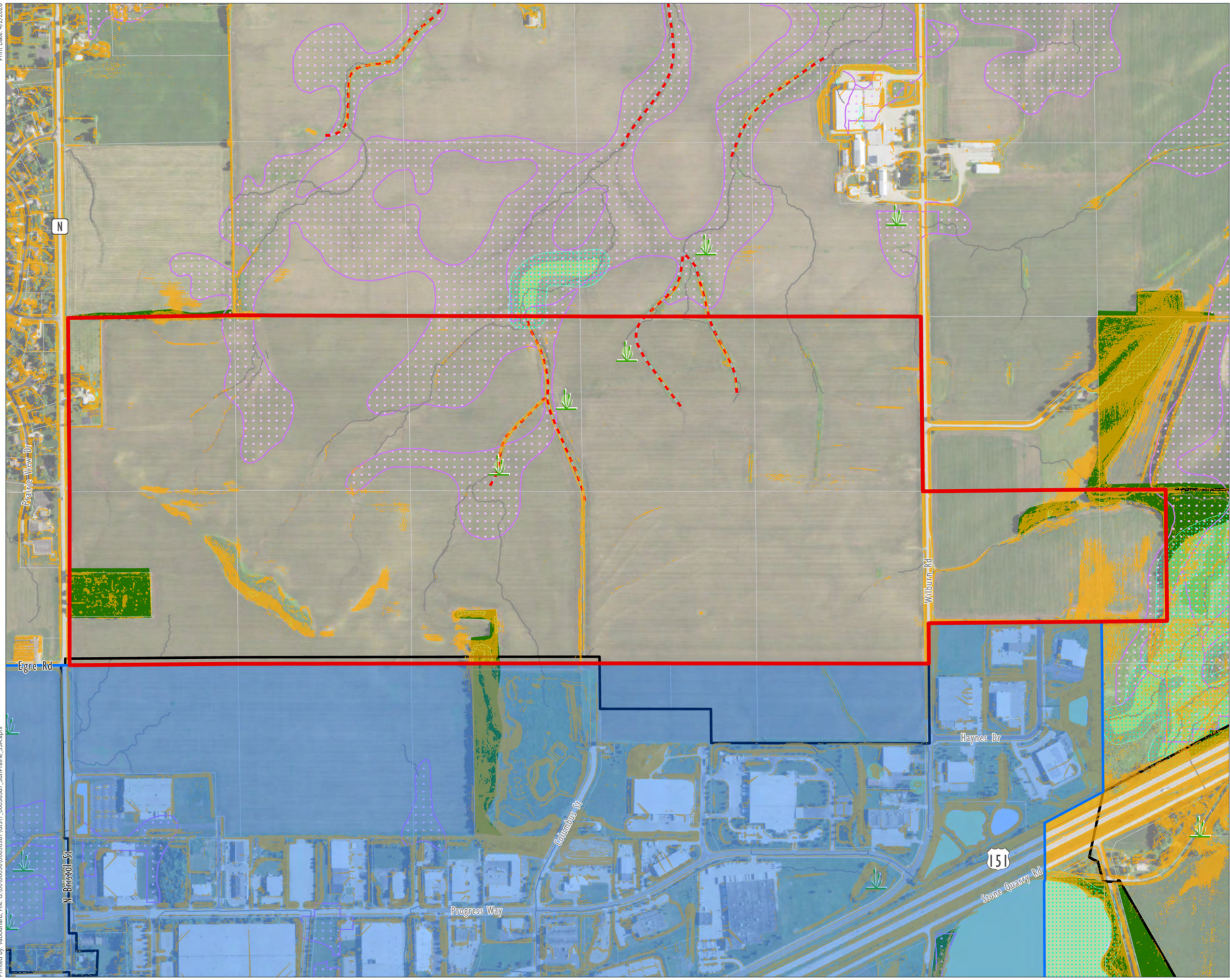
- Urban Service Area Amendment
- Existing Urban Service Area
- City of Sun Prairie
- Parcels
- Lakes and Ponds
- Rivers and Streams















Data Sources:
Municipal Boundaries and road names
provided by Dane County (May 2025).
Urban Service Area provided by Dane County.

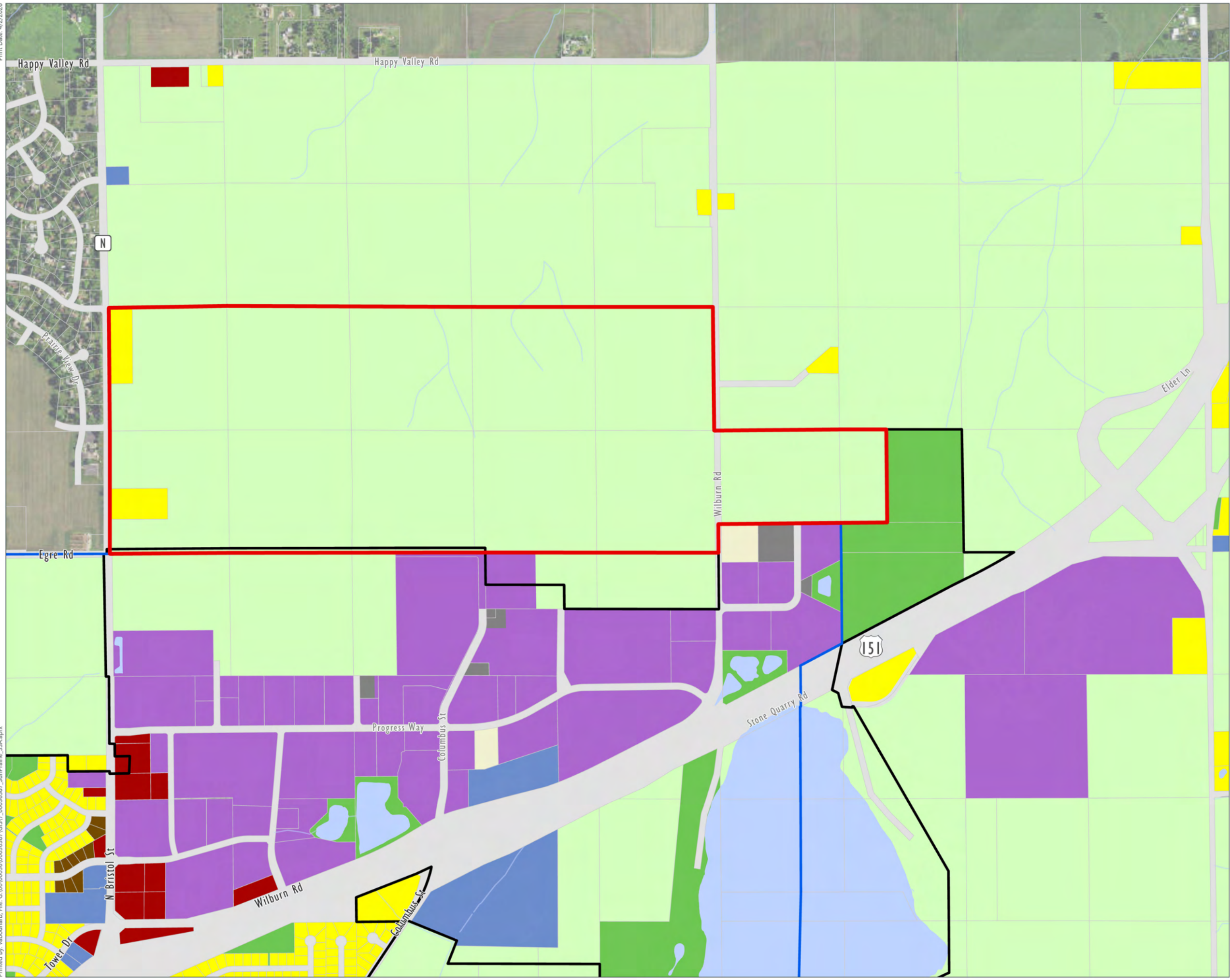
Map2 Natural Resources

Urban Service Area Amendment City of Sun Prairie Dane County, WI



-  Urban Service Area Amendment
-  City of Sun Prairie
-  Existing Urban Service Area
-  Parcels
-  Resource Protection Corridors
-  Steep Slopes (>12)
-  Woodland
-  Wetland Indicators
-  FWS Wetlands
-  Wetland too small to delineate
-  Rivers and Streams
-  Constructed Drainage

Data Sources:
Municipal Boundaries, natural resources, drainageways, and road names provided by Dane County (2025).



Map3 Existing Land Use

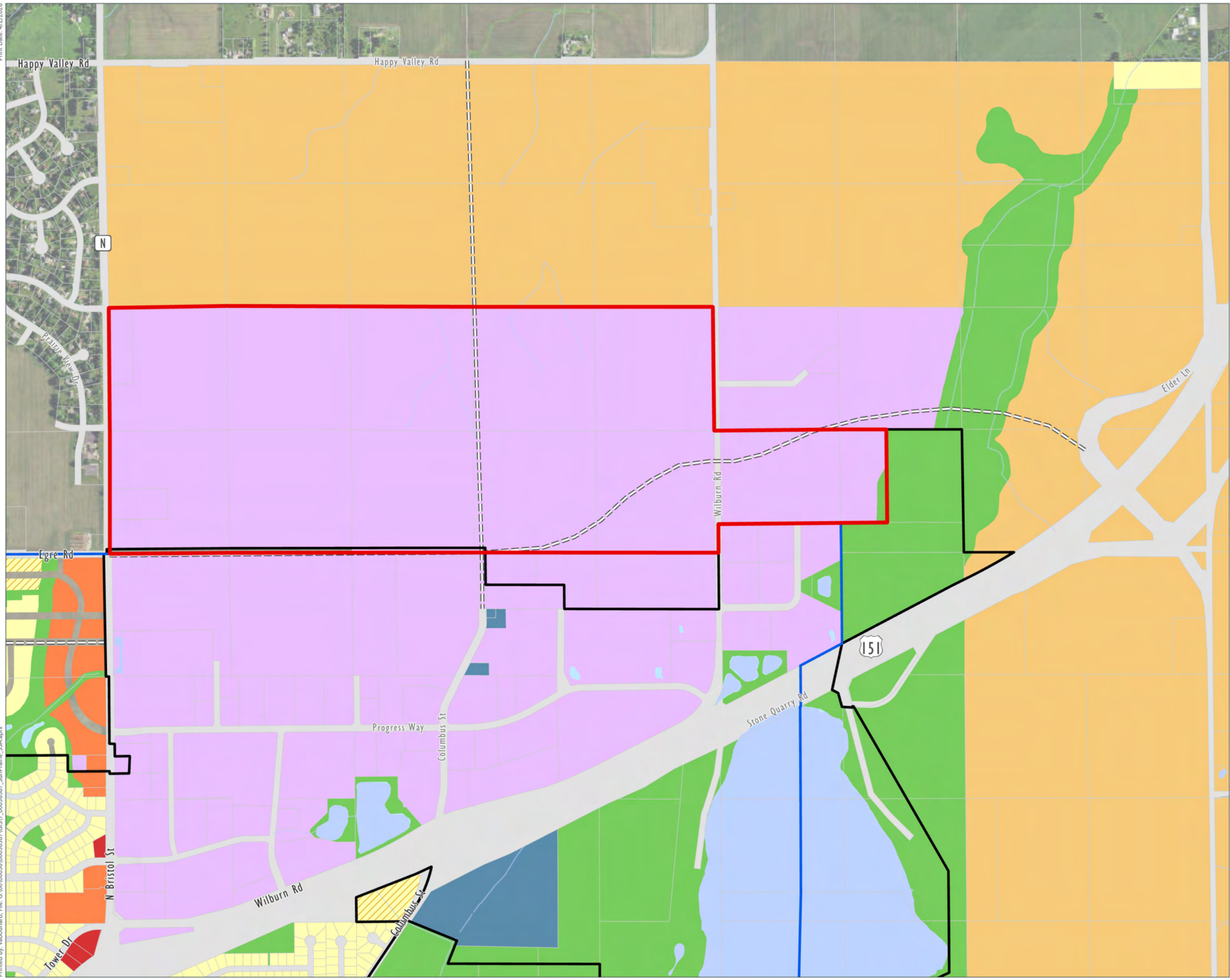
Urban Service Area
Amendment
City of Sun Prairie
Dane County, WI

- Urban Service Area Amendment
- City of Sun Prairie
- Existing Urban Service Area
- Parcels
- Lakes and Ponds
- Rivers and Streams
- Existing Land Use**
- Single and Two-Family Residential
- Multi-Family Residential
- Commercial/Office
- Industrial
- Institutional
- Parks and Open Space
- Utilities
- Agriculture
- Vacant Lot
- Water
- Right of Way

Data Sources:
Municipal Boundaries and road names
provided by Dane County (May 2025).
Urban Service Area & Right-of-Way provided by Dane
County (2025).
Existing Land Use Map (Comprehensive Plan 2019)

Map4 Future Land Use

Urban Service Area Amendment City of Sun Prairie Dane County, WI

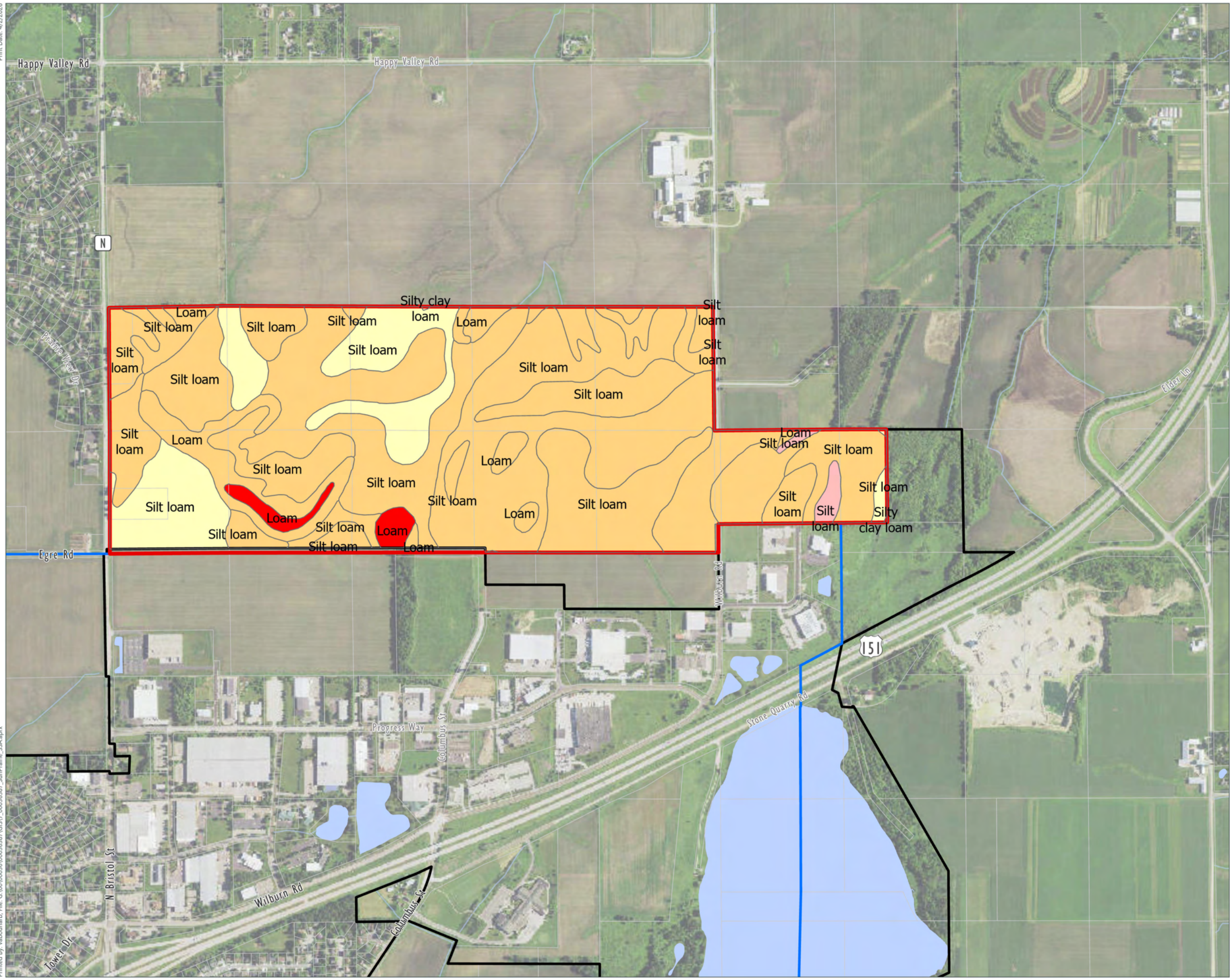


- Urban Service Area Amendment
 - City of Sun Prairie
 - Existing Urban Service Area
 - Parcels
 - Future Arterial/Collector
 - Lakes and Ponds
 - Rivers and Streams
- Future Land Use (2019)**
- Neighborhood Residential
 - General Commercial
 - Neighborhood Mixed Use
 - Employment
 - Institutional & Utilities
 - Parks & Open Space
 - Urban Reserve
 - Water/Stormwater Facilities
 - High-Intensity Residential Overlay
 - Right of Way

Data Sources:
Municipal Boundaries, road names, right-of-way,
Urban Service Area provided by Dane County (May
2025).
Future Land Use Map (from Sun Prairie Comprehensive
Plan 2019).

Map5 Soils

Urban Service Area
Amendment
City of Sun Prairie
Dane County, WI

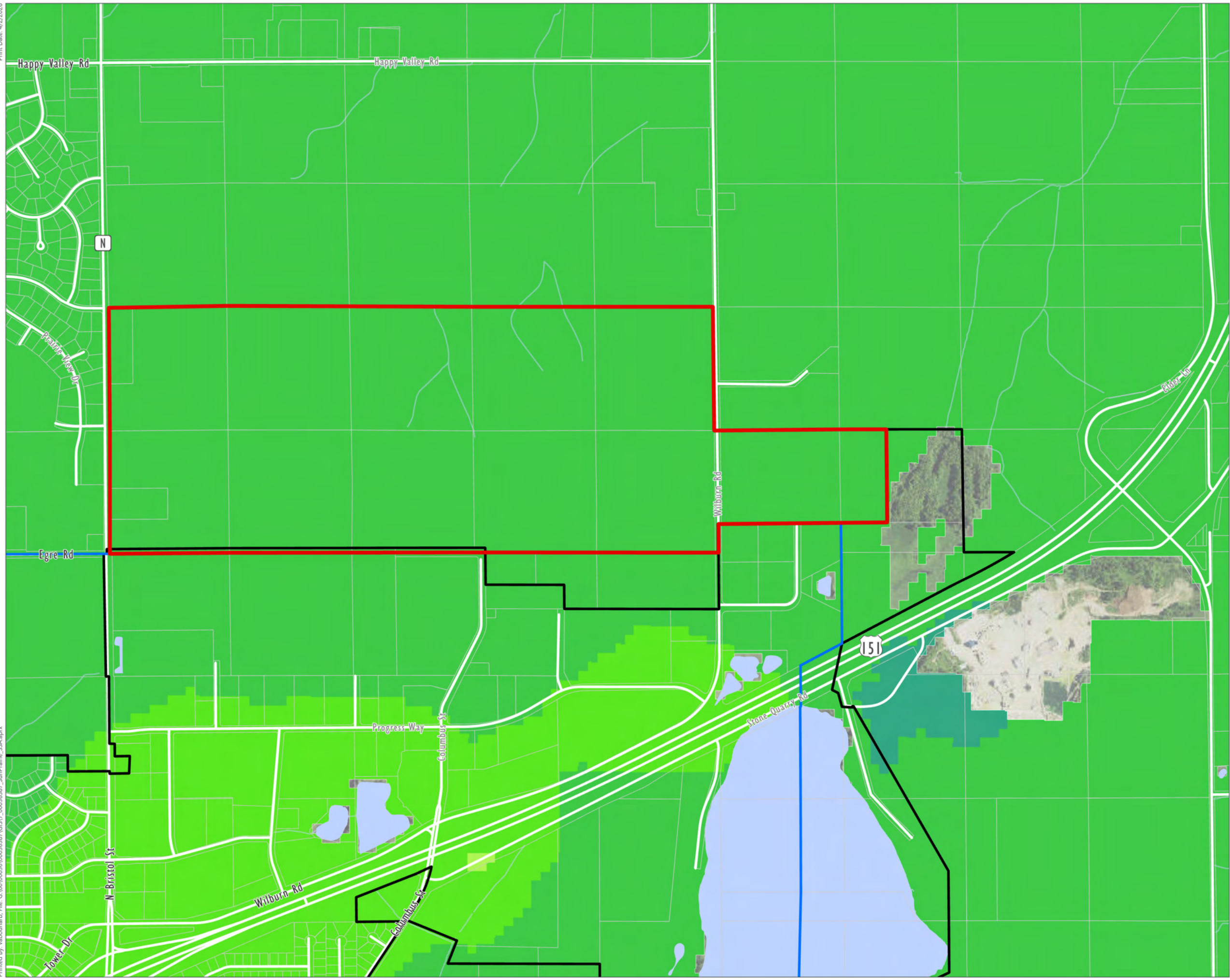


- Urban Service Area Amendment
 - City of Sun Prairie
 - Existing Urban Service Area
 - Parcels
 - Lakes and Ponds
 - Rivers and Streams
- Potential Erosion Hazard (Road/Trail)**
- Erosion hazard slight
 - Erosion hazard moderate
 - Erosion hazard severe
 - Erosion hazard very severe

Data Sources:
Municipal Boundaries, natural resources, drainageways, and road names provided by Dane County (2025).

Map6 Groundwater

Urban Service Area
Amendment
City of Sun Prairie
Dane County, WI

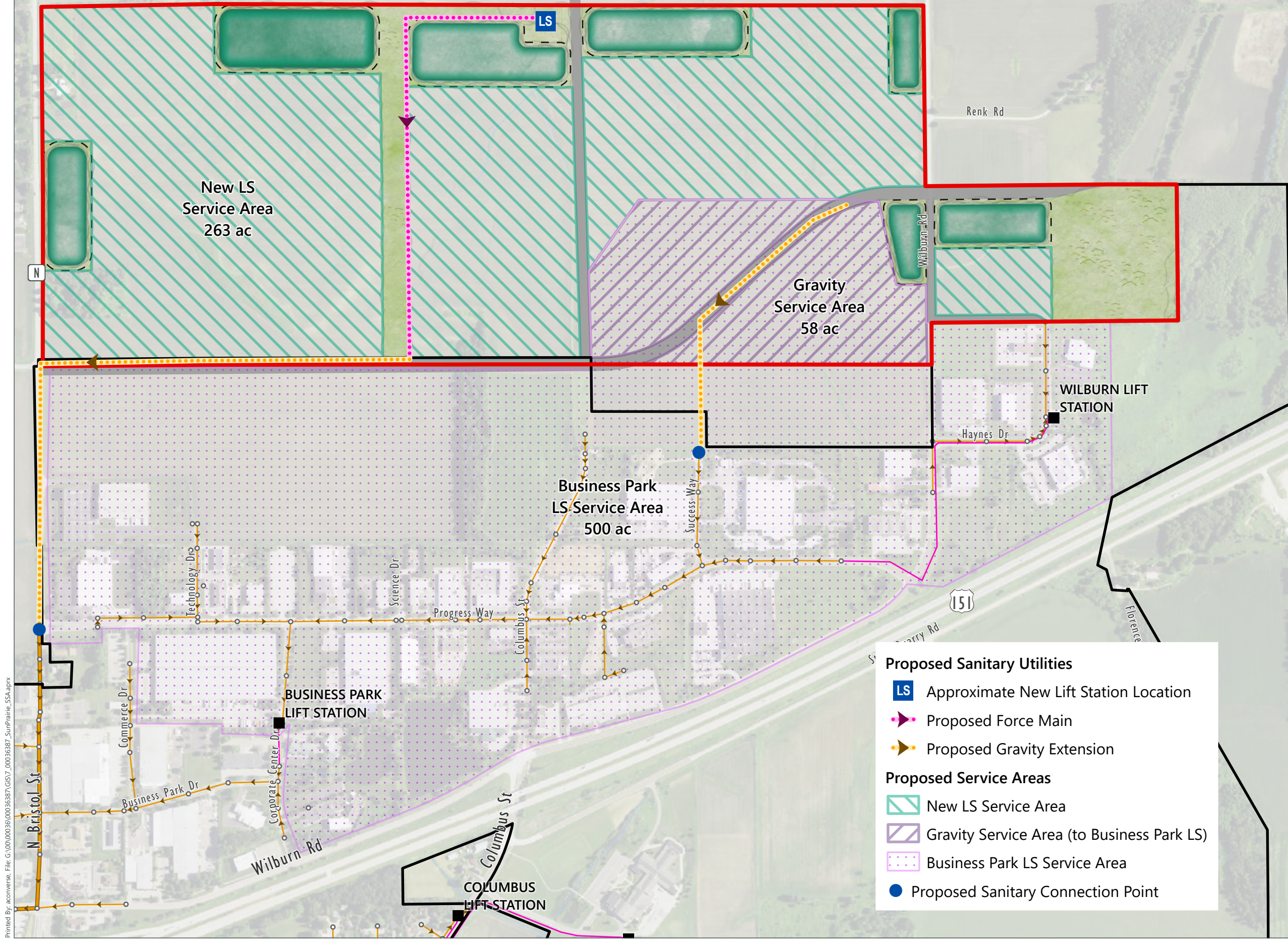


- Urban Service Area Amendment
 - Existing Urban Service Area
 - City of Sun Prairie
 - Parcels
 - Lakes and Ponds
 - Rivers and Streams
- SWB Recharge**
- < 5
 - 5 - 7
 - 7 - 9
 - 9 - 10
 - 10 - 11
 - 11 - 13
 - 13 - 15
 - > 15

Data Sources:
Municipal Boundaries, natural resources, drainageways, and road names provided by Dane County (2025).
Wisconsin Geological and Natural History Survey / CARPC

Map8a Proposed Sanitary Utilities

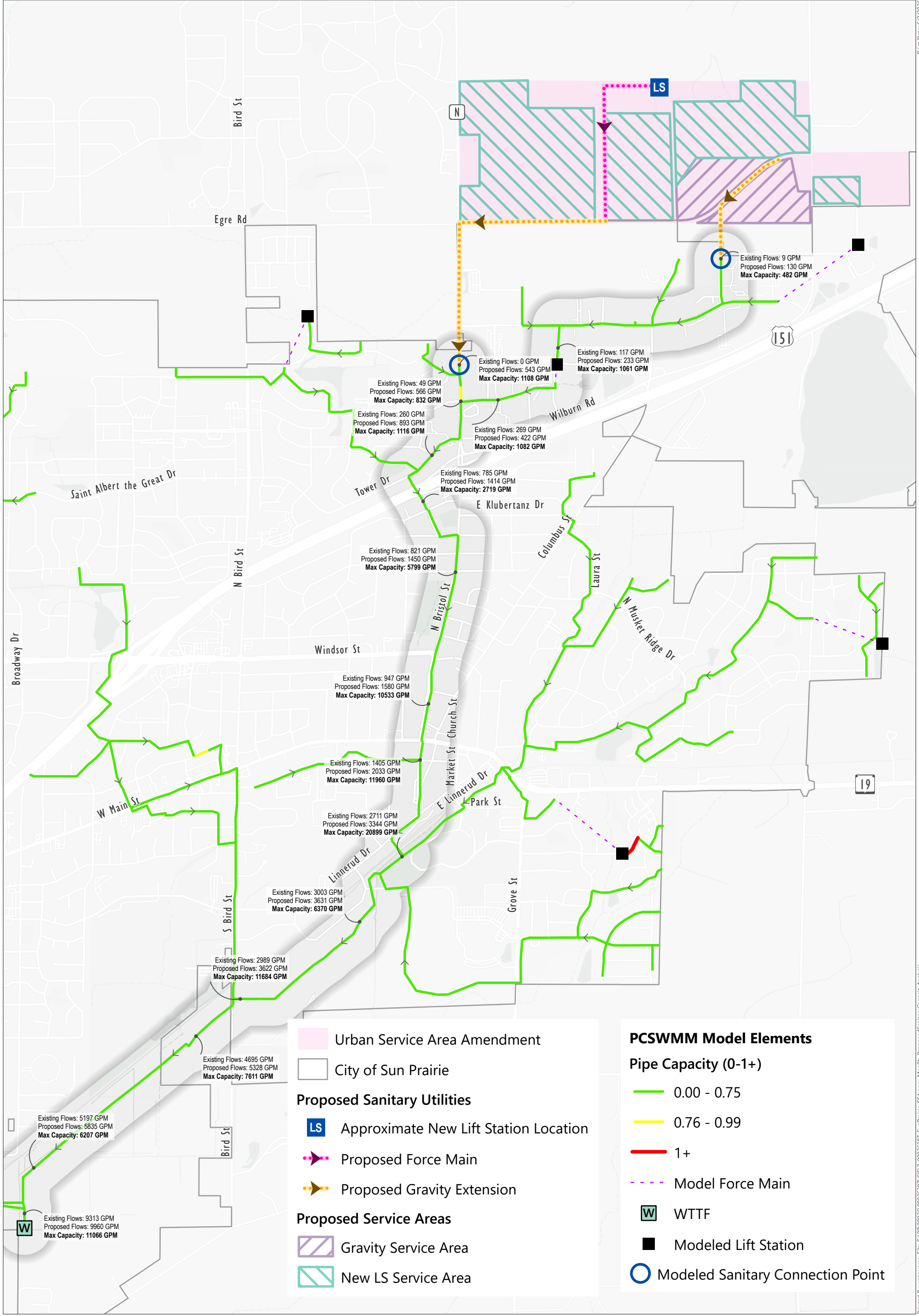
Urban Service Area Amendment
City of Sun Prairie
Dane County, WI



- Urban Service Area Amendment
 - City of Sun Prairie
 - Development Outlot
 - Conceptual Stormwater Basin
 - Stormwater Basin Buffer
 - Proposed Roads
- Existing Sanitary System**
- Gravity Main, Interceptor
 - Gravity Main
 - Force Main
 - Sanitary Lift Stations
 - Existing Manhole
 - Proposed Sanitary Connection Point

- Proposed Sanitary Utilities**
- LS Approximate New Lift Station Location
 - Proposed Force Main
 - Proposed Gravity Extension
- Proposed Service Areas**
- New LS Service Area
 - Gravity Service Area (to Business Park LS)
 - Business Park LS Service Area
 - Proposed Sanitary Connection Point

Data Sources:
Municipal Boundaries, road names, right-of-way,
Urban Service Area provided by Dane County (May 2025).
Utilities: Sun Prairie GIS (2026)



Data Sources:
Municipal Boundaries, road names, right-of-way, Urban Service Area provided by Dane County (May 2025).
PCSWMM Model: MSA on behalf of Sun Prairie (2026)



Map8b Proposed Sanitary Capacity Analysis

Urban Service Area Amendment

City of Sun Prairie
Dane County, WI

Map8c Proposed Water Utilities

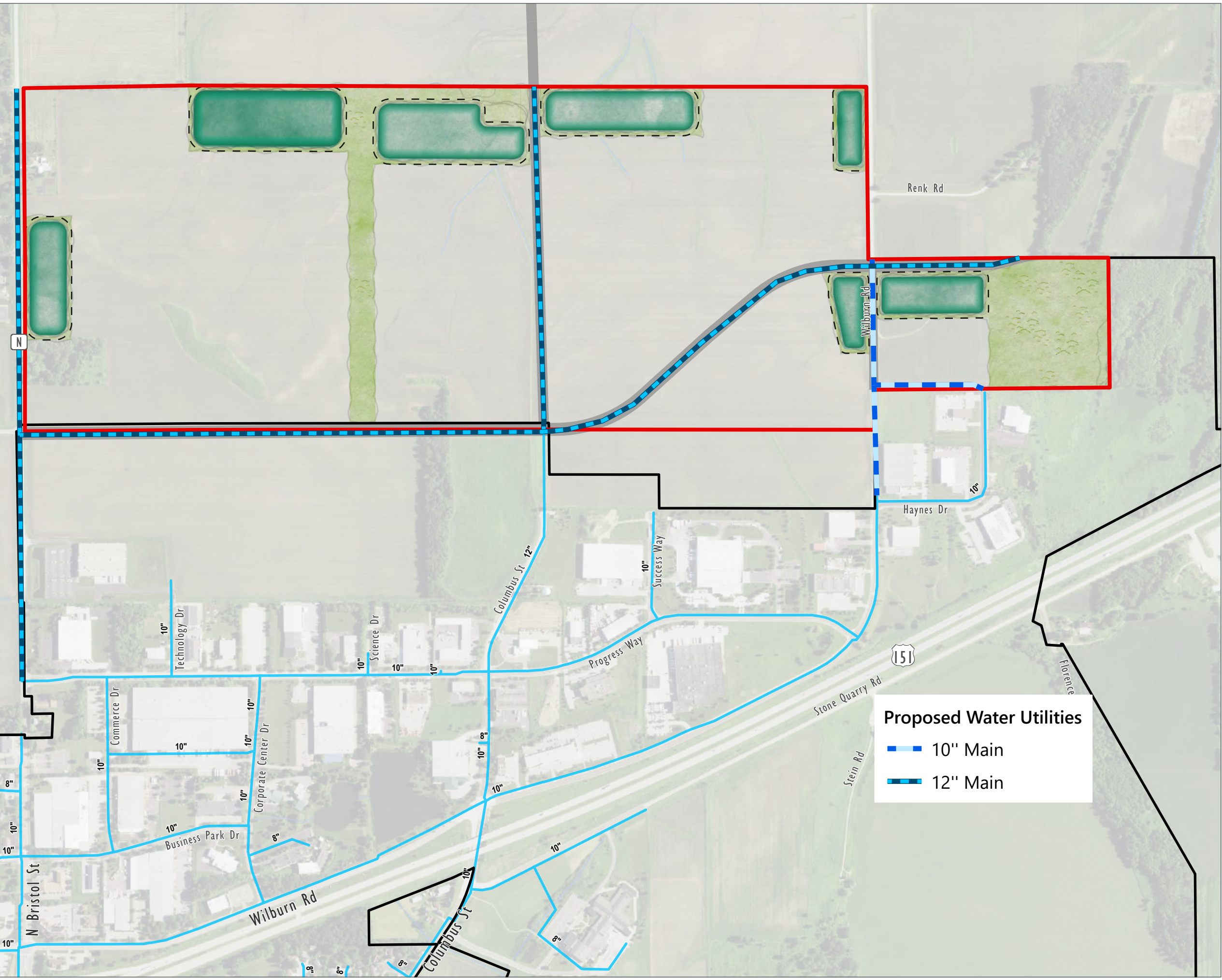
Urban Service Area Amendment
City of Sun Prairie
Dane County, WI

- Urban Service Area Amendment
 - City of Sun Prairie
 - Development Outlot
 - Conceptual Stormwater Basin
 - Stormwater Basin Buffer
 - Proposed Roads
- Existing Utilities**
- Existing Water Main

Proposed Water Utilities

- 10" Main
- 12" Main

Data Sources:
Municipal Boundaries, road names, right-of-way,
Urban Service Area provided by Dane County (May 2025).
Utilities: Sun Prairie GIS (2026)

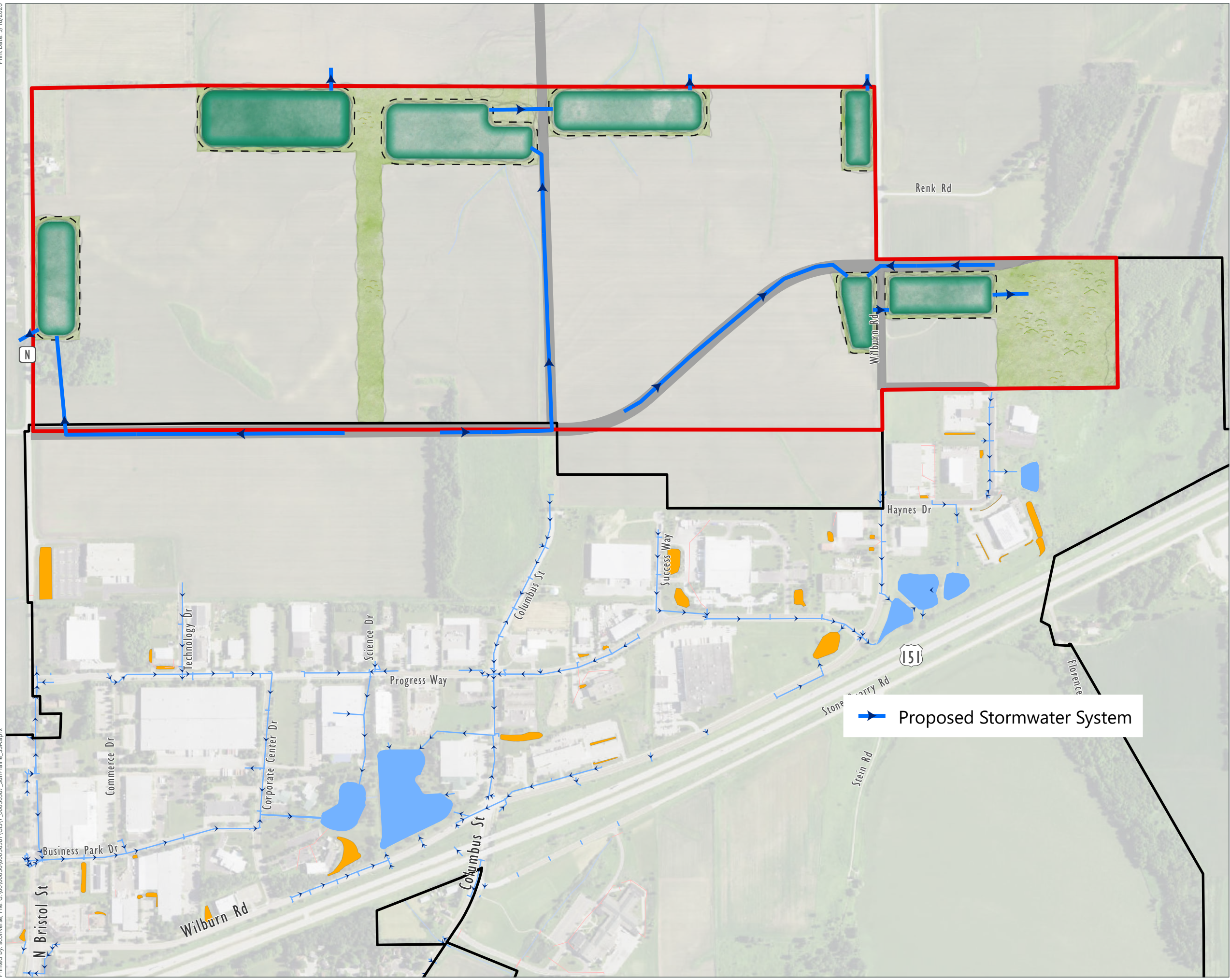


Map8d Proposed Stormwater

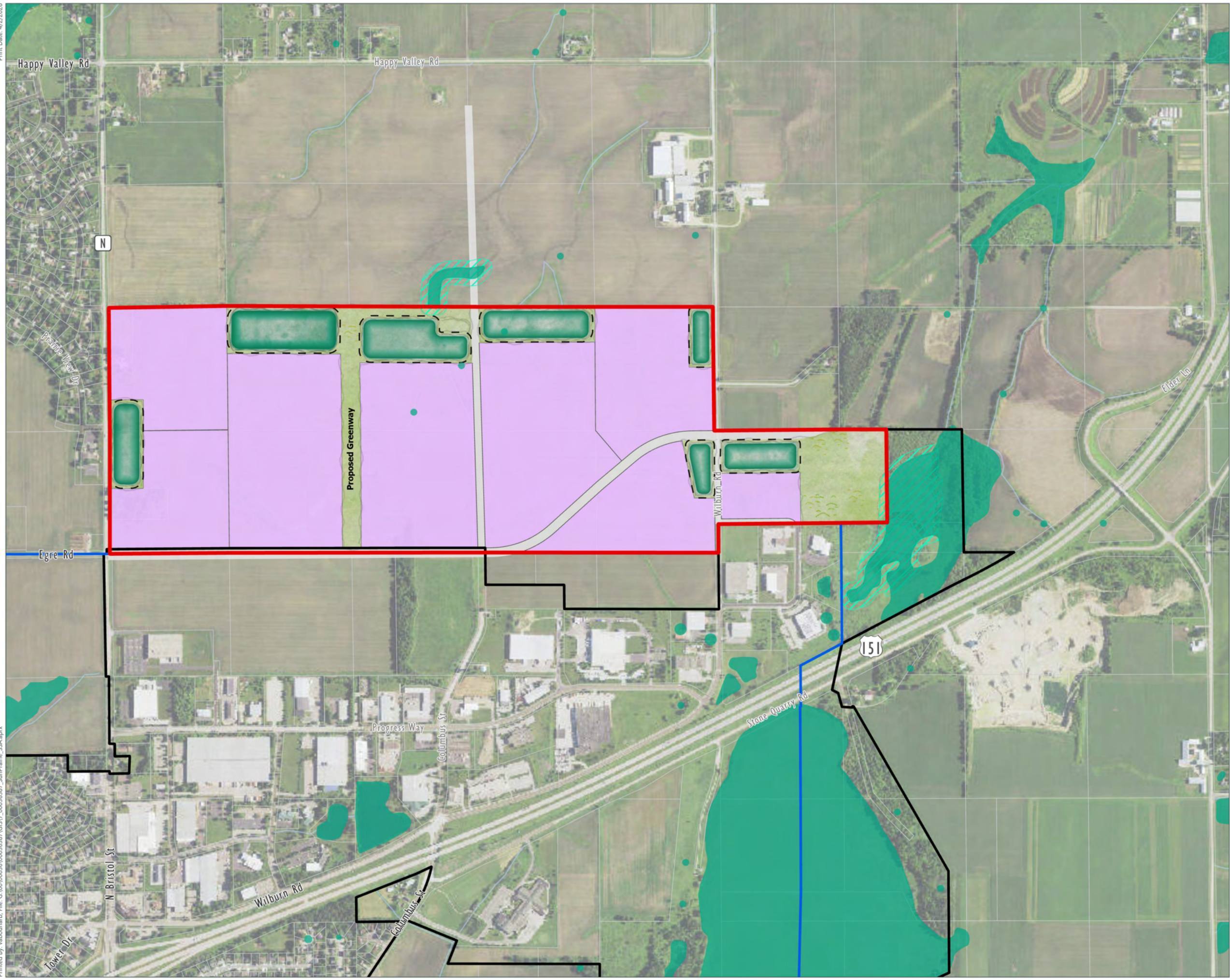
Urban Service Area Amendment
City of Sun Prairie
Dane County, WI

- Urban Service Area Amendment
- City of Sun Prairie
- Development Outlot
- Conceptual Stormwater Basin
- Stormwater Basin Buffer
- Proposed Roads
- Existing Stormwater System**
- Sun Prairie Storm Pipe
- Other Storm Pipe
- Sun Prairie BMP
- Private BMP

→ Proposed Stormwater System



Data Sources:
 Municipal Boundaries, road names, right-of-way,
 Urban Service Area provided by Dane County (May 2025).
 Utilities: Sun Prairie GIS (2026)



Map9 Proposed Environmental Corridor

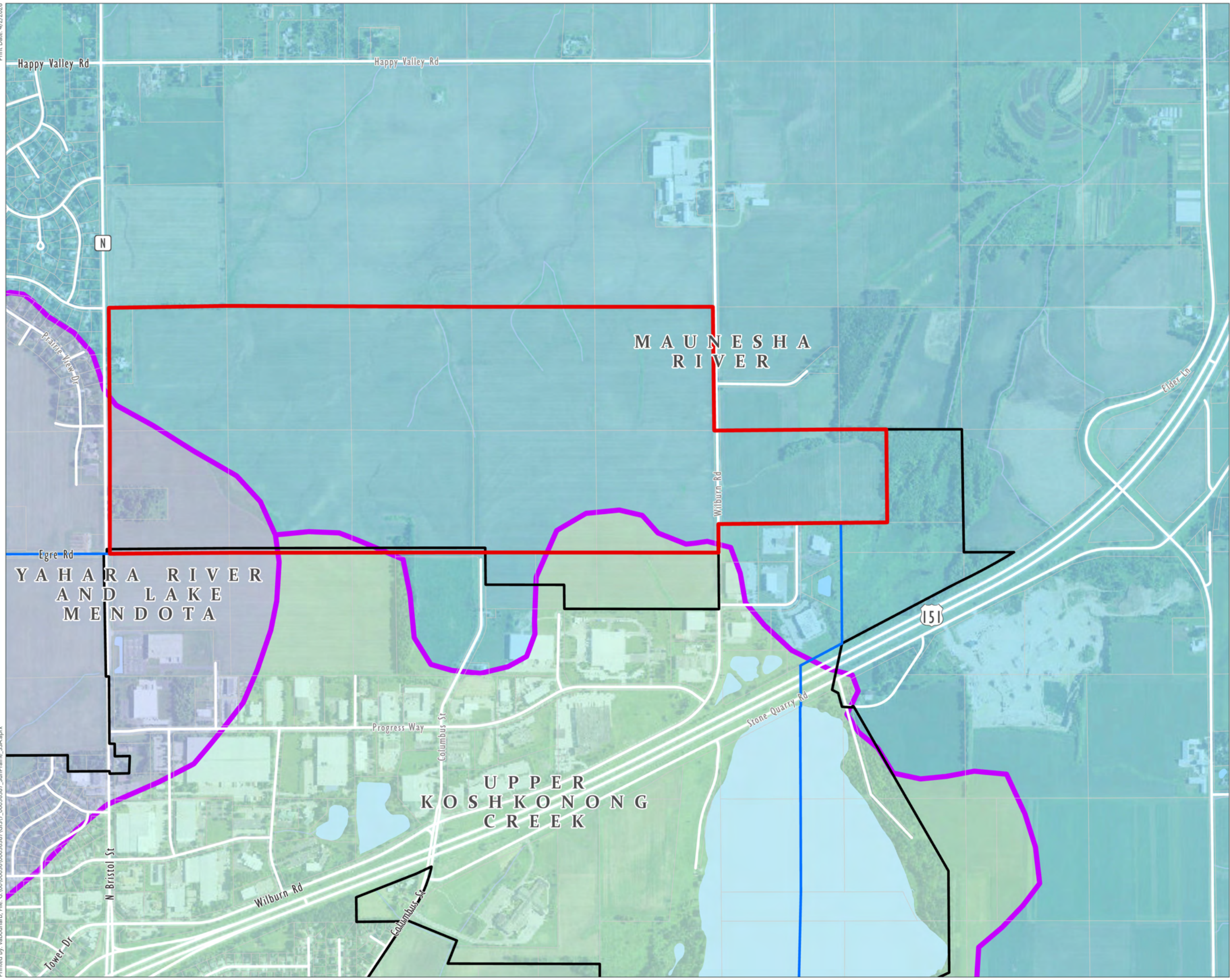
Urban Service Area Amendment
 City of Sun Prairie
 Dane County, WI

- City of Sun Prairie
- Urban Service Area Amendment
- Existing Urban Service Area
- FWS Wetlands
- Wetland Buffer
- Development Outlot
- Conceptual Stormwater Basin
- Stormwater Basin Buffer
- Proposed Roads
- Business Park

Data Sources:
 Municipal Boundaries, road names, right-of-way,
 Urban Service Area provided by Dane County (May 2025).
 Future Land Use Map (from Sun Prairie Comprehensive Plan 2019).

Map10 Watersheds

Urban Service Area
Amendment
**City of Sun Prairie
Dane County, WI**



- Urban Service Area Amendment
- Existing Urban Service Area
- City of Sun Prairie
- Parcels
- Lakes and Ponds
- Rivers and Streams

- Watersheds**
- Upper Koshkonong Creek
 - Mauneshia River
 - Yahara River and Lake Mendota

Data Sources:
Municipal Boundaries, natural resources, drainageways, and road names provided by Dane County (2025).
Wisconsin Geological and Natural History Survey / CARPC