
**Staff Analysis of the Proposed Amendment to the *Water Quality Plan*
Revising the Verona Urban Service Area Boundary and Environmental Corridors in
the City of Verona**

1. Applicant: City of Verona

2. Description of Proposal

The proposed amendment adds 19.4 acres to the Verona Urban Service Area, including 4.4 acres of existing right-of-way and 10.1 acres of environmental corridors for a net developable area of 4.9 acres. The proposed amendment is planned for development of a public library and a City recreation complex. The recreation complex is mostly already in the USA to the west of the amendment area. The amendment area is proposed for inclusion in environmental corridors, and only the extreme west edge of the amendment area will be part of the recreation complex. The rest of the amendment area houses a Park and Ride lot and the Capitol City Trail trail-head. The amendment area includes 4.9 acres in the City of Verona and 14.5 acres in the Town of Verona. Table 1 shows the detailed acreage of different uses proposed in this amendment (also see maps 1, 2, 3, and 4, and photographs).

Table 1

Proposed Land Use	Total (acres)	% of Total	Existing Develop.	Environ. Corridor	Developable
Institutional – Library	4.9	25.3%			4.9
Street R-O-W	0.7	3.6%	0.7		
Highway R-O-W	3.7	19.1%	3.7		
Park – Ball Field	10.1	52.1%		10.1	
TOTAL	19.4	100%	4.4	10.1	4.9

3. Existing Environment

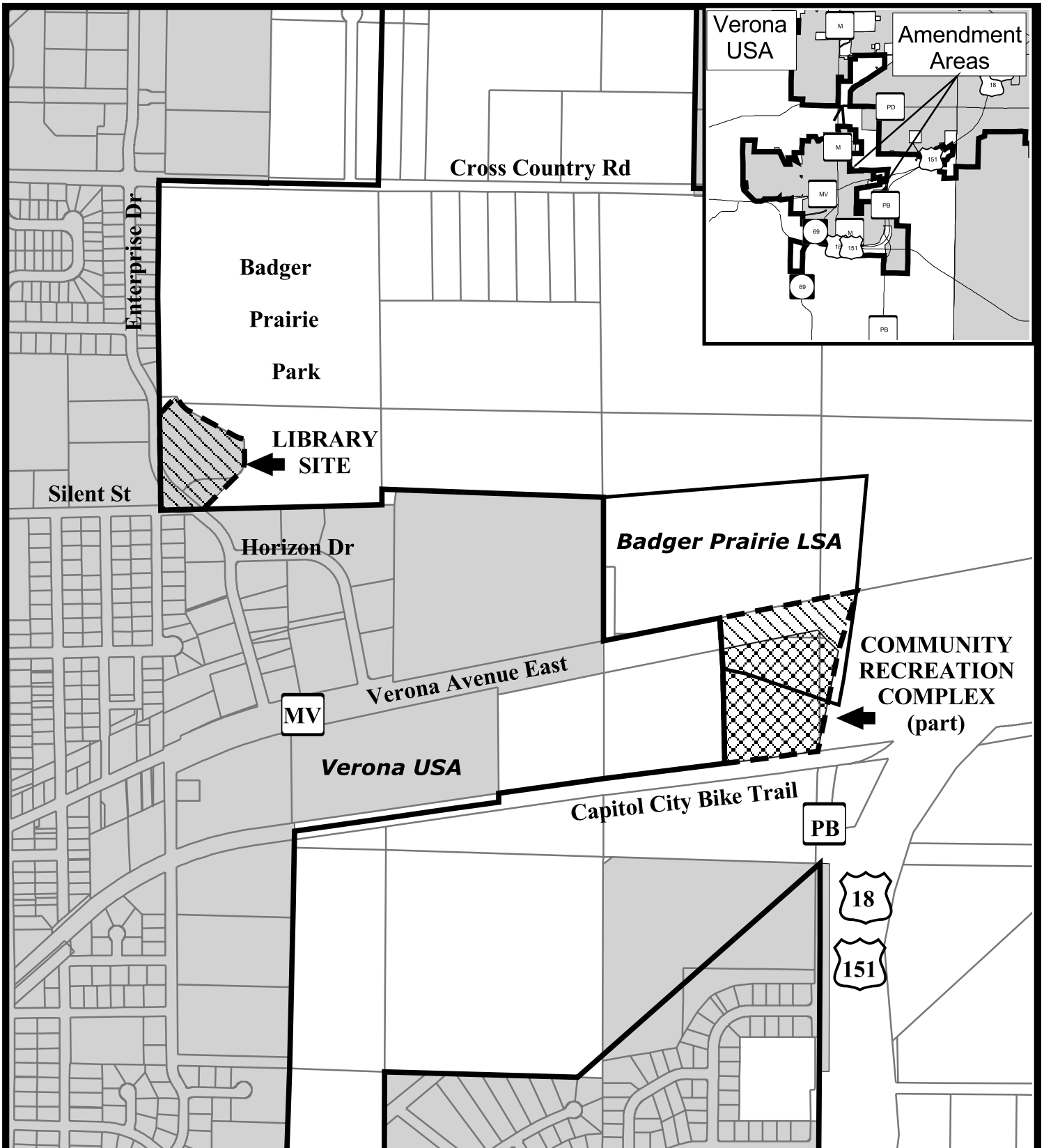
Land Use. The library portion of the proposed amendment area is presently in passive open space as part of Badger Prairie Park. The recreation complex portion of the proposed amendment area is west of a Park and Ride parking lot and the Capitol City Trail trail-head, and in agricultural use and open space. Over half of this area is in the Badger Prairie Limited Service Area.

Land uses adjacent to the library site are the following:






- North: Dane County Badger Prairie Park in the Town of Verona
- East: Dane County Badger Prairie Park in the Town of Verona
- South: Commercial/Residential development in the City of Verona
- West: Residential development in the City of Verona

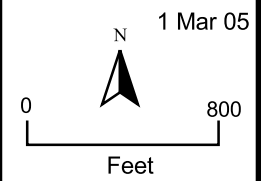
Land uses adjacent to the ball park site are the following:

- North: Senior group quarters (Badger Prairie LSA) in the Town of Verona
- East: Highway 18-151 and CTH PB right-of-way.
- South: Military Ridge Trail and county open space in the Town of Verona
- West: Agricultural in the Town of Verona

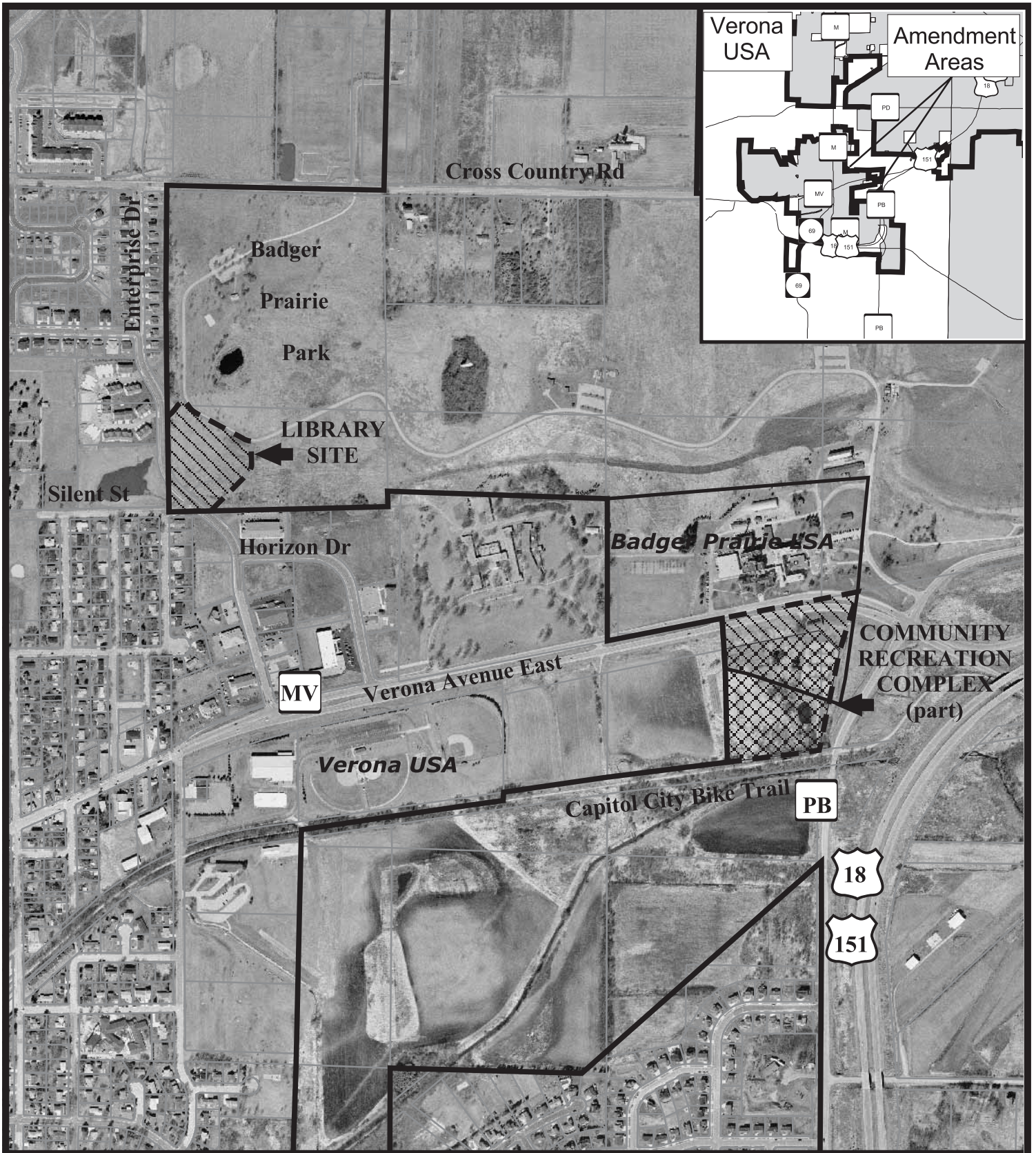


**Map 1 Amendment
to the Verona
Urban Service Area,
City & Town of Verona**





-  Service Area to be added
-  Proposed Environmental Corridor
-  Existing Urban Service Area Boundary
-  Proposed Urban Service Area Boundary
-  Incorporated Area

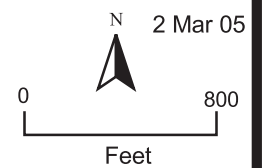


Prepared by CAPD.

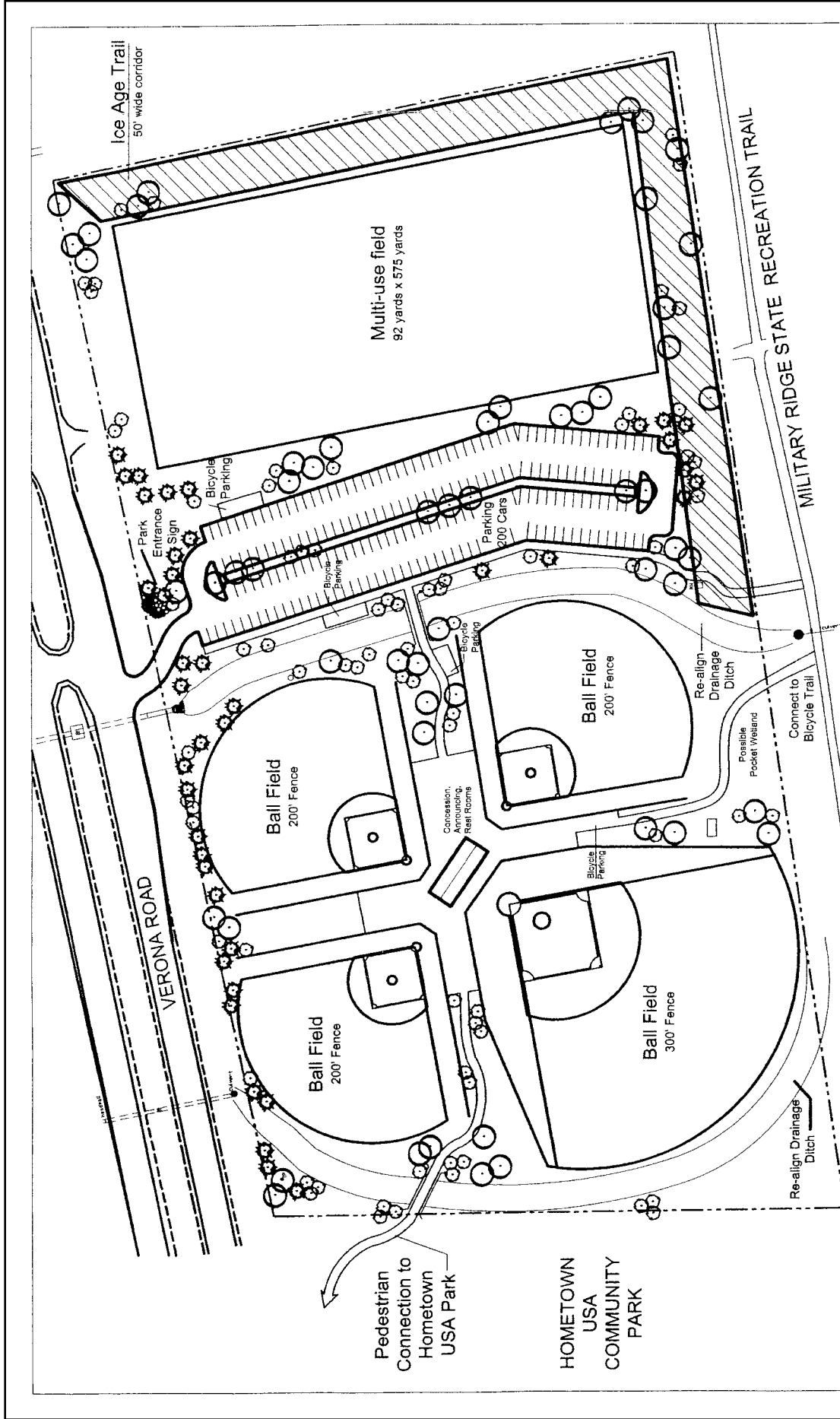


**Map 2 Amendment
to the Verona
Urban Service Area,
City & Town of Verona**

-  Service Area to be added
-  Proposed Environmental Corridor
-  Existing Urban Service Area Boundary
-  Proposed Urban Service Area Boundary



Prepared by CAPD.



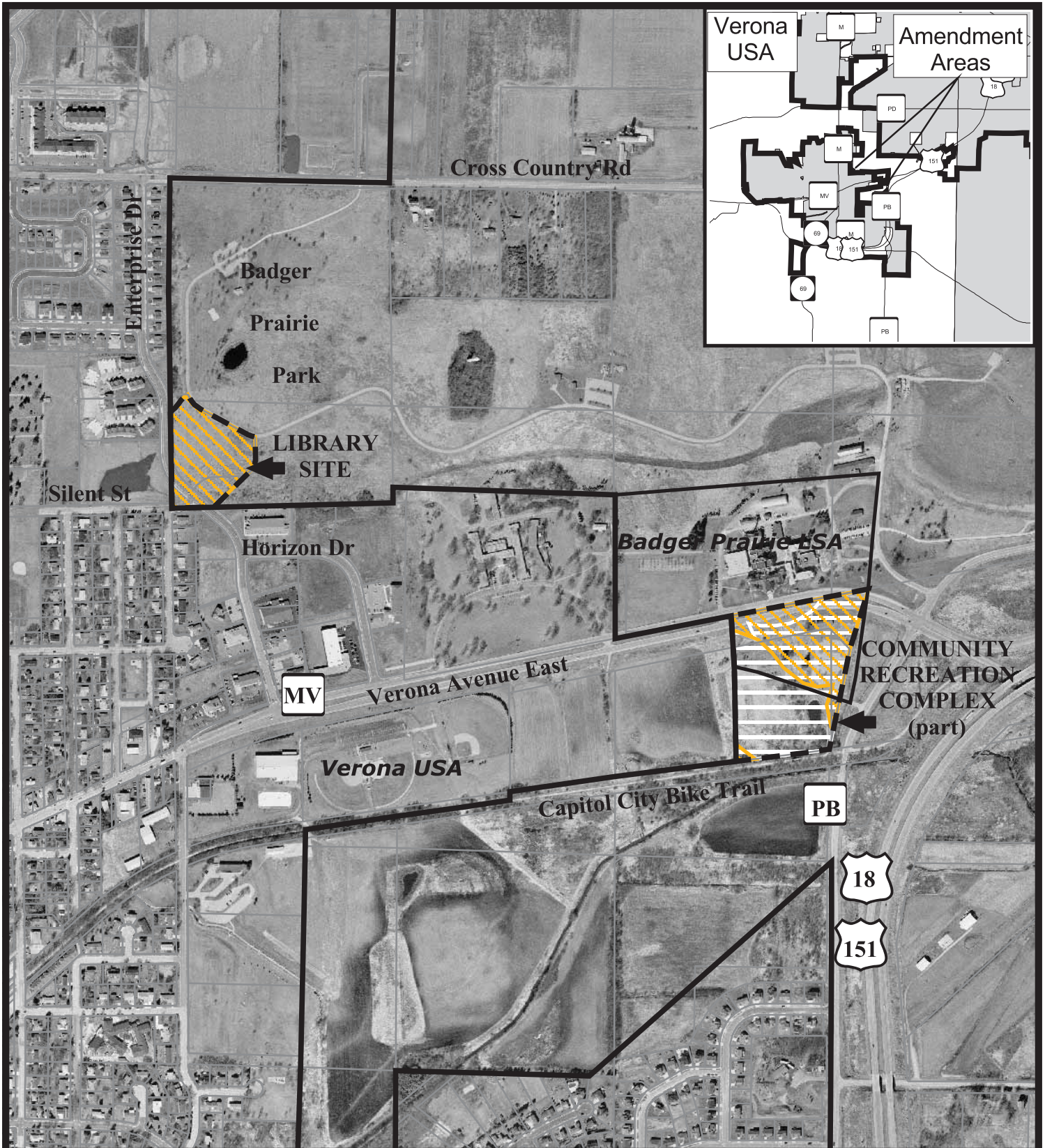
Verona Community Park Master Plan
Master Plan

City of Verona
Public and Public Works Department
410 Investment Court
Verona, Wisconsin 53592




0 25 50 100
Date: 11/23/04
Project No: 1650.001

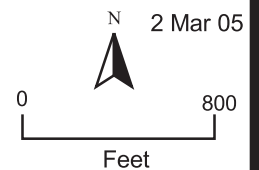
SCHREIBER / ANDERSON ASSOCIATES, INC.
717 John Nolen Drive Madison, WI 53713 608-255-0600
LANDSCAPE ARCHITECTS URBAN DESIGNERS PLANNERS CIVIL ENGINEERS

Map 3



**Map 4 Soil Characteristics
Amendment
to the Verona
Urban Service Area
City & Town of Verona**

-  Prime Agricultural Soils
-  Severe Limitations for Development
-  Existing Urban Service Area Boundary
-  Proposed Urban Service Area Boundary



Prepared by CAPD.

Verona USA Amendment



Southeasterly view of the library site.



View of regional stormwater Pond (Silent St. Pond) west of Enterprise Drive.



View of residential neighborhood northwest of the library site.

Verona USA Amendment



Southerly view of land proposed for the community recreation complex in the foreground and City of Verona development in the background.



View of the Capitol City Trail south of the amendment area.



Northeasterly view of the recreation complex amendment area from the southwest corner. Badger Prairie is in the background.

Verona USA Amendment



Badger Mill Creek under CTH PB, southeast of the amendment area.



Pond south of the trail head and Park and Ride parking area.



Southeasterly view of the recreational complex amendment area.

Natural Resource Features. The amendment area is situated in the Badger Mill Creek Watershed in western Dane County. Badger Mill Creek is a cold water fishery downstream from HWY 18/151 south-southwest of the City of Verona, and it has potential to support a cold water fishery upstream. Badger Mill flows into the Sugar River downstream from the City of Verona.

Drainage from the library amendment area is west to an existing City of Verona regional stormwater management facility. The recreation complex area drains to tributaries of the Badger Mill Creek that traverse the site, and flow south to the Creek immediately south of the Capitol City Trail. The southern portion of the baseball field area is in the 100 year floodplain and may also include wetlands. This part of the amendment is proposed for inclusion in environmental corridors.

The depth to sandstone bedrock in the amendment area is 10 to 50 feet. Depth to groundwater is less than 10 feet in the recreational area and over 25 feet in the library area.

The major soils in the amendment areas are in the Batavia-Houghton-Dresden association. These are well drained and poorly drained, deep and moderately deep silt loams and mucks formed in outwash material that are underlain by silt, sand and gravel. Soils in the library area are Batavia silt loam. These well drained soils on high benches are prime agricultural soils with high fertility and moderate permeability.

The soils in the majority of the recreation complex area are wet Orion silt loam and Virgil silt loam. These are soils with severe limitations for development due to seasonal high water table.

Table 2 describes the soils present in the amendment area and their characteristics. Prime agricultural soils compose 63% of the amendment area.

Map 3 shows the extent of prime agricultural soils in the amendment area as well as the coverage of soils posing severe limitation for development.

Records at the State Historical Society indicate the presence of undocumented cemeteries in the recreation complex area. State Historical Society comment letter (attached) states that a cemetery associated with the Poor Farm and one associated with the Leper Colony are both reported south of Verona Avenue, and few other details are available on them. The SHS recommends that “all areas of the proposed developments be surveyed by a qualified archaeologist to locate and evaluate the significance of any archaeological deposits that may be present and to attempt to locate the cemeteries”.

The Natural Heritage Inventory, maintained by the WDNR, does not contain any record of the presence of endangered or threatened resources in the amendment area.

Table 2 – Soil Characteristics

Soil	Percent of Area	Prime Agricultural Soils?	Characteristics
Orion Silt Loam, Wet; Os	37	No	Formed in low bottom lands of stream valleys. Deep, poorly drained soils. High fertility and moderate permeability. Very severe limitation to development due to high water table and flooding.
Batavia Silt Loam; BbA, BbB	29	Yes	Deep, well-drained soils on high benches. Soils have high fertility and moderate permeability. Poses moderate limitation for development. 150 Bu/acre corn yield. <i>This soil composes the entire library amendment area.</i>
Virgil Silt Loam (gravelly substratum); VwA	23	Yes	Deep, somewhat poorly drained soils on low benches on uplands and in stream valleys. Soil has high fertility and moderately slow permeability. Poses moderate hazard of erosion and severe limitation for development due to seasonal high water table, poor stability in the substratum, and subject to piping and liquefaction when wet. 155 Bu/acre corn yield.
St. Charles Silt Loam; ScB	5	Yes	Deep, well drained and moderately well drained soils on glaciated uplands. Soils have high fertility and moderate permeability. Slight to moderate limitation for development. 145 Bu/acre corn yield.
Wacousta Silty Clay Loam; Wa	5	Yes	Deep, poorly drained soils on low benches in old lake basins. Soils have low fertility and moderately slow permeability. Very severe limitation for development due to seasonally high water table. 110 Bu/acre corn yield.
Troxel Silt Loam; TrB	1	Yes	Deep, well drained soils in drainageways formed in silty alluvium. Soils have high fertility, moderate permeability, moderate hazard of erosion, and are subject to frequent flooding. Poses severe limitation for development due to flooding and low bearing capacity. 145 Bu/acre corn yield.

4. Consistency or Conflict with Plans

The Verona USA 2030 population forecast is 15,241. The Verona USA Housing and Land Use Analysis provides for a maximum urban service area of 5,849 acres to be consistent with the 2030 population forecast and existing densities. The current urban service area is 3,431 acres. Based on this information, the urban service area can grow an additional 2,418 acres. The proposed amendment adds 4.9 acres of developable land to the urban service area.

The land to be added to the urban service area is adjacent to city utilities and is a logical expansion of development. The developable portion of the proposal will add land for a new library facility and on-site parking. The community recreation complex portion of the development is adjacent to the existing Community Park and has been identified for the location of playing fields, ball diamonds, parking, stormwater management areas, and the Ice Age Trail corridor.

The proposed recreation complex is consistent with the City of Verona Master Plan. Although the library is not technically consistent with the Master Plan, the City has been in the public process of planning for it over the past two years. This has involved public hearings, informational meetings, Plan Commission and City Council meetings that resulted in an agreement with Dane County to acquire the land and in the approval of \$6.42 million funding for the facility.

Table 3 summarizes the consistency of this proposal with the goals of the *Dane County Land Use and Transportation Plan*. The proposed amendment is supportive of three goals: It supports the goal of promoting distinct communities, mixed-use neighborhoods with a full range of public services by allowing the development of improved library and recreational services in the community. It supports the goal of developing a system of open space corridors to preserve environmental functions, scenic value, and recreational opportunities by establishing 10.2 acres of environmental corridor including a new recreational facility. The proposal also supports the goal of protecting environmental, historic, and cultural resources by providing buffer areas around Badger Mill Creek and the Capitol City Trail. In eight categories, the proposal is neutral with respect to Plan goals.

5. Description of Urban Services

Public Water System. The library site will be served by a lateral from the existing City water main under Enterprise Drive fronting the site. The recreation complex site will be served by an 8" water main extended from the existing water main on the north side of Verona Avenue (County Highway MV). It will be looped to the west to the existing water main currently serving Community Park.

The City of Verona water system includes four wells and two 350,000 gallon elevated storage towers. The existing wells are adequate for future development in the proposed amendment area. Of the two existing water towers, the West Verona Avenue tower serves most of the City, while the County Highway M tower will serve future development. Storage capacity is limited for the northern and western portions of the City and a new tower will be needed to service these areas of the City within the next 6 to 8 years. The existing water towers allow water service to an elevation of 1,110 feet. The existing pumping capacity of 4,000 to 4,500 gallons per minute is more than adequate for the anticipated development. Existing wells, pumps, water towers, and water mains are sufficient to provide the necessary pressure, capacity, and supply for the anticipated development of both the library and recreation complex amendment areas.

**TABLE 3
Dane County Land Use and Transportation Plan
Goals Achievement Checklist**

Goals	Strongly Conflicts	Conflicts	Neutral or Offsetting Effects	Supports	Strongly Supports
Promote balanced communities with a mix of development			X		
Promote compact urban development			X		
Promote distinct communities, mixed-use neighborhoods with a full range of public services				X	
Provide a range of safe and affordable housing choices			X		
Provide an integrated all-mode transportation system			X		
Concentrate employment and activity centers along transit corridors			X		
Maintain Downtown Madison as region's major activity center			X		
Provide employment opportunities and a diverse economic base			X		
Protect agricultural lands by limiting non-farm development in agricultural areas			X		
Protect environmental, cultural and historic resources				X	
Develop a system of open space corridors to preserve environmental functions, scenic value, and recreational opportunities				X	

Proposal: Amendment to the Verona Urban Service Area

Applicant & Submittal Date: City of Verona, January, 2005.

Wastewater. Wastewater from the library site will flow to the west. A sanitary sewer lateral will connect the library to the existing sanitary sewer system under Enterprise Drive fronting the site. An existing north-south 8" sanitary sewer main runs south from the Badger Prairie Health Care Facility (located to the north) through the recreational complex site, and to the East Side Interceptor (located to the south). This sanitary sewer main will be upgraded during the development/improvement of this park. A single lateral will connect the proposed concession stand/restroom building to this new sanitary sewer main.

The Verona USA is served by the Madison Metropolitan Sewerage District (MMSD) Pump Station 17. All proposed USA amendment areas will be brought into the district. Pumping Station No. 17 pumps wastewater from Verona to the Nine Springs Wastewater Treatment Facility, and highly treated effluent is returned to the Badger Mill Creek to counter the interbasin transfer of groundwater from the Sugar River watershed to the Yahara River watershed. This effluent return has restored the dry weather baseflow of Badger Mill Creek.

The treatment plant has a design capacity of 50 million gallons per day (mgd) and is forecasted to receive 52.6 mgd of wastewater by year 2020. Pumping Station 17 would be upgraded by installing larger pumps or impellers. Pumping stations are typically designed to be upgraded every 5 to 10 years. When the Nine Springs Valley Interceptor reaches capacity, however, the MMSD would have to conduct detailed facility planning to find the most cost-effective manner of providing wastewater service to the district. One option expected to be considered is to construct a satellite regional treatment plant to treat wastewater generated in the Sugar River watershed, with effluent discharged to Badger Mill Creek or the Sugar River.

Stormwater Management System. The City adopted a comprehensive stormwater management plan in 2000, and revised it in 2002 to include more stringent stormwater management standards exceeding Dane County stormwater standards. All new developments in the proposed USA amendment area will provide stormwater detention ponds or areas as required by City of Verona and Dane County regulations.

Stormwater management on the library site is proposed to include infiltration of roof water and short term on-site storage such as rain gardens. Long term storage will be directed across the street to the existing stormwater pond in the northwest quadrant of the intersection of Enterprise Drive and Silent Street.

The recreation complex site includes a significant surface drainageway providing stormwater drainage for a large area to the north, including Badger Prairie Park. This stormwater flows from the north to the south. To accommodate this drainageway, the proposed park improvement plan calls for the existing single drainageway to be split into two parallel drainageways which will run on either side of the proposed baseball/softball diamonds.

Environmental Corridors. The recreation complex amendment area, with an area of 10.1 acres, has been designated as environmental corridor in the proposed amendment.

Public Areas and Facilities. The library site will provide a public improvement in an existing county park. The proposed facility will include a 31,000 square foot public library. The City of Verona believes that construction of the library and the Silent Street entrance

will increase community awareness and use of Badger Prairie Park by improving visibility and accessibility of the park.

The ballpark site will convert currently farmed agricultural land into a recreation complex with a four-diamond baseball/softball area, concession stand, and a large, multi-purpose playing field.

Public Safety Services. The City of Verona has a fire insurance rating of 5, adequate for a community of its size. The Verona Fire Department currently serves the City and Town of Verona, and a portion of the Town of Springdale. Typical response times within the City itself are between 5 and 6 minutes, and the proposed amendment areas would be served with a similar response time.

Police service will be provided by the City of Verona Police Department, staffed by 14 full-time officers, or 1.49 officers per 1,000 persons. Beginning in 2005, the Police Department is hoping to add staff to allow two sworn officers to be on duty at all times, and to have an “officer to population” ratio more similar to comparable communities in Dane County of 1.86 officers per 1,000 residents.

Emergency and Other Urban Services. Other urban services, including solid waste collection, will be provided through the City’s existing delivery system.

The Fitch-Rona EMS service provides ambulance and emergency medical services to the City and the Town of Verona and the City of Fitchburg, and currently provides one full-time ambulance with 2 paramedics and an additional ambulance with 2 paramedics from 7:00 a.m. to 7:00 p.m. daily.

6. Impacts or Effects of Proposal

Surface and Ground Water Impacts. The recreation complex area is mostly in the current USA. Proposed fields will not have an appreciable adverse impact on water quality if construction erosion standards are met. The portion of the amendment area that currently houses the Park and Ride lot will remain the same. Stormwater measures to maximize infiltration have been proposed for the library. The regional stormwater pond located across Enterprise Drive from the proposed library will provide further stormwater management for the library. The proposed measures, if implemented aggressively, should adequately mitigate the adverse impacts of the proposed amendment.

School System Impacts. The proposed development is in the Verona School District but has no residential development and adds no students.

7. Alternatives

This proposed amendment represents a logical extension of urban development in the area. Alternative locations for the proposed public facilities were contemplated as part of the planning process. The proposed locations have been deemed to be the best locations for the facilities.

8. Controversies, Comments Received, Unresolved Issues

A public hearing is scheduled for March 7, 2005, in the City of Verona. No controversies are noted. The Town of Verona has been notified of the hearing.

9. Findings and Conclusions

The proposed amendment is for a public library and a small portion of a community recreation complex. The City proposes to include stormwater management measures in both projects. Measures include infiltration maximization and stormwater quality and quantity management. The sport complex area may contain two undocumented cemeteries associated with the County Poor Farm and the Leper Colony that had been located in this area. The SHS recommends that an archaeological survey be performed to locate these cemeteries and evaluate the significance of any resources.

Recommendation

Staff recommends approval of the proposed amendment to the *Dane County Water Quality Plan* with the following conditions, to be met prior to development as part of the sewer extension review process:

1. An archaeological survey to be performed by a qualified archaeologist prior to land disturbance, to locate and evaluate the significance of archaeological deposits, and attempt to locate the undocumented cemeteries in the recreation complex area. Provide two copies of the survey report for the SHS.
2. Submit stormwater management plans for each area for DCLCD and CAPD staff review and approval. Stormwater management plans should include infiltration maximization measures and water quality and quantity measures to mitigate the adverse impacts of the proposed development to the maximum extent practicable.

Report approved by: Kamran Mesbah, Deputy Administrator/Director of Environmental Resources Planning, Dane County Community Analysis and Planning Division