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

1. Applicant: City of Stoughton

2. Description of Proposal

The proposed amendment adds 10.47 acres to the Stoughton Urban Service Area, including 0.65 acres of environmental corridors, resulting in a net developable area of 9.82 acres. The proposed amendment is located within the City of Stoughton and is intended to serve institutional uses, specifically the relocation of Christ Lutheran Church and school (see Maps 1, 2, and 3).

3. Existing Environment

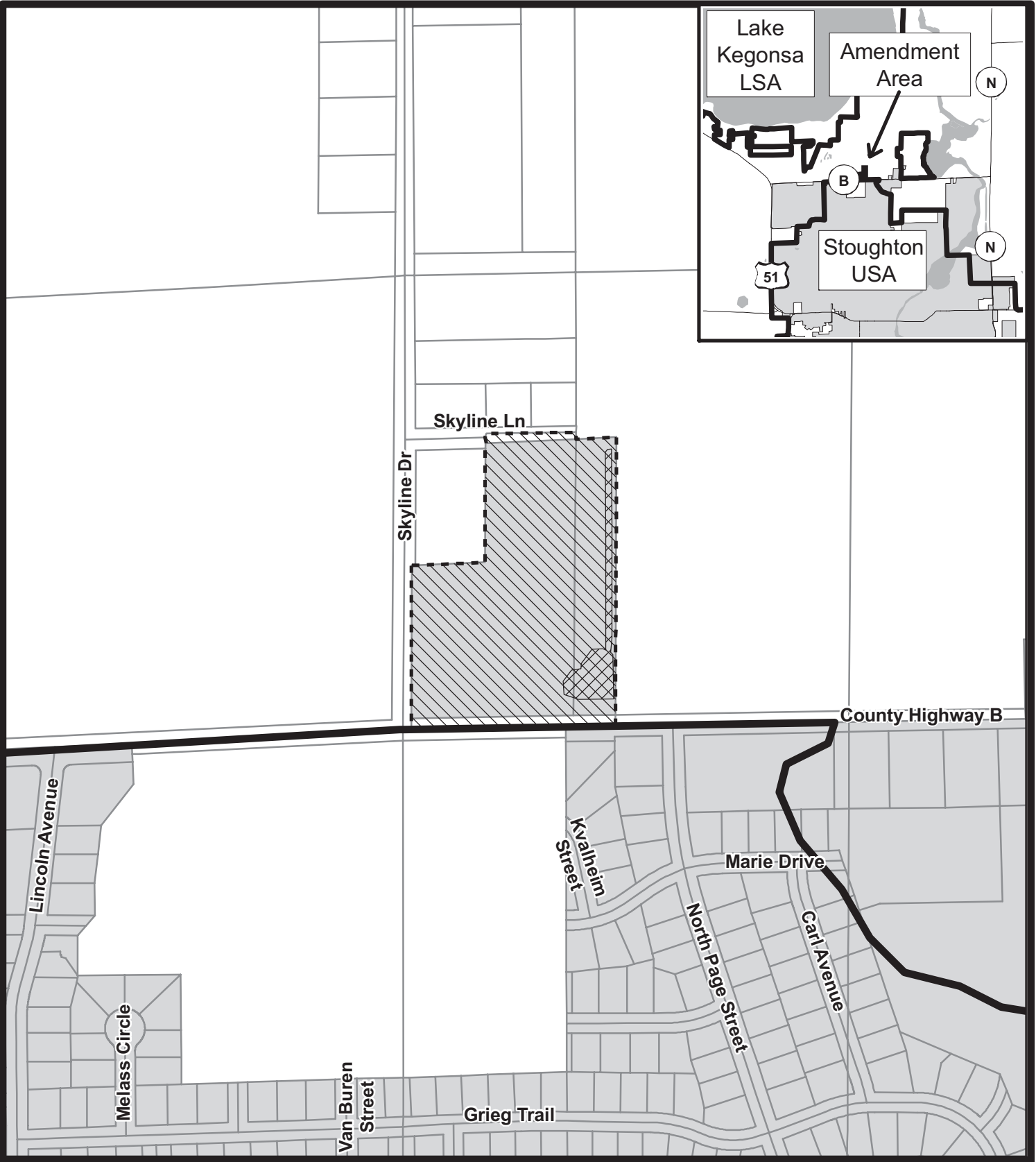
Natural Resources. The surficial geology of the amendment area is influenced by the most recent period of Wisconsin Glaciation. This area of Dane County is characterized by undulating low hills created by glacial till. The amendment area generally slopes to the east, and is located in the Lower Yahara River Watershed. The Yahara River, a warm water sport fishery, is approximately 3,500 feet east of the amendment area.

Depth to the water table in the amendment area is over 25 feet. There are no mapped wetlands or floodplains in the amendment area. The southeast corner and eastern edge of the amendment area is proposed for designation as environmental corridors for stormwater management purposes. Depth to sandstone bedrock is over 50 feet.

The soils of the area are in the Plano-Ringwood-Griswold association. These are soils that have been formed on sandy loam glacial till. They are moderately well drained and well drained, deep silt loams and loams. Detailed characteristics of the soils of the amendment area are shown in Table 1 (also see Map 4).






Archeological information at the State Historical Society indicate the presence of prehistoric cultural resources near the amendment area. Since no archaeological investigation has been conducted in the amendment site, and because of the presence of nearby resources, the State Historical Society recommends that an on-the-ground archaeological survey be conducted prior to other land disturbing activities on the site (comment letter attached).

Available information on endangered resources does not indicate the existence of any threatened or endangered species within the area.




Map 1

**Amendment
to the Stoughton
Urban Service Area,
City of Stoughton**

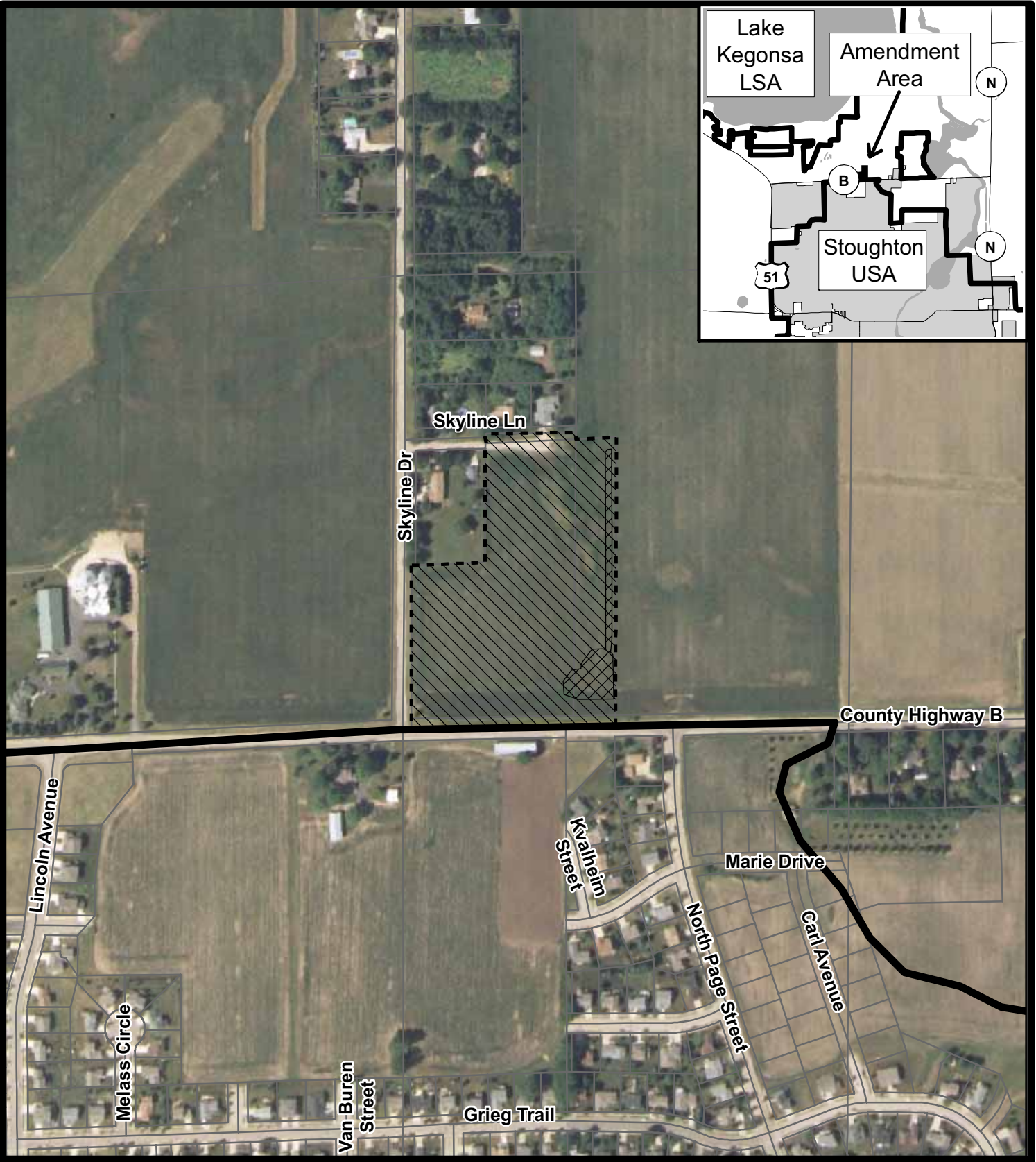
-  Service Area to be added
-  Proposed Environmental Corridor
-  Existing Urban Service Area Boundary
-  Proposed Urban Service Area Boundary
-  Incorporated Area

31 Jul 06







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Feet

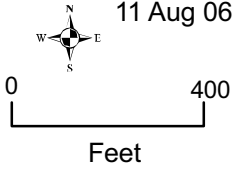
Prepared by staff
of the CAPD.



Map 2 Aerial
Amendment
to the Stoughton
Urban Service Area,
City of Stoughton

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

11 Aug 06



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 Feet

2005 Aerialphotograph courtesy of FSA/NRCS

Prepared by staff
 of the CAPD.

Map 3

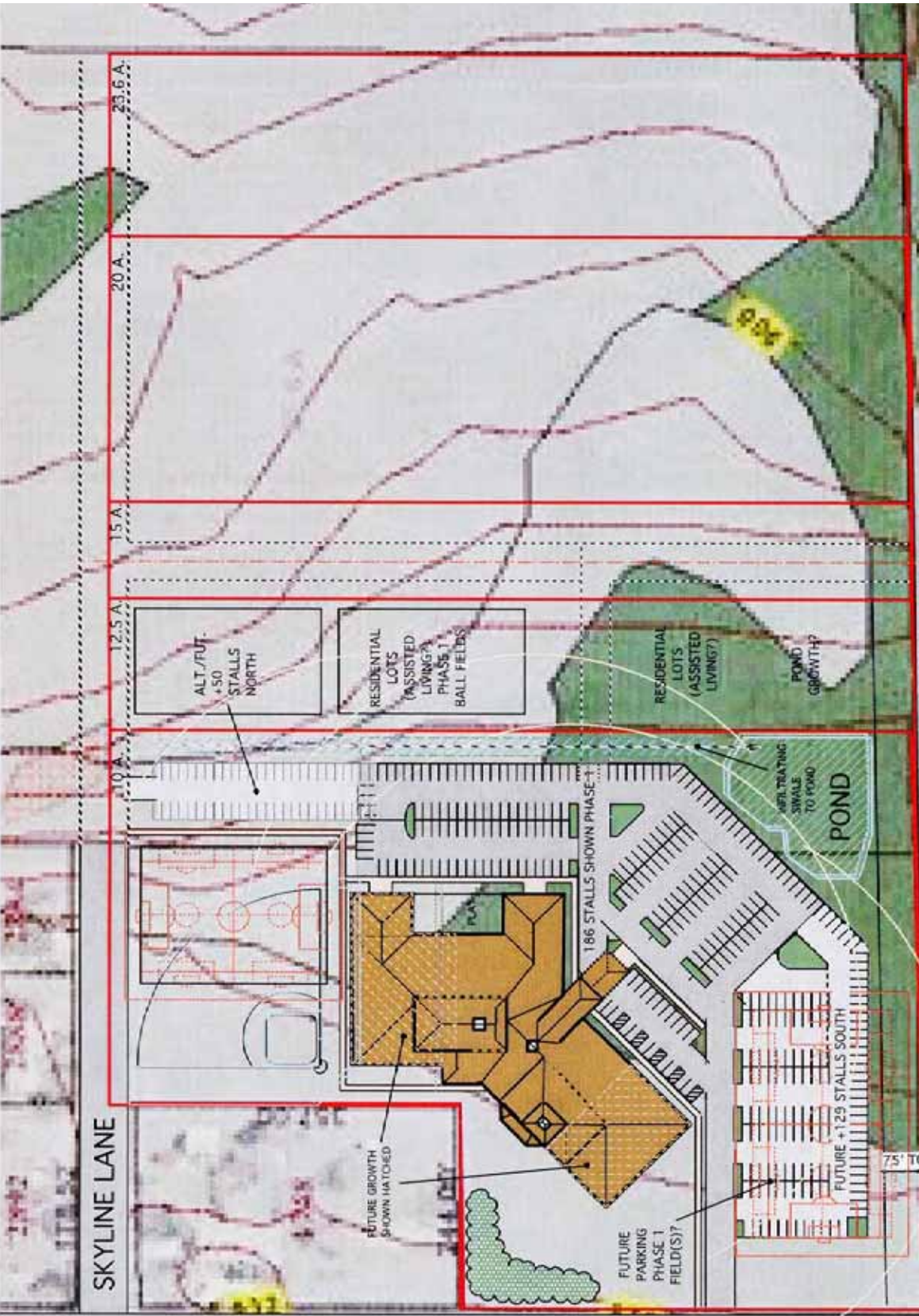


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N PAGE ST

COUNTY ROAD "B"

OPTION "C" 12 APRIL 2006
PRELIMINARY SITE CONCEPT
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SKYLINE LANE

SKYLINE DRIVE



Table 1 – Soil Characteristics

Soil	Percent of Area	Characteristics
Ringwood silt loam; RnB	39	Deep, well-drained soils on glaciated uplands underlain by sandy loam glacial till. Substrate is rapidly permeable. Severe hazard of erosion. Slight to moderate limitation for development. Prime agricultural soil. 110 bu/acre corn yield.
Plano silt loam; PnB	39	Deep, well-drained and moderately well drained soils on glaciated uplands. High fertility, moderate permeability. Poses slight to moderate limitation for development. Prime agricultural soils. 155 bu/acre corn yield.
Griswold loam; GwC	22	Deep, well-drained soils in glaciated uplands formed on thick glacial till. Soils have medium fertility and moderate permeability and pose moderate to severe hazard of erosion. Pose moderate limitation for development.

Source: Dane County Soil Survey

Land Use. The proposed amendment is primarily in agricultural use. Existing land uses adjacent to the amendment areas are:

- North: Residential (Town of Pleasant Springs)
- East: Agricultural (Town of Pleasant Springs)
- South: Residential (City of Stoughton) and Agricultural (Town of Pleasant Springs)
- West: Agricultural (Town of Pleasant Springs)

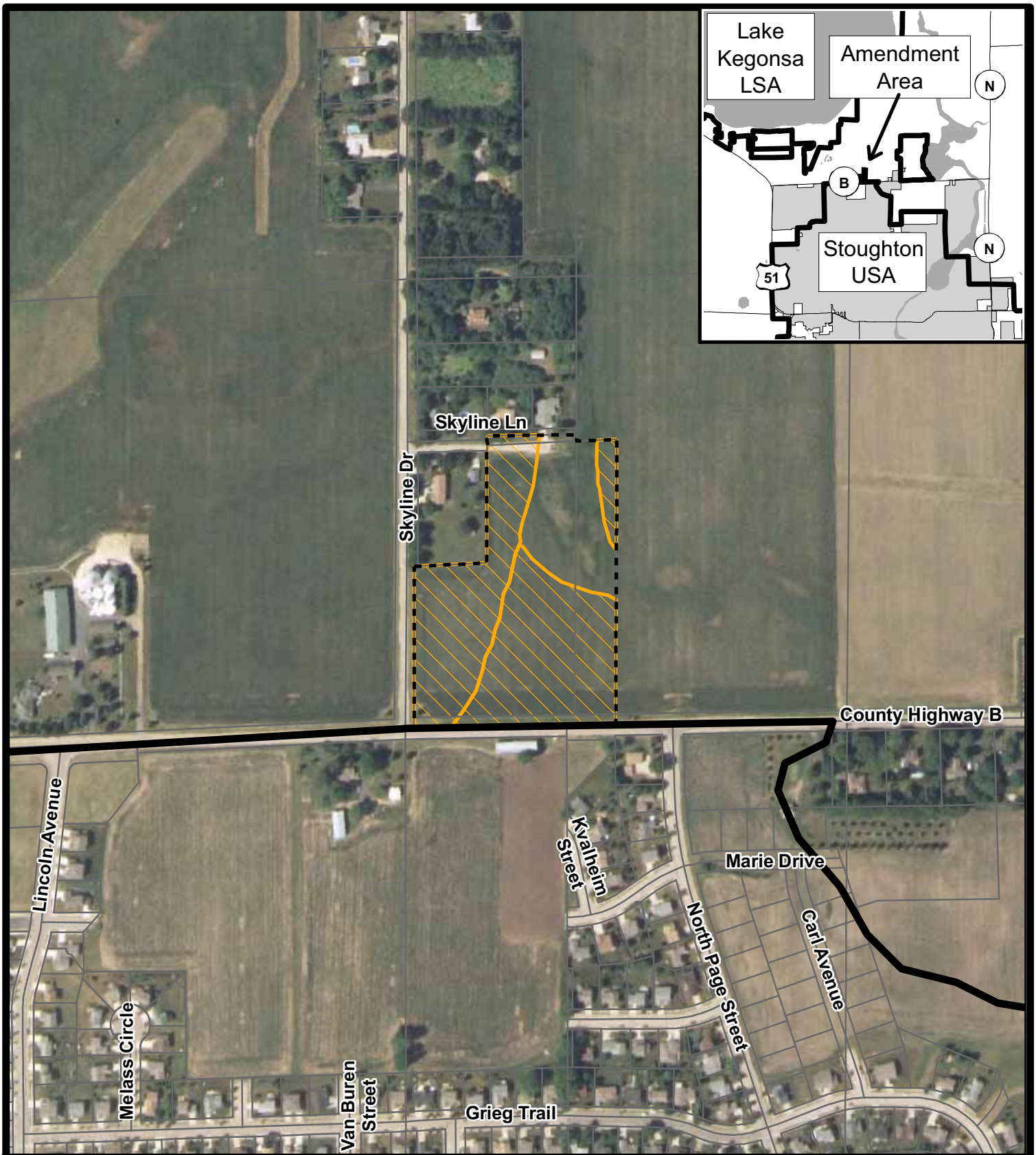
4. Consistency or Conflict With Adopted Plans and Policies

The Stoughton USA was established in 1977 and the environmental corridors were adopted in 1985. The urban service area was last amended in February, 2004.

The proposed amendment is consistent with the City of Stoughton Comprehensive Plan as amended in June, 2006.





The Stoughton USA has an estimated 2005 population of 13,070 and a 2030 population forecast of 19,160. The Stoughton Housing Unit and Land Area Analysis provides for a maximum urban service area of 4,750 acres. This represents a potential increase of 1,706 acres of developable land over the current urban service area size of 3,044 acres. The proposed amendment would add 9.82 acres of developable land to the urban service area.

The land to be added to the urban service area is adjacent to the current urban service area and within 200 feet of City utilities on North Page Street. The proposal will provide urban services to the site to accommodate the relocation of Christ Lutheran Church, and a future school associated with the church.

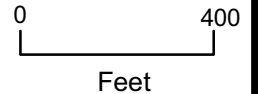


Map 4 Soils

**Amendment
to the Stoughton
Urban Service Area,
City of Stoughton**

-  Prime Farmland (8.1 acres)
-  Severe Limitations to Development
-  Existing Urban Service Area Boundary
-  Proposed Urban Service Area Boundary

11 Aug 06

Prepared by staff
of the CAPD.

2005 Aerialphotograph courtesy of FSA/NRCS

The proposed amendment is consistent with the *Dane County Land Use and Transportation Plan* policies and objectives. Table 2 presents the evaluation checklist for the proposed amendment regarding consistency or conflict with the 11 major goals of the Plan. The proposed amendment appears to support one of the 11 goals and to have minor or neutral effects for another nine goals. The amendment supports the goal of developing a system of open space corridors by designating stormwater management facilities as environmental corridors.

The proposed amendment conflicts with only one major goal: protecting agricultural lands, since the soils in 78 percent of the amendment area are prime agricultural soils that will be converted to development.

5. Proposed Urban Services

Public Water System. Stoughton Utilities has five wells in a single pressure system, with a total pumping capacity of 4,815 gallons per minute (gpm), and 700,000 gallons of storage. The 2005 average daily water usage was 1,405,000 gallons and the maximum daily water usage was 2,368,000 gallons. Therefore, the system has adequate capacity to provide fire-fighting flows of 2,500 gpm for 2.5 hours.

The proposed amendment is estimated to consume approximately 3,500 gallons per day (gpd) of potable water at full development (assuming a school with 120-150 students; a range consistent with the historical enrollment of the school in recent years). Potable and fire-fighting water will be supplied to the amendment area through the extension of an existing water main on North Page Street. The 10-inch main will be extended approximately 200 feet west along County Trunk Highway B to the southeast corner of the amendment area. The City does not anticipate any need to modify its current water distribution or supply facilities to accommodate the proposed amendment.

The proposed amendment does not increase the water use forecast for the service area, since it provides institutional uses that are included in a typical community of this size. Furthermore, the proposed development replaces a facility in the current USA that burned down in a fire.

Wastewater. The Stoughton Wastewater Treatment Facility has a rated capacity of 1.65 million gallons per day (MGD). The 2005 average daily flow was 1.39 MGD.

The proposed amendment is estimated to generate approximately 3,000 gallons per day of wastewater at full development (assuming a school with 120-150 students; a range consistent with the historical enrollment of the school in recent years). The amendment area will be served by a 10-inch gravity sanitary sewer extension from North Page Street to the southeast corner of the area, along County Trunk Highway B, approximately 200 feet from the amendment area. The wastewater conveyance and treatment facilities have adequate capacity to serve the amendment area. The proposed amendment does not increase the wastewater forecast for the service area, since it provides institutional uses that are included in a typical community of this size. Furthermore, the proposed development replaces a facility in the current USA that burned down in a fire.

Table 2
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: Stoughton Urban Service Area Amendment

Applicant and Submittal Date: City of Stoughton, July 2006

Stormwater Management System. A stormwater management plan has been prepared for the development. The plan includes a swale along the east side of the area and a detention pond in the southeast corner. The proposed detention pond releases to a culvert leading to the ditch along the south side of CTH B.

In May of 2006, the City of Stoughton amended its Erosion Control and Stormwater Management Ordinance to make it consistent with the Dane County stormwater standards. The proposed development will be reviewed in accordance with the City of Stoughton Erosion Control and Stormwater Management Ordinance by Dane County Land Conservation, under a contractual agreement with the City.

Environmental Corridors. Environmental corridors include 0.65 acres for stormwater management facilities. There are no other sensitive resources requiring environmental corridors designation.

Public Safety Services. The distance from the police, fire and EMS services to the proposed amendment area is approximately 2.57 miles. The Police Department has total of 26 full-time equivalent staff serving the City. Police response time to the proposed amendment area is anticipated to be seven minutes from the police department office.

The Fire Department has three full-time personnel and 30 part-time volunteers. The Fire Department contracts with the towns of Dunn, Dunkirk, Pleasant Springs, Albion, Porter and Rutland. The response time to the proposed amendment area is anticipated to be between 4.5 and seven minutes.

The Stoughton Area EMS is staffed by 30 volunteer members. The area serviced is about 105 square miles including the towns of Dunkirk, Dunn, Pleasant Springs and Rutland. The response time to the amendment area is anticipated to be seven minutes.

Other Urban Services. Other urban services, including street maintenance, snow removal, refuse collection and recycling pickup, will be provided through the existing City delivery systems.

Parks and Open Space. The City of Stoughton has over 140 acres of parkland, three recreation trails and three marked bike lanes. The proposed amendment, which does not have a residential component, includes 0.65 acres of environmental corridors encompassing the drainage facilities and includes no parkland.

6. Impacts or Effects of Proposal

Surface and Ground Water Impacts. The potential impacts of urban development on receiving water bodies are to increase stormwater runoff rates and volumes, reduce groundwater recharge and stream base flow, and introduce additional contaminants into the receiving bodies of water. This occurs from the expansion of impervious surfaces (i.e., streets, parking areas, and roofs). Development can also cause substantial soil erosion and off-site siltation from construction activities.

The proposed amendment is roughly 3,000 feet from the Yahara River. Therefore, the adverse impacts of the development are more likely to be experienced by adjacent property owners. The City proposes to meet Dane County stormwater standards. This would provide adequate protection against short-term construction erosion impacts if the construction erosion control measures are aggressively enforced by the City Building Inspector. However, the standards would not protect adjacent downstream properties against increased flooding from larger storm events. It is important that the stormwater plan for the proposed development maintain pre-development stormwater runoff rates for all storms up to the 100-year event.

Adverse impact from the proposed development on the groundwater should be minimal since the Dane County stormwater standard includes infiltration requirements, and because the development is not located in a sensitive, groundwater dependant area of the watershed.

The proposed amendment is expected to have negligible impacts on the water supply and the wastewater conveyance and treatment systems in the City of Stoughton.

School System Impacts. With no residential component, this amendment will not impact school system enrollment with additional students. The proposed church use may potentially include a school at a future date.

7. Alternatives

This proposed urban service area amendment is prompted by an annexation requested to provide a location for Christ Lutheran Church to build a new facility for their ministry and school. A fire in 2005 that destroyed the Christ Lutheran Church facility in Stoughton prompted the congregation to pursue a larger site with better accessibility and potential for future growth. The annexation of the area was reviewed and found to be in the public interest by the Wisconsin Department of Administration. The purpose of the proposed amendment is to allow the City of Stoughton to provide sanitary sewer, water, and other urban services to the proposed Christ Lutheran Church property. The City has revised the comprehensive plan to allow institutional uses at the proposed location. The property is being deed restricted to be only used for church and school.

Alternatives to expanding the urban service area to include this location are addition to the USA in another location, or no expansion of the USA. According to the standards outlined in NR 121, and the USA expansion flexibility standards of the current *Dane County Water Quality Plan*, the Stoughton Urban Service Area can expand up to a maximum of 1,706 developable acres by 2030. The *Water Quality Plan* does not provide for “no-growth” urban service areas if they fulfill the conditions, standards, and requirements of adding to the USA as outlined in the *Water Quality Plan*.

Expanding in another location within the current urban service area may be an option for providing this type of institutional use. The church established a search and rebuilding committee to investigate other sites and options for rebuilding the church complex, and decided to sell its original site to Stoughton Hospital for its expansion needs and relocate to the proposed amendment area. Since the City of Stoughton has accepted the proposed location, it would appear that the amendment meets the overall community goals and preferences.

8. Controversies, Comments Received, Unresolved Issues

The Dane County Community Analysis and Planning Division will hold a public hearing on this amendment on September 5, 2006, at 6:00 p.m. at the Stoughton City Council Chambers, 324 S. Fifth St., Stoughton, Wisconsin. No controversies are noted and the City of Stoughton has included the Town of Pleasant Springs throughout the planning process for the proposed development.

9. Conclusions and Staff Recommendation

The proposed amendment meets the goals and policy requirements of the *Dane County Water Quality Plan* and is relatively neutral with regards to the goals of the *Dane County Land Use and Transportation Plan*. Staff tentatively recommends approval of the request based on the proposed land uses, urban services, and restrictions, conditioned on the City of Stoughton pursuing the following:

- 1- Submit a detailed stormwater management plan for CAPD and DCLCD staff review and approval. The stormwater plan should prevent increased off-site erosion and flooding and mitigate the water quality impacts of the development.
- 2- Stormwater management practices to be publicly owned or included in an easement and maintained with public oversight.

It is also recommended that the City of Stoughton require an on-the-ground archaeological survey of the property by a qualified archaeologist, prior to other land disturbing activities.

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



WISCONSIN
HISTORICAL
SOCIETY

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Office: 608-264-6500
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Web: www.wisconsinhistory.org

17 August 2006

K. Mesbah
Community Analysis and Planning Division
City-County Building, Room 362
210 Martin Luther King Jr. Boulevard
Madison, WI 53703-2558

RE: Amending the *Dane County Water Quality Plan* by Revising the Stoughton Urban Service Area Boundary and Environmental Corridors within the City of Stoughton.

Dear Mr. Mesbah:

One previously recorded archaeological site has been recorded near the project area (DA-427). Considering the presence of this site and the presence of Lake Kegonsa and the Yahara River drainage system, it seems prudent to have an on-the-ground archaeological survey of the project area completed by a qualified archaeologist. When the survey is completed please send **two** copies of the report directly to our office.

Under Wisconsin law, Native American burial mounds, unmarked burials, and all marked and unmarked cemeteries are protected from intentional disturbance. If anyone suspects that a Native American burial mound or an unmarked or marked burial is present in an area, the Burial Sites Preservation Office should be notified. If human bone is unearthed during any phase of a project, **all work must cease**, and the Burial Sites Preservation Office **must be contacted** at 1-800-342-7834 to be in compliance with Wis. Stat. 157.70 which provides for the protection of all human burial sites. **Work cannot resume until the Burial Sites Preservation Office gives permission.** If you have any questions concerning the law, please contact the Coordinator of the Burial Sites Preservation Program at the Wisconsin Historical Society, Dr. Leslie Eisenberg at 608-264-6503.

If you have any questions, or if you need additional information, please feel free to contact me.

Sincerely;

John H. Broihahn
State Archaeologist
State Archaeology and Maritime Preservation
608-264-6496
jhbroihahn@whs.wisc.edu
(asi searches/Dane/ City of Middleton 06_29_06)