

Baraboo Urban Area – 2030 Sanitary Sewer Service Area Plan

**City of Baraboo
Sauk County, Wisconsin**

Project No. 00035005

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Baraboo Urban Area – 2030 Sanitary Sewer Service Area Plan

**City of Baraboo
Sauk County, Wisconsin**

Project No. 00035005

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ACKNOWLEDGMENTS

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EXECUTIVE SUMMARY

The following document is the 2009 update to the 2002 Sewer Service Area Plan (SSAP) prepared for the City of Baraboo and subsequently updated in 2006. Updates to the SSAP are required every five years. This update projects the growth of the City to the year 2030 Using population and growth projections that are explained in more detail within the update, the following was determined:

- 2008 City population 11,755 people
- 2030 City population projection 14,707 people
- 2008 Village population 1,288 people
- 2030 Village population projection 2,003 people
- Total Developed land within the City as of 2008 - 3,074 acres
- Total Developed acreage within the Village as of 2008 – 360 acres

	Total Land (Acres)	Developed Land (Acres)	Vacant Land (Acres)	Devel. Vacant Land (Acres)	20-Year Increase (Acres)	Devel. Infill (Acres)	Devel. Ag Land (Acres)	Additional Land Use (Acres)	Excess Devel. Land (Acres)
2022 Plan	3,554.0	2,810.6	743.4	455.8	1,150.4	162.5	293.3	694.6	0.0
2030 Plan	5,418.0	3,433.7	1,854.8	1,320.6	919.0	270.7	648.3	0.0	452.6

The proposed SSAP Boundary includes only the Village of West Baraboo and the City of Baraboo. Land in the Town of Greenfield, Town of Fairfield, and the Town of Baraboo have not been included in the proposed boundary.

The Baraboo Sanitary District #1 has not increased the size of the District and currently maintains a signed agreement with the City for acceptance of wastewater. A copy of this agreement can be found in Appendix C. The boundary for Devil’s Lake State Park has not increased and the current wastewater acceptance agreement with the City is still in effect.

I. BACKGROUND INFORMATION

A. Introduction

The Sanitary Sewer Service Area Plan, or water quality plan, is the official area-wide water quality management plan for the City of Baraboo, the Village of West Baraboo, and the surrounding Townships. The terms “sanitary sewer service area plan” and “water quality plan” will be used interchangeably throughout this report and they are intended to mean the same thing.

The Sewer Service Area Plan (SSAP) provides an inventory of land use and environmental conditions in the planning area, projects future land use based upon a logical extension of the existing conditions, and develops a proposed sanitary sewer service boundary to guide the development of public sewer facilities. The proposed boundary identifies land in the planning area that is most suitable for urban development through the construction of cost effective public sewerage facilities. The proposed sewer service area that has been developed for the City of Baraboo through the year 2030 is shown in **Figure 1-1**. The City requires unsewered developments within this area to have a minimum of 20 acres per lot.

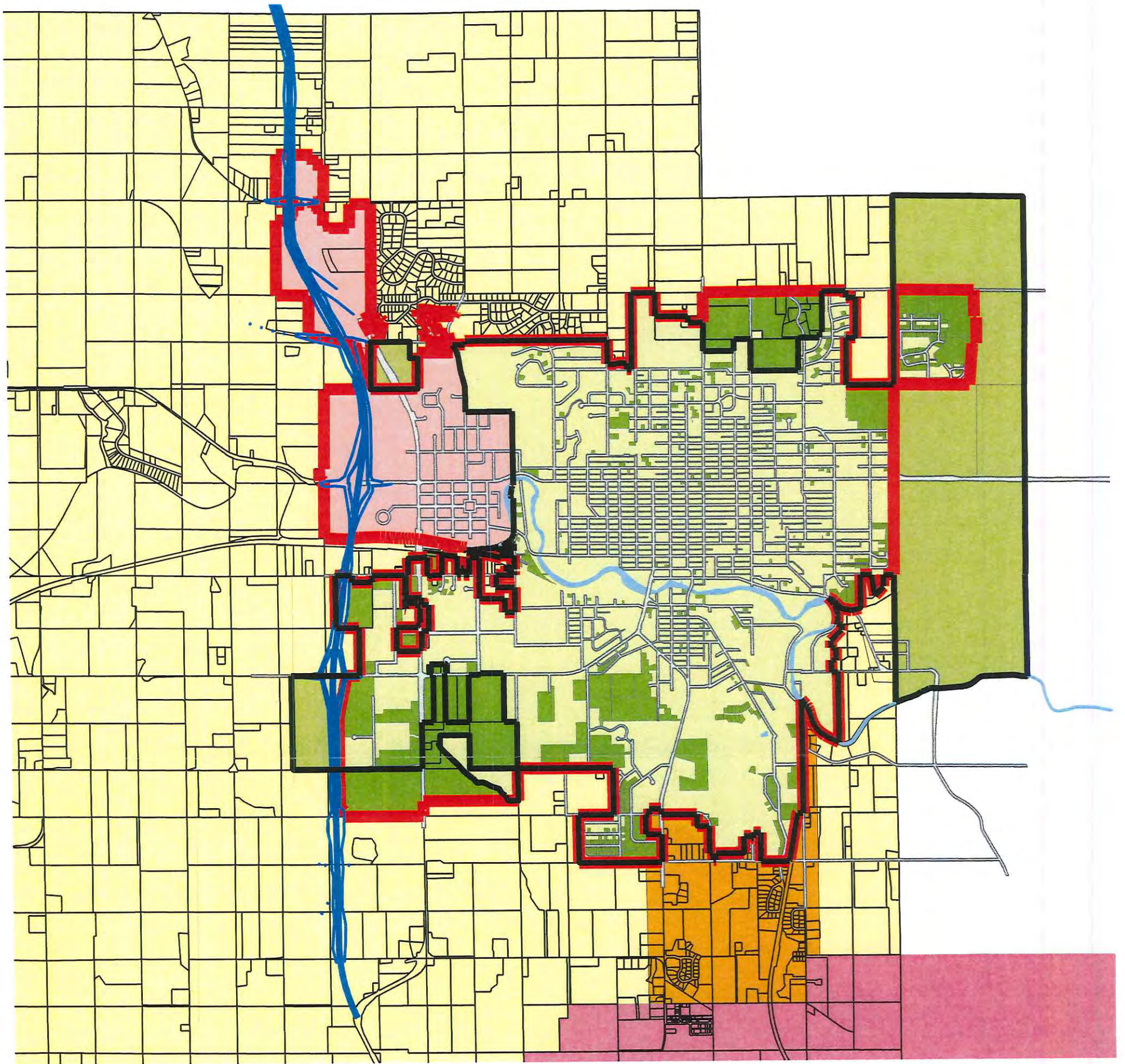
In accordance with the directives of the federal law, the state established a continuing area-wide water quality management planning process. This process is described by Wisconsin Administrative Code NR 121, enacted in 1981. The City of Baraboo water quality plan is developed as part of the water quality management plans for Sauk County as well as the Baraboo River, and Wisconsin River basins. These plans are reviewed by the Wisconsin Department of Natural Resources (DNR) as part of the statewide continuing water quality management planning process. Though there are many separate plans, the overall goal is to maintain consistency and support between the City water quality plans and the plans of the larger basin areas.

B. Purpose of this Study

Sewer Service Area Plans are an integral part of the comprehensive long range planning done by the County, Cities, Villages, and Townships. The purpose of the plan is to provide a policy framework and a set of guidelines to enforce the federal, state, and local water quality programs in the City of Baraboo, and the surrounding area. The plan identifies areas that can be developed to provide municipal services in a cost effective manner and in a way that protects environmentally sensitive areas. Sewer Service Area Plans serve as a basis for Department of Natural Resources approval of state and federal grants for the planning and construction of wastewater collection and treatment facilities. They also serve as a basis for DNR approval of locally proposed sanitary sewer extensions and approval of private sewer laterals by

the Department of Commerce, Division of Safety and Buildings. Environmentally sensitive areas are also identified in the service area plans to serve as a guide for environmental permit decisions by federal and state agencies.

CITY OF BARABOO SEWER SERVICE AREA PLAN



3,000 1,500 0 3,000 Feet

LEGEND

- CITY OF BARABOO DEVELOPMENT PROJECTED WITHIN 20 YEARS
- CITY OF BARABOO DEVELOPMENT PROJECTED BEYOND 20 YEARS
- CITY OF BARABOO - DEVELOPED
- DEVILS LAKE STATE PARK
- VILLAGE OF WEST BARABOO
- EXISTING SANITARY SEWER DISTRICT
- TOWNSHIP OF BARABOO
- PROPOSED STH 12 BYPASS
- BARABOO CITY LIMITS
- SSAP BOUNDARY

Sewer Service Area Plans are intended to be an important planning and development guide for local communities. The water quality management plan for the City of Baraboo primarily addresses the following purposes:

1. Establish the geographic boundaries of a sewer service area for the year 2030 as part of a periodically revised plan.
2. Provide a technical basis to anticipate future needs for wastewater collection and centralized treatment facilities for the planning area.
3. Provide recommendations for solutions to on-site wastewater treatment problems.
4. Serve as a guideline for government involvement in water quality management and establish common goals for developing detailed community plans.
5. Identify areas to be protected from development in order to protect environmental, social, and economic concerns.
6. Become part of a countywide water quality plan to guide water quality management in Sauk County.

The Sewer Service Area Plan is used as a planning and growth management tool. It is incorporated into village and city master plans to encourage cost effective growth areas to reduce the expense of furnishing wastewater treatment and other services to areas with limitations for development. The SSAP is not a comprehensive land-use plan. It is reflective of the current land use practices in and around Baraboo. Smart Growth planning or Master Plan updates may dictate different development scenarios and the SSAP can be reviewed and modified as this occurs.

The program was also developed to outline and protect environmentally sensitive areas from indiscriminate urban growth. Such areas include, but are not limited to, wetlands, floodplains, steep slopes, hydric soils and shorelands.

C. Relationship to Other Plans

1. State Plans

State administration code NR 121 outlines a continuing Areawide Water Quality Management Planning process of which sewer service area planning is one component. Under this planning process, each basin or geographic management unit (GMU) has a water quality management plan, or “state of the basin” report. The Lower Wisconsin State of the Basin report identifies water resource conditions and recommendations for management actions in the Lower Wisconsin Basin. The Baraboo Sewer Service Area Plan, when

approved by the state, will become a formal amendment to the Lower Wisconsin Water Quality Management Plan (or “State of the Basin” report).

This and similar plans are reviewed by the Wisconsin Department of Natural Resources (DNR) as part of the statewide continuing water quality management planning process. Specifically, facility plans, land updates, and sewer extension plans and specifications developed under NR 110 must also be consistent with the Sewer Service Area Plan and the Lower Wisconsin Basin Plan.

A Highway 12 Corridor Growth Management Plan was prepared in June 2003 using a grant from the Wisconsin Department of Transportation (WisDOT). The plan’s recommendations are focused on identifying areas for development, preserving natural areas and farms, protecting community appearance and views, promoting appropriate economic development, and making the most of transportation improvements. The recommendations of the Highway 12 Corridor Growth Management Plan that address the Baraboo area are consistent with the recommendations of the Baraboo SSAP. Specifically, both studies map environmentally sensitive areas similarly. Both studies show growth occurring on the west side of Baraboo out to, but not beyond the bypass. The population projections used for the City and Village utilize a similar methodology, and fall within 7% of one another.

2. Local Plans

The Baraboo Sewer Service Area Plan is a comprehensive long-range planning effort undertaken by the City of Baraboo, with input from Sauk County, the Village of West Baraboo, and the surrounding townships. The plan identifies areas that are likely to be provided with municipal services in a cost effective and environmentally protective manner. It also recognizes the visions, goals and policies of the City of Baraboo and Village of West Baraboo’s master plans as well as the land use plans for the towns of Baraboo, Fairfield, and Greenfield. Adoption of this plan will significantly aid in the updating of the comprehensive plans for the areas within this study.

Invariably, there will be conflicts in the land use plans for neighboring cities and towns. Towns wish to retain their sovereignty, tax base, and rural character. Meanwhile, individual land owners who wish to develop land at a higher density than allowed for unsewered growth will generally seek to annex to the City in order to receive municipal services. This can lead to stressful situations for the City, Town, and private landowner alike.

The following are the local plans in existence at the time this study was prepared.

- a) City of Baraboo Plan
The City of Baraboo completed an update to the comprehensive plan entitled City of Baraboo, Wisconsin Master Plan Update that was adopted in May of 1992. In November of 2000 the City adopted the Industrial Development Area Plan, which presented a long-range non-residential development strategy for the City. The City has recently selected a consultant to begin Smart Growth Planning. It is anticipated that planning process will take two years to complete. It is anticipated that these planning documents will build off of the SSAP. However, any changes in land use planning dictated by the Master Plan will be cause to amend the SSAP.

- b) Village of West Baraboo Plan
The Village of West Baraboo completed a land use plan titled West Baraboo Comprehensive Master Plan in September of 1995. The plan has been revised three times since its adoption, the last of which was completed in December of 1999. The Village is currently revising the existing plan to account for the increased rate of development along the U.S.H. 12 corridor. Since the Village's plans will affect this Sewer Service Area Plan, the City has been working with the Village to include the most up-to-date projections and plans that the Village has adopted.

- c) Sauk County Plan
The Sauk County Department of Planning and Zoning produced a county profile called Sauk County 20/20 County Profile Executive Summary in June of 1997. This report presents current information on the County's demographics; economic, agricultural and housing statistics; parks and recreation information and a review of the county's natural resources, as well as information about future trends.

- d) Town of Greenfield Plan
The Town of Greenfield adopted a land use plan in November of 1995. Their plan was written in response to population growth and the lack of control on land development within the Town. The plan was updated in 1998, and is again undergoing revision to comply with the County's Smart Growth legislation. The updated plan adopted an RC35 (Resource Conservancy) policy, which limits the minimum new lot size to 35 acres. The plan encourages commercial and

industrial development to take place inside or adjacent to the City of Baraboo where they can be served by sanitary sewer.

e) Town of Fairfield

The Town of Fairfield adopted a Development Plan in 1955.

f) Town of Baraboo

The Town of Baraboo adopted a Development Plan in July of 1993, and updated it in 1998. The Town of Baraboo also adopted an RC35 policy and designated undeveloped areas of the Town as general agriculture zoning.

This Sewer Service Area Plan will lay the foundation for community growth, outlining where growth may occur and setting parameters for other related components such as storm water management, water supply, and waste disposal. However, because of the changing nature of community growth and refinements that will be made as the results of the “smart growth” legislation, amendments to the SSAP may be required in the coming years.

II. GOALS AND OBJECTIVES

A. Overview

The diversity of community interests and local government bodies involved in urban development activities and sanitary sewer extensions requires that common goals be established for sewer service area planning. Goals, objectives and policies that have been used in the past (community land use plans or comprehensive plans) should be re-evaluated for the purposes of a sanitary sewer service area plan. Any departures from past ideas and activities should be identified and discussed.

Goals can be defined as statements of the direction in which the plan is aimed.

Objectives are specific statements of desired results, which are measurable and contribute to the accomplishment of a goal.

Policies, which are discussed in the implementation section of this report, are actions or guidelines directed toward achieving objectives which should be followed in day-to-day decision making.

B. Goals

Statements of the direction in which the plan is aimed.

1. To preserve and enhance the natural features that make Baraboo a desirable place to live, visit, and do business, while encouraging development in suitable areas.
2. Provide the infrastructure necessary to serve the level of development proposed in the comprehensive plans of the City, while continuing to provide environmentally safe, efficient and cost-effective utilities to the community.
3. Promote sound, environmentally sensitive, and efficient urban development on the fringe of the present urbanized area through sequential, orderly and compatible growth.
4. Promote sound, environmentally sensitive, and efficient urban development of unimproved parcels within the city and redeveloped of brownfield's and other underutilized areas of the city.

5. Maximize the capacity and promote the efficient use of the wastewater treatment facilities.
6. Coordinate the efforts of local government (City of Baraboo, Village of West Baraboo, Townships of Baraboo, Fairfield, and Greenfield, and County of Sauk) to promote responsible planning and implementation of shared facilities and interests.

C. Objectives

Specific statements of desired results which are measurable and contribute to the accomplishment of a goal.

1. Identify, map, preserve, and in some cases (where practical, economical, and environmentally feasible as determined by the plan review authority) restore the features that make Baraboo and the surrounding area a desirable place to live, visit and do business.
2. Prepare and implement a Sanitary Sewer Service Area Plan which;
 - Correlates with the development vision and trends of the comprehensive plan;
 - protects environmentally sensitive areas, by encouraging future development to locate in areas suitable for development and where environmental impacts can be sufficiently mitigated;
 - recognizes environmental limitations on development; and
 - identifies cost-effective development areas.
3. Protect environmental resources and ground water through the application of high-quality design standards for all new sanitary sewer extensions.
4. Protect environmental resources and ground water through the application of high-quality design standards to address stormwater retention and infiltration.
5. Use advance planning to identify the most desirable and effective locations for new sanitary sewer interceptors, pumping stations, and related infrastructure, and protect the corridors and areas which affect these items by the regulation of development.
6. Promote public input, and request active participation by adjacent governmental bodies in the development and implementation of plans, studies and actions that have a common interest.

III. INVENTORY, CRITICAL ISSUES AND ANALYSIS

A. Planning Area

The planning area is located in Sauk County, Wisconsin and includes the City of Baraboo which is the county's largest municipality. The planning area is shown in **Figure 3-1**. This area encompasses all or a portion of the following sections within Sauk County:

Sections 13-16, 21-28, and 33-36 in Township 12 North, Range 6 East;
Sections 1-5, and 8-15 in Township 11 North, Range 6 East;
Sections 17-20, 29, 31, and 32 in Township 12 North, Range 7 East; and
Section 5-8, 17, and 18 in Township 11 North, Range 7 East Sauk County, Wisconsin.

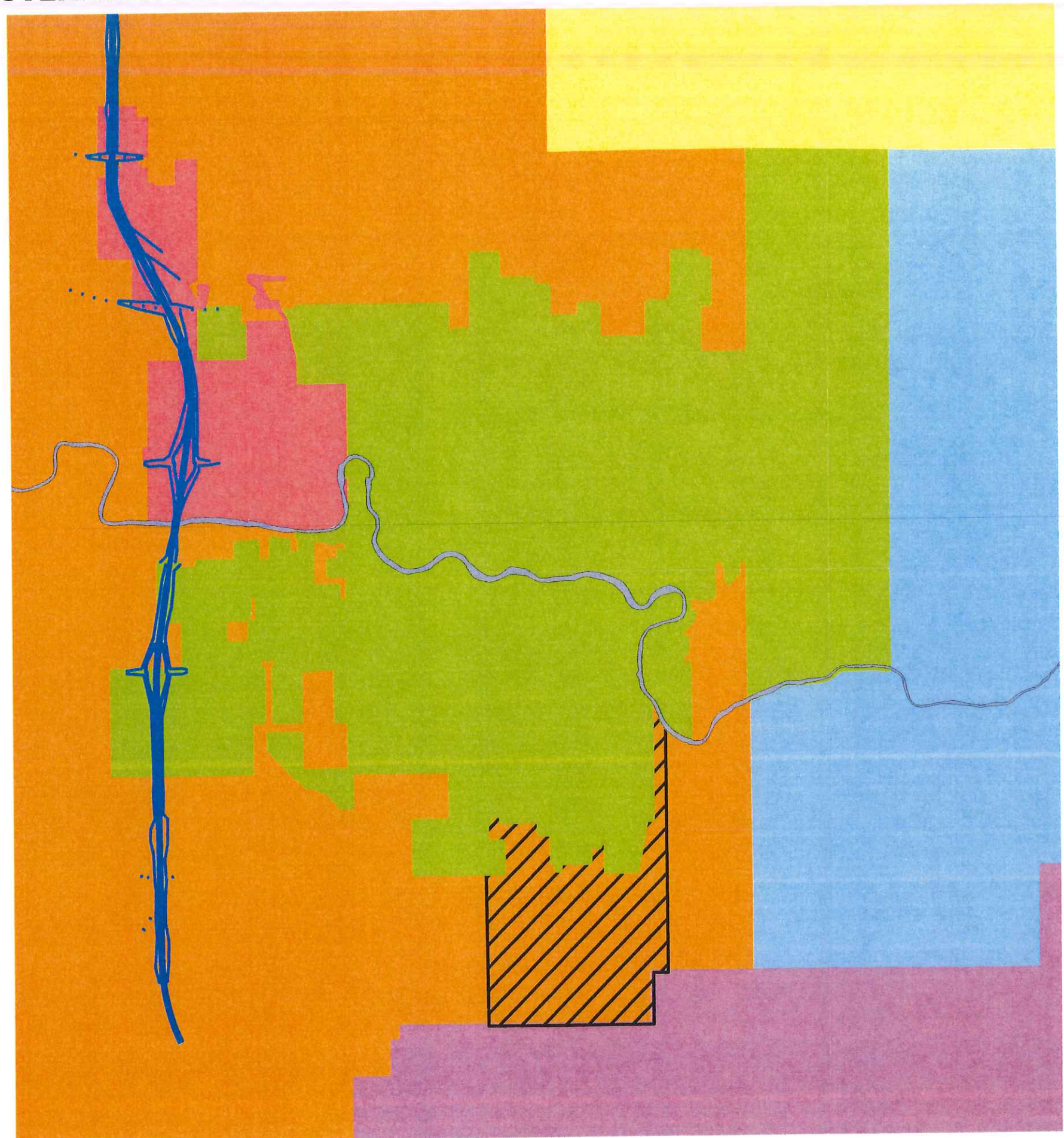
It should also be noted that based on the 2000 census, the City of Baraboo is now large enough to expand its extraterritorial authority to three miles. The City has not chosen to exercise that right.

The planning area is tributary to the Baraboo River and Devil's Lake, and is within the limits of the Lower Wisconsin River Basin. The Baraboo River flows through Sauk County and into Columbia County where it meets the Wisconsin River. In order to maintain the water quality in the rivers and lakes within the study area the City actively maintains the sanitary and storm sewer systems to reduce the potential for contaminations to enter the waters. The City of Baraboo is classified by the EPA as a Municipal Separate Storm Sewer System (MS4). As part of the requirements they are required to reduce their sediment discharge to a water body by 20% by 2014.

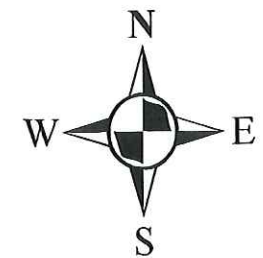
The city is actively pursuing this goal through storm sewer system upgrades. The City also maintains a WPDES permit for storm water discharge. These requirements, in conjunction with the Lower Wisconsin River Basin Plan, and the SSAP will continue address any potential issues that regarding sewer service within the planning area and the SSAP boundary limits.

GOVERNMENTAL ENTITIES

LEGEND



- PROPOSED STH 12 BYBPASS
- CITY OF BARABOO
- VILLAGE OF WEST BARABOO
- ▨ EXISTING SANITARY SEWER DISTRICT
- TOWNSHIP OF BARABOO
- TOWNSHIP OF FAIRFIELD
- TOWNSHIP OF GREENFIELD
- DEVILS LAKE STATE PARK



B. Development and Trends

The future development pattern of the City of Baraboo is discussed in detail within the updated plans entitled “City of Baraboo Wisconsin, Master Plan Update”, and “City of Baraboo Comprehensive Master Plan- Industrial Development Areas Plan. The following points highlight the main characteristics of the major land uses described in these plans and which are essentially the broad goals of the comprehensive plan.

• **Residential**

- ✓ Variable housing densities (single family versus moderate or high density) in specific locations.
- ✓ Higher density development adjacent to or near arterial streets.
- ✓ Minimize conflicts by identifying alternative land uses early to prevent housing developments adjacent to high intensity uses.
- ✓ Single-family residential development will continue to be the dominant housing unit type.
- ✓ The private market will still play a primary role in determining the City’s housing type and design. The City’s role in determining the land use pattern, housing density and location will be greater under this scenario. These changes will be the result of modified land use ordinances and commitment to the “preferred development vision”.
- ✓ All new residential development will be serviced by municipal sanitary sewer and water.
- ✓ The City will continue its focus on revitalization and renovation of existing housing which already has infrastructure and neighborhood.
- ✓ Residential development will continue to parallel infrastructure expansions.
- ✓ Traffic patterns and access to neighborhood commercial development will be evaluated so that the new residential neighborhoods will not be far removed from commercial activity; this scenario would promote more pedestrian-oriented development, and slightly reduce roadway congestion and dependence on the automobile.

• **Commercial**

- ✓ Focus development along main corridors and within City boundaries.
- ✓ The type and location of new commercial development under this vision will be a combination of regional shopping center, highway oriented business development, and a centralized downtown commercial district. Small commercial nodes, including retail and office located in the proximity of new residential developments, may be considered if consistent with a development concept.

- ✓ Efforts to revitalize the downtown commercial area will continue; the downtown will be a vibrant and fully utilized commercial retail and office area, consisting primarily of service, office and local retail trade operations.
- **Industrial**
 - ✓ Industrial expansion, relocation and development is encouraged through the work of the Baraboo Economic Development Corporation (BEDC), expansion of the Baraboo Business Parks, and designation of land uses adjacent to the Business Parks.
 - ✓ Land available for expansion and relocation of growing industrial uses will be maintained in coordination with the Baraboo Business Parks and future expansion of this development.
 - ✓ There will be a fluid system of relocating, expanding or bringing new industries into the Business Parks. Vacant sites within the central part of the City will then be filled with smaller industries from either within or outside the City that were marketed and acquired through aggressive BEDC efforts.
 - ✓ The Baraboo Business Parks and existing vacant sites will continue to be marketed aggressively in an effort to fill vacancies, provide employment opportunities within the City, and diversify the City's economic base.
 - ✓ Truck traffic conflicts between industrial and residential land uses will be minimized through the enforcement of existing truck routes through the City.
- **Government/Institutional**
 - ✓ Little expansion of government/institutional land area.
 - ✓ The Fire Department will engage in a study of response times and determine the need for a secondary facility.

C. Community Growth Projection

1. Population Projections

a) City of Baraboo

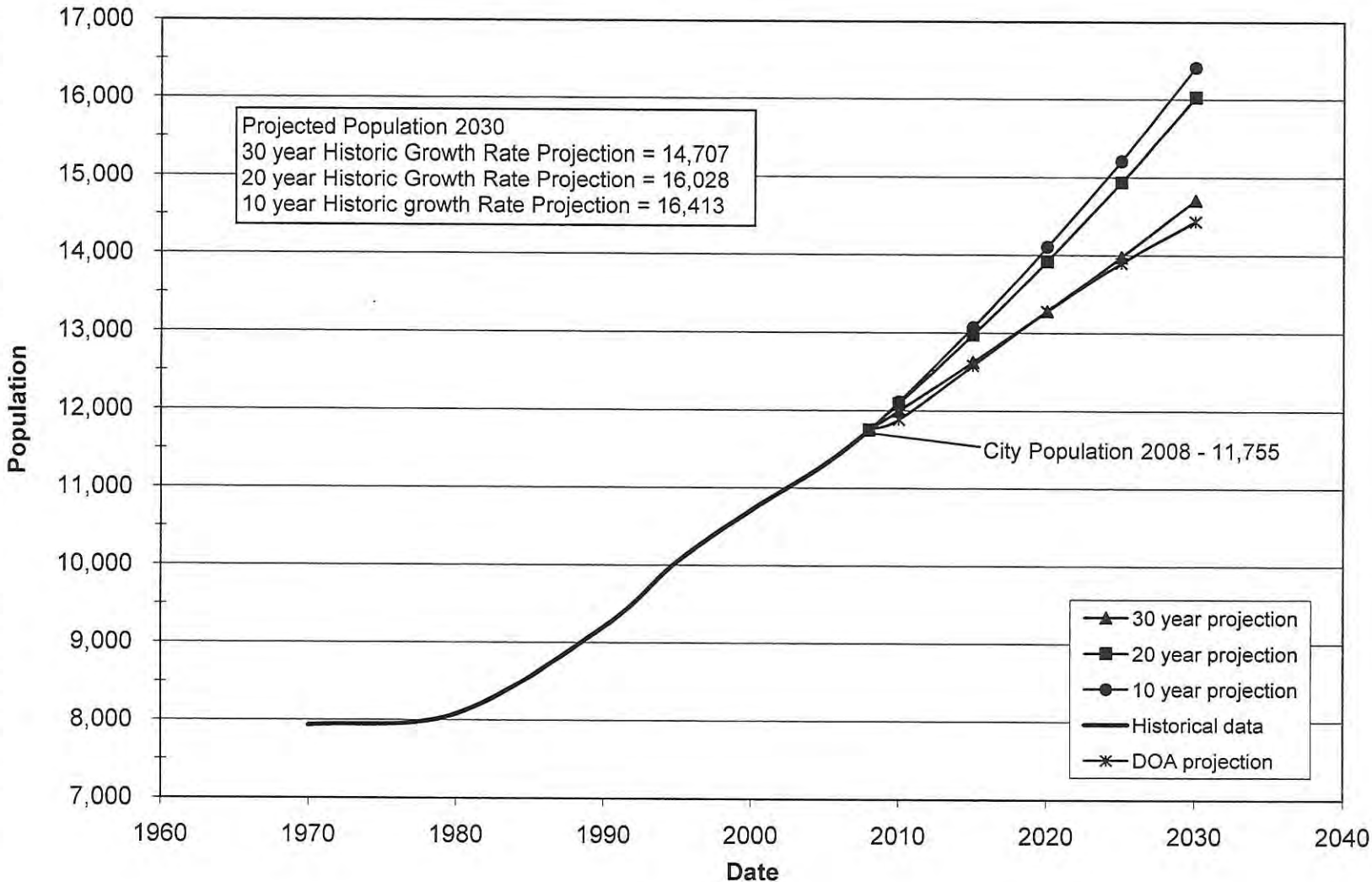
Population projections are a key factor in the forecasting of urban growth. The following information on population and land use projections is taken from the U.S. Census Data and The City of Baraboo's 1992 Master Plan Update. These projections should be updated and revised to reflect updated census information and revised growth projections as they become available in the future.

In order to prepare land use alternatives for this twenty-year plan, a realistic vision for the future is needed. The economic and population growth experienced in the area since 1990 has created some questions as to the applicability of the official population projections produced

in 1993 by the Wisconsin Department of Administration (DOA). In general, the DOA projections have been low, and 2000 census data shows that to be true for the Baraboo area as well.

New official projections from the DOA based on 2000 census data were compared to three alternative population scenarios developed in response to these concerns. A 10 year average, 20 year average and 30 year average growth rate were calculated using census data, and future projections were made based on these historical growth rates. Although these methods are not a formal population projection, these scenarios were based upon knowledge of current trends and expectations. Taking into consideration factors such as the expansion of U.S. Highway 12, the Baraboo Range Program, and the history of the area, the “30-Year Trend” population projection was selected for planning purposes by the City Planning Commission and will be used herein. **Figure 3-2** shows the historical census data for Baraboo from 1970 until 2008 and the projected population curves.

City of Baraboo Population Projection



Projected Population 2030
 30 year Historic Growth Rate Projection = 14,707
 20 year Historic Growth Rate Projection = 16,028
 10 year Historic growth Rate Projection = 16,413

▲ 30 year projection
 ■ 20 year projection
 ● 10 year projection
 — Historical data
 * DOA projection

Figure 3-2. Baraboo Census (1970-2000) and the Projected Population Curves
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**TABLE 3-1
City of Baraboo Population Growth
30-Year Historic Growth Trend**

Decennial Growth Rate = 10.7 %		
Year	Population	
1970	7931	
1980	8,081	US Census
1990	9,203	US Census
1995	10,049	US Census
2000	10,711	US Census
2005	11,522	DOA
2008	11,755	DOA
2010	11,997	Projected
2015	12,624	Projected
2020	13,283	Projected
2025	13,977	Projected
2030	14,707	Projected

For the sake of making land use projections, we will assume that for many of the land use classifications the land use changes will parallel population changes. In order to make land use projections using the projected change in population as our guide, we use something called a population multiplier. The multiplier is simply the projected population level divided by the present population level. In determining the 30-Year Trend Multiplier, we used the DOA population estimate for 2008 as our current population estimate and the projection for 2030 as our future population estimate. The 30-Year Trend Population Multiplier was derived using the following equation:

$$\frac{14,707 \text{ (2030 22-Year Trend Population Projection)}}{11,755 \text{ (2008 DOA Estimate)}} = 1.26$$

The projected population for the City of Baraboo is critical for making projection for future land use. The WWTF receives flow from the City of Baraboo, the Village of West Baraboo, the Town of Baraboo Sanitary District #1, and Devil's Lake State Park. The City has a signed agreement with each of the three outside dischargers and works with these entities to ensure that the WWTF will be able to handle incoming flows.

b) Village of West Baraboo

The Village of West Baraboo has recently completed its own Master Plan in order to prepare for future growth within the Village. The Village has provided its own population projections through the year 2030 based on a 22.2% decennial growth rate. A projection to the year 2030 based on the same growth rate was calculated and used for this report. **Table 3-2** shows the currently adopted population projected for the Village of West Baraboo.

TABLE 3-2		
Village of West Baraboo Population Projection		
Decennial Growth Rate = 22.2%		
Year	Population	
1970	846	US Census
1980	1,021	US Census
1990	1,079	US Census
2000	1,248	US Census
2005	1,388	DOA
2008	1,288	DOA
2010	1,341	Projected
2015	1,482	Projected
2020	1,639	Projected
2025	1,812	Projected
2030	2,003	Projected

c) Townships

Growth in the neighboring townships must also be considered by the City during the planning process to aid in congruent development. Although the areas within the townships will not be receiving sewer services from the City without annexation into the City, the development plans of the towns will influence the development adjacent to the City. None of the neighboring towns have adopted a population projection for planning purposes. Similar to the City of Baraboo and Village of West Baraboo the official DOA projections for the townships have been historically low.

2. City of Baraboo Land Use Projection

The land use projections, as described in the following section, estimate the amount of additional undeveloped land area necessary to accommodate

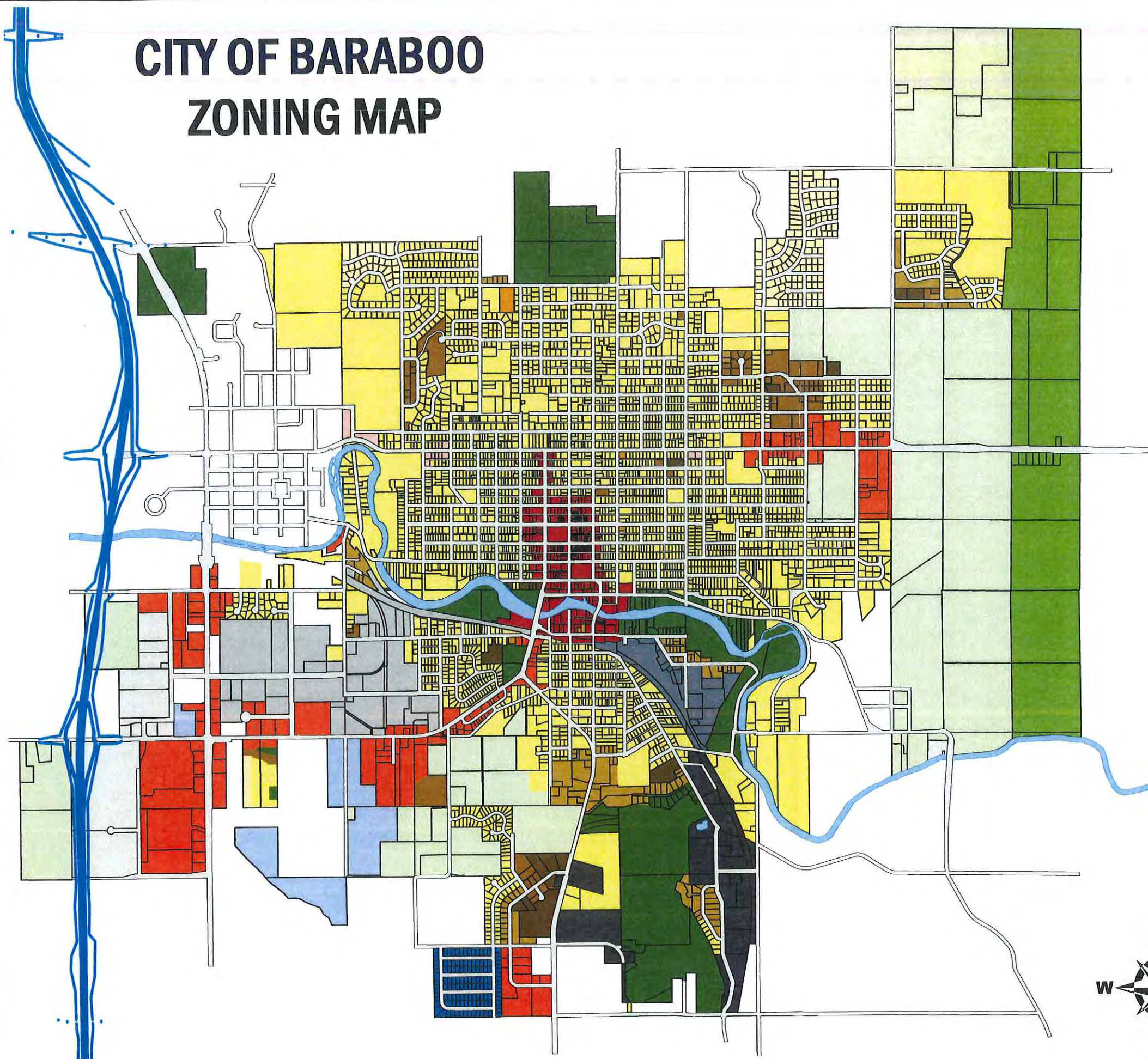
projected development through the year 2030. This study uses a population multiplier based on existing and projected population estimates to project land use for the majority of the land use categories. Single and multi-family housing projections have been made taking into consideration historical data on household densities, and housing density trends. Commercial and industrial growth has been based on the recent trend in the type of development related to population growth. A brief description of the land use projections for all of the land use categories follows.

a) Existing Land Use

Figure 3-3 is the 2009 City of Baraboo Zoning Map. The zoning for each of these parcels is also indicated. **Table 3-3** shows the different zoning classifications with the area associated with them, area of vacant or undeveloped lands within them, and the percentage of the total developed acreage within the City. These values were taken directly from a land use interpretation of the digitized mapping for the City's tax parcels. The developed area comprises nearly 66 percent (3,176 acres) of the City's total area (4,828 acres). The total agricultural land area within the City is about 27 percent (1,298 acres) of the total area contained within the City's corporate boundary.

Of the land use categories, residential lands are the most predominant in the City (46% of developed area). Industrial and business land comprises the second-highest proportion of the developed area (18.7%). Conservancy lands, consisting of the Circus World Museum and the cemeteries, account for another 10.2% of the developed lands.

CITY OF BARABOO ZONING MAP



LEGEND

-  PROPOSED USH 12 BYPASS

- ZONING DISTRICTS**
-  A-1 Agricultural Transition
-  A-2 Agricultural Holding
-  C-1 Conservancy District
-  R-1 Single Family Residential
-  R1-A Single Family Residential
-  R-2 Two Family Residential
-  R-3 Three and Four Family Residential
-  R-4 Four - Twelve Family Residential
-  R-5 Thirteen Family and Up Residential
-  NRO Neighborhood Residential/Office
-  B-1 Central Business
-  B-2 Central Neighborhood
-  B-3 Highway Oriented Business
-  I-1 Industrial, Enclosed Storage
-  I-2 Industrial, Open Storage
-  I-3 Industrial/Business
-  I-4 Planned Industrial/Business
-  MH-P Manufactured Home Park
-  MH-S Manufactured Home Single Family

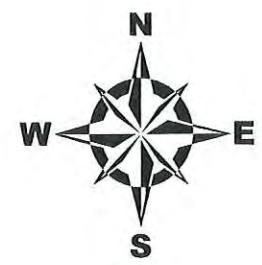


FIGURE 3-3

**TABLE 3-3
2008 Land Use Acreage by Category**

Land Use Category	Zoned Area (Acres)	Vacant Area (Acres)	Developed Area (Acres)	Percentage of Developed Land
Total Industrial & Business	753.9	144.4	609.5	19.0%
Total Residential	1,782.1	311.4	1,470.7	46.0%
Agricultural	1,298.4	1169.0	129.4	4.0%
Conservancy	324.6	0.0	324.6	10.1%
Roads	612	0.0	612	19.1%
River	57.0	0.0	57	1.8%
TOTAL	4,828.0	1,624.8	3,203.2	100.0%

Based on City of Baraboo Zoning as of March 2009

b) Projected Population and Associated Land Use

The City of Baraboo has a current population of approximately 11,755 people. In the year 2030 the plan projects the population to be 14,707 people. Accordingly, the plan shows that this increase of 2,952 people will require an additional 726.4 acres of land.

The City currently contains 1,624.8 acres of undeveloped lands. Of this area, 1,169 acres is currently zoned agricultural, and 455.8 acres have been zoned for residential, industrial or business development. It will be assumed that infilling of the unimproved parcels such that 55% of the area currently unimproved and zoned Residential, Commercial, or Business will be developed by the year 2030. It is assumed that the remaining 45% of the area is undevelopable due to the physical properties of the land such as steep slopes, or due to ownership issues.

The City will also develop the lands zoned Agricultural within the City and will re-zone these lands as development occurs. It will be assumed that 877.0 acres, or 75%, of the available 1,169 acres are developable. The developable vacant land areas will be subtracted from the projected land use needs in order to arrive at the estimated new land use requirements for the year 2030.

The additional land use requirements for the City have been calculated by subtracting the developable infill lands and the developable agricultural lands from the projected required acreage for each of the land use categories. The required additional lands will be allocated according to **Table 3-4**.

TABLE 3-4				
2030 Baraboo Land Use Area Requirement Projects by Land Use Category				
Land Use Category	2008 Developed Area (Acres)	20 Year increase (Acres)	Developable Infill (Acres)	Developable Ag Land (Acres)
Total Industrial & Business	609.5	88.3	79.4	8.8
Total Residential	1,470.7	403.0	171.3	231.8
Conservancy	324.6	81.5	0.0	76.9
Roads	612	153.6	0.0	145
TOTAL	3,073.7	726.4	250.7	475.7

Total acreage available for development within the City limits: 1,169.0
 Required acreage for development based on population projects: 726.4
 Acreage of excess developable land within the City Limits: 442.6

c) Residential Housing

Land use estimates for Residential Housing were calculated using estimated household densities, housing density, and population projections. The household density within the City has been decreasing since at least 1970. **Table 3-5** shows the historical housing density of the City since 1970 and the projected household density and number of occupied units for 2030. The persons per household value for 2030 has been taken from the City of Baraboo Master Plan projection for the year 2010. It is unlikely that the household density will fall below this level.

TABLE 3-5					
Historical Household Densities					
Description	1970	1980	1990	2008	2030
Total Population	7,931	8,081	9,203	11,755	14,707
Group Qtrs. Population	184	198	202	303	303
Household Population	7,747	7,883	9,000	11,452	14,404
Total Occupied Units	2,735	3,206	3,744	4,870	6,318
Persons per Household	2.83	2.46	2.40	2.30	2.28

Total housing units, occupied and vacant, required for the year 2030 can be estimated using historical vacancy rates. Although the City of Baraboo experienced an unexpected increase in vacancy (4.7% to 5.3%) rates between 1990 and 2000, it is unlikely that this increase will continue into the future. A vacancy rate equal to that reported in the 2000 census was used to calculate projected housing requirements for 2030. **Table 3-6** shows the historical data as well as the projected Housing Requirements for 2030.

TABLE 3-6					
Historical Housing Units					
Description	1970	1980	1990	2008	2030
Total Occupied Units	2,735	3,206	3,744	4,870	6,318
Total Vacant Units	106	139	186	273	335
Percent Vacancy	3.7	4.2	4.7	5.3	5.3
Total Units Occupied and Vacant	2,841	3,345	3,930	5,143	6,652

The density of housing in new subdivisions and developments is likely to follow recent trends. The Sauk County Treasurer’s office reported in a “Comparison of Living Units per Acre of Subdivision” for the Towns of Fairfield and Baraboo and the City of Baraboo the unit densities for developments between 1993 and 2000. **Table 3-7** shows a summary of this report for the City of Baraboo.

TABLE 3-7			
New Development Housing Densities			
Name of Development	Number of Units	Acres	Acres per Unit
Single Family Developments			
Spruce Haven	34	11.46	0.34
Highland	28	12.23	0.44
Westfork	22	9.78	0.44
Parkridge	52	15.29	0.29
TOTAL (Single Family)	136	48.76	0.36
Multiple Family Developments			
Springbrook Hills	23	9.68	0.42
Parkside	278	44.24	0.16
Active Living Options	67	7.73	0.12
TOTAL (Multi Family)	368	61.65	0.17

The developments in **Table 3-7** have an average lot density of 0.36 acres (15,700 ft²) per lot for single-family lots and 0.17 acres (7,400 ft²) per unit for multi-family lots. These lot densities will be used in Table 3-9 as the average lot size for future developments.

The 1993 City Master Plan stated that the amount of multi-family housing is expected to increase gradually over time as a percentage of total housing units. The City projected that the percent of multifamily housing would increase from 31% to 36% of the total housing units between 1990 and 2010. Since it is likely that this trend will continue through the year 2030, a projection of the division of single and multifamily housing units for the year 2030 can be made. **Table 3-8** shows the historical data and the projection of for 2030.

TABLE 3-8 Housing Unit Type Projection					
Unit Type	1970	1980	1990	2009	2030
Single Family	2,080	2,386	2,709	3,156	4,457
2+Units	761	959	1,225	1,987	2,195
Total Units	2,841	3,345	3,934	5,143	6,652
Percent Multi Unit	27%	29%	31%	38%	33%

Using established projections for housing unit type, housing densities, and household density projections, and land use projection for residential housing can be made. **Table 3-9** shows the land use projection for 2030.

TABLE 3-9 Residential Land Use Projections	
Single Family Housing	
Units Required (2030 projection - 2009 reported)	1,301
Housing Density	0.36 acres per unit
Acreage Required	468 acres
Multi-Family Housing	
Units Required (2030 projection - 2009 reported)	208
Housing Density	0.17 acres per unit
Acreage Required	35 acres

The land use in Table 3-9 includes roads within the subdivisions. Roads account for about 20% of the land in residential subdivisions. As Roads are accounted for separately in Tables 3-3 and 3-4, the lot sizes above should be reduced by 20%. The resulting land area requirements for housing are as follows:

Single Family: 374 acres
Multi-Family: 25 acres

- d) Business and Industrial
Business and industrial growth is difficult to forecast. Variations in the areas infrastructure, economy, and tourism will greatly affect commercial growth. The City feels that business and industrial development will continue at similar rates into the future due to the

pending improvement of U.S. Highway 12. For this reason it will to be assumed that business and industrial land use requirements will continue to increase. **Table 3-10** shows the projected land use for Business and Commercial.

TABLE 3-10 Business and Industrial Land Use Projections			
Land Use Category	2002 Developed Area Acres	2008 Developed Area Acres	2030 Projected Area Acres
Business	585.4	609.5	697.7

- e) Conservancy
Little data exists on land use requirements for Conservancy lands. Therefore, it will be assumed that land use requirements will parallel population growth. The population multiplier based on the 20-year population trend will be used to project conservancy land use for the year 2030. **Table 3-11** shows the projected land use.

TABLE 3-11 Conservancy Land Use Projections			
Land Use Category	2008 Developed Area Acres	2030 Area Increase Acres	2030 Projected Area Acres
Conservancy	324.6	81.5	406.0

- f) Roads
It will be assumed that land use requirements for roads will parallel population growth. The population multiplier based on the 20-year population trend will be used to project Road land use for the year 2030. **Table 3-12** shows the projected land use.

Land Use Category	2008 Developed Area Acres	2030 Area Increase Acres	2030 Projected Area Acres
Roads	612.0	153.6	765.6

3. Village of West Baraboo Land Use Projection

The Village of West Baraboo currently contains 200 acre of vacant land within the corporate boundary to accommodate all of the potential development. The primary development within the Village is anticipated to be residential, and commercial. This development will take place primarily along the Highway 12 corridor.

The Village currently contains approximately 360 acres of developed land with the Village. In order to accommodate the projected growth of the Village and additional 195 acres of land will be needed. The Village contains approximately 230 acres of vacant land within the Village therefore there is enough land within the Village to accommodate projected growth.

IV. SEWERAGE SYSTEM CAPACITY

A. Description of Wastewater Sources

The Baraboo Wastewater Treatment Plant treats sewage from the City of Baraboo, Village of West Baraboo, the Town of Baraboo Sanitary District #1, and Devil's Lake State Park. Future wastewater flows for the City of Baraboo and the other users of the Baraboo WWTF must be estimated in order to predict if the existing facility has the capacity to provide service into the future. Future wastewater flows generated by the City of Baraboo, Village of West Baraboo, and Town of Baraboo Sanitary District #1 are assumed to parallel population growth. Therefore the population projections established by the City, Village, and Sanitary District can be used to calculate anticipated flows. None of the entities can extend sanitary sewer beyond their corporate limits.

1. Devil's Lake State Park

Devil's Lake State Park generates sanitary sewage flows proportional to the number of visitors at the park. The number of visitors utilizing the park is dependant on a number of criteria, including the amount of facilities or services offered at the park, and the number of people living within easy access of the park. The Park is not planning any park improvements that would cause increased park use or increased sanitary discharge. However, due to the expected increases in population in the area, a corresponding increase in park use can be anticipated.

2. Village of West Baraboo

The City has an agreement with the Village to provide potable water and sanitary sewer service to the Village until March 2015. The agreement was made in 1995 and states that the Village is limited to a daily average of 29,412 cubic feet (0.220 mgd) during any 90-day billing period. The Village may construct sanitary sewer extensions without prior approval as long as these extensions are within their boundaries and the total flow generated by the Village does not exceed limits set forth in that agreement. The projected growth of the Village by 2030 would exceed the daily average flow indicated in the agreement. The Village and the City should revisit the limitations when the agreement expires in 2015.

At this time the Village is considering the development of a new well and storage facility to supplement the water supplied by the City. The City and Village will need to address the Village's plans to supply its own water and the projected 2030 sanitary flow from the Village.

3. Town of Baraboo Sanitary District

The Town of Baraboo Sanitary District #1 is expected to see minimal population growth, although they would like to be able to expand the District.

By inter-municipal agreement, the City will accept up to 57,821 gallons per day from the Sanitary District. Currently, the District sends about 10,000 gallons of wastewater to the City each day. The City has indicated that they will not serve lands outside the existing boundaries without amendment of the existing service agreement. The District appears to have ample room for infill development to occur, without expansion of their boundaries.

B. Future Design Conditions

Table 4-2 shows the current population and sanitary flow rates for the Baraboo WWTF customers and the projected population and flow rates for the year 2030. For the City of Baraboo, wastewater flows have been divided into residential, commercial, and industrial categories. As discussed earlier, the City believes that commercial and industrial growth will not parallel population growth, but will continue to grow at a rate similar to that experienced over the last ten years. Year 2008 sanitary flows for the three categories were estimated using the reported total influent flows to the WWTF, and billable sewage flow data supplied by the City of Baraboo Water Department. 2008 Sanitary flows for the City's commercial and industrial dischargers were calculated by paralleling sanitary flows with land use.

**TABLE 4-2
Baraboo WWTF Wastewater Sources and Loadings**

Source	Year 2008		Flow per Capita (gpc)	Year 2030	
	Estimated Population	Sanitary Flow mgd		Population	Sanitary Flow mgd
City of Baraboo	11,755		72	14,707	
Residential		0.469			0.591
Commercial		0.267			0.467
Industrial		0.059			0.103
Public Authority		0.044			0.077
Village of West Baraboo	1,288	0.120	93	2,003	0.186
Town of Baraboo Sanitary District #1	91* ²	0.014	157* ³	150* ²	0.024
Devil's Lake State Park * ¹		0.057			0.093* ¹
Hauled-in waste		0.015			0.015
Baseline Infiltration		0.500			0.500
Average Daily Flow		1.55			2.06
Design wet weather flow		1.85			2.36
Peak Day		4.0			5.32
Peak Hour		4.65			6.18

*1 Devil's Lake's projection is for Peak Season Flows (June-Aug)

*2 Number of sanitary connections

*3 Flow in gallons per connection

C. Sewerage Treatment Capacity

The City of Baraboo's Wastewater Treatment facility serves The City, the Village of West Baraboo, the Town of Baraboo, the Town of Baraboo Sanitary District #1, and Devil's Lake State Park. The City currently maintains two lift station within the City that serve small portions of the overall service area. Figure 4-1 is a map of City of Baraboo Existing Sanitary Sewer System. This map also identifies the two lift stations that the City currently operates and the service areas for each station.

A facility plan amendment was completed for the proposed upgrades in February 2005. As part of the facility upgrade a design report was prepared and submitted to the DNR. Based on the design report provided the rated capacity for the treatment facility is as follows:

- | | |
|----------------------------------|----------|
| • Average Daily Flow | 2.23 mgd |
| • Average Daily Wet Weather Flow | 2.53 mgd |
| • Peak Month Flow ¹ | 2.80 mgd |
| • Peak Week Flow ² | 2.98 mgd |
| • Peak Daily Flow ³ | 5.62 mgd |
| • Peak hourly Flow ⁴ | 8.86 mgd |

¹ Based on peak month factor of 1.11

² Based on peak week factor of 1.18

³ Based on peak day factor of 2.22

⁴ Based on peak hour factor of 3.50

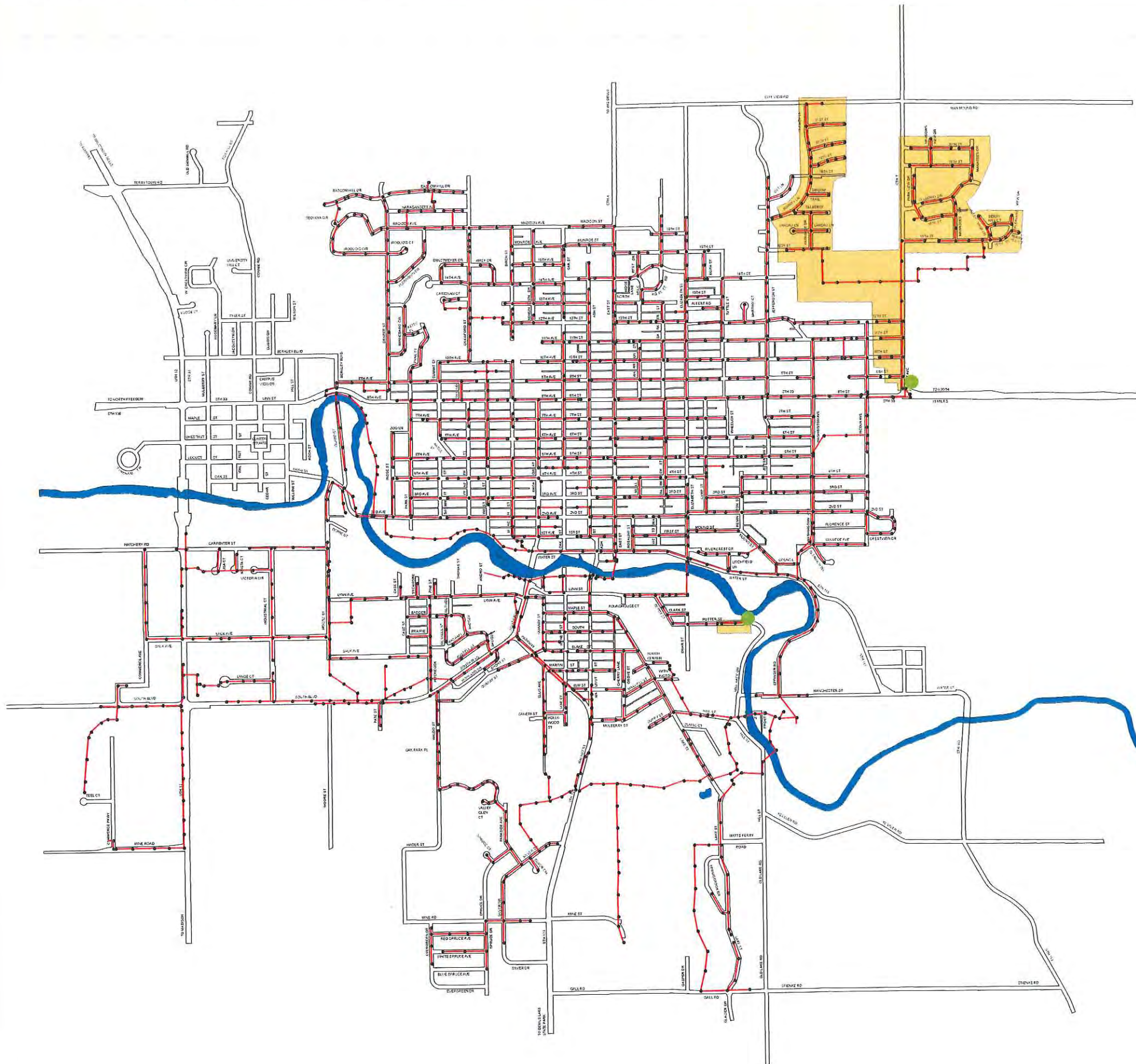
Wastewater enters the treatment facility by gravity through a 36” gravity sewer main and passed through a 12” Parshall Flume for influent flow measurement. Flow then passes through a comminutor where large solids are shredded and reduced in size. The flow is then pumped through a grit removal system as it proceeds to the secondary treatment processes. The secondary treatment processes are as follows:

- Compartmentalized selector tanks for phosphorous removal
- Parallel oxidation ditches
- Secondary clarifiers
- Chlorine contact tank for disinfection (May – October)
- Sodium bisulfate injection for de-chlorination (May – October)
- Cascade aerator prior to discharge to the Baraboo River

Excessive solids generated in the biological treatment process are wasted to an aerobic digester for partial sludge stabilization. Sludge from the digester is fed through a belt filter press, dewatered then alkaline stabilized. Stabilized sludge is then stored on site until it can be land applied.

Based on the treatment plant upgrades noted in the facility plan and design report, the existing system has the capacity to handle the projected 2030 flows from the contributing entities listed above.

CITY OF BARABOO EXISTING SANITARY SEWER SYSTEM



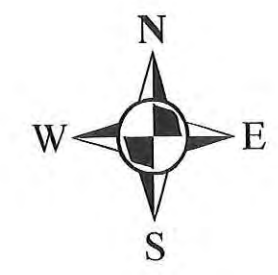
LEGEND

- SANITARY MANHOLE
- SANITARY SEWER LINE
- SANITARY LIFT STATION
- LIFT STATION AREAS

RECEIVED

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BUREAU OF WATERSHED MGMT



ESA DEFINITIONS

D. Wetlands

The wetland areas shown on the mapping for this report are based upon a graphical interpretation of the “Wisconsin Wetlands Inventory” maps as prepared by the Department of Natural Resources. The report maps are not intended to accurately represent the location, size or existence of wetlands. The exact determination of wetland areas shall be by field survey or other approved methods.

The specific map used herein is labeled “Wisconsin Wetlands Inventory - DNR Bureau of Planning – Baraboo NW, WI, Quadrangle 1974, and North Freedom NE, Wis, Quadrangle 1974

Note that for purposes of interpretation of the limits of the City of Baraboo’s sanitary sewer service area, a 50 foot wide buffer shall be incorporated around each wetland area. This buffer shall be interpreted as being a restricted part of each wetland determination.

Figure 5-1 shows the lands within the study area identified as Wetlands.

E. Floodplains & Shorelands

The limits of the regional flood (100-year) shown on the mapping for this report are based upon a graphical interpretation of the “Flood Insurance Study” maps as prepared by the Federal Emergency Management Agency (FEMA). The report maps are not intended to accurately represent the location, size or existence of flood areas. The exact determination of flood areas shall be by field survey or other approved methods.

The specific information used herein is contained in three documents. These documents are labeled as follows:

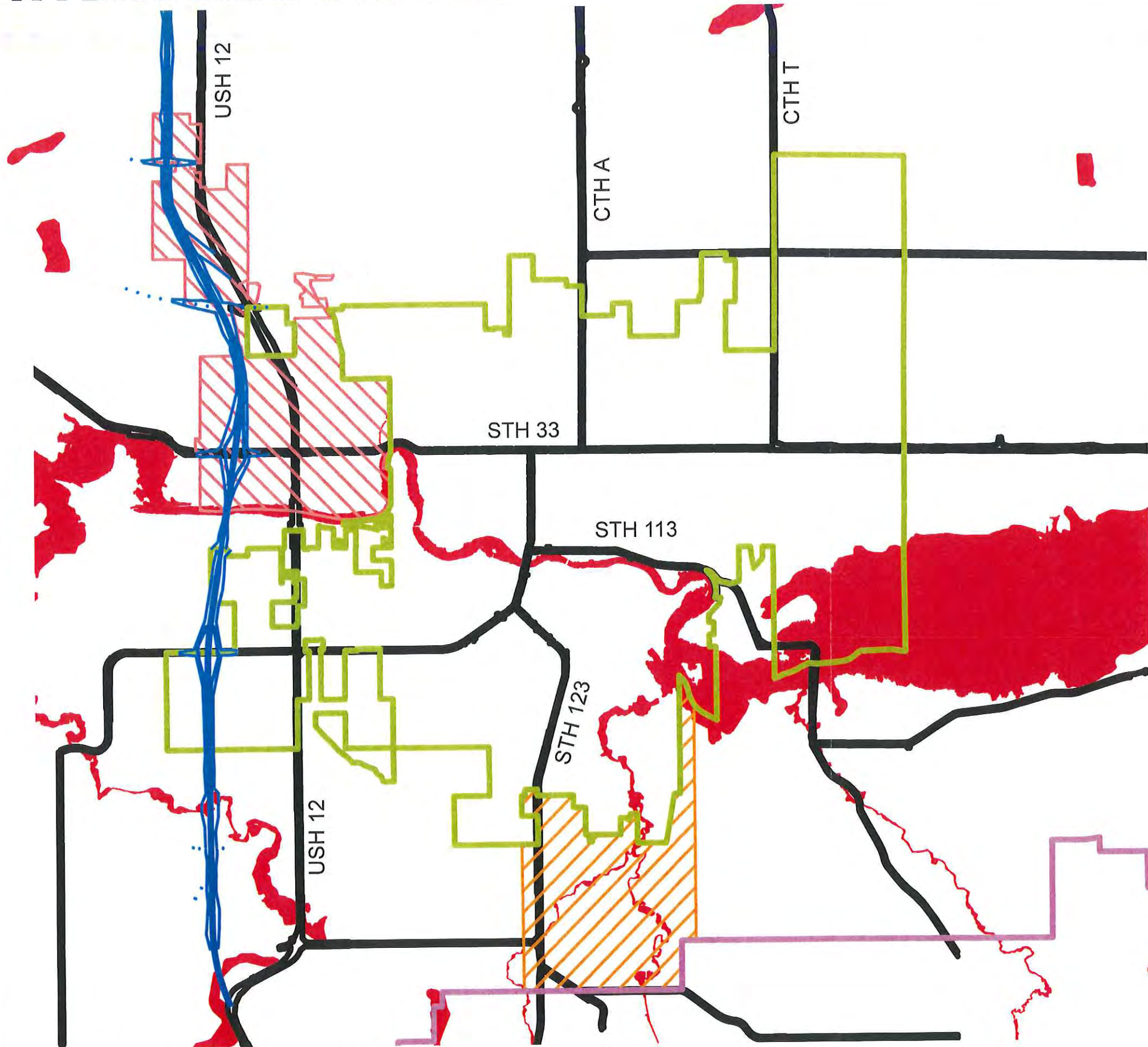
“FIRM - Flood Insurance Rate Map - County of Sauk, Wisconsin - Panel 385 of 675 - Community Panel Number 55111C0405 D - Effective Date: March 7, 2001 - Federal Emergency Management Agency - Federal Insurance Administration”

“FIRM - Flood Insurance Rate Map - County of Sauk, Wisconsin - Panel 405 of 675 - Community Panel Number 55111C0405 D - Effective Date: March 7, 2001 - Federal Emergency Management Agency - Federal Insurance Administration”

Shoreland areas include those areas within 1,000 feet of the ordinary highwater mark of navigable lakes, ponds, or flowages, and within 300 feet of the ordinary highwater mark of navigable rivers or streams or to the landward side of the floodplain, whichever distance is greater. For the purposes of navigability, it is assumed that all lakes, ponds, flowages, rivers, and streams that appear as permanent bodies of water on the United States Geological Survey (USGS) quadrangle maps are navigable bodies of water. The location and extent of these bodies of water have been determined through the combined use of the USGS maps and through digitized aerial photography. The report maps are based upon current information and data and are approximate in the location, size or existence of shorelands. Local review and approval authorities shall verify the exact determination of these areas.

Figure 5-1 shows the lands within the study area considered within the 100-year flood region and the shoreland buffer.

HYDROGRAPHIC MAP



LEGEND

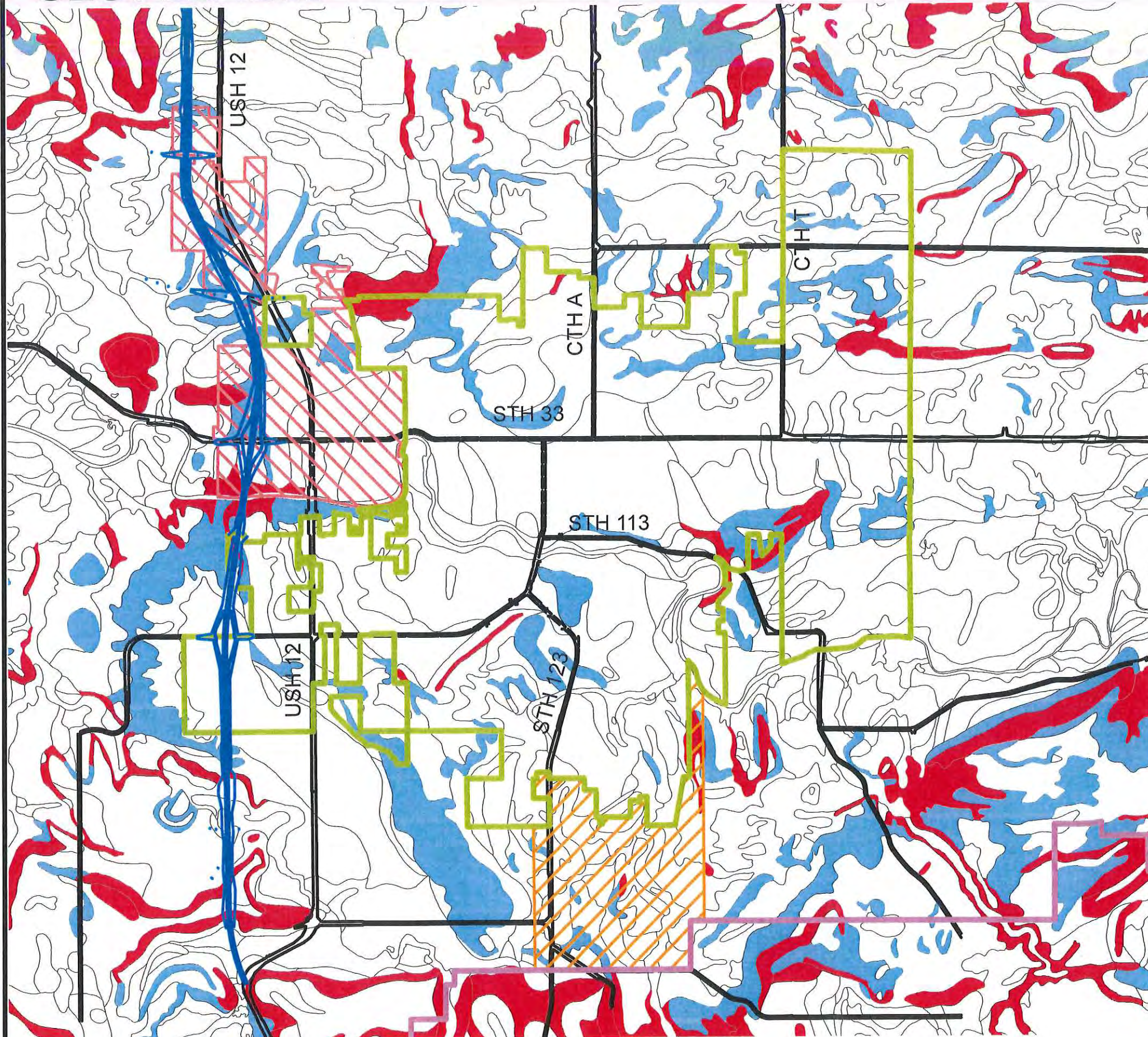
- PROPOSED STH 12 BYPASS
- ▨ EXISTING SANITARY SEWER DISTRICT
- ▭ DEVILS LAKE STATE PARK
- ▨ VILLAGE OF WEST BARABOO
- ▭ CITY OF BARABOO
- 100 YEAR FLOODPLAIN AND 50 FOOT BUFFER OF WETLANDS DEVELOPMENT IS PROHIBITED











MAPPING BY THE CITY OF BARABOO

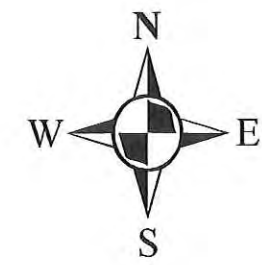
FIGURE 5-1

SLOPES MAP



LEGEND

-  PROPOSED STH 12 BYBPASS
-  EXISTING SANITARY SEWER DISTRICT
-  DEVILS LAKE STATE PARK
-  VILLAGE OF WEST BARABOO
-  CITY OF BARABOO
-  0 TO 12 PERCENT SLOPE
-  GREATER THAN 12 PERCENT SLOPE AND LESS THAN 20 PERCENT SLOPE
-  GREATER THAN 20 PERCENT SLOPE



G. Greenbelts and Parks

The greenbelt areas shown on the mapping for this report are based upon a graphical interpretation of the digitized aerial photography as described previously. These areas were determined to have significance in the management of storm water runoff. A minimum width of 50 feet shall be used for the interpretation of these areas for this report. The maximum size, location and related characteristics shall be as shown on the maps of this report (or as referenced by this report).

Figure 5-3 shows the lands within the study area identified within existing Greenbelts.

H. Storm Water Management Areas

The storm water management areas shown on the mapping for this report are based upon a graphical interpretation of the digitized aerial photography as described previously. These areas were determined to have significance in the management of storm water runoff. The location and size of these areas is approximate and shall be verified by future detailed studies.

I. Prime Agricultural Lands

The prime agricultural areas shown on the mapping for this report are based upon a criteria identified within, the “Soil Survey of Sauk County Wisconsin - United States Department of Agriculture - Soil Conservation Service in cooperation with Research Division of the College of Agricultural and Life Sciences - University of Wisconsin”, dated March 1980. These lands have been identified based on soil classification to be superior in quality to support agriculture.

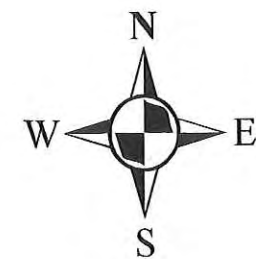
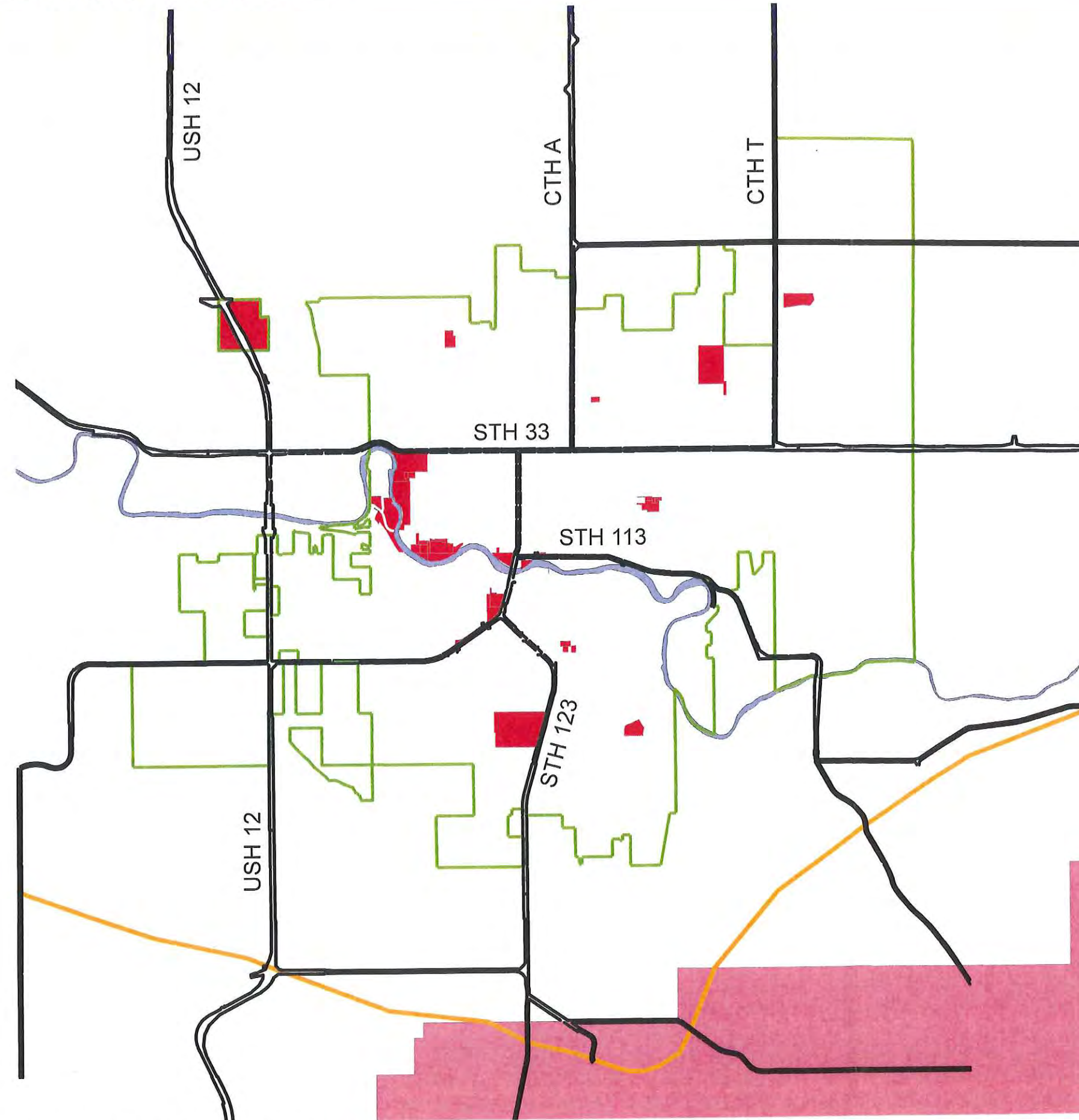
Figure 5-4 shows the lands within the study area identified as prime agricultural lands.

J. Hydric Soils and Infringing Bedrock

The hydric solids and infringing bedrock areas shown on the mapping for this report are based upon a criteria identified within, the “Soil Survey of Sauk County Wisconsin - United States Department of Agriculture - Soil Conservation Service in cooperation with Research Division of the College of Agricultural and Life Sciences - University of Wisconsin”, dated March 1980. These lands have been identified based on the soil classification of the areas

Figure 5-4 shows the lands within the study area identified as containing hydric soils or infringing bedrock.

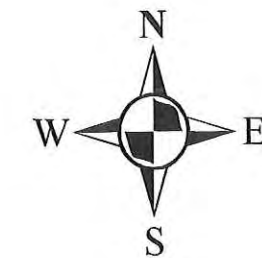
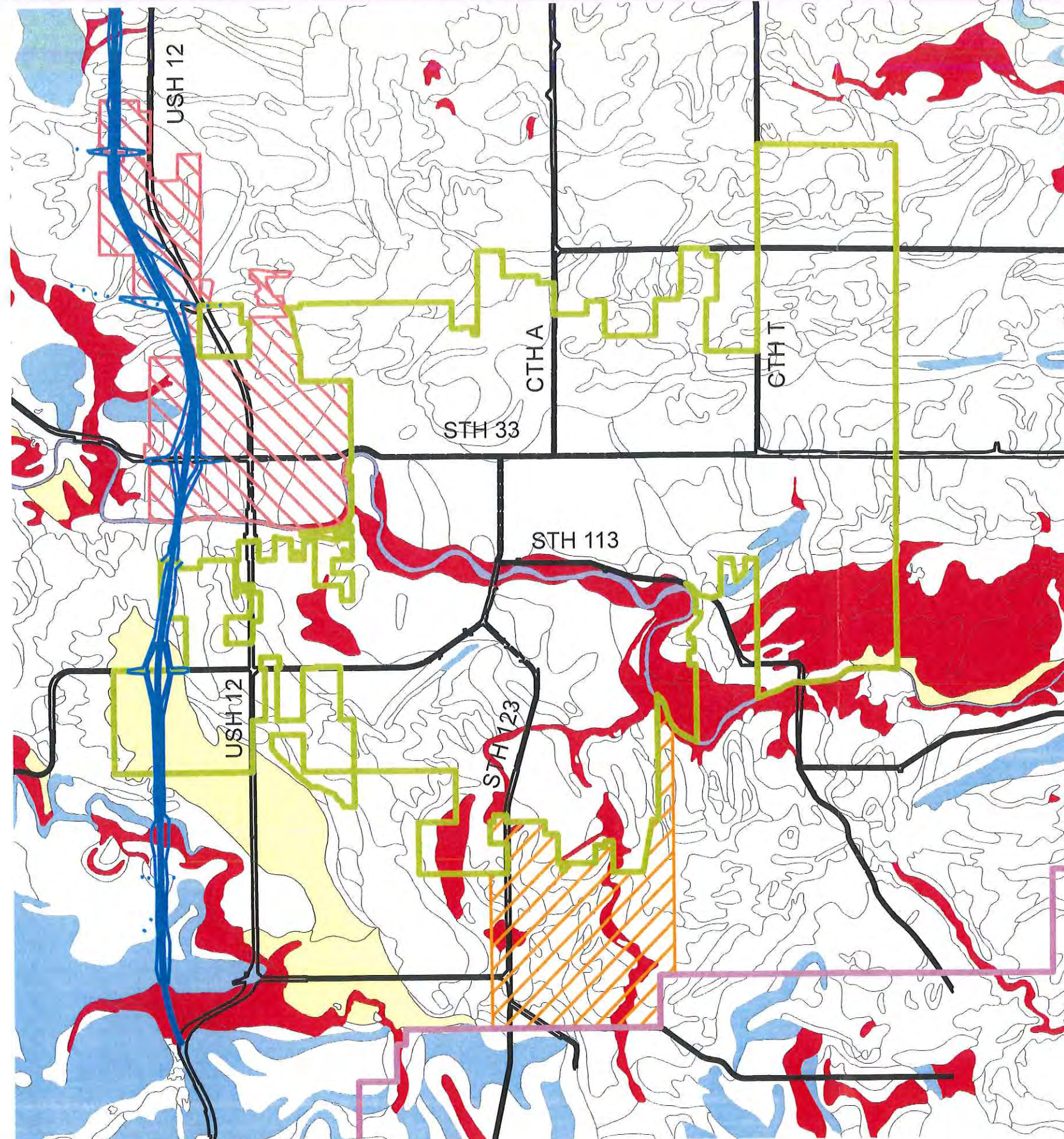
PARK LANDS



PRIME AGRICULTURAL LANDS, HYDRIC SOILS AND INFRINGING BEDROCK MAP

LEGEND

- PROPOSED STH 12 BYBPASS
- ▨ EXISTING SANITARY SEWER DISTRICT
- ▭ DEVILS LAKE STATE PARK
- ▨ VILLAGE OF WEST BARABOO
- ▭ CITY OF BARABOO
- PRIME AGRICULTURAL LAND
- INFRINGING BEDROCK
- HYDRIC SOILS



MAPPING BY THE CITY OF BARABOO

FIGURE 5-4

K. Town of Greenfield Boundary Agreement

The City recently completed the annexation of property from the Town of Greenfield into the City. As part of the signed annexation agreement, the City agreed to develop the property in the annexation in phases and to “Discourage” development along the ridge on the north edge of the annexation.

Figure 5-5 shows the lands within the annexation area from the Town of Greenfield, the agreement phases, and the area of “Discouraged Development” along the ridge at the north edge of the annexation area.

TOWN OF GREENFIELD AGREEMENT - RIDGETOP AREAS

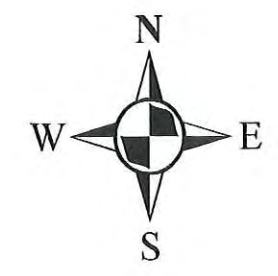
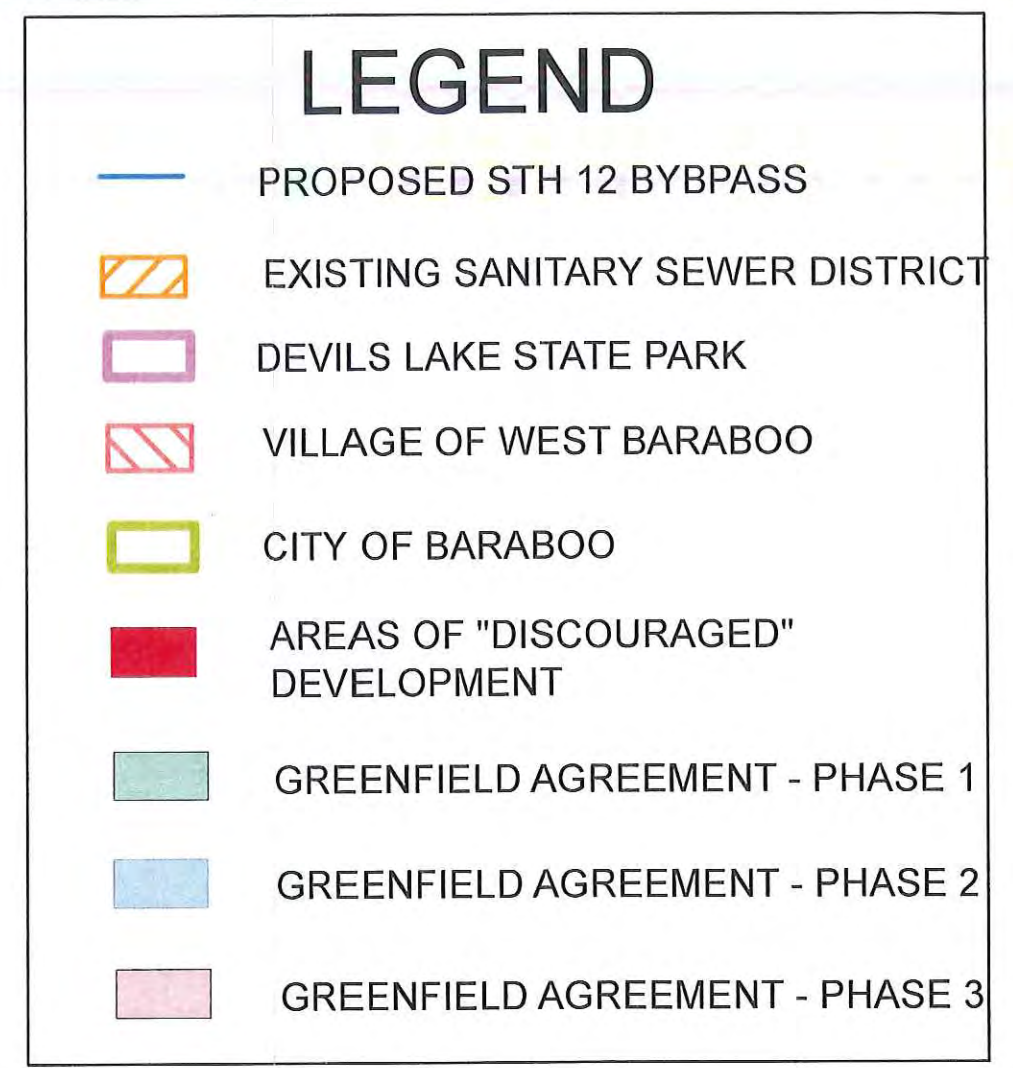
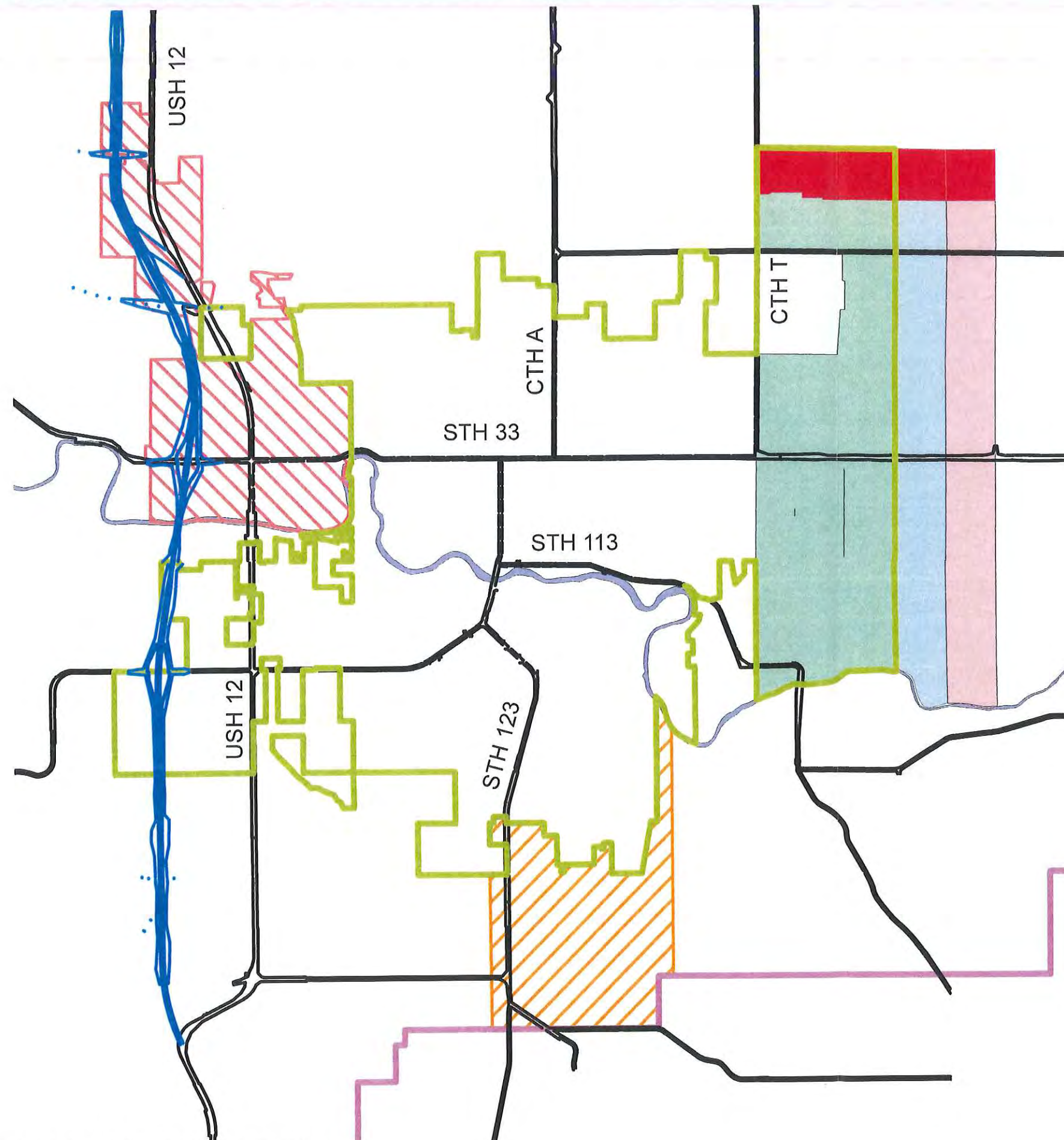


FIGURE 5-5

V. ENVIRONMENTALLY SENSITIVE AREAS

Protecting water resources for future generations and ourselves is the primary reason for preparation of the sewer service area plan. To accomplish this, identification of “Environmentally sensitive areas” or areas where development would have a more adverse impact on water quality is necessary. Unchecked development within these environmentally sensitive areas would lead to serious degradation of inland waters. By limiting development within these areas the quality of our water resources can be maintained.

Environmentally Sensitive Areas (ESA’s) are geographic areas which encompass especially valuable natural resource features such as lakes, rivers, streams, wetlands, and their associated undeveloped shorelands, floodplains, hydric soils and areas of steep slopes. ESA’s as defined within this report are as follows:

- Any Environmentally Sensitive Area associated with a non-navigable flowage, river or stream shall extend 25 feet from both sides of the center of the channel of such feature.
- All floodplains (FEMA 100-year) shall be designated as ESA’s.
- All Department of Natural Resources (DNR) mapped wetlands shall be included in an ESA. Any Environmentally Sensitive Area associated with such a wetland which is at least two acres in size shall extend 50 feet beyond the edge of the wetland.
- Areas of steep slope 20 percent or greater shall be designated as ESA’s. Areas with a slope between 12% and 20% require site specific construction site and storm water management planning.
- Publicly owned scientific and natural areas and areas with identified archaeological sites shall be included in the ESA.
- Other significant natural resource features, including but not limited to, river and stream headwaters, woodlands, high-value wildlife habitat areas, geologic and natural area sites, steep slopes, and wet, poorly drained and organic soils, shall be considered for inclusion as an ESA on a case-by-case basis by the City and plan advisory committee after consultation with DNR.

Sewer extensions for development within designated ESA’s will be prohibited. An exception to this exclusion does exist as the plan recognizes that it may be necessary, in some case, to construct sanitary sewers across and through identified environmental corridors, and that, compatible land uses such as public parks and outdoor recreation facilities may need sewer at a future date. Also, mapping detail may not portray exact boundaries of physical

features as they currently exist, in which case an onsite inspection would need to be conducted to properly identify the environmental corridor. The City Plan Commission and WDNR will review these exceptions/modification of environmental corridor mapping on a case-by-case basis. Pursuant to NR 1.95, when an exception of this particular nature exists, all reasonable alternatives to crossing the environmental corridor with sanitary sewer will be considered. Any changes to the ESA delineation would require a plan amendment and WDNR approval.

Intensive uses to be considered for exclusion from within ESA's include but are not limited to permanent structures such as residential, commercial, or industrial buildings; impervious surfaces such as parking lots and concrete or asphalt surfaced storage areas; and site disturbing activities such as clearing, grubbing, grading, and filling. Any consideration of development within or adjacent to an ESA must be in conformance with all applicable Federal, State, and local rules and regulations including the provisions and requirements of the Federal Clean Water Act, Wisconsin Administrative Codes NR 103, 115, 116, 117, 121, 216, and 299, and local zoning ordinances.

Uses which may be compatible with the protection and preservation of ESA's include non-intensive recreational facilities such as trails and picnic areas; in some instances, utility facilities such as sewer and water lines, detention basins, and storm water drainage-ways; and limited clearing, grubbing, grading, and filling.

If there is any doubt to the location of, or infringement on ESA's at the time of sewer extension or boundary amendment requests (as delineated on the review maps), the reviewing agency (City of Baraboo) will consult with and request site specific information (including proposed building footprints) from the local municipality and/or petitioner. This information, along with the ESA criteria from this plan, will be used to make a recommendation on the proposal.

Application of the above ESA definition will not apply to those areas currently developed or platted at the time of plan publication, but will apply to those areas not yet developed or platted at the time of publication.

Figure 6-1 through **Figure 6-4** shows the location of ESA's and other areas of concern throughout the planning area. Although ESA's may overlay existing developed lands, it is their location throughout the undeveloped portion of the Sewer Service Area that will determine future sewered development.

A. Areas Where Development is Prohibited

Figure 6-1 identifies all of the land within the study area that will be considered “Prohibited” from development. The criterion for the classification of these lands follows.

1. Wetlands

Wisconsin State Statute 23.32 defines wetlands as “an area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic (water tolerant) vegetation and which has soils indicative of wet conditions (hydric soils)”. For this report, the statutory definition of a wetland will be used. Examples of wetlands are open and wooded swamps, shallow and deep-water marshes, wet meadows and prairies, and ephemeral ponds.

These wetlands are important for groundwater recharge and discharge and often provide habitat for a wide variety of plants and animals. Wetlands also provide natural open space, reduce flood peaks and help maintain both surface and groundwater quality. The functional values of wetlands include: active and passive recreation, stream and lake buffer areas, pollutant trap, groundwater recharge, wildlife and fisheries habitat, and maintenance of stream base flows.

In general, any development in a wetland destroys valuable ecosystems, adversely affects surface water drainage and alters the quality of groundwater supplies. In addition, specialized construction techniques must be used when building structures, roads, and sanitary sewers in wetland areas. If these more costly specialized techniques are not used, recurring problems with frost action and infiltration of groundwater can reduce the effective life of the structures.

Note that for purposes of interpretation of the limits of the City of Baraboo’s sanitary sewer service area, a 50-foot wide buffer shall be incorporated around each wetland area which is at least 2 acres in size. This buffer shall be interpreted as being a restricted part of each wetland determination.

2. Floodplain

Construction in the floodway portion of the floodplain of any major drainage way is currently prohibited or regulated through existing Wisconsin Statutes and local ordinances. The floodway is the channel of a river or stream and

those portions of the floodplain adjoining the channel required to carry the regional flood discharge. All floodplain areas have been removed from potential development areas. Public utilities, streets and bridges can be extended in floodplain areas however they must comply with all state and local regulations. These requirements are outlined in Wisconsin Administrative Code NR116.

3. Hydric Soils

Soils types with a high water table exhibiting a saturated condition at or near the ground surface are generally characterized as hydric soils. The presence of saturated soil conditions may restrict the installation of building foundations and subject basements to seasonal wetness and flooding. Development on hydric soils increases the likelihood of surface and ground water contamination within these areas. Hydric soils are defined as soils that have the following soil map units as indicated in the United States Department of Agriculture - Soil Conservation Services Hydric Soil List for Sauk County, Wisconsin.

Ad	ArA	AtA	BaB	BdB	ChA
Co	CuA	DeA	EmA	Et	Fu
Fw	Gr	Gv	Ho	KlA	Mc
MsA	Or	Os	Pa	RmA	Ry
Se	SfA	ShA	Wt		

There may be isolated areas with hydric soil characteristics which may be appropriate for limited development. Such areas maybe developed following detailed analysis by soil experts and through implementation of appropriate construction techniques.

4. Existing or Proposed Greenbelts

Greenbelts are typically assumed to only provide a natural open area or park use. However, in addition to the aesthetic and natural benefits of maintaining greenbelts, they also serve essential purposes. The natural drainage ways established as greenbelts route storm water out of developed areas with a minimum adverse effect and at a nominal cost. This storm water routing technique can keep storm sewer construction at a minimum. Proper design of these preserved areas will reduce erosion and prevent damage to developed areas. In addition to a utility easement, the natural gradient of the drainage way provides an economical location for gravity interceptor sewers.







5. Slopes Greater than 20 Percent

Areas with steep slopes (greater than 20 percent) have been identified as developmentally limited areas. Construction activities on steep slopes typically require more site preparation and earth work, and can result in severe erosion and sedimentation problems if adequate drainage facilities and re-vegetation practices are not completed in a short period of time. This erosion deteriorates the water quality and can result in increased property damage downstream.

No land disturbance activities are allowed on slopes of 20% or greater except for access roads or installation of utilities to building sites of less than 20% slope. Development of lands having slopes of at least 12 percent but less than 20 percent, which are proximal to streams or other environmental features, should also be considered for designation as environmentally sensitive areas and excluded from development.

AREAS OF "PROHIBITED" DEVELOPMENT

LEGEND

-  PROPOSED STH 12 BYBPASS
-  EXISTING SANITARY SEWER DISTRICT
-  DEVILS LAKE STATE PARK
-  VILLAGE OF WEST BARABOO
-  CITY OF BARABOO
-  AREAS OF "PROHIBITED" DEVELOPMENT

- THIS MAP INCLUDES THE FOLLOWING FEATURES:
- SLOPES GREATER THAN 20 PERCENT
 - HYDRIC SOILS
 - FLOODPLAINS
 - 50 FOOT BUFFER OF WETLANDS
 - PARK LANDS
 - TOWN OF GREENFIELD AGREEMENT RIDGELANDS

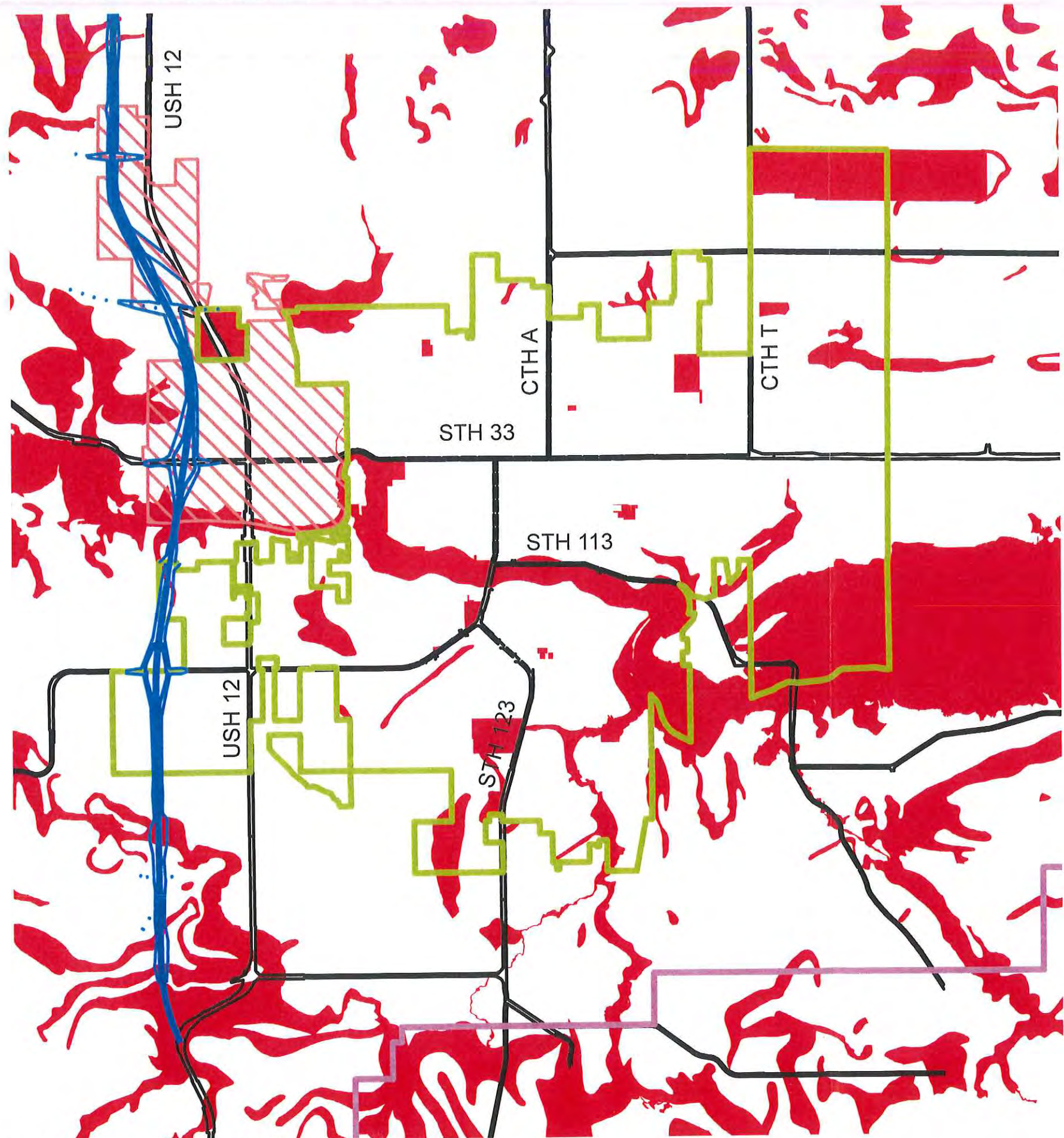
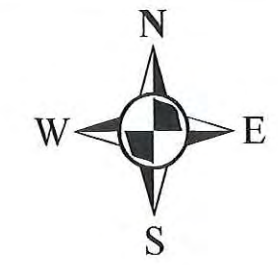


FIGURE 6-1

B. Areas Where Development is Controlled

Figure 6-2 identifies all of the land within the study area that will be considered “Controlled” development area. These lands have been identified as having characteristics that make development to these lands potentially threatening to adjacent environmentally sensitive lands or existing City infrastructure. Development of these lands is possible, but special actions must be taken during the planning and construction of the development to protect the threatened areas. The necessary actions will be established by the City on a case-by-case basis. The criterion for the classification of these lands follows.

1. Shorelands

Local County and Municipal Ordinances outline the potential uses of shorelands. Such controls are necessary to prevent any adverse affect of the natural waterways. If properly administered, conditional development can occur.

Shorelands shall include those areas within 1,000 feet of the ordinary highwater mark of navigable lakes, ponds, or flowages, and within 300 feet of the ordinary highwater mark of navigable rivers or streams or to the landward side of the floodplain, whichever distance is greater. For the purposes of navigability, it is assumed that all lakes, ponds, flowages, rivers, and streams that appear as permanent bodies of water on the United States Geological Survey (USGS) quadrangle maps are navigable bodies of water.

2. Soil Conditions for Private Septic Systems

Through existing State and County regulatory agencies, development on soils that are unsuitable for private waste disposal systems is avoided. This will prevent homes outside the City limits from being constructed on unsuitable soils and later requiring annexation for sewer connections due to failing septic systems. Such connections are often more expensive when trying to design around existing unplanned development. The U.S. Department of Agriculture, Soil Conservation Service identified soil classifications unsuitable for the construction of septic tanks. The majority of these soil types were either hydric soils, or soils with low distance to bedrock. Since areas of hydric soil have been identified as prohibited development areas, only those soils containing a low distance to bedrock will be classified in the controlled development areas.

3. Local Zoning Uses/Restrictions

Although local zoning ordinances attempt to regulate uncontrolled growth, public needs significantly influence final land use. Local zoning can be altered if the change is warranted and authorized by the local governing agency.

4. Flood Fringe

The flood fringe is that portion of the floodplain outside of the floodway, which is covered by floodwater during the regional flood. Development within the flood fringe portion of the general floodplain district must comply with local standards for development in those areas, and any other ordinance or other state or federal regulation/permit affecting such lands.

5. Slopes of 12 to 20 Percent Outside of Designated Environmentally Sensitive Areas

In order to protect the planning area's lakes, rivers and streams from excessive storm water runoff, this plan calls for the City to review and approve erosion and sedimentation control plans for an entire developing site and/or plat when slopes of 12% or greater exist. Those lands should be developed in accordance with standards for development that address erosion control, minimum lot size/building area requirements, vegetation removal, and site specific grading plans.

6. Storm Water Management Areas

The thorough nature of comprehensive planning implies long range and geographically broad consideration of storm water flows and water quality during and after development of major land parcels. This type of planning effort has a direct relationship to the overall water quality and works hand-in-hand with the sanitary sewer service area plan.

The City of Baraboo has a storm water management-zoning ordinance in effect. The ordinance mandates storm water control for new developments and redevelopment within the City. The ordinance is meant to control runoff volumes in developed parcels to levels less than or equal to pre-development levels. The management and regulation of storm water is divided among federal, state, county, and local governments, depending upon the land's status of incorporation, location, size, and activities affecting storm water on the land.

Phase II federal storm water regulations, which may affect the City of Baraboo in the near future, will require municipal storm water discharge permits for certain municipalities with populations of less than 100,000. Under this permit process, the City will be required to create and enforce rules which will control the discharge of pollutants.

At this point, the control of pollutants in storm water and erosion control at construction sites, is regulated by the Department of Natural Resources under Chapter NR216 of the Wisconsin Administrative Code, the Department of Commerce, the Department of Transportation, and local governments.

Under Chapter NR216 a landowner of a construction site is required to obtain coverage under a construction site storm water discharge permit. The landowner is required to ensure that a site specific erosion control plan and storm water management plan are developed and implemented at the site. Also under NR216, discharges of storm water from certain facilities require coverage under an industrial storm water discharge permit. The owner or operator of the permitted industrial facility is required to develop and implement a plan to reduce exposure of industrial materials to storm water.

Chapter NR151 of the Wisconsin Administrative Code establishes runoff pollution performance standards for non-agricultural facilities and transportation facilities and performance standards and prohibitions for agricultural facilities and practices designed to achieve water quality standards. This Chapter provides performance standards that developers must comply with during construction of new development and redevelopment, and performance standards for post-construction and developed urban areas.

The International Building Code as administered by the Department of Commerce contains provisions to control erosion during construction of one and two family dwellings. The Department of Commerce also regulates the construction activities at larger commercial building sites.

Through state statute and interagency agreements, regulation of erosion control at highway sites, is handled by the Department of Transportation.

Although there is coverage of certain activities under the regulations of the agencies described herein, there are still a number of activities that are not covered unless it is by adoption of a local storm water ordinance. There should be a heightened awareness about the consequences of, and laws

relating to, erosion control and storm water pollution. A better understanding of problems associated with this pollution by owners, developers, and contractors, coupled with improved enforcement of ordinances by local government should be a priority.

The City's Stormwater Management ordinance established the requirements that developers and current landowners must meet to prevent soil erosion. The ordinance applies to all lands within the incorporated boundaries of the City, and to lands subject to extraterritorial plat approval jurisdiction.

A detailed analysis of the current storm water runoff pattern has been conducted for a number of areas surrounding and within the corporate limits of the City of Baraboo. These studies should be referenced for a more detail description of the conclusions of these reports. A list of the reports prepared as a result of the studies follows.

South Boulevard Storm Sewer Study	December 1992
Northeast Drainage Study, Phase 1	November 1996
East Side Drainage Report	April 1999
Waldo Street Drainage Study	July 2000
East Street Drainage Report	July 2000
Lake Street Drainage Basin Analysis	August 2000
Industrial Court Capacity Study	2001
Birch and Rosaline Capacity Studies	2001

A number of areas within the sanitary sewer service boundary for 2022 have been identified as significant for the purposes of storm water management. These plans should be referenced whenever development occurs within their area of study so proper consideration for development can be made by review and approval authorities.

Future development plans may alter the proposed location, size, capacity and contributing area of these storm water management facilities based upon a more detailed development proposal and study. It is intended that the information presented herein form the basis for future review and approval considerations and in addition, provide an initial "heads-up" related to future storm water management concerns.

Past studies have identified a few areas of concern for future development. These areas have the potential to have a large negative affect on the City's storm water management facilities, and therefore development within these

areas should be monitored to assure proper techniques are used to control runoff volumes. The identified areas are:

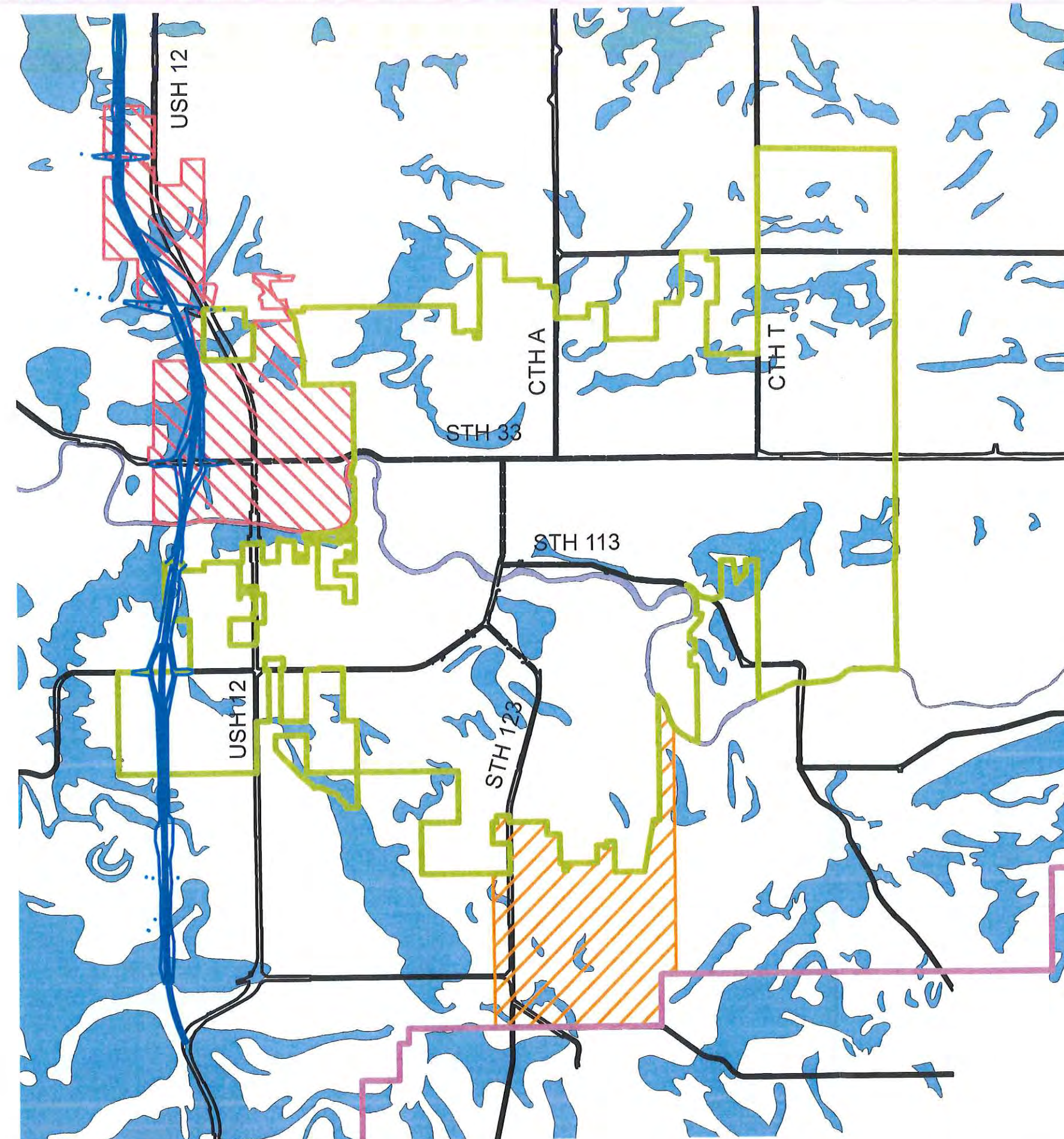
- Waldo Street Basin
- Lake Street Basin
- East Street Basin (particularly the north end of the basin)
- The East Side Drainage Basin

7. Other Significant Areas

Upland resource areas, groundwater recharge/discharge areas, and areas of exposed bedrock were also considered.

The most significant areas of groundwater recharge/discharge were determined to be contained within the existing wetland and shoreland areas. For this reason these areas were not included as a specifically mapped and/or identified area.

AREAS OF "CONTROLLED" DEVELOPMENT.



THIS MAP INCLUDES THE FOLLOWING FEATURES:
 SLOPES BETWEEN 12 PERCENT AND 20 PERCENT
 SOILS NOT SUITABLE FOR SEPTIC ABSORPTION FIELDS

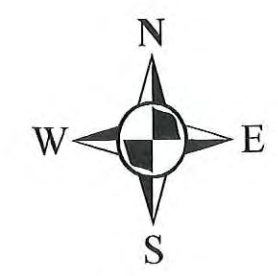


FIGURE 6-2

C. Areas Where Development is Discouraged

Figure 6-3 identifies the land within the study area that will be considered “Discouraged” from development. Lands that are discouraged from development are available for development if a compelling reason can be given. These areas contain a characteristic or characteristics that make them unique, and consideration to protect these areas should be made before development is allowed. The criterion for the classification of these lands follows.

1. Agricultural Preservation Areas

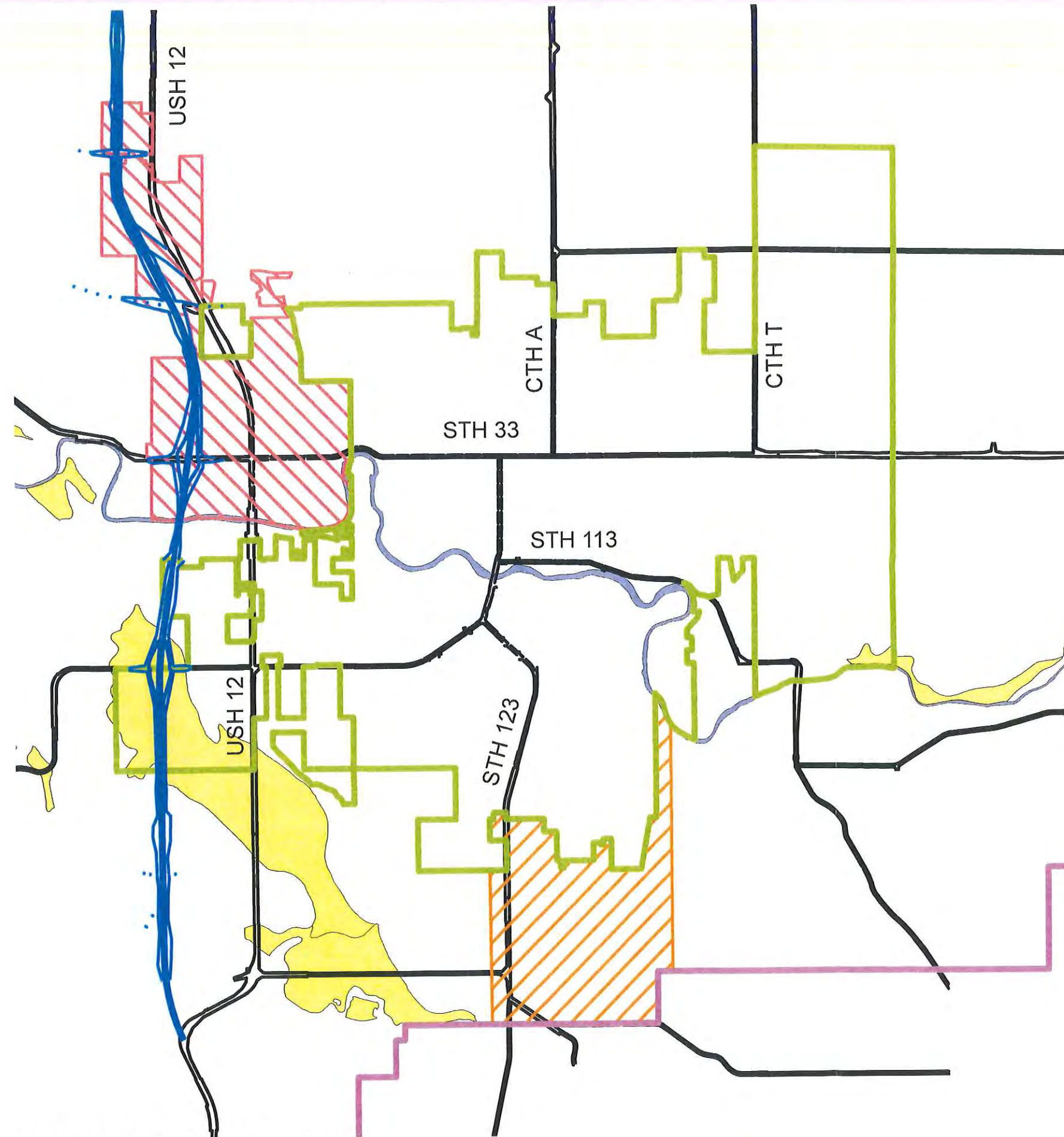
It is usually undesirable to take valuable farm land out of production. However, due to changing property values, urban pressures often outweigh agricultural demands. Unfortunately, most of the property available for development in the planning area is agricultural land.

It is the intent of this plan is to encourage development to occur in a location which conforms to the overall development vision as set forth in the City’s current comprehensive plan and is also beneficial to the overall needs of the community and surrounding area. In general, this vision may encourage “in-fill” development within the current service limits, or it may encourage the development of lands which are in proximity to an existing development or service area so as to maximize the cost effective use of existing utilities and services. It should discourage development which does not promote an orderly extension of municipal services along with the orderly and timely conversion of agricultural lands.

2. Areas with Construction Problems Not in Prohibited Areas

Construction problems translate into additional costs; costs that are absorbed by the person developing a property and by the entire service area through high utility costs. Although these areas will be somewhat naturally controlled through additional costs, the developer may feel that these costs are justifiable. Even with discouragement, undesirable growth may occur. The City has not identified any specific areas with construction problems that warrant controlled development at this time.

AREAS OF "DISCOURAGED" DEVELOPMENT.



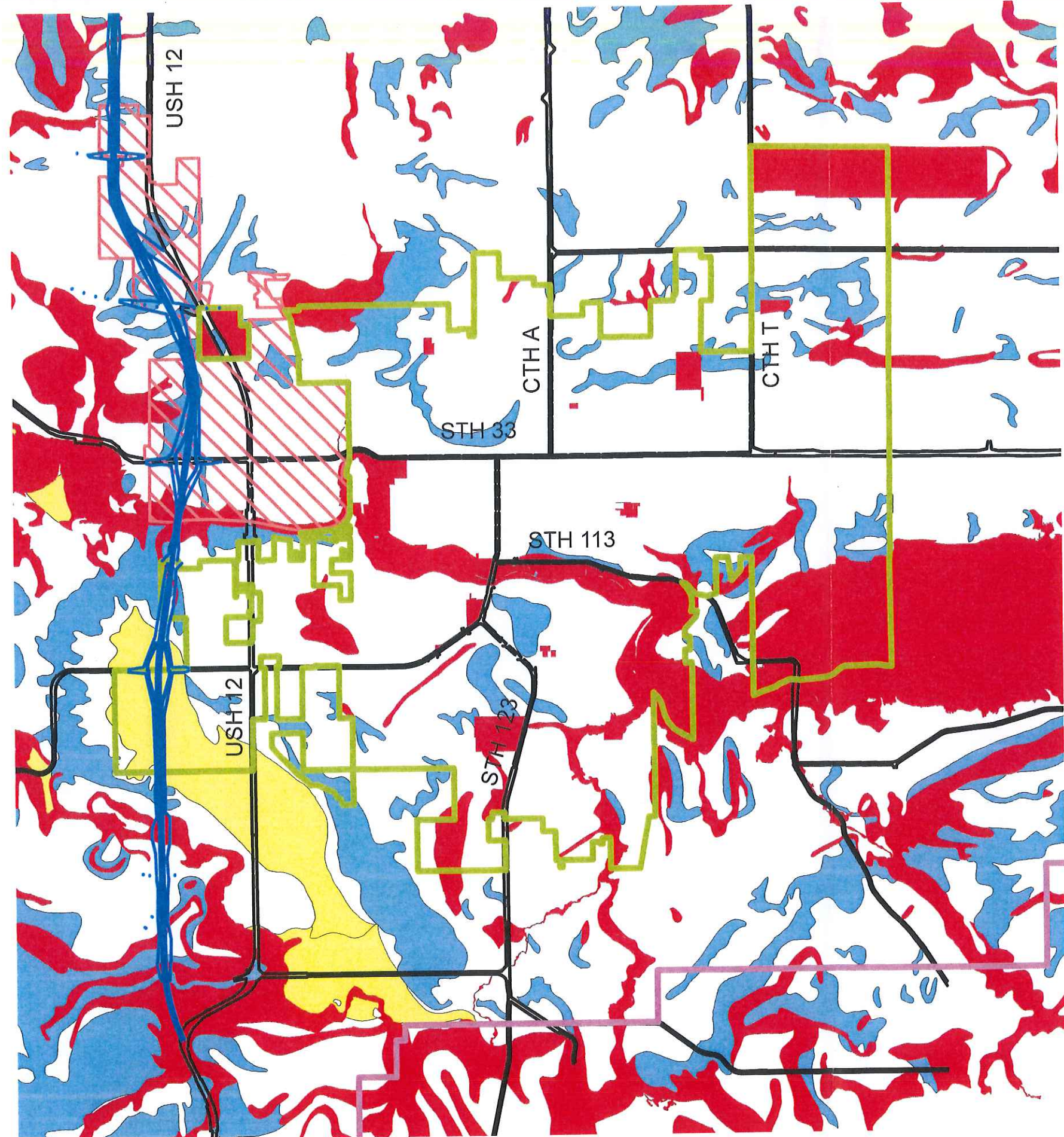
LEGEND

-  PROPOSED STH 12 BYBPASS
-  EXISTING SANITARY SEWER DISTRICT
-  DEVILS LAKE STATE PARK
-  VILLAGE OF WEST BARABOO
-  CITY OF BARABOO
-  AREAS OF "DISCOURAGED" DEVELOPMENT










THIS MAP INCLUDES THE FOLLOWING FEATURES:
PRIME AGRICULTURAL LANDS



COMPOSITE OF DEVELOPMENT TYPES



LEGEND

-  PROPOSED STH 12 BYBPASS
-  EXISTING SANITARY SEWER DISTRICT
-  DEVILS LAKE STATE PARK
-  VILLAGE OF WEST BARABOO
-  CITY OF BARABOO
-  AREAS OF "DISCOURAGED" DEVELOPMENT
-  AREAS OF "CONTROLLED" DEVELOPMENT
-  AREAS OF "PROHIBITED" DEVELOPMENT
-  AREAS WHERE DEVELOPMENT IS ENCOURAGED

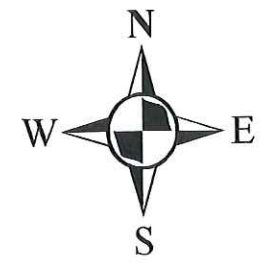


FIGURE 6-4

E. Summary

In summary, growth will be controlled by the following categories:

Prohibited:

- Wetlands (including a 50 foot wide buffer area)
- Floodways
- Greenbelts
- Hydric soils
- Steep slopes (20% or greater)

Controlled:

- Shorelands
- Adverse soil conditions
- Zoning uses
- Flood fringe
- Slopes between 12% and 20%
- Storm water management areas

Discouraged:

- Agricultural preservation areas
- Construction problems

Encouraged:

- Undeveloped areas within the City
- Adjacent areas

Prohibited and controlled areas are included in the ESA's. Proper application of methods used to encourage, control and prohibit development through policy action will directly satisfy the goals and objectives of this study.

VI. SANITARY SEWER SERVICE AREAS 2030

A. Methodology

The amount of land that can be included in the sanitary sewer service area boundary is limited by the need for urban land area to accommodate City growth within the 20 year planning period. The location of these lands is based on what areas remain developable, after consideration of environmental significance, location relative to the current city limits, and personal knowledge of the land and its current owners.

In some cases, lands that do not show up as being mapped as Environmentally Sensitive were nonetheless avoided for future development. Such cases include lands not easily served by gravity sewer, which would require service by a lift station. This includes a portion of the north range of the Baraboo Hills. Much of the land north of the City appears as developable in Figure 6-4, however, much of these lands are over the ridge and would require a sewage lift station in order to be served. It should be further noted that in discussions with the Wisconsin DNR held during the preparation of this study, they indicated that they preferred that what remains of the north range be left undeveloped.

Some developed areas of the Town of Baraboo, such as the Carpenter Street area, have been included in the SSA. It is assumed that within the next 20 years, these areas will annex, though they provide little or no developable land. For this reason, they were not assumed to count toward the developable land needed for the 20-year Sewer Service Area.

Figure 7-1 and **7-2** show the planned Sewer Service Area for the Baraboo WWTF. It incorporates the areas of land discussed earlier in this document, and assigns this acreage to the parcels of land most suitable for future sewer development. The City will maintain a large scale map showing details of which specific parcels are within the SSA. A summary of the lands assigned to the SSA for the City and Village is shown in **Table 7-1**. The net acreage excludes any areas within the SSA in which development would be prohibited due to Environmentally Significant Areas.

	Total Land (Acres)	Developed Land (Acres)	Vacant Land (Acres)	Devel. Vacant Land (Acres)	20-Year Increase (Acres)	Devel. Infill (Acres)	Devel. Ag Land (Acres)	Additional Land Use (Acres)	Excess Devel. Land (Acres)
2022 Plan	3,554.0	2,810.6	743.4	455.8	1,150.4	162.5	293.3	694.6	0.0
2030 Plan	5,418.0	3,433.7	1,854.8	1,320.6	919.0	270.7	648.3	0.0	452.6

B. Significance of Inclusion in the Sewer Service Area

It must be pointed out that inclusion in the Sewer Service Area is not a predictor of growth. It simply directs where growth, if it is to occur, should take place. It is ultimately the will of the landowner that determines whether development will occur.

The Sewer Service Area Plan dictates what form that growth should take, i.e., sewer versus unsewered. It therefore delineates which areas of the Extraterritorial Jurisdiction will remain subject to the 20-acre limit, and which should be developed as sewer development and brought into the City of Baraboo.

There are four potential cases which best illustrate the significance of being within the SSA:

Case 1 – Land is included in SSA, and Owner chooses to develop

Significance of SSAP: High

Development of lands included within the SSA will require annexation to the City and service by sanitary sewer in accordance with City Policy.

Case 2 – Land is included in SSA, and Owner chooses not to develop

Significance of SSAP: Low

Lands will continue under their current use.

Case 3 – Land is not included in SSA, and Owner chooses to develop

Significance of SSAP: Moderate

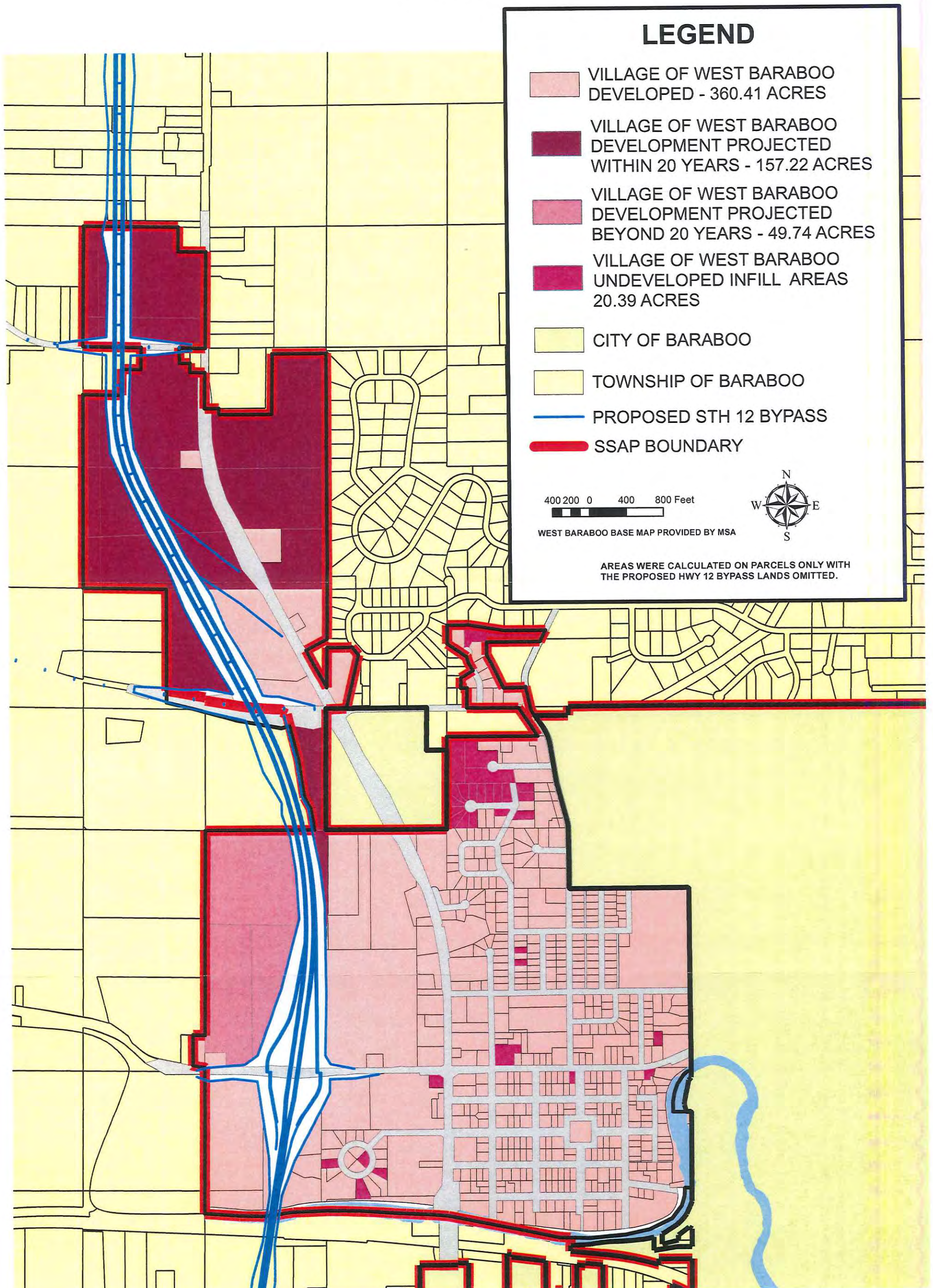
Lands will be subject to the current 20-acre lot minimum already in effect by the City under their extraterritorial zoning. Landowners wanting to annex may request an amendment of the SSAP, where the City can review whether the petitioner's parcel is more suitable for development than other SSA areas at that time.

Case 4 – Land is not included in SSA, and Owner chooses not to develop

Significance of SSAP: Low

Lands will continue under their current use.

WEST BARABOO SEWER SERVICE AREA PLAN UNIMPROVED PARCELS 8-31-09



C. Summary of Public Input and Participation

A series of public meetings have been held over the past nine months to define and shape the plan. These meetings were held at City hall on the following dates:

- | | |
|--------------------|--|
| December 19, 2008: | Informational project kick-off meeting
General discussion of topics <ul style="list-style-type: none">• Reasons for Updating SSAP• Process of Updating Plan• Review of Current Plan |
| January 15, 2009: | General discussion of topics <ul style="list-style-type: none">• Reasons for Updating SSAP• Review of Changes from Current Plan• Population Growth Trends |
| March 18, 2009: | General discussion of topics <ul style="list-style-type: none">• Plan Update• Population Projections• Current Land Use• Projected Land Use• Updated maps |
| October 27, 2009: | SSAP finalized <ul style="list-style-type: none">• Submitted Plan to City• Draft copies provided to stakeholders |
| December 15, 2009: | Presented plan to City Plan Commission <ul style="list-style-type: none">• Approved and recommended to City Council |
| December 22, 2009 | Presented Plan to City Council <ul style="list-style-type: none">• Plan Approved by City Council |

The comments received from the Advisory Committee and the City's response can be found in Appendix F

VII. IMPLEMENTATION

A. Policies

Policies are actions or guidelines directed toward achieving objectives which should be followed in day-to-day decision making. In order for this section to make sense, the related goals and objectives have been included.

Goal 1: To preserve and enhance the natural features that make Baraboo a desirable place to live, visit, and do business, while encouraging development in suitable areas.

Objective 1: Identify, map, preserve, and in some cases (where practical, economical, and environmentally feasible as determined by the plan review authority) restore, in a natural state, the features that make Baraboo and the surrounding area a desirable place to live, visit and do business.

Policy 1a: The local governmental bodies will promote preservation or restoration of the identified natural features by revising codes, policies, rules, and regulations accordingly, and to promote preservation in the review and approval of development proposals.

Policy 1b: Proposed developments should include areas which set aside open space for recreation, storm water retention, and include natural drainage ways to reduce peak storm water flows by increasing infiltration of storm runoff throughout watershed.

Goal 2: Provide the infrastructure necessary to serve the level of development proposed in the Comprehensive Plan entitled "City of Baraboo Wisconsin Master Plan Update", while continuing to provide environmentally safe, efficient and cost-effective utilities to the community.

Objective 2: Prepare and implement a Sanitary Sewer Service Area Plan which;

- correlates with the development vision and trends of the comprehensive plan,*
- protects environmentally sensitive areas, by encouraging future development to locate in areas suitable for development where environmental impacts can be sufficiently mitigated*
- recognizes environmentally limited areas, and*

- *identifies cost-effective development areas.*

Policy 2a: The delegated planning entity, which will provide conformance reviews in accordance with the approved sanitary sewer service area plan, shall promote area wide water quality.

Policy 2b: Subdivision designs which do not provide adequate means of protecting future residents from problems associated with drainage and steep slopes will be rejected. In addition, developers will be required to submit detailed plans for adequately managing storm water in such areas.

Goal 3: *Promote sound, environmentally sensitive, and efficient urban development on the fringe of the present urbanized area through sequential, orderly and compatible growth.*

Objective 3: *Protect environmental resources and ground water through the application of high-quality design standards for all new sanitary sewer extensions.*

Policy 3a: The City of Baraboo, through the Utility Commission and its designated representatives, will continue to review plans and specifications for sanitary sewer extensions and will continue to provide periodic observation of construction to verify that the work is being performed in conformance with the approved design and construction standards.

Policy 3b: Eliminate inadequate on-site sewage systems within the urban service area through cost effective systems which can be adapted to the conventional city collection system, as urban services are extended into those areas.

Goal 4: *Maximize the capacity and promote the efficient use of the wastewater treatment facilities.*

Objective 4: *Use advance planning to identify the most desirable and effective locations for new sanitary sewer interceptors, pumping stations, and related infrastructure, and protect the corridors and areas which*

affect these items through development regulation and approval processes.

Policy 4: The City of Baraboo will prepare and periodically update a plan for the general staging of sanitary sewer extensions into the urban fringe. The plan will be based upon considerations of cost, land demand by type, and environmental protection.

Goal 5: *Coordinate the efforts of local government (City of Baraboo, Village of West Baraboo, Township of Baraboo, Township of Fairfield, Township of Greenfield, and County of Sauk) to promote responsible planning and implementation of shared facilities and interests.*

Objective 5: *Promote diverse public input, and request active participation by adjacent governmental bodies, in the development and implementation of plans, studies, and actions that have a common interest.*

Policy 5: The City of Baraboo will ask the Towns of Baraboo, Greenfield, and Fairfield to officially adopt and follow the Sanitary Sewer Service Area Plan as well as the other elements of the comprehensive plan as they apply to land in the township.

B. Implementation Process

1. General

Upon adoption of this plan, the Department of Natural Resources will require a map of the Baraboo Urban Service Area. Proposed sanitary sewer extensions will be reviewed against this map to determine if the extensions are in conformance with the current service area boundary. The City Engineer will be responsible for advising the Department of Natural Resources on whether the proposed sewer extensions are within the urban service area.

The Utility Commission, with recommendations from the Baraboo Plan Commission, will review proposed amendments to the Urban Service Area boundary and make recommendations to the Department on such proposals.

The City Engineer will act as the Administrative Agent of this Plan.

2. Plan Approval Process

The Baraboo Sewer Service Area Plan will be reviewed by the Utility and Plan Commissions. Upon their recommendation, a final draft will be presented to the Advisory Committee for final public comment. After consideration of the comments of the Advisory Committee, and upon recommendation by the Plan Commission, the Plan will be referred to the Common Council for adoption. The Common Council shall make the final recommendation to forward the plan to the Department of Natural Resources.

The Department of Natural Resources reviews the plan for approval, based upon consistency with applicable state statutes and administrative code.

Upon receipt of Department of Natural Resources approval, the city, town, and county agencies will be required to incorporate changes to the urban service area on their respective development plans.

3. Responsibilities of the City Engineer

In carrying out the duties of Administrative Agent of the Plan, the City Engineer shall:

- Call meetings of the required review and approval committees, boards, commissions, and/or agencies as necessary.
- Direct the preparation of conformance review documents in accordance with applicable regulations. The Administrative Agent shall forward said documents to the City Plan Commission, the Advisory Committee, and the Sauk County Planning and Development Department. The Administrative Agent shall carry out the procedure for plan updates and amendments as provided for herein.
- Coordinate review of sanitary sewer extensions by city staff for conformance with the urban service area plan.
- Provide written documentation that the sanitary sewer extension is general supportive and consistent with the goal and policies of the plan. Documentation should be submitted for approval within fifteen (15) working days of receiving the written request for approval. Plans should be approved if the request for sanitary sewer extension is within the urban service area and the plans are generally supportive and consistent with the

goals and policies of the Sanitary Sewer Service Area Plan. Notification should indicate that the acceptance letter should be forwarded to the Department of Natural Resources as part of the applicant submittal for sanitary sewer extension plan approval.

- Direct the presentation of technical information to the Utility Superintendent regarding sanitary sewer extension requests, plan amendments, and package treatment proposals within the planning area.

4. Procedures for Sanitary Sewer Extensions

All requests for sanitary sewer extensions must consist of at least the following:

- A letter of request
- A simple plan of the proposed sewer extension
- A map of the approximate 20-year service area and ultimate service area
- A copy of DNR Form 3400-105 “Sanitary Sewer Extension Submittal”

All requests received by the City shall be directed to the City Engineer. To avoid delays, this submittal shall be made early in the planning process, prior to completing detailed plans and specifications for the project. Submitting the plan early will insure that local review is made prior to submittal of the plans to the DNR and that costly detailed sewer design and specifications documents are not prepared for areas that do not conform to the plan service area and are subsequently rejected by the DNR.

If the sewer extension is not part of a new plat, is consistent with policies and goals of this Plan, and in conformance with all applicable codes, the City Engineer shall write a letter to the DNR stating that the sewer extension is consistent with the Sewer Service Area Plan.

If the sewer extension is part of a new plat, it shall be reviewed by the City Engineer for general conformance with this Plan. If in general conformance, the Plan Commission will review the plat in accordance with the City’s plat review procedures.

If the proposed extension is determined to be outside of the Sewer Service Area or incompatible with the current water quality plan, the applicant will be

informed. If the applicant wishes to pursue the extension, the applicant should request an amendment of the Plan. The amendment process is discussed in the following section. In almost all cases a Sewer Service Area boundary amendment will be required to make the extension conform to the plan.

If the applicant wishes to appeal the boundary determination of the City Engineer, or there is an interpretative question concerning the Urban Service Area boundary, the request will be reviewed by the Plan Commission, who will issue a determination. The applicant may also appeal a boundary ruling to the Department of Natural Resources.

5. Criteria and Procedures for Amending the Plan

Requests for amendment of the adopted Sewer Service Area Plan and map could involve undeveloped or already developed land and could be initiated by one of several sources: property owners, the City of Baraboo, or another government agency. Two types of amendments are possible. The first involves no change in the total service area which could include updated mapping of ESA's. The second kind of amendment involves an increase in the total service area. This type of amendment would be approved by the Department if it is justified by unanticipated growth or density of development that is different from that estimated in this document.

Criteria for review of a proposed plan amendment include the following information:

- Sewer service can be provided in a cost effective manner.
- The receiving, collection and treatment facility can adequately transport and treat the wastewater from the area and the amount of undeveloped land in the proposed area.
- The amendment is consistent with the policies and goals of this plan.
- The amendment conforms to other City of Baraboo plans.
- There will be no significant adverse water quality and/or environmental impact associated with providing sewer service to the area.

The procedure for amending the plan should be similar for all of the above cases. If the request is initiated by a property owner or by the Advisory Committee, Step 1 below will be necessary. If the request is initiated by the City of Baraboo, the process will begin with Step 2. The steps required for plan amendment are outlined as follows:

- Step 1: The property owner(s) or Advisory Committee may apply to the City Engineer to request the plan amendment, and the applicant shall provide information showing that the proposal is consistent with the criteria above.
- Step 2: The application would be forwarded to the City of Baraboo Plan Commission. The application should be accompanied by a map of the proposed area to be serviced, existing and anticipated population and wastewater generation of the area and a description of the type of development that is expected to occur. The Administrative Agent shall solicit written comments from the Advisory Committee, and present the application and the comments to the Plan Commission. If the application is found to be in conformance, a public hearing on the amendment shall be scheduled before the Plan Commission.
- Step 3: The Plan Commission shall hold a public hearing and review the request on the basis of the stated criteria and any other relevant factors. The Commission will then forward its recommendation to the Common Council. If the members of the Advisory Committee do not make a recommendation within 30 days of their receipt of the request, the Common Council may proceed to consider the request without their recommendations.
- Step 4: The Common Council shall evaluate the recommendation of the Plan Commission and the Advisory Committee, if received, and then forward its recommendation and the Advisory Committee comment or recommendations to the Wisconsin Department of Natural Resources.
- Step 5: If approved by the Department of Natural Resources, the requested amendment will be adopted and become part of the existing plan. The Department of Natural Resources will

notify the Plan Commission and the City Engineer of its action.

6. Plan Updates

Administrative Code NR 121.08(2)(a) requires that this Plan be subject to a major review and update at least once every five years.

- A comprehensive review and update of the sewer service plan should be completed at least every five years. However, the plan should be updated whenever there is an obvious change in community needs. The plan update will be controlled and directed by using the approval and review process outlined in this plan. Updates to the plan are intended to address the following components:
- A revision of the population and demographic projections for the next 20-year planning period shall be reviewed by the Department of Administration (DOA) per NR 121.
- A review of housing starts, population densities, household size changes, and urban development trends within the planning area.
- An assessment of the impact of major land use changes in the planning area.
- An examination of the significant environmental changes.
- A review and revision of the goals and objectives of the plan, based on present concepts and needs.
- A discussion of any social or economic impacts on the area that may affect the area-wide water quality planning efforts.
- A list and explanation of any interim amendments to the plan that occurred since the last update to the plan.
- A revised service area boundary based on 20-year projections.
- A review of any affective changes in the constitutional or implementation structure of the plan.

- An update of citizen participation efforts.

APPENDIX A
Definitions, Terms and Abbreviations

APPENDIX A: DEFINITIONS, TERMS AND ABBREVIATIONS

Whenever in the report, the following abbreviations, terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

AC. Acre or Acres.

ADMINISTRATIVE CODE. Wisconsin Administrative Code.

A.N.S.I. American National Standards Institute.

A.S.T.M. The American Society of Testing and Materials.

ARCH. The upper inside section of a sewer or water main pipe above the spring line.

BOD₅. Biochemical Oxygen Demand, a term used to describe the strength of wastewater.

BUILDING SEWER. A conduit which carries the drainage from a building or private property to a street sewer.

CFS. Cubic feet per second.

CITY. The City of Baraboo, Sauk County, Wisconsin.

CMAR. Compliance Maintenance Annual Report, which is a report describing the overall condition and operation of a wastewater treatment plant.

CONTRACTOR. Any individual, firm, partnership or corporation or a combination of any or all jointly submitting a proposal to whom the Contract is awarded by the Owner or its heirs, executors, administrators, successors or assigns.

COUNTY. The County of Sauk, Wisconsin.

C.T.H. or CTH. County Trunk Highway.

D.O.A. or DOA. Department of Administration of the State of Wisconsin.

D.O.C. or DOC. Department of Commerce of the State of Wisconsin.

D.O.T. SPECIFICATIONS. Current Standard Specifications for Road and Bridge Construction of the Wisconsin Department of Transportation.

D.N.R. Wisconsin Department of Natural Resources.

DO. Dissolved Oxygen.

ENGINEER. The City Engineer, Director of Public Works, Superintendent of Public Works or a consulting Engineer employed by the municipality including such assistants as are authorized to represent him, or the consulting engineer acting through his authorized agents, who represents the Owner.

ESA. Environmentally Sensitive Area.

F.E.M.A. or FEMA. Federal Emergency Management Agency.

F.I.R.M. or FIRM. Flood Insurance Rate Map.

F.I.S. or FIS. Flood Insurance Study.

FLOW LINE. The inside bottom of the vertical line of a sewer or water main pipe.

GCPD. Gallons per capita per day.

GPD. Gallons per day.

GPM. Gallons per minute.

HRT. Hydraulic Retention Time.

I/I. Infiltration and Inflow.

INFILTRATION. Water that enters the sewerage system from the surrounding soil. Common points of entry include broken pipe and defective joints in pipe and manhole walls. Infiltration occurs where sewers are laid below the normal groundwater level and also when water from rain or melting snow soaks into the ground and enters the sewerage system.

INFLOW. Water that enters the sewerage system only during or immediately after rainfall from direct connections. Points of entry may include connections with roof and area drains, storm drain connections, and holes in manhole covers in streets.

INVERT. The lower inside section of a sewer or water main pipe below the spring line.

LBS or lbs. Pounds.

LBS/DAY or lbs/day. Pounds per day.

MCRT. Mean cell residence time.

MGD or mgd. Million gallons per day.

MG/L or mg/l. Milligrams per liter.

MSA. MSA Professional Services, Inc.

NH₄-N. Ammonia as Nitrogen.

NR. A section of the Wisconsin Administrative Code entitled "Natural Resources".

O.S.H.A. Federal Occupational Safety and Health Administration.

OWNER. The City or municipality, corporation, partnership, or individual initiating the project, acting through its legally constituted officials, officers, or employees.

PE=s. Population Equivalents.

PLANS. All contract drawings, reproductions of drawings, sketches, and revisions thereof pertaining to the work covered by the contract on file in the office of the Engineer.

PROJECT. The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

PSIG. Pounds per square inch gauge.

PVC. Polyvinyl chloride.

R__E. Range __ East.

RAS. Return activated sludge.

SANITARY SEWAGE. Waterborne wastes principally derived from the sanitary conveniences of residences, business establishments, institutions, and industrial buildings.

SANITARY SEWER. A conduit which carries sewage and to which storm, surface and ground waters are not intentionally admitted.

SERVICE CONNECTION. A conduit which carries the drainage from a building or private property to a street sewer (sanitary service connection) and/or a conduit which carries potable water from the street water main to a building or private property (water service connection).

SEWAGE. The water carried wastes created in and to be conducted away from residences, industrial establishments, commercial buildings, and public buildings as defined in Section 101.01 of the Wisconsin Statutes with such surface or groundwater as may be present.

SPECIAL PROVISIONS. The special body of directions, provisions, or requirements peculiar to a project, and otherwise not thoroughly or satisfactorily detailed or prescribed in the specifications. The requirements of these Special Provisions shall govern the work and shall take precedence over the specifications or plans whenever they conflict.

SPECIFICATIONS. Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

SPRING LINE. The line on either side of a sewer or water main pipe which the invert and arch meet and become tangent to the vertical.

SS. Suspended solids.

STATE SPECIFICATIONS. The current edition of the document entitled "Standard Specifications for Sewer and Water Construction in Wisconsin.

S.T.H. or STH. State Trunk Highway.

SUBCONTRACTOR. The individual, firm, partnership, or corporation to whom the Contractor, with the written consent of the Engineer, sublets, assigns, or otherwise disposes of any part of the work covered by the Contract Documents.

SURETY. The approved surety corporation licensed to do business in the State of Wisconsin bound with and for the Contractor to insure his acceptable performance of the Contract and for his payment of all obligations under the Contract.

T__N. Township __ North.

T.I.D. or TID. Tax Incremental District.

T.I.F. or TIF. Tax Incremental Finance.

TKN. Total Kjeldahl nitrogen.

TOWN OR TOWNSHIP. The Township of Baraboo, Sauk County, Wisconsin.

TSS. Total Suspended Solids.

UNDERGROUND FACILITIES. All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

U.S.G.S. or USGS. United States Geological Survey.

U.S.H. or USH. United States Highway.

WAS. Waste activated sludge.

WASTEWATER. The total liquid flow in a sewerage system. Wastewater may include sanitary sewage, industrial wastes, and infiltration and inflow in any combination.

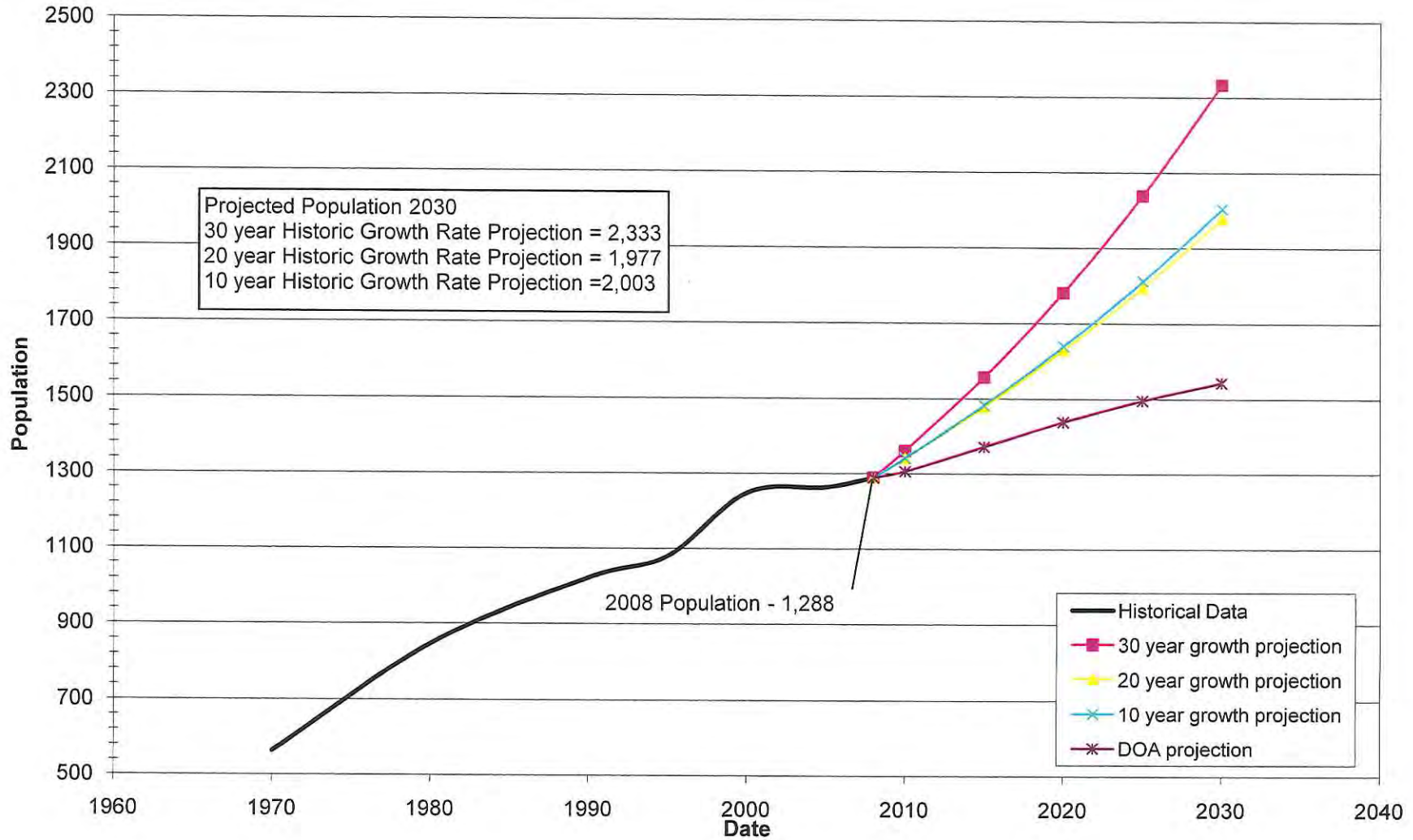
W.D.N.R. Wisconsin Department of Natural Resources.

W.P.D.E.S. or WPDES. Wisconsin Pollutant Discharge Elimination System.

WWTP. Wastewater treatment plant.

APPENDIX B
Township Population Projections

Village of West Baraboo Population Projection



City of Baraboo Population Projection

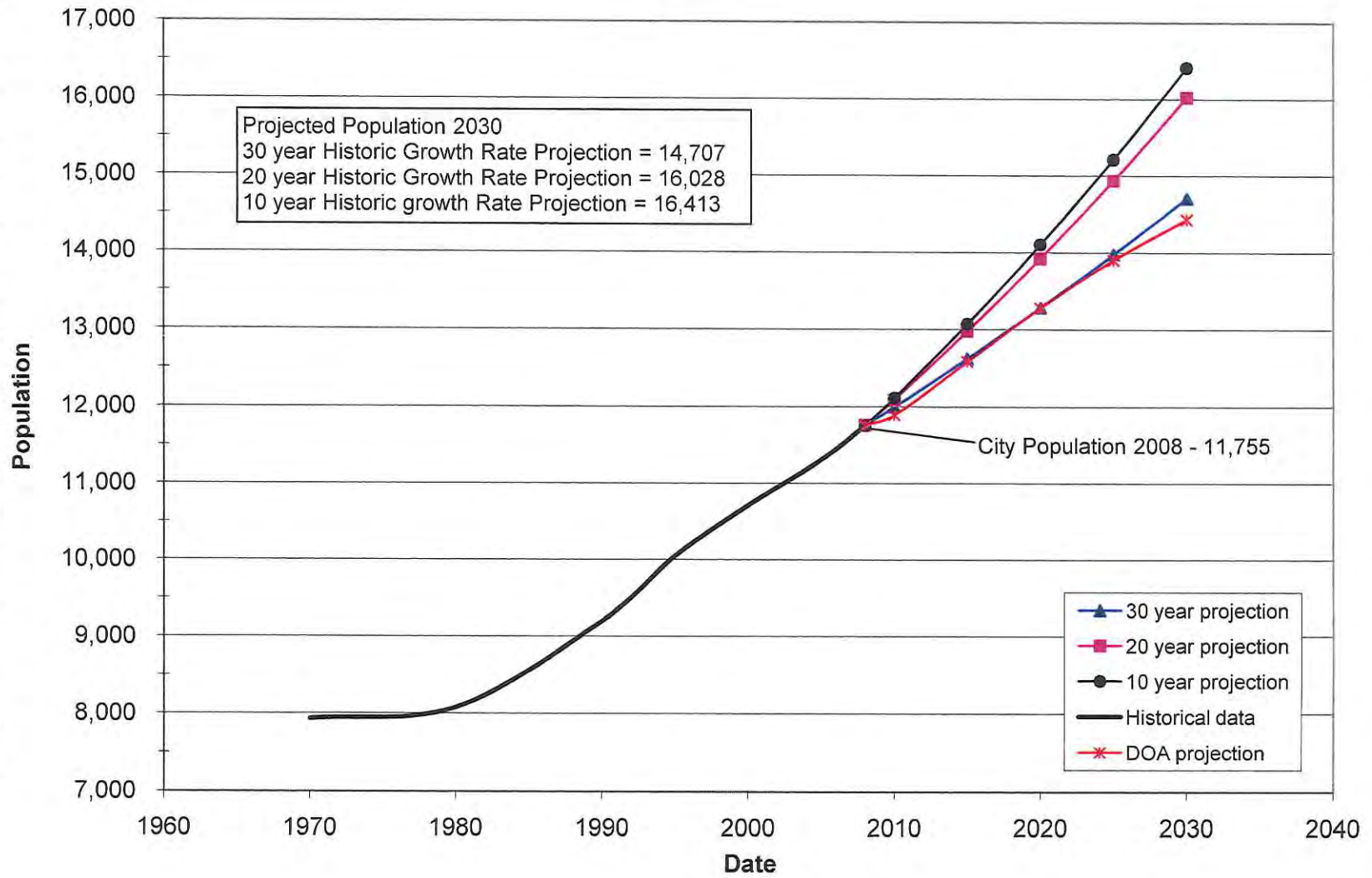
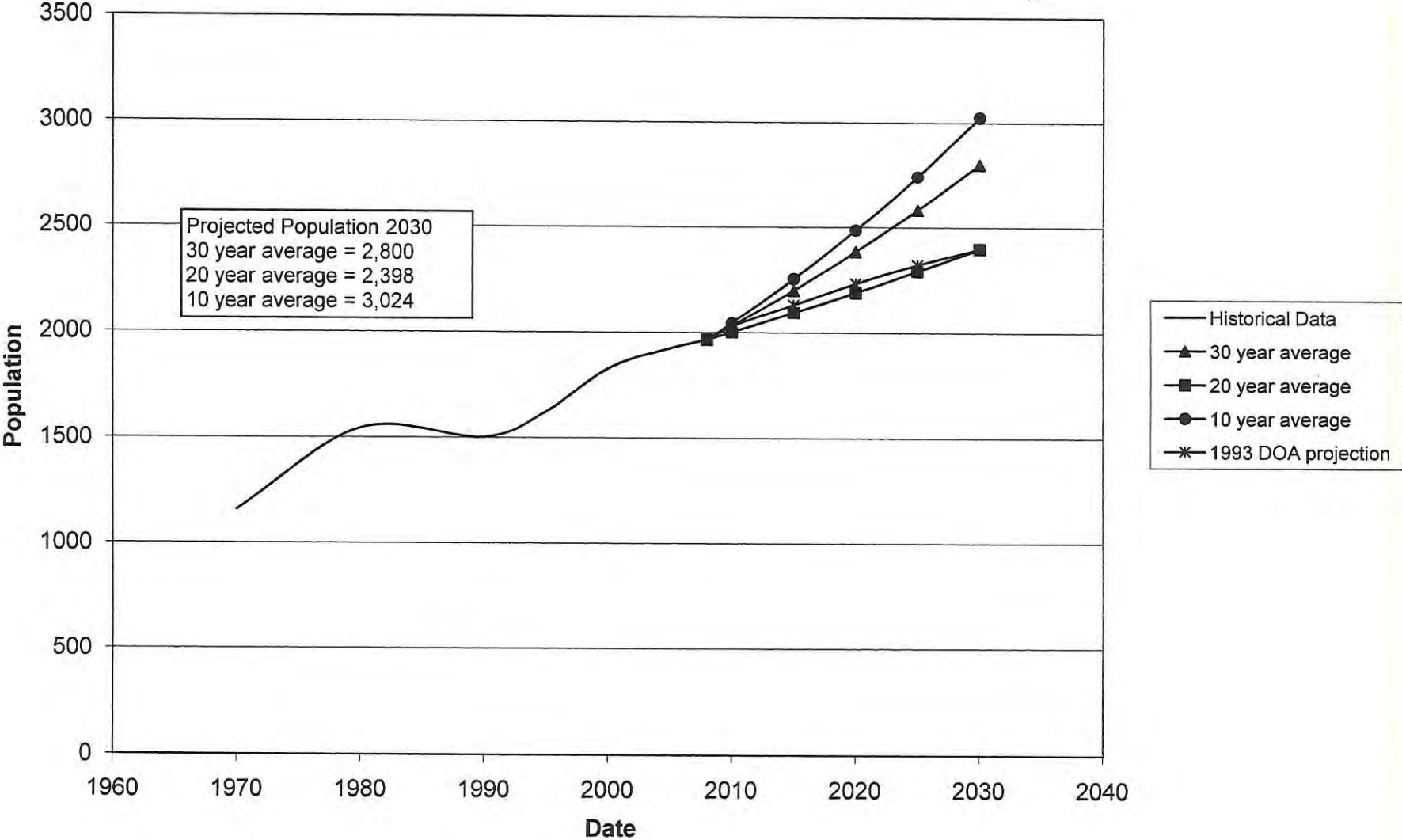
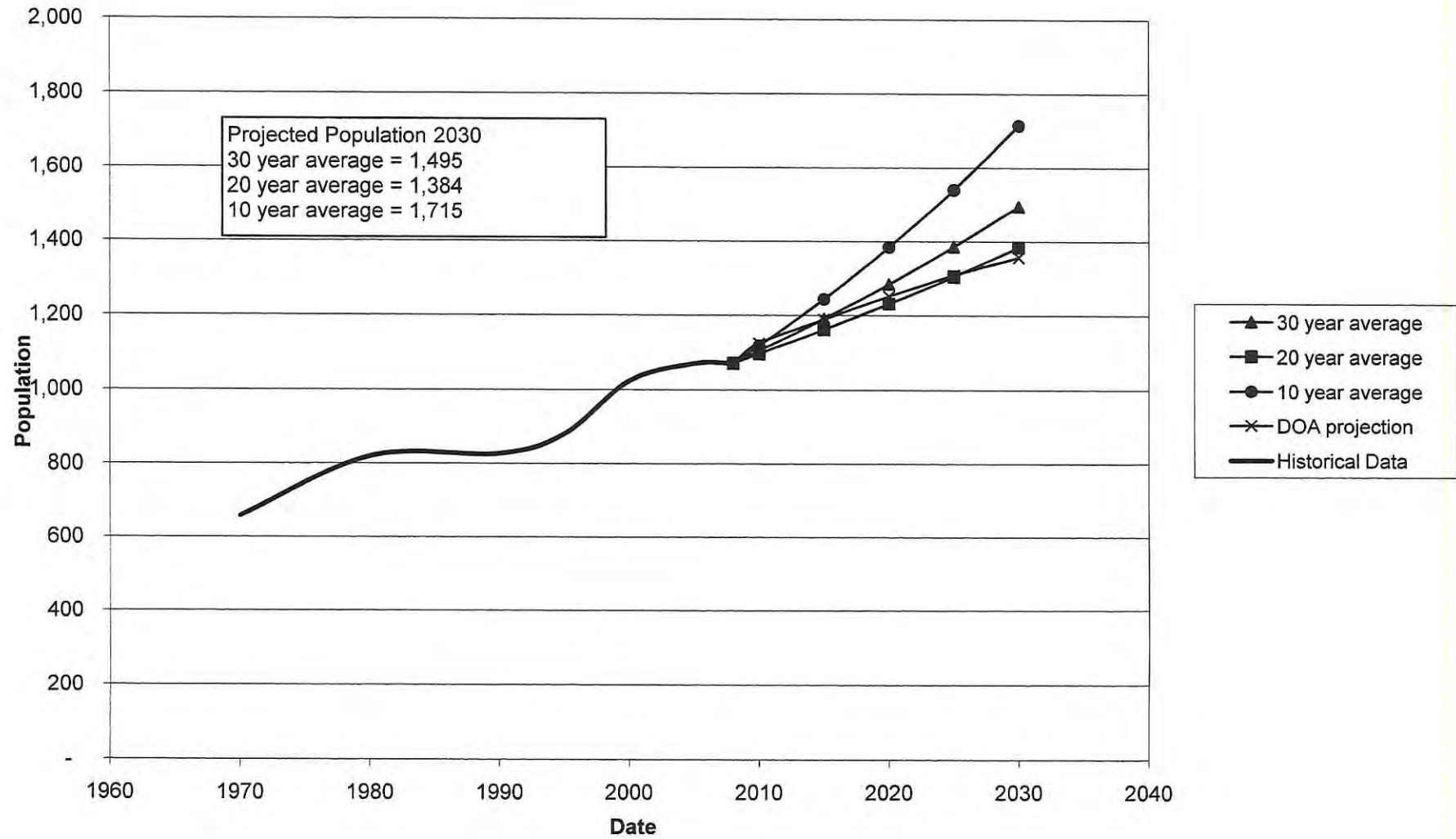


Figure 3-2. Baraboo Census (1970-2000) and the Projected Population Curves
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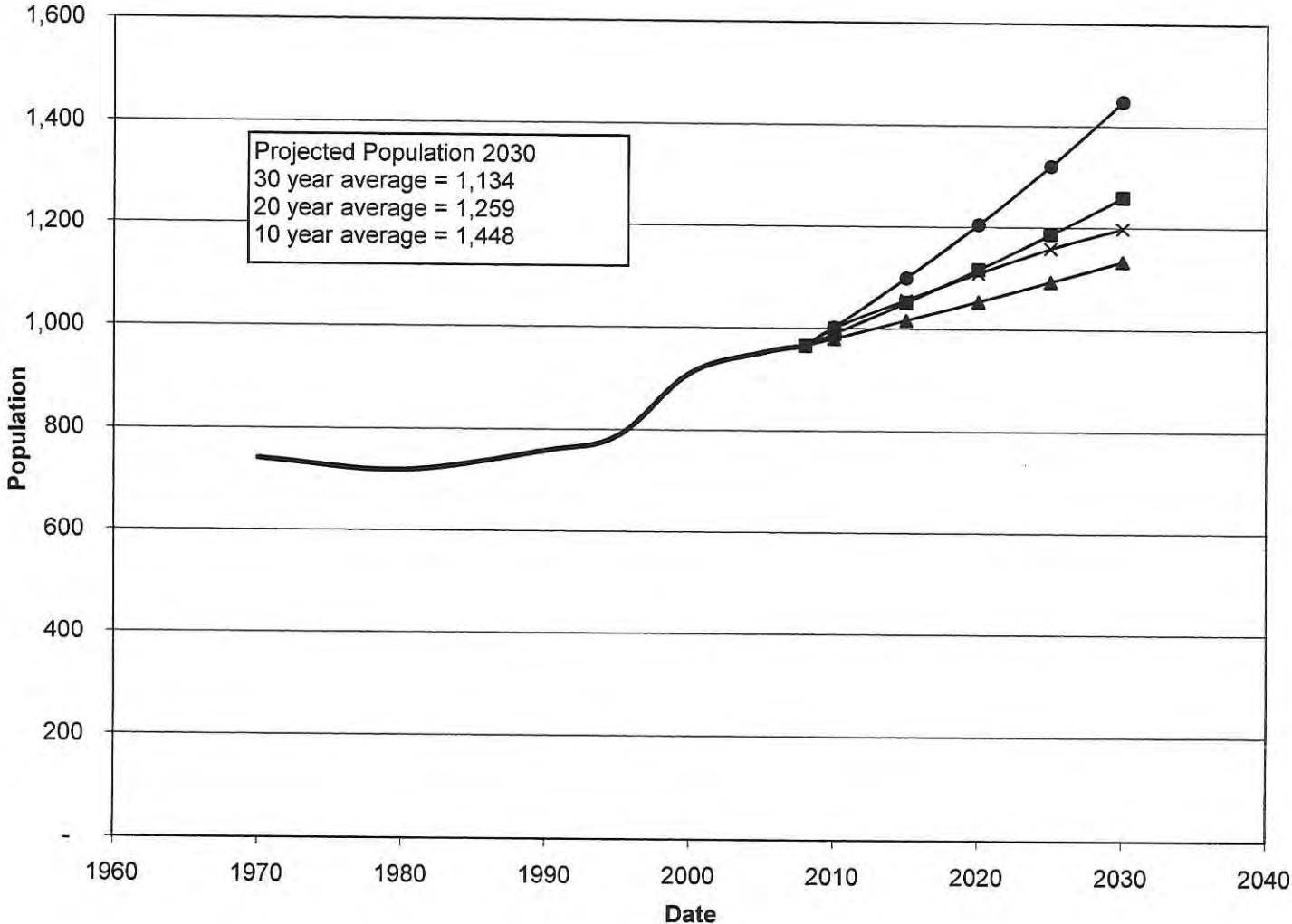
Town of Baraboo Population Trends



Town of Fairfield Population Trend



Town of Greenfield Population Trend



- ▲ 30 year average
- 20 year average
- 10 year average
- × DOA projection
- Historical Data

APPENDIX C

Sewer Service Agreements

- Village of West Baraboo Sewage Service
- Village of West Baraboo Water Supply
- Town of Baraboo Sanitary District #1
- Devil's Lake State Park

SEWAGE SERVICE AGREEMENT

THIS AGREEMENT, made and executed this 14th day of MARCH, 1995, by and between the City of Baraboo, hereinafter called the City, and the Village of West Baraboo, hereinafter called the Village.

WITNESSETH:

WHEREAS, the City and the Village are adjacent municipal corporations located in Sauk County, Wisconsin; and

WHEREAS, the City is the owner of a sanitary sewer system and wastewater treatment plant located within said City; and

WHEREAS, the Village has no sewage disposal plant and is desirous of having the City continue to accept and treat, in the City's wastewater treatment plant, sewage produced in the Village;

NOW THEREFORE, IT IS UNDERSTOOD AND AGREED AS FOLLOWS:

1. The City, in consideration of the covenants hereinafter set out, agrees to accept and treat, in the City waste water treatment plant, all sewage produced in the Village for an initial term of twenty (20) years from the date of this agreement as set forth above. This term shall be extended at the time of each capital outlay requiring proration between the City and the Village as set forth in paragraph six (6) of this Agreement, where such capital outlay is at least \$100,000. Each such extension shall be for the period of the replacement reserve term for the expansion, revision or replacement to which the capital outlay relates. For each capital outlay of \$100,000 or more for which no replacement reserve is established, the term shall be extended for twenty (20) years from the date such expansion, revision or replacement is placed in service.

2. The City further agrees that the sewage produced in the Village may be discharged into the sewer main at the western city limits of the City and said sewage will be transported to the wastewater treatment plant through the City sewer mains.

3. The Village agrees to pay the City a sewer use charge based on 100 CF of water used as recorded on the Water Department water meter (or meters) located at the City limits. This charge shall be computed by dividing the net yearly operation and maintenance budget as provided in Section 13.28 City Code of Ordinances by the previous years' average water consumption. This charge shall be recomputed yearly at the time the sewer budget is approved. The new rate established each year shall take effect on the first quarterly billing the following year. The sewer use fee shall be billed quarterly. The rate shall be the same as the City billing rate less such costs in the budget designated for City sewer lines other than the intercepting sewer.

The City agrees that a member of the Village Board of the Village shall be permitted to sit in on the posted budget meetings of the City Clerk during the preparation of the annual maintenance budget. The said Village Board member shall not have a vote in the establishing of said budget, but shall be permitted to voice opinions and contribute other input to the making of said budget. Written notice shall be given to the Village Clerk at least twenty-four (24) hours prior to any such meeting or meetings and the Village Clerk shall be charged with the responsibility of notifying the appropriate Village Board member.

4. The Village or City may, at its own respective expense, install a properly operating sewer meter and recorder at the connection to the City lines at the western city limits of the City. The flow of actual sewage will then be substituted for the water meter reading, as providing in paragraph 3, in computing the quarterly billing. The meter and meter structure shall be of a type approved by the City of Baraboo before installation.

5. The Village agrees to make adequate provision by municipal ordinance to insure that no deleterious sewage be introduced into the sewage system, which ordinance shall be substantially the equivalent of Section 13.33 of the City Ordinance. The Village further agrees that all maintenance and cleaning of the sewer system and mains located in the Village will be done by the Village at the expense of the Village, and the Village further agrees that no storm sewers will be connected to the sewer system and that no surface water will be introduced therein.

6. The cost of the capital outlay of the new wastewater treatment plant shall be pro-rated between the Village and the City; such proration shall be based upon the latest official population of the two municipalities. (See Section 13.37 Baraboo City Code of Ordinances). If in the future any expansion or capital revision in an amount over \$5000 is required, the cost of such capital outlay shall be pro-rated as stated above. Payment for such capital outlay of the City shall be upon presentation of a prorated contractors request for periodic payment being received by the Village by the first of the month with payment from the Village to the City being received by the City by the fifteenth of the same month.

7. It is specifically understood and agreed that the City is the sole owner of its own sewer lines and its wastewater treatment plant, and that no payments of any kind made by virtue of this contract by the Village shall be construed to mean the Village becomes part owner of the sewage system or the wastewater treatment plant, nor shall the Village at any time be deemed to have any equity in said

facilities.

8. Either party hereto may terminate this contract at the end of the term upon giving the other party at least four (4) years written notice, but in the absence of such notice this contract shall be deemed to be automatically renewed for successive terms of five (5) years, until such four-year notice of termination is given.

9. Whenever there is disagreement between the City and the Village as to the interpretation or application of the provisions of this agreement, either municipality, by action of its governing body, may make application to the Public Service Commission of Wisconsin to determine such question in the manner provided in Section 66.076(9) of the Wisconsin Statutes, and any successor statute. If any question so referred is of a nature that the Public Service Commission of the State of Wisconsin declines to accept jurisdiction, and the statutes of the State do not require it to accept jurisdiction, such question shall be submitted to a Board of Arbitration. If the Public Service Commission of Wisconsin declines to accept the request to determine such a question, the complaining party may serve upon the other party a demand for arbitration. Such arbitration shall be by three (3) reputable and experienced engineers other than the consulting engineers working with either municipality. Within twenty (20) days thereafter, each municipality shall select and obtain the agreement of an engineer to so serve and within ten (10) days thereafter the two (2) engineers shall select a third engineer. If either party fails to so select an engineer, either party may proceed under Chapter 788 or any successor statute to enforce arbitration. In either event, the arbitration shall be handled in the manner as provided in said Chapter 788 or any succeeding chapter. Any decision of the Public Service Commission pursuant to this section shall be subject to review in the manner provided in Chapter 227 of the Wisconsin Statutes and if proceeding under arbitration, the decision of the arbitrators shall be subject to modification by the court or other procedure as set forth in Chapter 788. It is hereby provided that any dispute arising between the parties other than default in payment shall be handled pursuant to this section.

10. If any clause, provision, or section of this agreement be ruled invalid by any court of competent jurisdiction, the invalidity of such clause, provision, or section shall not affect any of the remaining provisions hereof.

11. Attached hereto is a copy of Ordinance No. 12359 of the City of Baraboo as approved by the Department of Natural Resources of the State of Wisconsin.

IN WITNESS WHEREOF, the City has caused this contract to be signed by its Mayor and Clerk and the Village has caused this contract to be signed by its President and Clerk, and the respective seals of the municipalities affixed hereto, the day and year first above written

In Presence of:

CITY OF BARABOO

Tim M. Krom

BY: Dean W. Steinhilber
Mayor

Kathleen K. Loeck

BY: Leticia F. Seaberg
Clerk

VILLAGE OF WEST BARABOO

John J. Gull

BY: David K. Alford
President

Ayn A. Hoge

BY: Mary K. Klingensmeyer
Clerk

WATER SUPPLY AGREEMENT

This agreement, made and executed this 14th day of MARCH, 1995, by and between the City of Baraboo, the City of Baraboo Water Commission, collectively, hereinafter called "City", and the Village of West Baraboo, hereinafter called "Village."

WITNESSETH

WHEREAS, the City and Village are adjacent Municipal Corporations, located in Sauk County, Wisconsin, and

WHEREAS, the City is the owner of a water system containing both wells and elevated storage devices located within said City, and the City water system is managed by the City Water Commission, and

WHEREAS, the Village has no independent source for its water system and is desirous of having the City continue to provide potable water to the Village, and

WHEREAS, the City first supplied water to the area now incorporated as a Village, but then known as the unincorporated Village of Lyons, since 1935 by means of a water connection located on Eighth Avenue, and

WHEREAS, the Unincorporated Village of Lyons was incorporated as the Village of West Baraboo in 1953, and

WHEREAS, a second connection was made by the Village to the City's mains on Berkley Boulevard, in 1966,

NOW, THEREFORE it is understood and agreed as follows:

1. The City, in consideration of the covenants hereinafter set out, agrees to provide potable domestic water supply to the Village for a term of Twenty (20) years, commencing on the date first above written. Domestic water supply is understood by both parties to mean, residential, commercial and industrial water supply, but is not intended to provide fire protection flow capabilities.

2. The Village agrees that it is a wholesale customer of the City and will reimburse the City for all water used in accordance with the City's current rates on file with the Public Service Commission of Wisconsin.

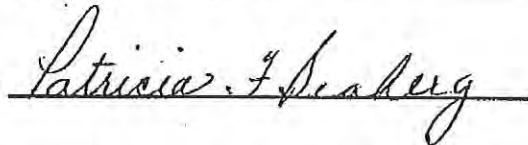
proceeding under arbitration, the decision of the arbitrators shall be subject to modification by the court or other procedure as set forth in Chapter 788. It is hereby provided that any dispute arising between the parties other than default in payment shall be handled pursuant to this section.

18. If any clause, provision or section of this agreement be ruled invalid by any court of competent jurisdiction, the invalidity of such clause, provision or section shall not affect any of the remaining provisions hereof.


19. No modification or amendment of this Agreement shall be binding on the parties unless executed in writing between the City, and the Village. Failure of either party to enforce any rights or remedies to which it may be entitled hereunder shall not constitute a waiver of estoppel thereof nor prevent the exercise or enforcement of any rights or remedies at any time thereafter with respect to either a preceding or subsequent breach of any terms, conditions, covenants or agreements contained in this Agreement. This Agreement constitutes the entire Agreement between the City and the Village, and except as expressly set forth herein, there are no representations, warranties or inducements, whether oral, written, express or implied, that in any way affect or condition the validity of this Agreement or alter its terms. The wording of this Agreement was reviewed and accepted by the parties hereto prior to it being signed, and no party to this Agreement shall be entitled to have any wording of this Agreement construed against another party to this Agreement in the event of any dispute arising between them in connection with it.

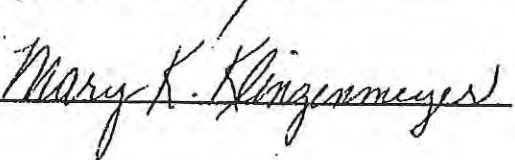
CITY OF BARABOO

By: 

By: 

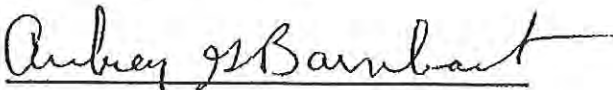
VILLAGE OF WEST BARABOO

By: 

By: 

CITY OF BARABOO

WATER COMMISSION

By: 

#26

SEWER AGREEMENT

WHEREAS, on March 5, 1971, Sanitary District No. 1 of the Town of Baraboo (District) was formed by Order of the Town Board of the Town of Baraboo, Sauk County, Wisconsin, and the real estate included within the District is described in the Order Creating Sanitary District, which Order is attached hereto, marked Exhibit A, and made a part hereof, and

WHEREAS, a number of the sanitary disposal systems serving properties within the District need to be replaced and the District has requested permission from the City of Baraboo (City) to connect to the City's sanitary sewer system (City System), and

WHEREAS, the City is willing to allow the District to be connected to the City System on the condition that the terms and conditions of this Agreement are fully performed by the District.

NOW, THEREFORE, it is hereby agreed between the City and District as follows:

1. The District warrants and represents that it is a duly organized sanitary district created under the laws of the State of Wisconsin, and that it has the full and complete authority, power and right to enter into this Agreement with the City.

2. The City agrees that residents of the District may connect to the City System and that wastewater generated by residents connected to the City System may be discharged into the sewer main at the southern City limits at the Baraboo Business Park and such wastewater may be transported to the City's Wastewater Treatment Plant through the City's sewer mains.

3. The District and the City acknowledge that the provisions of this contract were arrived at by using estimates of wastewater flow provided to the City by the District. The parties agree that residents of the District may connect to the City's System provided that they meet the requirements of this Agreement until such time as the wastewater flow from the District equals 57,821 gallons per day. It is agreed by the District that when the flow reaches the level of 57,821 gallons per day, no further connections to the City System by residents or properties within the District will be allowed.

4. Property owners and residents of the District who wish to connect to the City System shall be fully responsible for all costs incurred to connect to the City System and such connection shall be without any cost whatsoever to the City. Prior to the commencement of the project work for construction, maintenance or repair of a connection of any property within the District to the City System, the plans for the construction, maintenance or repair of the sewer line from a particular property to the City System

and the plans for connection to the City System shall be submitted to and approved by the City Engineer. All construction, installation, and other work necessary to connect to the City System shall be performed by a plumber licensed by the State of Wisconsin and shall fully comply with the ordinances of the City, Sauk County, Town of Baraboo, and with the laws of the State of Wisconsin.

5. Prior to the commencement of the work to connect to the City System, the property owner shall pay the City a reserve capacity assessment fee in the amount of \$450.00 per residential equivalent connection (REC) as provided in the then existing provisions of the Municipal Code of Baraboo. This amount shall increase by \$50.00 per year per REC with the first such increase occurring on January 1, 1991, and each year thereafter, except that the maximum reserve capacity assessment fee shall not exceed \$650.00 per REC. It is further agreed that in the event the City incurs additional or new capital outlay in order to make improvements, modifications, repairs, or expansion of the Wastewater Treatment Plant, the cost of the capital outlay shall be prorated between the District and the City and the Village of West Baraboo. The District share shall be determined by multiplying the total new capital outlay by the following fraction: Total flow of users in the Sanitary District for the most recent calendar year divided by the total flow of the treatment plant by all users for the same period. This formula is expressed as follows:

$$\text{District Share} = \frac{\text{New Capital Expenditure}}{\text{Total Yearly Flow Users in District}} * \frac{\text{Total Yearly Flow All Users}}{\text{Total Yearly Flow All Users}}$$

The District agrees that its portion of the capital debt shall be paid to the City within 90 days after the District is notified by the City as to the amount due. It is further agreed that if the City incurs additional or new capital outlay, as set forth above, the REC shall be subject to renegotiation and, in such event, the REC shall be set at an equitable rate as shall be agreed upon by the parties.

6. A property owner connected to the City System shall also pay an interceptor contribution fee in the amount of \$275.00 per REC. This payment reflects a prorata REC share assessed at 30 percent of the total cost incurred by the City to install the interceptor sewer from the Wastewater Treatment Plant to the southern City limits of the Baraboo Business Park. This fee shall increase by \$25.00 per year per REC with the first such increase occurring on January 1, 1991, and each year thereafter, except that the maximum interceptor fee shall not exceed \$500.00 per REC.

7. The District further agrees to pay to the City the quarterly sewer service charge incurred by the District. The service charge shall be the same rate as charged to the Village of West Baraboo under its present contract with the City, or as said contract may be amended in the future. Initially, the rate charged shall be the same as the operational service rate charged to residents of the City. The City agrees that if in the future the rate charged to residents of the District is greater than the rate charged to City residents, the rate differential for City residents versus District residents shall be no greater than the rate differential charged by the Baraboo Water Utility between non-City residents and City residents as provided in the then current Baraboo Water Works Rates and Rules approved by the Public Service Commission. The payment shall be made in a timely manner and in accordance with the City Sewer Commission rules and with City Ordinances. All sewer charges all shall be paid quarterly on January 1, April 1, July 1, and October 1, of each year, or at such other intervals as shall be established by the City for sewer service users. A payment not made within 30 days of its due date shall be considered delinquent and shall incur a penalty fee at the rate of 12 percent per annum from the due date until paid. The District shall further pay to the City the reasonable attorney's fees and legal costs incurred by the City to collect delinquent sewer charges under this Agreement or to enforce the terms and provisions of this Agreement.

8. The District agrees to be subject to and to comply with any emergency rules or regulations regarding sewer service use as may be proclaimed from time to time by the City or the Baraboo Sewer Commission. The District further agrees to be subject to and abide by the following:

- A. All rules and regulations proclaimed by the City and/or the Baraboo Sewer Commission for sanitary sewer use.
- B. All provisions of Chapter 13 of the Municipal Code of Baraboo and other ordinances of the City of Baraboo relating to the City's sewer service system.
- C. Any revisions, additions, amendments, or changes in the Municipal Code of Baraboo or in the rules and regulations promulgated by the City and/or Baraboo Sewer Commission for sewer usage as may be made by the City and/or the Baraboo Sewer Commission from time to time in connection with the use of the City System.

It is intended that the District shall be subject to the same rights, duties, and responsibilities in connection with the use of the City's sewer system as all City residents as this relates to the use of the City System. The District agrees that if any violations of the applicable provisions of the Municipal Code of Baraboo occur within the District, the party (including the

District, if the District is the violator) committing the violation shall be subject to prosecution for such violations in the Sauk County Circuit Court and the Sauk County Circuit Court shall have subject matter and personal jurisdiction over the action. Upon conviction, the violator shall be subject to the penalties provided in the City's Municipal Code of Ordinances. The District acknowledges and agrees that the City's willingness to allow the District, and property owners located therein, to connect to the City system is conditioned upon the City's ability to enforce its Ordinance Code and the rules and regulations of the Baraboo Sewer Commission as these relate to users of the City System. The violator shall pay the reasonable attorney's fees and costs incurred by the City to enforce its rules, ordinances, and laws where the violator is adjudged culpable of violating such rules, ordinances, or laws.

9. The District agrees that before any property owner within the District is permitted to connect to the City System, the property owner shall warrant and represent that they/he/she are the sole fee simple title holders of the property to be connected to the City System and that as such owner, they have the full and complete authority and right to enter into an agreement with the District. In addition, each property owner within the District connecting to the City System shall agree to be subject to and to comply with all the terms and provisions of this Agreement.

10. The District agrees to make adequate provision with property owners within the District who wish to connect to the City System to insure that no sewage is introduced into the City System which is prohibited by the Municipal Code of Baraboo or by State law. The District further agrees that no storm sewers shall be connected to the City System and that no surface water will be introduced to the City System.

11. The District understands and agrees that the City is the sole owner of its own sewer lines and its Wastewater Treatment Plant and that no payments of any kind made by virtue of this Agreement by the District, or any property owner within the District shall be construed to mean that the District or any of its property owners has become a part owner of the City System or the Wastewater Treatment Plant, nor shall the District or any property owner within the District, at any time be deemed to have any equity in said facilities.

12. The parties acknowledge that the City has entered into a Sewer Agreement with the Wisconsin Department of Natural Resources (DNR), and a copy of the Sewer Agreement between the City and DNR is attached hereto as Exhibit B. The District acknowledges that the DNR has constructed at its expense a sewer main between the southern City limits and Devil's Lake State Park (The Park), and that a portion of the sewer main constructed by the