

SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF FREDONIA

OZAUKEE COUNTY WISCONSIN

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Special acknowledgement is due SEWRPC Principal Planner Timothy J. McCauley, SEWRPC Specialist Jeffrey A. McVay, AICP, and SEWRPC Planner James P. Siegler for their contributions to this report.

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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SUBJECT: Certification of Amendment to the Adopted Regional Water Quality Management Plan (Fredonia Sanitary Sewer Service Area)

TO: The Legislative Bodies of Concerned Local Units of Government within the Southeastern Wisconsin Region, namely: the County of Ozaukee, the Village of Fredonia, the Waubeka Sanitary District, and the Towns of Fredonia and Saukville.

This is to certify that at the meeting of the Southeastern Wisconsin Regional Planning Commission, held at the Racine County Ives Grove Office Complex, Sturtevant, Wisconsin, on the 3rd day of March 2004, the Commission did by unanimous vote of all Commissioners present, being 17 ayes and 0 nays, and by appropriate Resolution, a copy of which is made a part hereof and incorporated by reference to the same force and effect as if it had been specifically set forth herein in detail, adopt an amendment to the regional water quality management plan, which plan was originally adopted by the Commission on the 12th day of July 1979, as part of the master plan for the physical development of the Region. Said amendment to the regional water quality management plan pertains to the revised Fredonia sanitary sewer service area and consists of the documents attached hereto and made a part hereof. Such action taken by the Commission is recorded on, and is a part of, said plan, and the plan as amended is hereby transmitted to the constituent local units of government for consideration, adoption, and implementation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal and cause the Seal of the Southeastern Wisconsin Regional Planning Commission to be hereto affixed. Dated at the City of Pewaukee, Wisconsin, this 4th day of March 2004.

Thomas H. Buestrin, Chairman
Southeastern Wisconsin
Regional Planning Commission

ATTEST:

Philip C. Evenson, Deputy Secretary

RESOLUTION NO. 2004-02

RESOLUTION OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION AMENDING THE ADOPTED REGIONAL WATER QUALITY MANAGEMENT PLAN, THAT PLAN BEING A PART OF THE MASTER PLAN FOR THE PHYSICAL DEVELOPMENT OF THE REGION CONSISTING OF THE COUNTIES OF KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH, WASHINGTON, AND WAUKESHA IN THE STATE OF WISCONSIN (FREDONIA SANITARY SEWER SERVICE AREA)

WHEREAS, pursuant to Section 66.0309(10) of the *Wisconsin Statutes*, the Southeastern Wisconsin Regional Planning Commission, at a meeting held on the 12th day of July 1979, duly adopted a regional water quality management plan as documented in the three-volume SEWRPC Planning Report No. 30, *A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000*; and

WHEREAS, at a meeting held on the 13th day of September 1984, the Commission duly adopted an amendment to the regional water quality management plan refining and detailing the Fredonia sanitary sewer service area as documented in SEWRPC Community Assistance Planning Report No. 96, *Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin*, July 1984; and

WHEREAS, by letter dated July 11, 2000, the Village of Fredonia requested that the Commission revise the Fredonia sanitary sewer service area; and

WHEREAS, the Commission, working with the Village of Fredonia, has completed revisions to the Fredonia sanitary sewer service area plan, such revised plan being set forth in SEWRPC Community Assistance Planning Report No. 96 (2nd Edition), *Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin*, dated March 2004; and

WHEREAS, the newly revised Fredonia sanitary sewer service area, as documented in SEWRPC Community Assistance Planning Report No. 96 (2nd Edition), was the subject of a public hearing held jointly by the Village of Fredonia and the Regional Planning Commission on February 5, 2004; and

WHEREAS, Section 66.0309(9) of the *Wisconsin Statutes* authorizes and empowers the Regional Planning Commission, as the work of making the whole master plan progresses, to amend, extend, or add to the master plan or carry any part or subject thereof into greater detail;

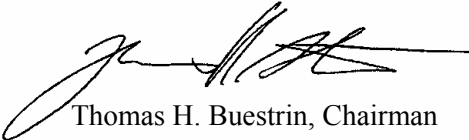
NOW, THEREFORE, BE IT HEREBY RESOLVED:

FIRST: That the regional water quality management plan for the Southeastern Wisconsin Region, being a part of the master plan for the physical development of the Region and comprised of SEWRPC Planning Report No. 30, Volumes One, Two, and Three, which was adopted by the Commission as a part of the master plan on the 12th day of July 1979, and which was amended on the 13th day of September 1984 to include the refined Fredonia sewer service area, as set forth in SEWRPC Community Assistance Planning Report No. 96, be and the same hereby is amended to include the newly revised sanitary sewer service area plan for the Village of Fredonia, as set forth in SEWRPC Community Assistance Planning Report No. 96 (2nd Edition).

SECOND: That the said SEWRPC Community Assistance Planning Report No. 96 (2nd Edition), together with the maps, charts, programs, and descriptive and explanatory matter therein contained, is hereby made a matter of public record; and the originals and true copies thereof shall be kept, at all times, at the offices of the Southeastern Wisconsin Regional Planning Commission presently located at W229 N1812 Rockwood Drive in the City of Pewaukee, County of Waukesha, and State of Wisconsin, or at any subsequent office the said Commission may occupy, for examination and study.

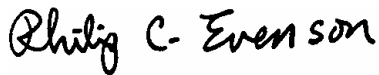
THIRD: That a true, correct, and exact copy of this resolution, together with a complete and exact copy of SEWRPC Community Assistance Planning Report No. 96 (2nd Edition), shall be forthwith distributed to each of the local legislative bodies of the local governmental units within the Region entitled thereto and to such other bodies, agencies, or individuals as the law may require or as the Commission, its Executive Committee, or its Executive Director, at their discretion, shall determine and direct.

The foregoing resolution, upon motion duly made and seconded, was regularly adopted at the meeting of the Southeastern Wisconsin Regional Planning Commission held on the 3rd day of March 2004, the vote being: Ayes 17; Nays 0.



Thomas H. Buestrin, Chairman

ATTEST:



Philip C. Evenson, Deputy Secretary

COMMUNITY ASSISTANCE PLANNING REPORT
NUMBER 96 (2nd Edition)

**SANITARY SEWER SERVICE AREA
FOR THE VILLAGE OF FREDONIA,
OZAUKEE COUNTY, WISCONSIN**

Prepared by the

Southeastern Wisconsin Regional Planning Commission
W239 N1812 Rockwood Drive
P. O. Box 1607
Waukesha, Wisconsin 53187-1607

March 2004

Inside Region \$2.50
Outside Region \$5.00

TABLE OF CONTENTS

	Page		Page
Chapter I—INTRODUCTION	1	Currently Approved Fredonia Sanitary Sewer Service Area	11
Background	1	Pre-Public Hearing Revised Fredonia Sanitary Sewer Service Area	11
Need for Refinement and Detailing of Local Sanitary Sewer Service Areas	1	Public Reaction to the Proposed Revised Sanitary Sewer Service Area Plan	14
The Village of Fredonia Sanitary Sewer Service Area Refinement Process	4	Post-Public Hearing Plan	14
Relationship to the Waubeka Sewer Service Area	4	Environmentally Significant Lands.....	18
Chapter II—STUDY AREA DESCRIPTION	5	Water Quality Impacts	20
Location.....	5	Cost-Effectiveness Analysis of Sewage Conveyance and Treatment Alternatives.....	20
Population.....	5	Sewage Treatment Plant Capacity Impact Analysis.....	20
Environmentally Significant Lands.....	5	Village of Fredonia Action on the Proposed Sewer Service Area Amendment.....	21
Chapter III—PROPOSED SANITARY SEWER SERVICE AREA	11	Implementing Recommendations.....	21
Significance of Sanitary Sewer Service Area Delineation	11	Subsequent Revisions to the Fredonia Sewer Service Area	21

LIST OF APPENDICES

		Page
Appendix		
A	Public Hearing Record.....	33

LIST OF TABLES

		Page
	Chapter II	
1	Values Assigned to Natural Resource Base and Resource Base-Related Elements in the Process of Delineating Environmental Corridors and Isolated Natural Resource Areas	9

LIST OF MAPS

Map	Page
Chapter I	
1	Recommended Sanitary Sewer Service Areas in the Region: December 2003 2
Chapter II	
2	Study Area Identified for Purposes of Refining and Detailing the Village of Fredonia Sanitary Sewer Service Area 6
3	Environmentally Significant Lands in the Village of Fredonia Study Area 8
Chapter III	
4	Proposed Changes to the Village of Fredonia Sanitary Sewer Service Area (Pre-Public Hearing) 12
5	Village of Fredonia Planned Sanitary Sewer Service Area (Pre-Public Hearing) 15
6	Proposed Changes to the Village of Fredonia Sanitary Sewer Service Area (Post-Public Hearing) 16
7	Village of Fredonia Planned Sanitary Sewer Service Area (Post-Public Hearing) 17
8	Anticipated Changes in the Environmentally Significant Lands in the Village of Fredonia Study Area (Post-Public Hearing) 19
9	Index of Maps Showing Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Village of Fredonia 23
9-1	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Village of Fredonia, U. S. Public Land Survey Section 22, Township 12 North, Range 21 East 24
9-2	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Village of Fredonia, U. S. Public Land Survey Sections 23 and 24, Township 12 North, Range 21 East 25
9-3	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Village of Fredonia, U. S. Public Land Survey Sections 27 and 34, Township 12 North, Range 21 East 26
9-4	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Village of Fredonia, U. S. Public Land Survey Sections 25, 26, 35, and 36, Township 12 North, Range 21 East 27
9-5	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Village of Fredonia, U. S. Public Land Survey Section 3, Township 11 North, Range 21 East 28
9-6	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Village of Fredonia, U. S. Public Land Survey Sections 1 and 2, Township 11 North, Range 21 East 29

Chapter I

INTRODUCTION

BACKGROUND

On July 12, 1979, the Southeastern Wisconsin Regional Planning Commission formally adopted an areawide water quality management plan for Southeastern Wisconsin. The plan is aimed at achieving clean and wholesome surface waters within the seven-county Region, surface waters that are “fishable and swimmable.”¹

The plan has five basic elements: 1) a land use element, consisting of recommendations for the location of new urban development in the Region and for the preservation of primary environmental corridors and prime agricultural lands; 2) a point source pollution abatement element, including recommendations concerning the location and extent of sanitary sewer service areas; the location, type, capacity of, and the level of treatment to be provided at, sewage treatment facilities; the location and configuration of intercommunity trunk sewers; and the abatement of pollution from sewer system overflows and from industrial wastewater discharges; 3) a nonpoint source pollution abatement element, consisting of recommendations for the control of pollutant runoff from rural and urban lands; 4) a sludge management element, consisting of recommendations for the handling and disposal of sludges from sewage treatment facilities; and 5) recommendations for the establishment of continuing water quality monitoring efforts in the Region.

The plan was formally certified over the period July 23 to September 20, 1979, to all of the local units of government in the Region and to the concerned State and Federal agencies. The plan was formally endorsed by the Wisconsin Natural Resources Board on July 25, 1979. Such endorsement is particularly important because under State law and administrative rules, certain actions by the Wisconsin Department of Natural Resources (WDNR) must be found to be in accordance with the adopted and endorsed plan. These actions include, among others, WDNR approval of waste discharge permits, WDNR approval of State and Federal grants for the construction of wastewater treatment and conveyance facilities, and WDNR approval of locally proposed sanitary sewer extensions.

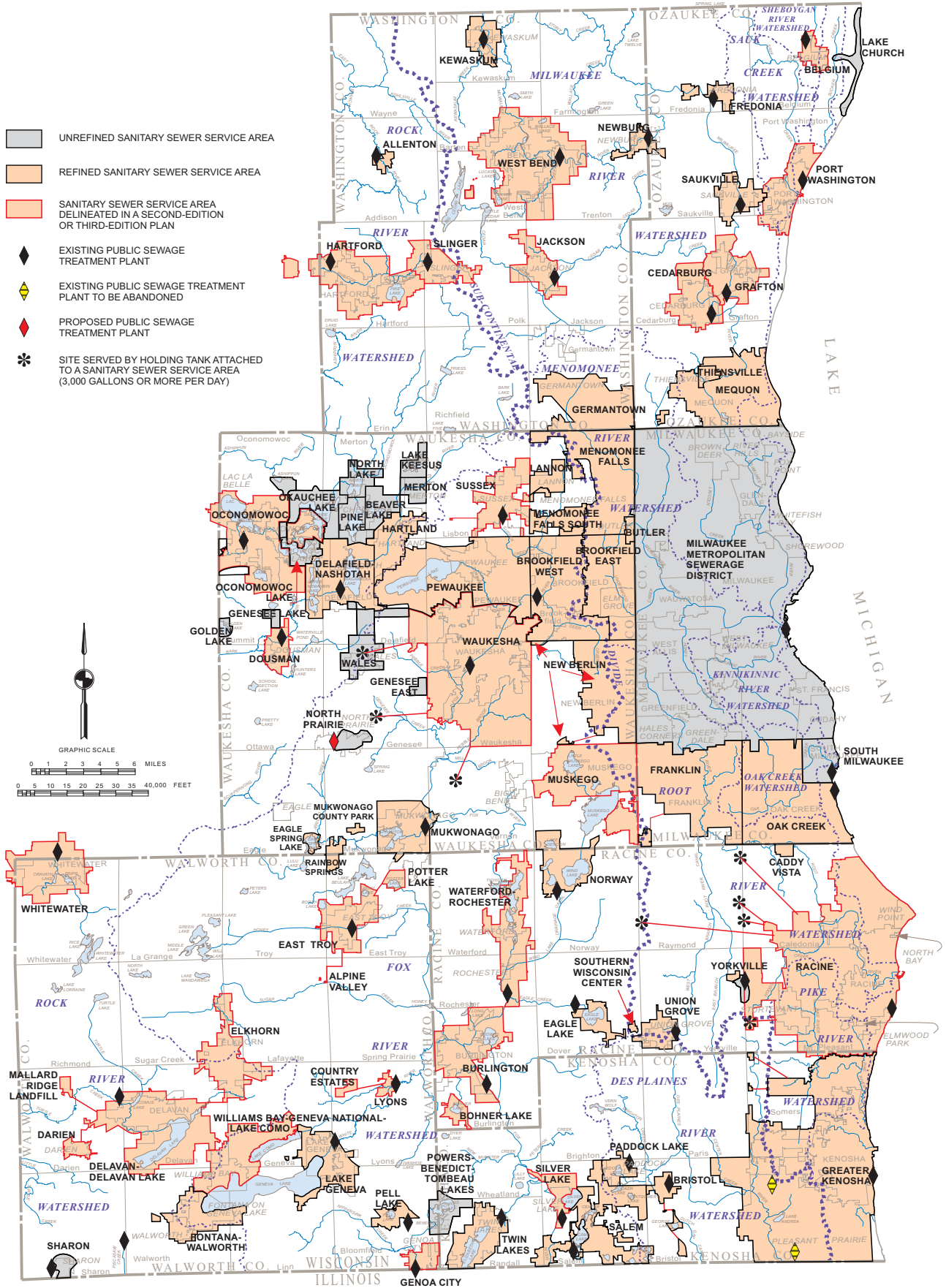
NEED FOR REFINEMENT AND DETAILING OF LOCAL SANITARY SEWER SERVICE AREAS

The adopted regional water quality management plan includes recommended sanitary sewer service areas attendant to each recommended sewage treatment facility (see Map 1). There were in the plan, as initially adopted, a total of 85 such identified sanitary sewer service areas. The initially recommended sanitary sewer service areas were based upon the urban land use configuration identified in the Commission-adopted regional

¹The adopted areawide water quality management plan is documented in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative Plans; and Volume Three, Recommended Plan.

Map 1

RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION: DECEMBER 2003



Source: SEWRPC.

land use plan for the year 2000.² As such, the delineation of the areas was necessarily general, and may not have reflected detailed local planning considerations.

Section NR 110.08(4) and Section Comm 82.20(4) of the *Wisconsin Administrative Code* require that the Wisconsin Department of Natural Resources, with respect to public sanitary sewers, and the Wisconsin Department of Commerce, with respect to private sanitary sewers, make a finding that all proposed sanitary sewer extensions be in conformance with adopted areawide water quality management plans and the sanitary sewer service areas identified in such plans. These Departments, in carrying out their responsibilities in this respect, require that the Southeastern Wisconsin Regional Planning Commission, as the designated areawide water quality management planning agency for the Southeastern Wisconsin Region, review and comment on each proposed sewer extension as to its relationship to the approved plan and sewer service areas. In order to properly reflect local, as well as areawide planning concerns in the execution of this review responsibility, the Regional Planning Commission, in adopting the areawide water quality management plan, recommended that steps be taken to refine and detail each of the 85 sanitary sewer service areas delineated in the plan in cooperation with the local units of government concerned. The refinement and detailing process consists of the following seven steps:

1. Preparation of a base map at an appropriate scale for each sanitary sewer service area identified in the areawide water quality management plan.
2. The delineation on that base map of a sanitary sewer service area consistent with the objectives set forth in the adopted regional water quality management plan.³
3. The conduct of intergovernmental meetings involving the local or areawide unit or units of government concerned. At these meetings, the initial sanitary sewer service area delineation is to be presented and discussed and the positions of each of the units of government concerned solicited.
4. The preparation of modifications to the initially proposed sanitary sewer service area to reflect concerns expressed at the intergovernmental meetings. These modifications would meet, to the fullest extent practicable, the objectives expressed both in the adopted areawide water quality management and regional land use plans and in any adopted local land use and sanitary sewerage system plans.
5. The holding of a public hearing jointly by the Commission and the local or areawide unit or units of government concerned to obtain public reaction to site-specific sewer service area issues that might be raised by the proposed sewer service area delineation.
6. The preparation of a final sanitary sewer service area map and accompanying report.
7. Adoption of the final sewer service area report by the Commission and certification of the report to the Wisconsin Department of Natural Resources and the U. S. Environmental Protection Agency as an amendment to the adopted areawide water quality management plan. Desirably, such adoption by the Commission would follow endorsement of the report by the local or areawide unit or units of government concerned. While such a consensus by the local governments concerned will always be sought by the Commission, it is recognized that in some cases unanimous support of the refined and detailed sanitary sewer service areas may not be achieved. In those cases, the Commission will have to weigh the positions of the parties concerned and make a final determination concerning the issues involved.

²See *SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation System Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; and Volume Two, Alternative and Recommended Plans.*

³*The sewer service areas in the water quality management plan were based upon the urban land use configurations as set forth in the Regional Planning Commission's design year 2000 land use plan. The Regional Planning Commission has since completed and adopted a design year 2020 land use plan, which plan served as the point of departure in the delineation of the sewer service area set forth in this report.*

THE VILLAGE OF FREDONIA SANITARY SEWER SERVICE AREA REFINEMENT PROCESS

The process of refining and detailing the sanitary sewer service areas in Southeastern Wisconsin was initiated after the Commission's adoption of the regional water quality management plan in July 1979. An effort to refine and detail the Fredonia sewer service area was undertaken in 1984. The resulting sewer service area plan is documented in SEWRPC Community Assistance Planning Report No. 96, *Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin*, dated July 1984. This plan was adopted by the Fredonia Village Board on July 17, 1984, and by the Regional Planning Commission on September 13, 1984; and was endorsed by the Wisconsin Department of Natural Resources on October 11, 1984. The Fredonia sewer service area plan has been amended once since then. That amendment, which involved the addition of a relatively small parcel on the south side of the sewer service area, was adopted by the Fredonia Village Board and the Regional Planning Commission in 2002.

The Regional Planning Commission recognizes that, like other long-range plans, sanitary sewer service area plans should be reviewed periodically to assure that they continue to properly reflect regional and local urban development objectives, especially as such objectives may relate to the amount and spatial distribution of new urban development requiring sewer service. By letter dated July 11, 2000, the Village of Fredonia requested the assistance of the Regional Planning Commission in updating the Fredonia sanitary sewer service area. It was agreed that the process of updating the sewer service area should begin after the preparation of a comprehensive plan for the Village. The updating of the sewer service area plan would consider the Village comprehensive plan, the most recent available natural resource base inventory data, and current Commission population projections for the area.

The process of updating the Village of Fredonia sewer service area plan began in 2003, following completion of the Village comprehensive plan. A draft report setting forth a preliminary revised sanitary sewer service area plan was provided to the Village of Fredonia, the Town of Fredonia, the Waubeka Area Sanitary District, Ozaukee County, and the Wisconsin Department of Natural Resources for review and comment prior to a public hearing on the preliminary plan held on February 5, 2004. The public reaction to the proposed sanitary sewer service area plan, documented in the minutes contained in Appendix A, is summarized later in this report. The final revised sanitary sewer service area attendant to the Village of Fredonia sewage treatment facility is described in Chapter III of this report.

RELATIONSHIP TO THE WAUBEKA SEWER SERVICE AREA

This report, then, updates the sewer service area for the Village of Fredonia and environs. This report does not address the Waubeka sewer service area, which, under the regional water quality management plan, would be tributary to the Fredonia sewerage system, if and when sewer service were provided. No changes are proposed for the Waubeka sewer service area at this time, and the boundaries of that area remain as presented in SEWRPC Community Assistance Planning Report No. 96, dated July 1984.

Chapter II

STUDY AREA DESCRIPTION

LOCATION

The study area considered for revising the Fredonia sanitary sewer service area is shown on Map 2. The area consists of all of the land encompassed by the Village of Fredonia along with portions of the Towns of Saukville and Fredonia. The total study area is 12.2 square miles in extent, including 1.5 square miles in the Village of Fredonia, 7.7 square miles in the Town of Fredonia, and 3.0 square miles in the Town of Saukville.

POPULATION

The existing (2000) resident population of the study area was estimated at 2,360 persons. Of this total, it is estimated that about 1,930 persons were served by public sanitary sewers tributary to the Fredonia sewage treatment facility; the remaining 430 persons in the study area, or about 18 percent of the total population of the study area, were served by onsite sewage disposal systems.

The projected population of the study area in 2020 was prepared by the Regional Planning Commission as part of the year 2020 regional land use plan. The preparation of population projections—especially for small geographic areas such as the Fredonia study area—always involves some degree of uncertainty. Future social and economic conditions, which are predicted and then used as a basis for population projections, can vary widely, and as a result can significantly influence future population levels. It is thus desirable to consider alternative possibilities for growth and change when preparing projections, so that unforeseen changes in social and economic conditions can be accommodated. The Regional Planning Commission has projected a range of population growth which could be expected to occur over the period 1990 to 2020 under alternative growth scenarios for the Region. The Commission's year 2020 regional land use plan considers two regional growth scenarios, ranging from "intermediate growth," considered to be the most likely scenario, to "high-growth," intended to represent the upper extreme of possible future regional growth and change.

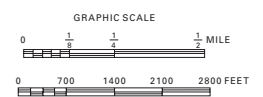
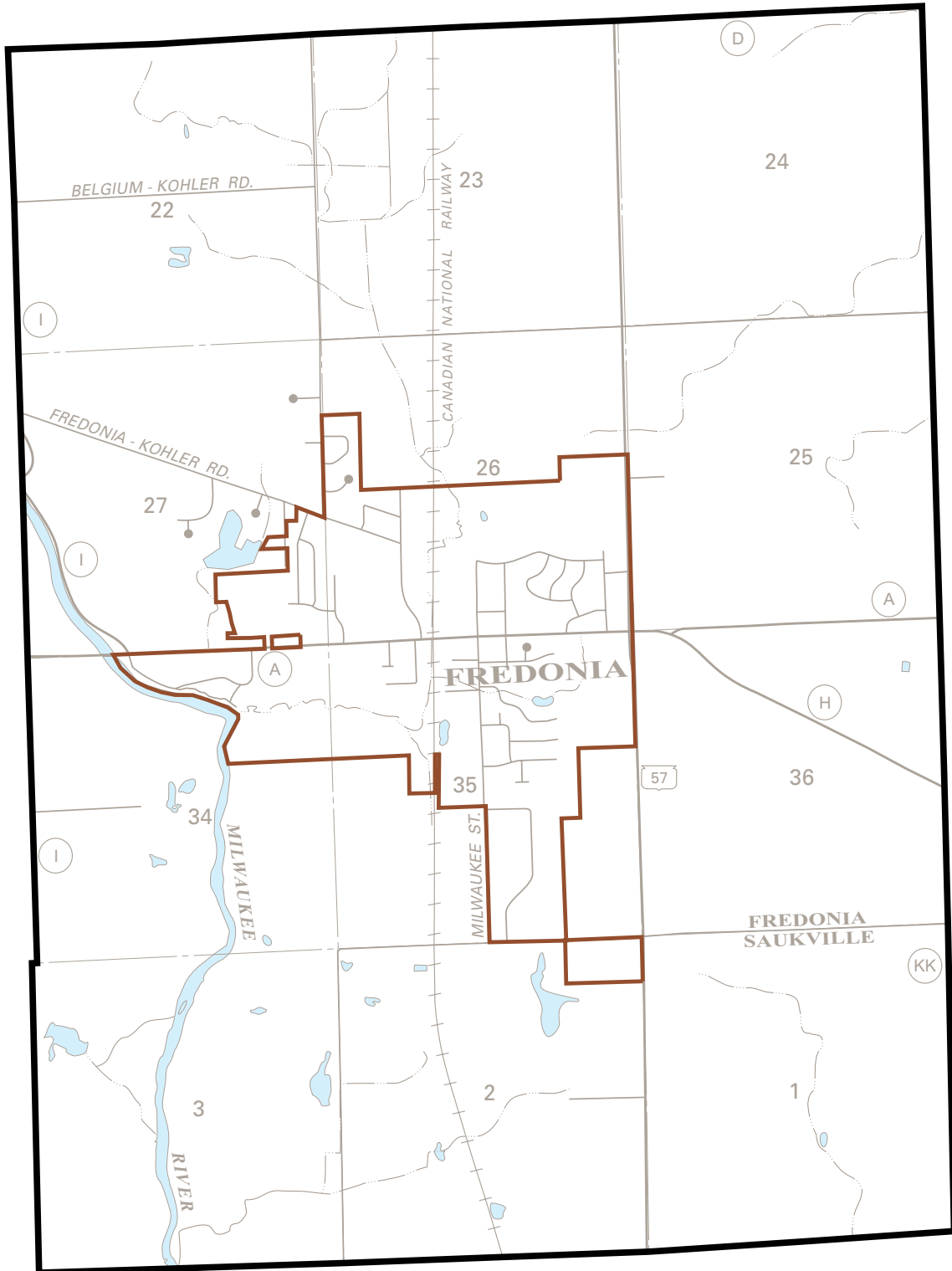
The adopted regional land use plan for the year 2020, which is based upon an intermediate-growth scenario, would accommodate a year 2020 resident population level of about 2,600 persons in the Fredonia study area. Under a high-growth scenario, the population level within the study area could be as high as 3,600 persons by the year 2020.

ENVIRONMENTALLY SIGNIFICANT LANDS

Environmental corridors are defined as linear areas in the landscape containing concentrations of natural resource and resource-related amenities. These corridors generally lie along the major stream valleys, around major lakes, and in the Kettle Moraine area of southeastern Wisconsin. Almost all the remaining high-value wetlands, woodlands, wildlife habitat areas, major bodies of surface water, and delineated floodlands and shorelands are contained within these corridors. In addition, significant groundwater recharge and discharge areas, many of the

Map 2

STUDY AREA IDENTIFIED FOR PURPOSES OF REFINING AND DETAILING
THE VILLAGE OF FREDONIA SANITARY SEWER SERVICE AREA



Source: SEWRPC.

most important recreational and scenic areas, and the best remaining potential park sites are located within the environmental corridors. Such corridors are, in effect, a composite of the most important individual elements of the natural resource base in southeastern Wisconsin, and have immeasurable environmental, ecological, and recreational value.

The land use element of the adopted regional water quality management plan recommends that lands identified as primary environmental corridors not be developed for intensive urban use. Accordingly, the plan further recommends that sanitary sewers not be extended into such corridors for the purpose of accommodating urban development in the corridors. It was recognized in the plan, however, that it would be necessary in some cases to construct sanitary sewers across and through primary environmental corridors, and that certain land uses requiring sanitary sewer service could be properly located within the corridors, including park and outdoor recreation facilities and certain institutional uses. In some cases, extremely low density residential development at a density not to exceed one housing unit per five acres of upland corridor, compatible with the preservation of the corridors in essentially natural, open uses, may also be permitted to occupy corridor lands, and it may be desirable to extend sewers into the corridors to serve such uses. Basically, however, the adopted regional land use plan seeks to ensure that the primary environmental corridor lands are not destroyed through conversion to intensive urban uses.

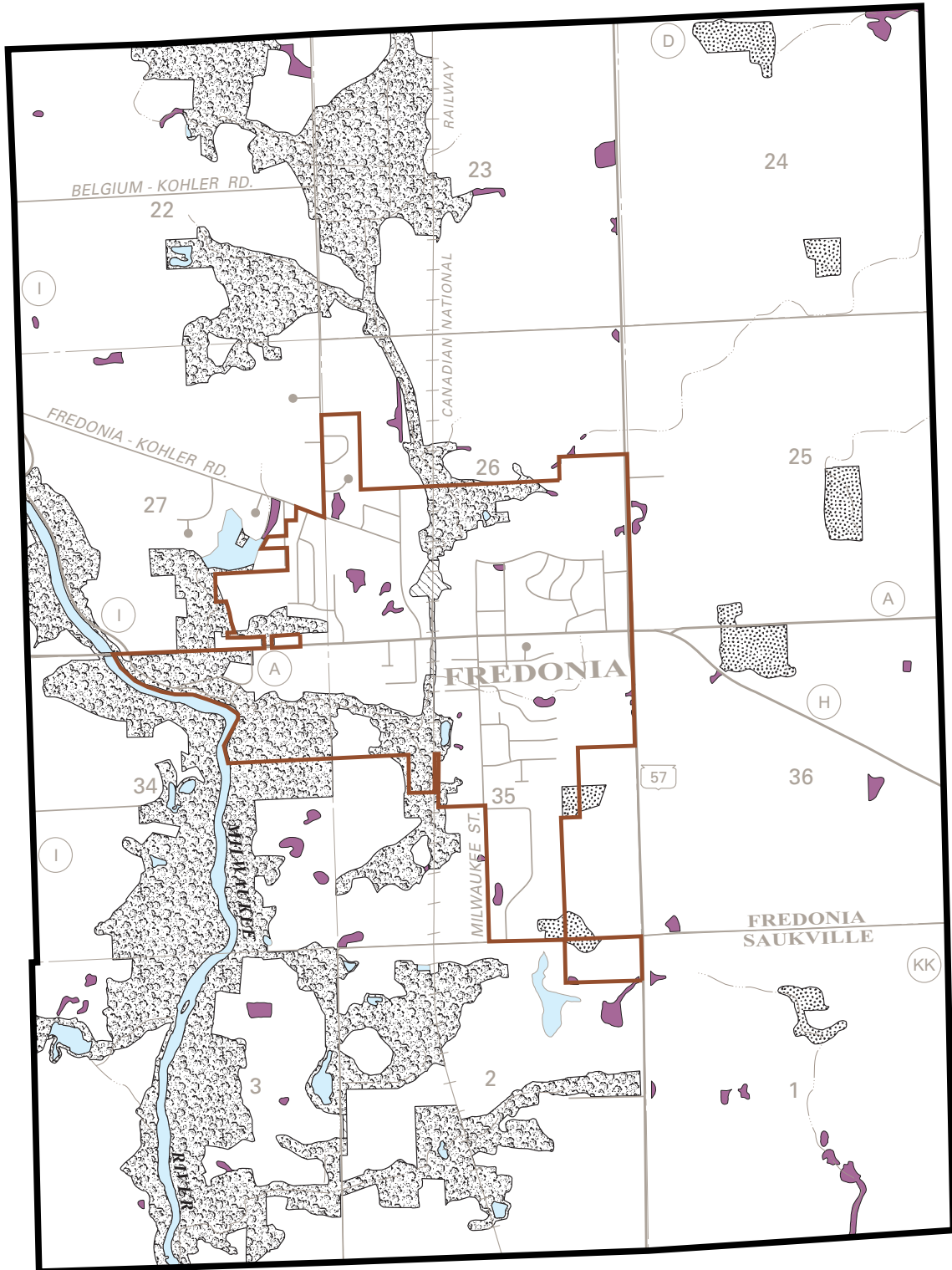
One of the first steps in refining the Fredonia sanitary sewer service area was to map in detail the environmentally significant lands in the study area. Accordingly, Commission inventories were reviewed and updated as necessary with respect to the following elements of the natural resource base: lakes, streams, and associated shorelands and floodlands; wetlands; woodlands; wildlife habitat areas; areas of rugged terrain and high-relief topography; wet, poorly drained, and organic soils; and remnant prairies. In addition, inventories were reviewed and updated as necessary with respect to such natural resource-related features as existing parks, potential park sites, sites of historic and archaeological value, areas offering scenic vistas or viewpoints, and areas of scientific value.





Each of these natural resource and resource-related elements was mapped on aerial photographs at a scale of one inch equals 400 feet, and an established point system for value rating the various elements of the resource base was applied (see Table 1). The primary environmental corridors were delineated using this rating system. To qualify for inclusion in a primary environmental corridor, an area must exhibit a point value of 10 or more. In addition, a primary environmental corridor must be at least 400 acres in size, be at least two miles long, and have a minimum width of 200 feet. This environmental corridor refinement process is more fully described in SEWRPC *Technical Record*, Vol. 4, No. 2, in an article entitled, "Refining the Delineation of Environmental Corridors in Southeastern Wisconsin." The primary environmental corridors, along with secondary environmental corridors and isolated natural resource areas, as delineated in the Fredonia study area, are shown on Map 3. The secondary environmental corridors should be considered for preservation as the process of urban development proceeds, because such corridors often provide economical drainageways, as well as needed "green" space, through developing residential neighborhoods. To qualify for inclusion in a secondary environmental corridor, an area must exhibit a point value of 10 or more, and have a minimum area of 100 acres and a minimum length of one mile.

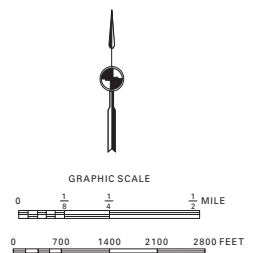
Isolated natural resource areas generally consist of those natural resource base elements that have value, such as wetlands, woodlands, wildlife habitat areas, and surface water areas, but are separated physically from the primary and secondary environmental corridors by intensive urban or agricultural land uses. Since isolated natural resource areas may provide the only available wildlife habitat in an area, provide good locations for local parks and nature study areas, and lend aesthetic character and natural diversity to an area, they should also be protected and preserved in a natural state to the extent practicable. An isolated natural resource area must be at least five acres in size and have a minimum width of 200 feet.

In addition, wetlands less than five acres in size, located outside of environmental corridors and isolated natural resource areas, are shown on Map 3. Under Section 23.32 of the *Wisconsin Statutes*, a wetland is defined as, "an area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions." It should be noted the information presented on Map 3 does not represent an exhaustive inventory of wetlands in the study area. The identified

ENVIRONMENTALLY SIGNIFICANT LANDS IN THE VILLAGE OF FREDONIA STUDY AREA



-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE



Source: SEWRPC.

wetlands are based upon the Wisconsin Wetlands Inventory, field investigation of some wetlands by the Regional Planning Commission staff, and interpretation of 2000 aerial photographs.¹

Table 1

VALUES ASSIGNED TO NATURAL RESOURCE BASE AND RESOURCE BASE-RELATED ELEMENTS IN THE PROCESS OF DELINEATING ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS

Natural Resource Base Element	Point Value	Natural Resource Base Related Element	Point Value
Lake		Existing Park or Open Space Site	
Major (50 acres or more).....	20	Rural Open Space Site.....	5
Minor (5-49 acres).....	20	Other Park and Open Space Site.....	2
Rivers or Streams (perennial).....	10	Potential Park Site	
Shoreland		High-Value.....	3
Lake or Perennial River or Stream.....	10	Medium-Value.....	2
Intermittent Stream.....	5	Low-Value.....	1
Floodland (100-year recurrence interval).....	3	Historic Site	
Wetland.....	10	Structure.....	1
Woodland.....	10	Other Cultural.....	1
Wildlife Habitat		Archaeological.....	2
Class I.....	10	Scenic Viewpoint.....	5
Class II.....	7	Natural Area	
Class III.....	5	State Scientific Area.....	15
Steep Slope		Statewide or Greater Significance.....	15
20 Percent or More.....	7	County or Regional Significance.....	10
12-19 Percent.....	5	Local Significance.....	5
Prairie.....	10		

Source: SEWRPC.

Lands and surface water encompassed within the primary environmental corridors of the Fredonia study area in 2000 totaled 2.1 square miles, or 17 percent of the total study area. Lands and surface water encompassed within secondary environmental corridors totaled 9 acres—a very small portion of the total study area. Lands and surface water encompassed within isolated natural resource areas totaled 0.2 square mile, or 2 percent of the study area. About 0.1 square mile, or about 1 percent of the total study area, was encompassed within wetlands and surface water areas less than five acres in size.² Thus, all environmentally significant lands in the Fredonia study area encompassed 2.4 square miles, or about 20 percent the study area.

While the adopted regional water quality management plan places great emphasis upon the protection of the lands identified as primary environmental corridors in essentially natural, open uses, it recognizes that there may be situations in which the objective of preserving the corridor lands directly conflicts with other legitimate regional and local development objectives. For example, the regional plan recognizes that if a community were to determine the need for a strategic arterial street extension through the primary environmental corridor lands in order to service an important local development project, the street extension may be considered to be of greater community benefit than the preservation of a small segment of the primary environmental corridor. When such conflicts in legitimate community development objectives occur, it is important that they be resolved sensitively and that any damage to the natural environment in the corridors be minimized.

While portions of the delineated floodlands in the Fredonia study area are contained within the environmental corridors, there are areas of the floodlands utilized for agricultural or other open space uses located outside such

¹Precise delineation of such small wetlands as well as other environmentally significant lands, including primary and secondary environmental corridors and isolated natural resource areas, can only be determined through field investigation.

²Acreage noted here refers to wetlands and surface water areas less than 5 acres in size located outside environmental corridors and isolated natural resource areas.

corridors. The Regional Planning Commission recognizes that such floodlands are generally unsuitable for intensive urban development owing to poor soil conditions and periodic flood inundation. The Commission thus recommends that, as development of lands located within urban areas and adjacent to these floodland areas occurs, such floodland areas should be preserved in essentially natural, open space uses, and over time become part of the adjacent environmental corridors. In addition, the adopted regional water quality management plan recognizes that certain secondary environmental corridors, isolated natural resource areas, and wetlands less than five acres in size may be converted to urban uses over the plan design period. However, current Federal, State, and local regulations may effectively preclude development of such areas. Of particular importance in this regard are natural resource protection regulations dealing with wetlands, floodplains, shorelands, stormwater runoff, and erosion control. Therefore, it is important that the developer or local unit of government concerned determine if it is necessary to obtain any applicable Federal, State, or local permits prior to any proposed disturbance of wetlands, floodplains, or other regulated lands.

Chapter III

PROPOSED SANITARY SEWER SERVICE AREA

SIGNIFICANCE OF SANITARY SEWER SERVICE AREA DELINEATION

As noted earlier in this report, changes in the Wisconsin Department of Natural Resources (WDNR) and Wisconsin Department of Commerce rules governing the extension of sanitary sewers have made the delineation of local sanitary sewer service areas an important process for local units of government and private land developers. Prior to the rule changes, review and approval of locally proposed sanitary sewer extensions by the WDNR and the Department of Commerce was confined primarily to engineering considerations and was intended to ensure that the sewers were properly sized and constructed. The rule changes significantly expanded the scope of the State review process to include water quality-oriented land use planning considerations. Before the two State agencies concerned can approve a locally proposed sanitary sewer extension, they must make a finding that the lands to be served by the proposed extension lie within an approved sanitary sewer service area. Such areas are identified in the Commission's adopted areawide water quality management plan and any subsequent amendments thereto. If a locally proposed sanitary sewer extension is designed to serve areas not recommended for sewer service in an areawide water quality management plan, the State agencies concerned must deny approval of the extension. Consequently, it is important that an intergovernmental consensus be reached in the delineation of proposed sanitary sewer service areas.

CURRENTLY APPROVED FREDONIA SANITARY SEWER SERVICE AREA

The currently adopted design year 2000 Fredonia sanitary sewer service area is set forth in SEWRPC Community Assistance Planning Report No. 96, *Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin*, dated July 1984, as amended. As shown in the gray-shaded area on Map 4, this service area as amended through 2003 encompasses 1.7 square miles, or 14 percent of the total study area of 12.2 square miles.¹

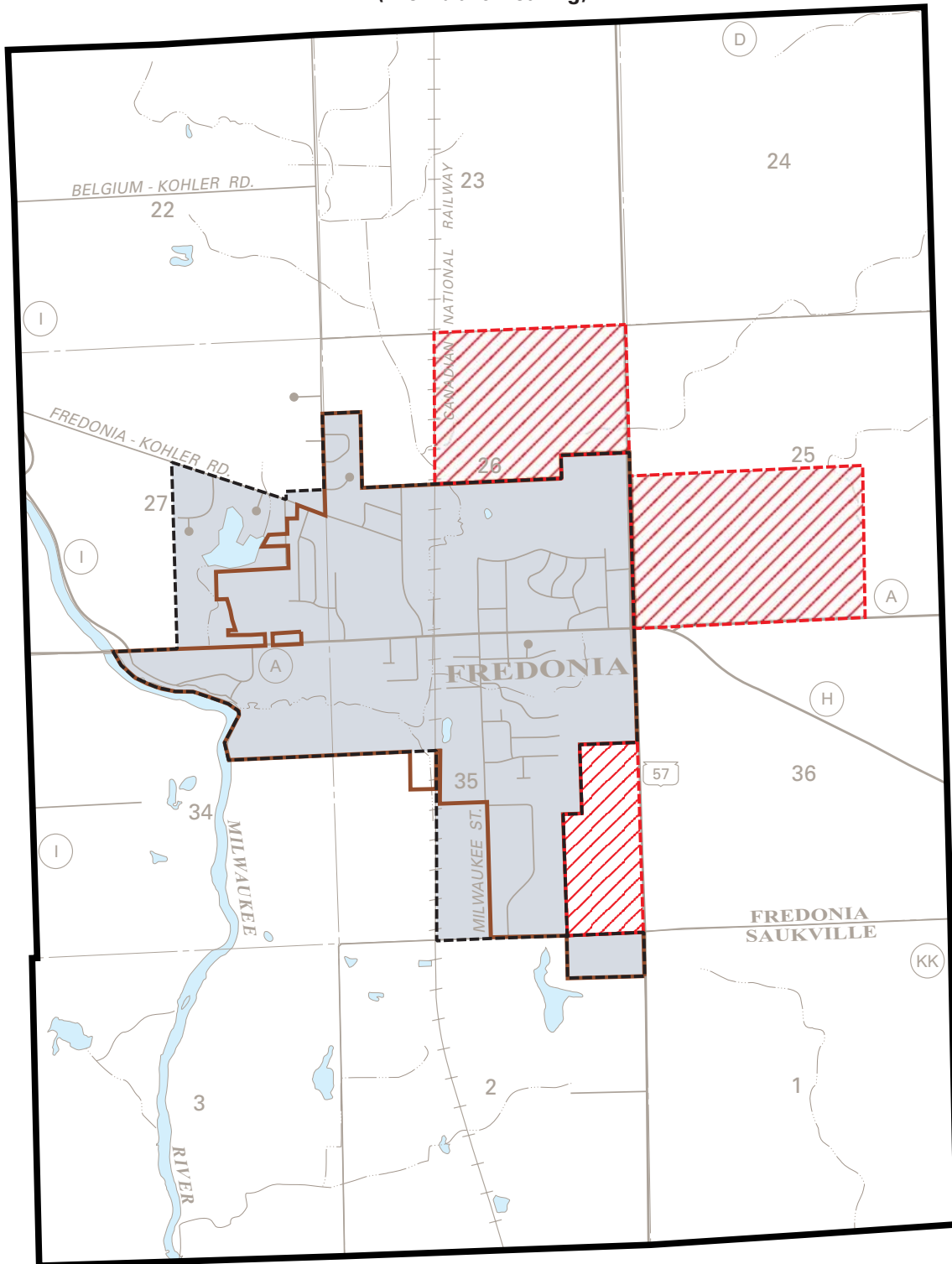
PRE-PUBLIC HEARING REVISED FREDONIA SANITARY SEWER SERVICE AREA

A comprehensive review of the Fredonia sanitary sewer service area was last undertaken during the preparation of Community Assistance Planning Report No. 96 in 1984. The purpose of the current planning effort is to review once again the sewer service needs of lands envisioned to be tributary to the Village of Fredonia sewage treatment facility and to adjust and extend, as necessary, the sewer service area boundaries to accommodate the design year 2020 population levels envisioned for this service area.

¹ As noted in Chapter I, this report updates the sewer service area for the Village of Fredonia and environs. This report does not address the Waubeka sewer service area, which, under the regional water quality management plan, would be tributary to the Fredonia sewerage system, if and when sewer service were provided. No changes are proposed for the Waubeka sewer service area at this time, and the boundaries of that area remain as presented in SEWRPC Community Assistance Planning Report No. 96, dated July 1984.

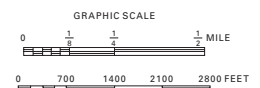
Map 4

PROPOSED CHANGES TO THE VILLAGE OF FREDONIA SANITARY SEWER SERVICE AREA
(Pre-Public Hearing)



 CURRENTLY ADOPTED VILLAGE OF FREDONIA SANITARY SEWER SERVICE AREA AS DEFINED IN SEWRPC COMMUNITY ASSISTANCE PLANNING REPORT NO. 96, AS AMENDED

 AREAS PROPOSED TO BE ADDED TO THE VILLAGE OF FREDONIA SANITARY SEWER SERVICE AREA



Source: SEWRPC.

Sewer Service Area Planning Considerations

Factors taken into account in the delineation of the revised Fredonia sanitary sewer service area included the currently identified sanitary sewer service area plan set forth in the first edition of SEWRPC Community Assistance Planning Report No. 96, *Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin*, dated July 1984, as amended, and shown on Map 4; the design year 2020 regional land use plan documented in SEWRPC Planning Report No. 45, *A Regional Land Use Plan for Southeastern Wisconsin: 2020*, dated December 1997 and adopted by the Regional Planning Commission in 1997; and the Village of Fredonia comprehensive plan.²

The refinement effort considered the location, type, and extent of existing urban development; the location of areas where onsite soil-absorption sewage disposal systems were known to be failing; the location and extent of gravity drainage areas tributary to planned sewage treatment facilities; the location and capacity of planned trunk sewers; the location of existing property ownership boundaries; and certain pertinent aspects of the natural resource base, including the location and extent of soils suitable for urban development, the location and extent of primary and secondary environmental corridors, and the location and extent of prime agricultural lands.

Population Projections

As previously noted, the Commission utilizes a range of population projections to account for uncertainties regarding future growth and development within the Region. The sewer service area revision for the Fredonia area thus incorporates a range of resident population levels, with the most reasonable lower end of the population range based upon an intermediate-growth scenario and with the most reasonable upper end of the population range based upon a high-growth scenario.

Local sanitary sewer service area and sewerage facility planning work should also consider a range of possible future population levels in the evaluation of alternative facility plans in order to identify alternatives which perform well under a reasonable range of possible future conditions. Construction of certain facilities and mechanical and electrical components of sewage treatment facilities such as pumps, compressors, and chemical-feed equipment are typically based upon relatively short-term population and loading forecasts. These facilities are often replaced or rebuilt at intervals of 10 to 15 years and are amenable to expansion in a staged manner. Accordingly, capital investments in such facilities are often limited to those relatively certain to be needed over a 15 to 20-year design period. The use of the intermediate population projection may thus be most appropriate for use in the design of such facilities.

Consideration of a high-growth population projection, however, may be appropriate in delineating a service area and in the design of certain components of the sewerage system that have a longer life, including gravity-flow conveyance facilities and such treatment plant components as hydraulic conduits and tanks. With respect to the size of the service area, the high-growth population forecast may be the most logical to use since it is considered by the Commission to be potentially achievable within the Southeastern Wisconsin Region. A sanitary sewer service area size based upon that level may also be desirable in order to provide flexibility to communities in determining the spatial distribution of anticipated new urban development and to facilitate the operation of the urban land market. With respect to the design of certain components of the sewerage system, the use of the high-growth population projection may also be desirable where the physical life of the facilities is substantially greater than 20 years. Thus, facility construction based upon the high-growth population and loading levels may be warranted where the physical life of the facilities extends beyond the 20-year planning period.

Under the foregoing conditions, the resident population of the area anticipated to be tributary to the Village of Fredonia sewage treatment facility would, by the design year 2020, range from about 2,250 persons under the Commission's intermediate-growth scenario, also reflected in the Commission's adopted regional land use plan, to about 3,450 persons under the Commission's high-growth scenario.

² *Ruekert & Mielke, Village of Fredonia Comprehensive Plan-2020, July 2003*

Pre-Public Hearing Sanitary Sewer Service Area

The proposed changes to the outer boundary of the Fredonia sanitary sewer service area, as submitted to the public hearing, are shown on Map 4. The proposed changes would expand the sewer service area on the north and east. In total, the proposed additions to the sewer service area encompass 530 acres, or about 0.8 square mile. Of this total, 35 acres consist of existing urban land and street rights-of-way; 37 acres consist of environmentally significant land; and 458 acres consist of agricultural and other open lands. The proposed sewer service area, with these additions, as presented at the public hearing, is shown on Map 5.

It is envisioned that the developable land within the two northerly proposed additions would be developed as mixed use neighborhoods. It is envisioned that the southeasterly proposed addition would be developed as a business park, accommodating industrial uses.

PUBLIC REACTION TO THE PROPOSED REVISED SANITARY SEWER SERVICE AREA PLAN

A public hearing was held on February 5, 2004, at the Fredonia Fire Department Meeting Room to receive public comment on, and reaction to, the proposed revision of the Fredonia sanitary sewer service area plan. The hearing was sponsored by the Village of Fredonia and the Regional Planning Commission. Summary minutes of the public hearing are presented in Appendix A.

At the hearing, a summary of the findings and recommendations of the sanitary sewer service area plan update and revision effort was presented prior to receiving public comment. Topics specifically addressed in the summary presentation included the rationale for revising the Fredonia sewer service area, the importance of the delineation of the outer boundaries of the sewer service area, the importance of the delineation of environmentally significant lands within the service area, and the significance of these lands insofar as the future extension of sewer service is concerned. The probable impact of planned development within the revised sanitary sewer service area on the capacity of the Fredonia sewage treatment plant was also summarized. Comments on the revised plan were then solicited.

At the hearing, the owner of an approximately seven-acre parcel situated west of STH 57, just north of the Village of Fredonia, requested that the parcel be excluded from the area being added to the sewer service area. The owner indicated that the parcel is a hobby farm that is served by a relatively new and properly functioning onsite sewage disposal system. The owner does not want the property to be connected to a public sanitary sewerage system. The owner also submitted letters to this effect prior to, and at, the hearing.

Review of the hearing record indicates that there were no other proposed changes to, or adverse comments regarding, the sewer service area plan as presented at the hearing.

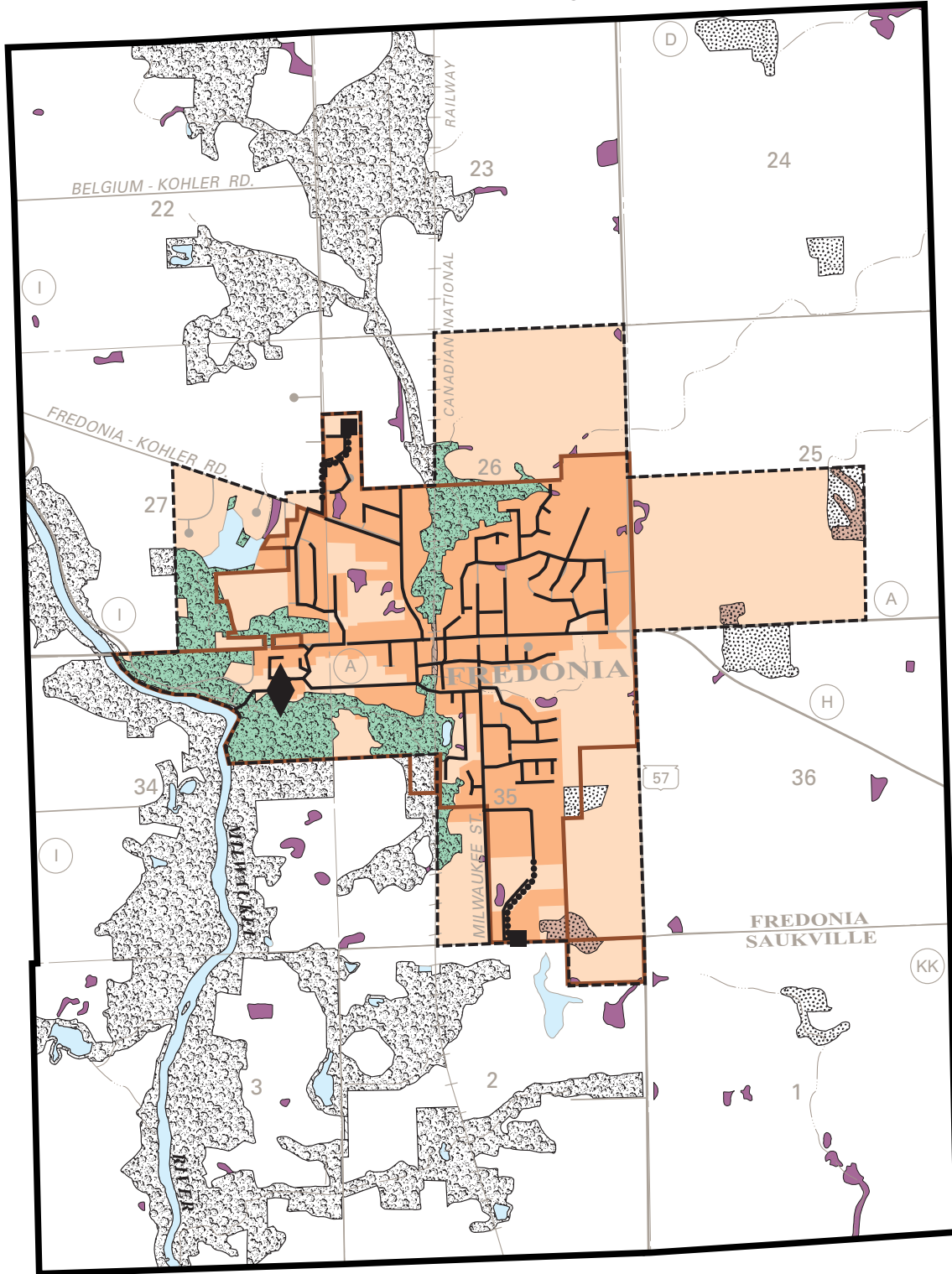
After the hearing, Village officials and Regional Planning Commission staff agreed that the parcel located west of STH 57, north of the Village, would be excluded from the final sewer service area plan, in accordance with the owner's wishes. It was concluded that exclusion of this parcel would not impact the provision of sewer service to adjacent lands proposed to be added to the sewer service area.

POST-PUBLIC HEARING PLAN

The post-public hearing plan is shown on Maps 6 and 7. The post-hearing plan is identical to the pre-hearing plan except for the exclusion of the seven-acre parcel located west of STH 57, north of the Village of Fredonia, as described above.

The additions to the sewer service area proposed under the post-public hearing plan encompass 522 acres, including 28 acres of existing urban land and street rights-of-way; 37 acres of environmentally significant lands; and 457 acres of agricultural and other open lands. The environmentally significant lands consist of 6 acres of primary environmental corridor, 28 acres of isolated natural resource areas, and 3 acres of small wetlands less than five acres in size.

VILLAGE OF FREDONIA PLANNED SANITARY SEWER SERVICE AREA
(Pre-Public Hearing)



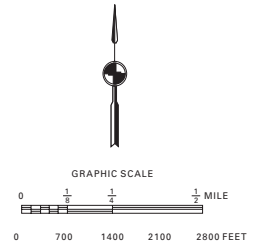
- PRIMARY ENVIRONMENTAL CORRIDOR
- SECONDARY ENVIRONMENTAL CORRIDOR
- ISOLATED NATURAL RESOURCE AREA
- WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
- EXISTING AREA SERVED BY PUBLIC SANITARY SEWER SYSTEM: 2000
- PLANNED SANITARY SEWER SERVICE AREA: 2020

RESTRICTIONS ON SEWERED DEVELOPMENT

PRIMARY ENVIRONMENTAL CORRIDORS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA: THE EXTENSION OF SEWERS TO SERVE NEW DEVELOPMENT IS CONFINED TO LIMITED RECREATIONAL AND INSTITUTIONAL USES AND RURAL-DENSITY RESIDENTIAL DEVELOPMENT IN AREAS OTHER THAN WETLANDS, FLOODLANDS, SHORELANDS, AND STEEP SLOPES.

PORTIONS OF SECONDARY ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCES AREAS WHICH ARE COMPRISED OF WETLANDS, FLOODLANDS, SHORELANDS, AND STEEP SLOPES: THE EXTENSION OF SEWERS TO SERVE NEW DEVELOPMENT IN THESE AREAS IS NOT PERMITTED.

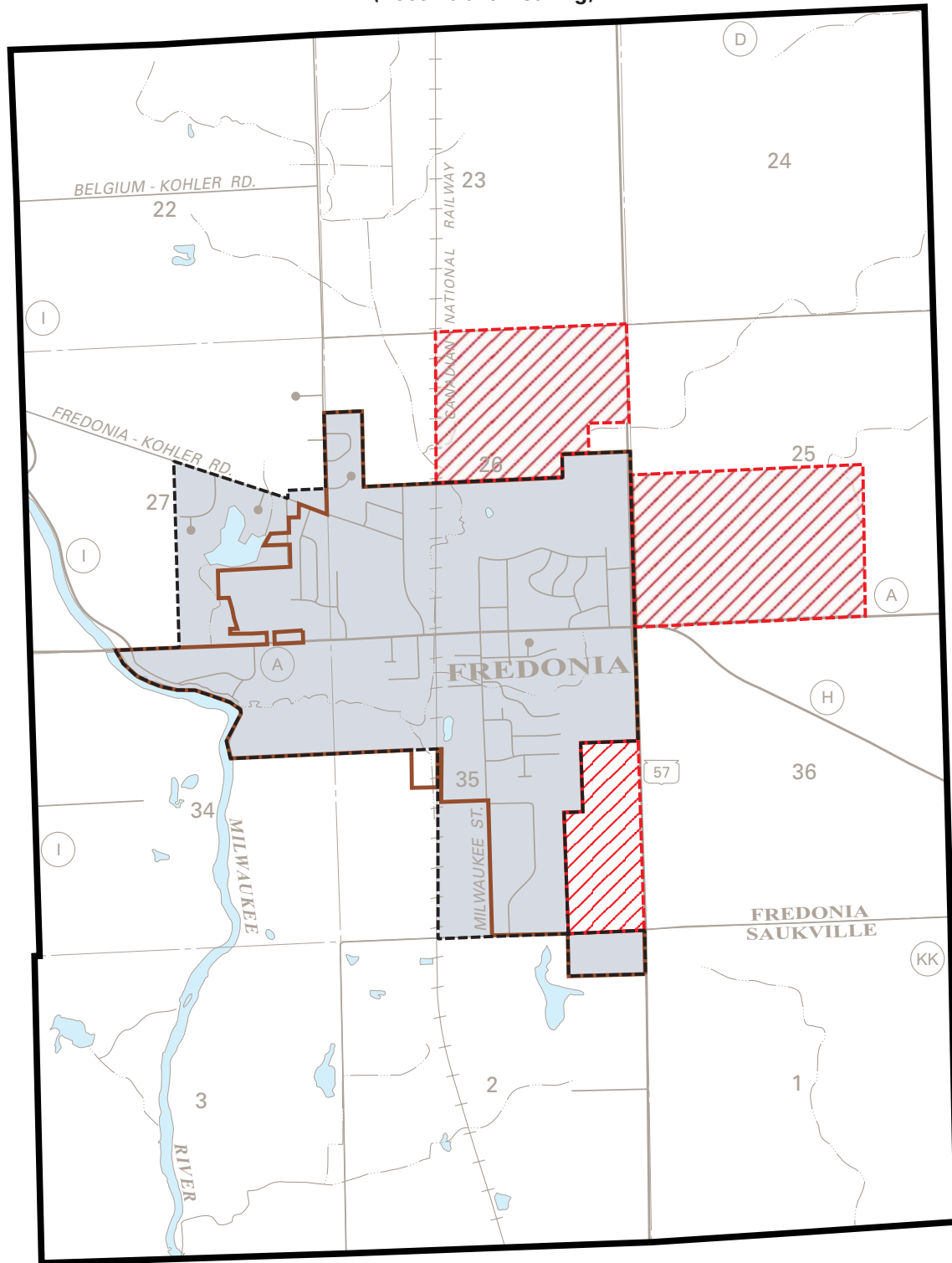
- PLANNED SANITARY SEWER SERVICE AREA BOUNDARY
- EXISTING PUBLIC SEWAGE TREATMENT FACILITY
- EXISTING GRAVITY SEWER
- EXISTING FORCE MAIN
- EXISTING PUMPING STATION





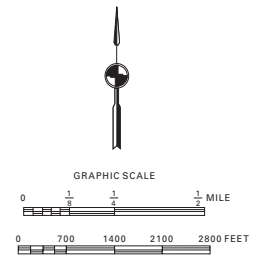
Source: SEWRPC.

Map 6

PROPOSED CHANGES TO THE VILLAGE OF FREDONIA SANITARY SEWER SERVICE AREA
(Post-Public Hearing)

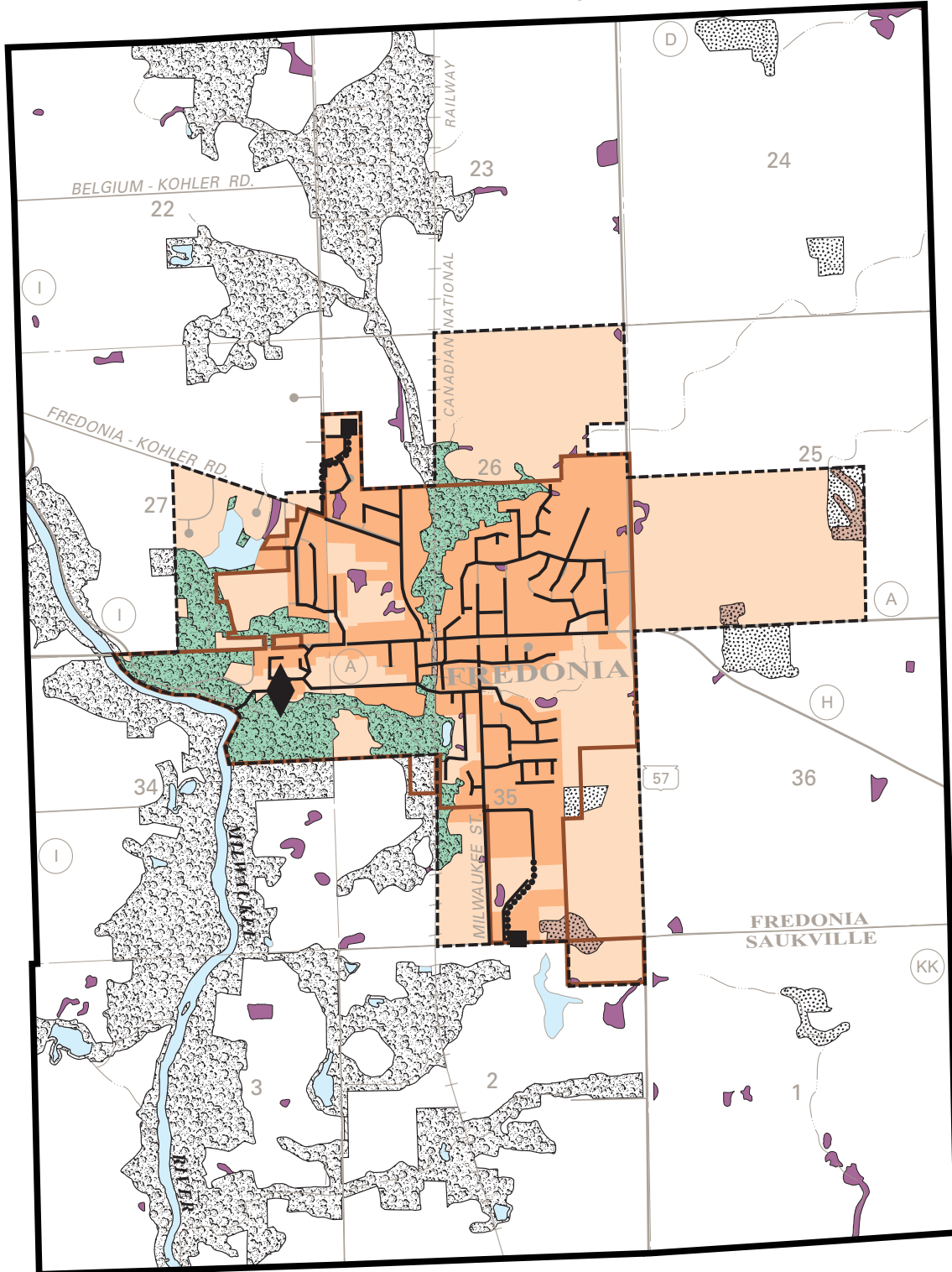


-  CURRENTLY ADOPTED VILLAGE OF FREDONIA SANITARY SEWER SERVICE AREA AS DEFINED IN SEWRPC COMMUNITY ASSISTANCE PLANNING REPORT NO. 96, AS AMENDED
-  AREAS PROPOSED TO BE ADDED TO THE VILLAGE OF FREDONIA SANITARY SEWER SERVICE AREA



Source: SEWRPC.

VILLAGE OF FREDONIA PLANNED SANITARY SEWER SERVICE AREA
(Post-Public Hearing)

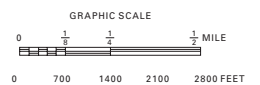


- PRIMARY ENVIRONMENTAL CORRIDOR
- SECONDARY ENVIRONMENTAL CORRIDOR
- ISOLATED NATURAL RESOURCE AREA
- WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
- EXISTING AREA SERVED BY PUBLIC SANITARY SEWER SYSTEM: 2000
- PLANNED SANITARY SEWER SERVICE AREA: 2020

RESTRICTIONS ON SEWERED DEVELOPMENT

- PRIMARY ENVIRONMENTAL CORRIDORS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA: THE EXTENSION OF SEWERS TO SERVE NEW DEVELOPMENT IS CONFINED TO LIMITED RECREATIONAL AND INSTITUTIONAL USES AND RURAL-DENSITY RESIDENTIAL DEVELOPMENT IN AREAS OTHER THAN WETLANDS, FLOODLANDS, SHORELANDS, AND STEEP SLOPES.
- PORTIONS OF SECONDARY ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCES AREAS WHICH ARE COMPRISED OF WETLANDS, FLOODLANDS, SHORELANDS, AND STEEP SLOPES: THE EXTENSION OF SEWERS TO SERVE NEW DEVELOPMENT IN THESE AREAS IS NOT PERMITTED.

- PLANNED SANITARY SEWER SERVICE AREA BOUNDARY
- EXISTING PUBLIC SEWAGE TREATMENT FACILITY
- EXISTING GRAVITY SEWER
- EXISTING FORCE MAIN
- EXISTING PUMPING STATION



Source: SEWRPC.

Including the proposed additions, the Fredonia sanitary sewer service area would encompass a total of 2.5 square miles, representing an increase of about 0.8 square mile, or 47 percent, over the currently adopted sewer service area.

The revised Fredonia sanitary sewer service area would accommodate a resident population of about 4,400 persons assuming full development of vacant lands within the sewer service area as envisioned under the Village of Fredonia comprehensive plan. This population level exceeds the high growth population projection range for the sewer service area for the year 2020 (3,450 persons) embodied in the regional land use plan and exceeds as well an extrapolation of the high-growth projection to the year 2024 (3,740 persons). This “overage”—the equivalent of about 250 households—is largely the result of the proposed addition of relatively large parcels located on either side of STH 57 and north of CTH A. Under the Village comprehensive plan, those parcels would be developed as mixed used neighborhoods, including residential and commercial development and related neighborhood amenities. The Village comprehensive plan is intended to comply with the Wisconsin’s “Smart Growth” planning legislation in this respect. Within each of the planned neighborhoods, all or nearly all of the land is under single ownership. The addition of those parcels to the sewer service area in their entirety is desirable insofar as it will help the Village to implement its comprehensive plan as it pertains to these areas in a coordinated, rather than a piecemeal, manner.

ENVIRONMENTALLY SIGNIFICANT LANDS

The revised sanitary sewer service area encompasses 276 acres, or about 0.4 square mile, of environmentally significant lands. This includes 222 acres of primary environmental corridor, 2 acres of secondary environmental corridor, 38 acres of isolated natural resource areas, and 14 acres of wetlands and surface water areas less than five acres in size. The delineation of these areas on Map 7 and elsewhere in this report reflects the most recently available natural resource base inventory data and floodplain information.

Under the sewer service area plan, it is envisioned that certain floodlands currently in agricultural and related uses would revert to a natural condition and become part of the adjacent environmental corridor. These areas are shaded green and yellow on Map 8. As a result, the planned environmentally significant lands within the revised Fredonia sewer service area shown on Maps 7 and 8 encompass 7 acres more than the existing environmentally significant lands shown on Map 3.³

Finally, Map 8 identifies undeveloped floodlands located outside the planned sewer service area that would be added to adjacent environmental corridors and isolated natural resource areas should the sewer service area be expanded. Shaded tan on Map 8, these areas encompass a total of 22 acres.

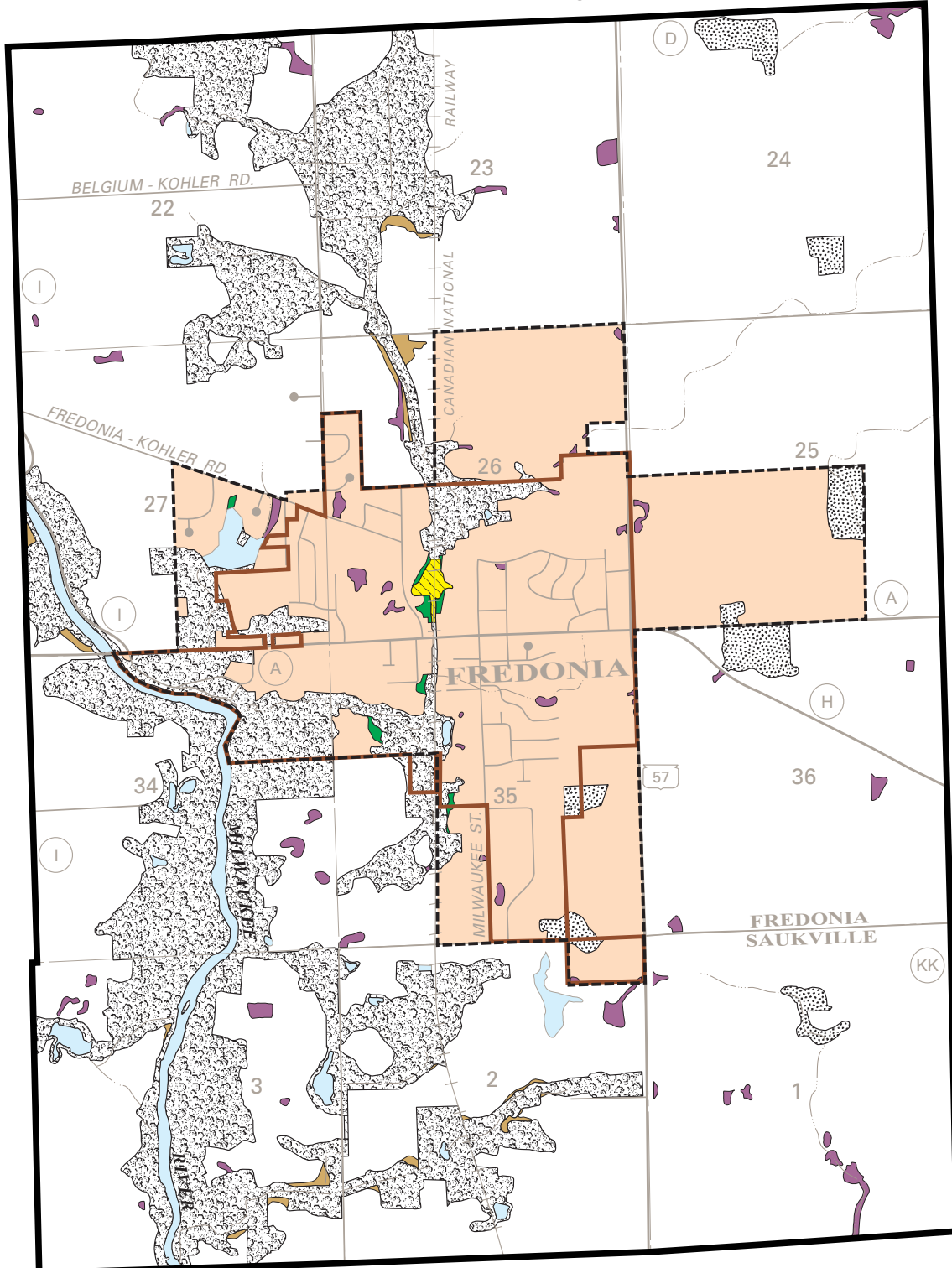
Restrictions on Sewered Development in Environmentally Significant Areas






Policies adhered to by the Wisconsin Department of Natural Resources and Department of Commerce in their regulation of sanitary sewerage systems prohibit or otherwise limit the extension of sanitary sewers to serve development in certain environmentally significant lands identified in local sewer service area plans. The following restrictions apply:




- The extension of sanitary sewers to serve new development in primary environmental corridors is confined to limited recreational and institutional uses and rural-density residential development (maximum of one dwelling unit per five acres) in areas other than wetlands, floodlands, shorelands, and steep slope. Primary environmental corridors within the proposed Fredonia sewer service area are shown with a green background color on Map 7.

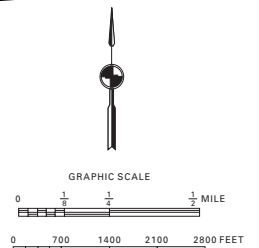
³*It is recognized that limited modification of floodplain boundaries may take place within flood fringe areas. Where no other natural resource features are impacted, the delineation of the environmental corridor or isolated natural resource area shown in the sewer service area plan may be amended to reflect such changes in the floodplain.*

ANTICIPATED CHANGES TO THE ENVIRONMENTALLY SIGNIFICANT LANDS IN THE VILLAGE OF FREDONIA STUDY AREA (Post-Public Hearing)



-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
-  PLANNED SANITARY SEWER SERVICE AREA BOUNDARY

-  UNDEVELOPED FLOODLANDS WITHIN PLANNED SANITARY SEWER SERVICE AREA TO BE ADDED TO THE PRIMARY ENVIRONMENTAL CORRIDOR
-  UNDEVELOPED FLOODLANDS LOCATED OUTSIDE THE PLANNED SANITARY SEWER SERVICE AREA THAT WOULD BE ADDED TO THE ENVIRONMENTAL CORRIDORS SHOULD THE SEWER SERVICE AREA BE EXPANDED
-  EXISTING SECONDARY ENVIRONMENTAL CORRIDOR TO BE RECLASSIFIED AS PRIMARY ENVIRONMENTAL CORRIDOR



Source: SEWRPC.

- The extension of sanitary sewers to serve development in portions of secondary environmental corridors and isolated natural resource areas comprised of wetlands, floodlands, shorelands, or steep slopes is not permitted. The portions of secondary environmental corridors and isolated natural resource areas comprised of wetlands, floodlands, shorelands, and steep slopes within the proposed sewer service area are shown with a tan background color on Map 7.

WATER QUALITY IMPACTS

Under the adopted regional water quality management plan and the revised sanitary sewer service area plan herein set forth, it is envisioned that all urban lands within the planned urban service area would receive sanitary sewer service. It is also envisioned that nearly all lands identified as primary environmental corridor would be retained in essentially natural open use. It is recognized, however, that certain land uses requiring sanitary sewer service could be properly located in the primary environmental corridors, including park and outdoor recreation facilities, certain institutional uses, and in some cases, extremely low density residential development at a density not to exceed one housing unit per five acres of upland corridor land, compatible with the preservation of the corridors in essentially natural, open uses. These plans also recognize that certain secondary environmental corridors and isolated natural resource areas may be converted to urban uses over the plan design period. However, current Federal, State, and local regulations may effectively preclude development of many such areas. Of particular importance in this regard are natural resource protection regulations dealing with wetlands, floodplains, shorelands, stormwater runoff, and erosion control. Therefore, it is important that the developer or local unit of government concerned determine if it is necessary to obtain any applicable Federal, State, or local permits before any proposed disturbance of wetlands, floodplains, or other regulated lands.⁴ In addition, the provision of public sanitary sewer service to those lands within the planned sanitary sewer service area which are currently developed and served by onsite sewage disposal systems may be expected to reduce the pollutant loadings from the existing onsite sewage disposal systems to both surface and ground waters.

Accordingly, assuming that any applicable Federal, State, and local permits are obtained and that proper site development and construction practices are employed, there should be no significant adverse water quality impacts attributable to the development of the planned sanitary sewer service area.

COST-EFFECTIVENESS ANALYSIS OF SEWAGE CONVEYANCE AND TREATMENT ALTERNATIVES

All of the proposed additions to the Fredonia sewer service area lie adjacent to the currently adopted sewer service area. The nearest other public sanitary sewer service area is located more than three miles from the subject areas. No further analysis is deemed to be required to conclude that the subject areas would be served most cost-effectively through connection to the sewerage system tributary to the Village of Fredonia sewage treatment facility.

SEWAGE TREATMENT PLANT CAPACITY IMPACT ANALYSIS

The Fredonia sewage treatment plant has a hydraulic design capacity to treat 0.60 million gallons per day (mgd) of wastewater on an average annual basis. The current (2003) loading to the plant is about 0.20 mgd on an average annual basis. The increase in the population from about 1,930 persons in 2000 to about 4,400 persons, assuming full development of vacant lands within the sewer service area as envisioned in the Village of Fredonia

⁴*It should be noted that the sanitary sewer service area map set forth herein, particularly the environmental corridors and isolated natural resource areas shown thereon, are a representation of conditions at the time of map preparation and that such physical features may change over time from natural or human causes. Therefore, the presence and location of wetlands, navigable water, floodplains, and similar site features should be verified by developers, and applicable permits obtained prior to any land disturbing activity.*

comprehensive plan, is estimated to result in a flow rate of 0.45 to 0.55 mgd, with total flows being somewhat dependent upon the sewage flows generated by new commercial and industrial land uses.

It should be noted that, under the regional water quality management plan, sewage from the Waubeka area would be conveyed to the Village of Fredonia sewage treatment plant for treatment and disposal, if and when sanitary sewer service is extended to that area. It is estimated that the currently adopted Waubeka sewer service area would accommodate a population of 670 persons upon full development. The attendant sewage flow is estimated at approximately 0.08 mgd.

The current sewage treatment plant capacity is considered adequate. It is possible, however, that facility planning for a plant expansion may be needed toward the end of the planning period, or as full development conditions are approached. The need for such actions would be identified through the compliance maintenance reporting process.

VILLAGE OF FREDONIA ACTION ON THE PROPOSED SEWER SERVICE AREA AMENDMENT

The Fredonia Village Board of Trustees approved the revised sanitary sewer service area plan on February 5, 2004.

IMPLEMENTING RECOMMENDATIONS

It is recommended that the following steps be taken to implement the sanitary sewer service area proposals contained in this report:

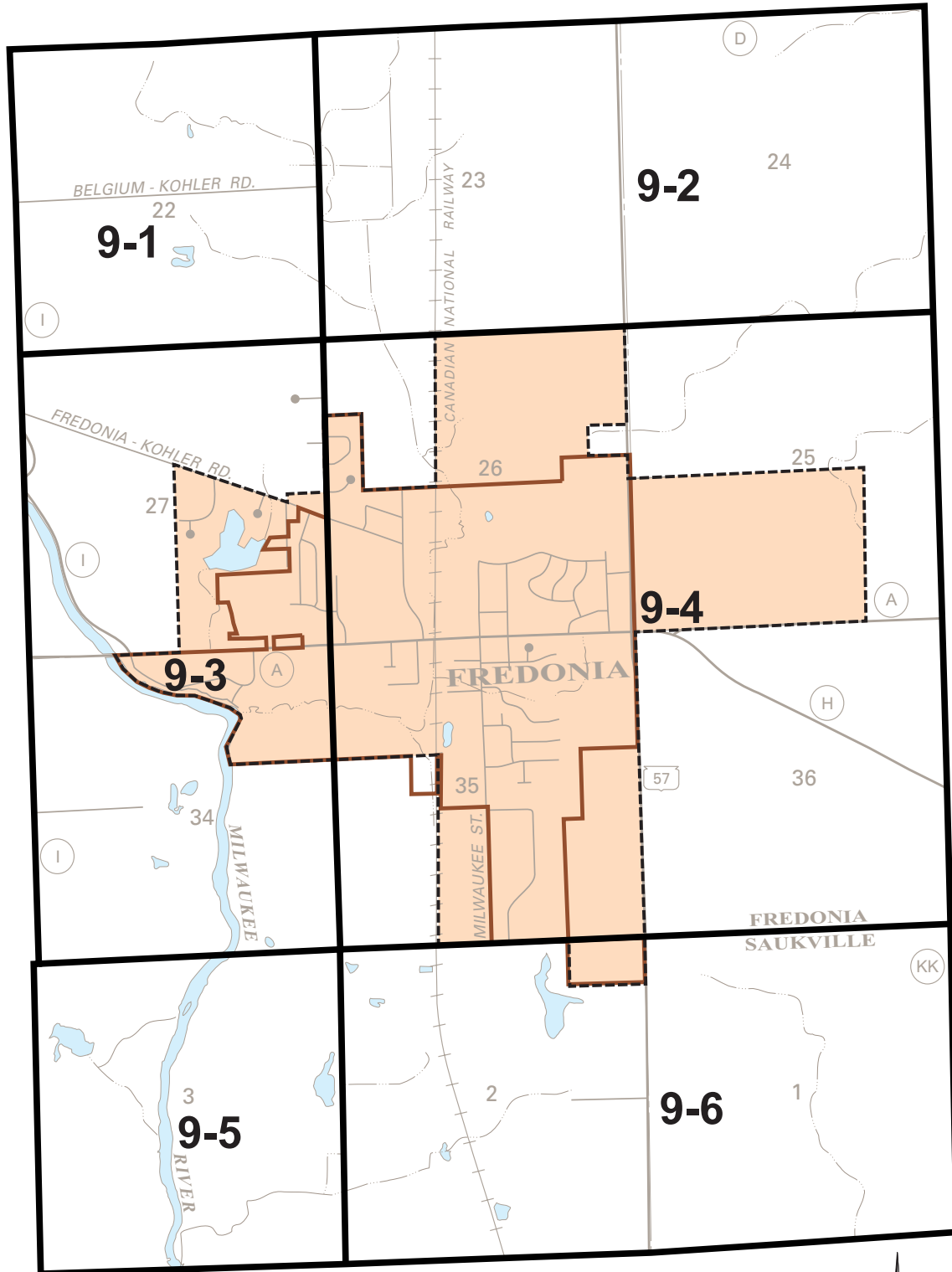
1. In addition to adoption by the Village of Fredonia, formal adoption of SEWRPC Planning Report No. 30, *A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000*, and this SEWRPC Community Assistance Planning Report by the Town of Fredonia is recommended. In addition, endorsement of the plan by Ozaukee County, as having joint responsibility with the Town of Fredonia in planning and zoning and otherwise regulating the development of lands in the unincorporated portion of the study area, would be desirable.
2. Formal adoption of this SEWRPC Community Assistance Planning Report by the Regional Planning Commission as an amendment to the regional water quality management plan set forth in SEWRPC Planning Report No. 30, with certification of this report as a plan amendment to all parties concerned, including the Wisconsin Natural Resources Board and the U.S. Environmental Protection Agency.
3. Review by the local units of government concerned of their zoning, land subdivision control, and related ordinances to ensure that the policies expressed in such ordinances reflect the urban development recommendations inherent in the Fredonia sanitary sewer service area as shown on Map 7. In particular, steps should be taken to ensure that those lands identified as being environmentally significant in this report are properly zoned to reflect a policy of retaining such lands, insofar as possible, in essentially natural, open uses.
4. Review by the Village of Fredonia of utility extension policies to ensure that such policies are consistent with the urban land development recommendations inherent in the delineation of the planned sanitary sewer service area.

SUBSEQUENT REVISIONS TO THE FREDONIA SEWER SERVICE AREA

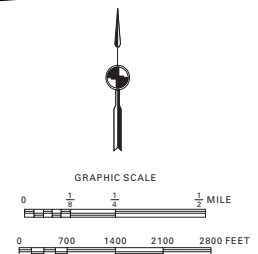
This report presents the revised Fredonia sewer service area tributary to the Village of Fredonia sewage treatment facility. The revised sewer service area was subjected to review at a public hearing. It is envisioned that the delineated sewer service area will accommodate new urban development anticipated in the Fredonia area to the

year 2020. Like other long-range plans, however, this sewer service area plan should be periodically reviewed, at about five year intervals, to assure that it continues to properly reflect local urban development objectives, especially as such objectives may relate to the amount and spatial distribution of new urban development requiring sewer service. Should it be determined that amendments to the sewer service area plan as presented herein are necessary, the Village of Fredonia should ask the Southeastern Wisconsin Regional Planning Commission for assistance in undertaking the technical work required to properly amend the plan. Any such plan revision should be carried out in a manner similar to that utilized in the revision effort described in this report.

**INDEX OF MAPS SHOWING ENVIRONMENTALLY SIGNIFICANT LANDS AND
PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF FREDONIA**



Source: SEWRPC.






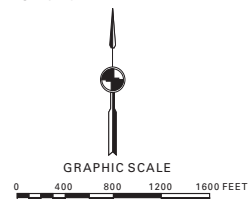
ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF FREDONIA

U. S. Public Land Survey Section 22
Township 12 North, Range 21 East



Photography Date: March 2000

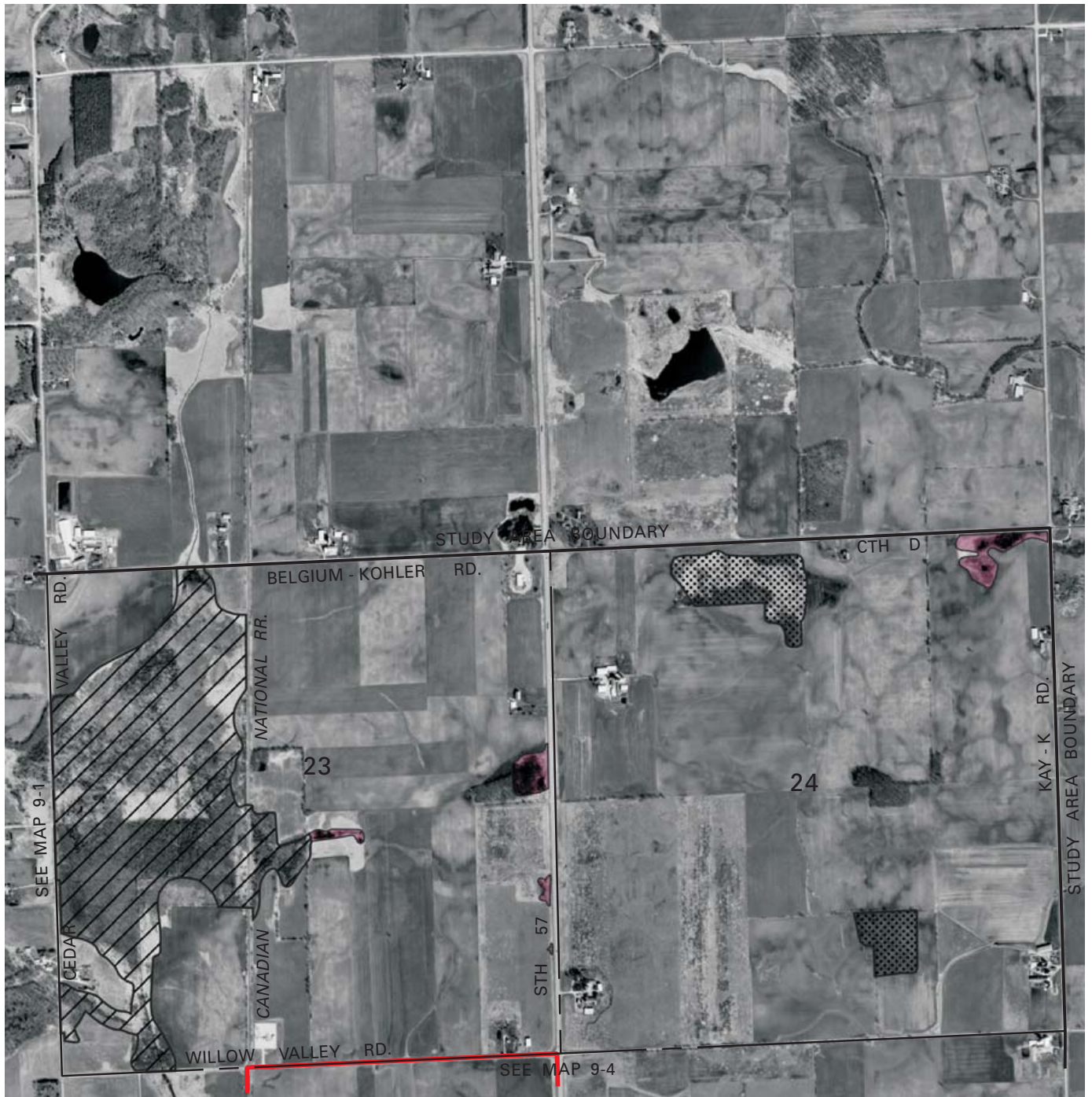
-  PRIMARY ENVIRONMENTAL CORRIDOR
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
-  SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS







Source: SEWRPC.

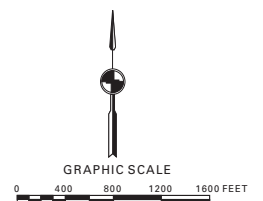
ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF FREDONIA

U. S. Public Land Survey Sections 23 and 24
Township 12 North, Range 21 East



Photography Date: March 2000

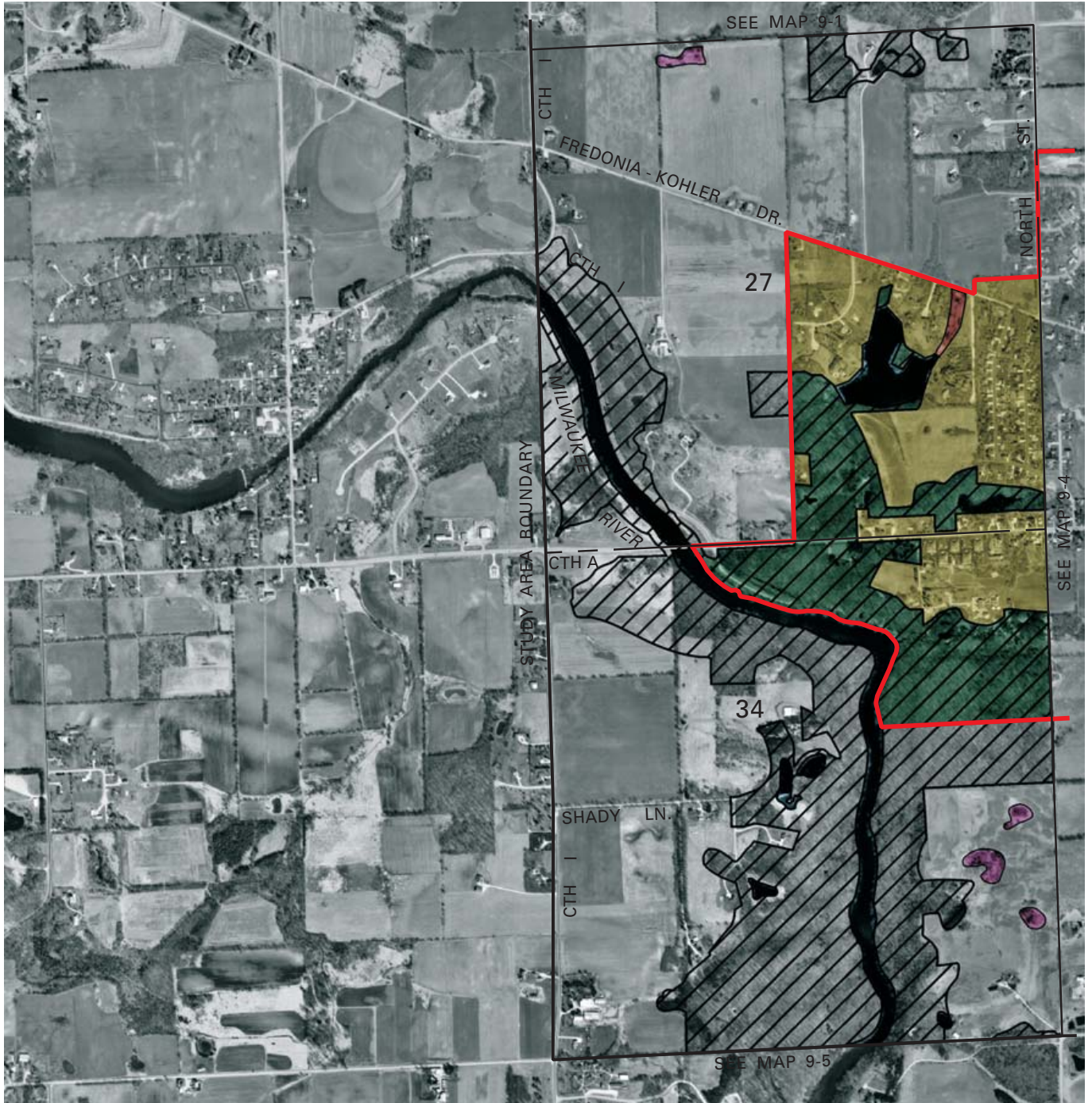
-  PRIMARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY







Source: SEWRPC.

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF FREDONIA


**U. S. Public Land Survey Sections 27 and 34
Township 12 North, Range 21 East**



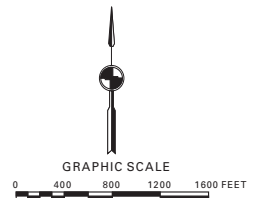
-  PRIMARY ENVIRONMENTAL CORRIDOR
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
-  SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

-  PLANNED SANITARY SEWER SERVICE AREA

RESTRICTIONS ON SEWERED DEVELOPMENT

-  PRIMARY ENVIRONMENTAL CORRIDORS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA: THE EXTENSION OF SEWERS TO SERVE NEW DEVELOPMENT IS CONFINED TO LIMITED RECREATIONAL AND INSTITUTIONAL USES AND RURAL-DENSITY RESIDENTIAL DEVELOPMENT IN AREAS OTHER THAN WETLANDS, FLOODLANDS, SHORELANDS, AND STEEP SLOPES.

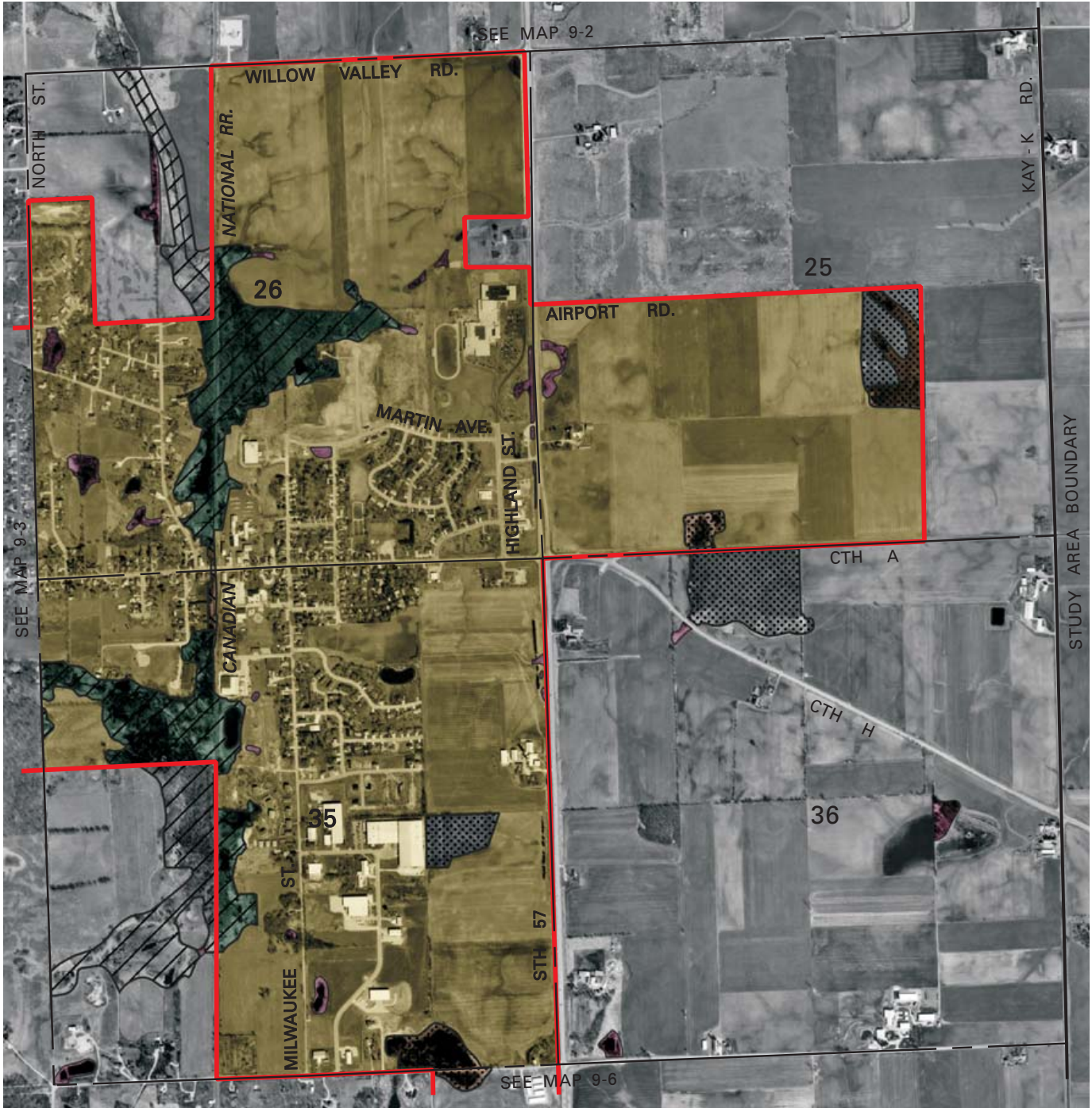
Photography Date: March 2000









Source: SEWRPC.

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF FREDONIA

U. S. Public Land Survey Sections 25, 26, 35, and 36
Township 12 North, Range 21 East





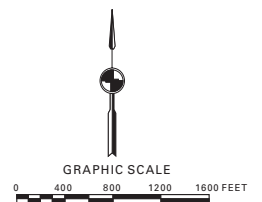
Photography Date: March 2000

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
-  SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

-  PLANNED SANITARY SEWER SERVICE AREA

RESTRICTIONS ON SEWERED DEVELOPMENT

-  PRIMARY ENVIRONMENTAL CORRIDORS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA: THE EXTENSION OF SEWERS TO SERVE NEW DEVELOPMENT IS CONFINED TO LIMITED RECREATIONAL AND INSTITUTIONAL USES AND RURAL-DENSITY RESIDENTIAL DEVELOPMENT IN AREAS OTHER THAN WETLANDS, FLOODLANDS, SHORELANDS, AND STEEP SLOPES.
-  PORTIONS OF SECONDARY ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA WHICH ARE COMPRISED OF WETLANDS, FLOODLANDS, SHORELANDS, AND STEEP SLOPES: THE EXTENSION OF SEWERS TO SERVE NEW DEVELOPMENT IN THESE AREAS IS NOT PERMITTED.






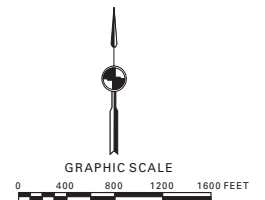
ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF FREDONIA

**U. S. Public Land Survey Section 3
Township 11 North, Range 21 East**



Photography Date: March 2000

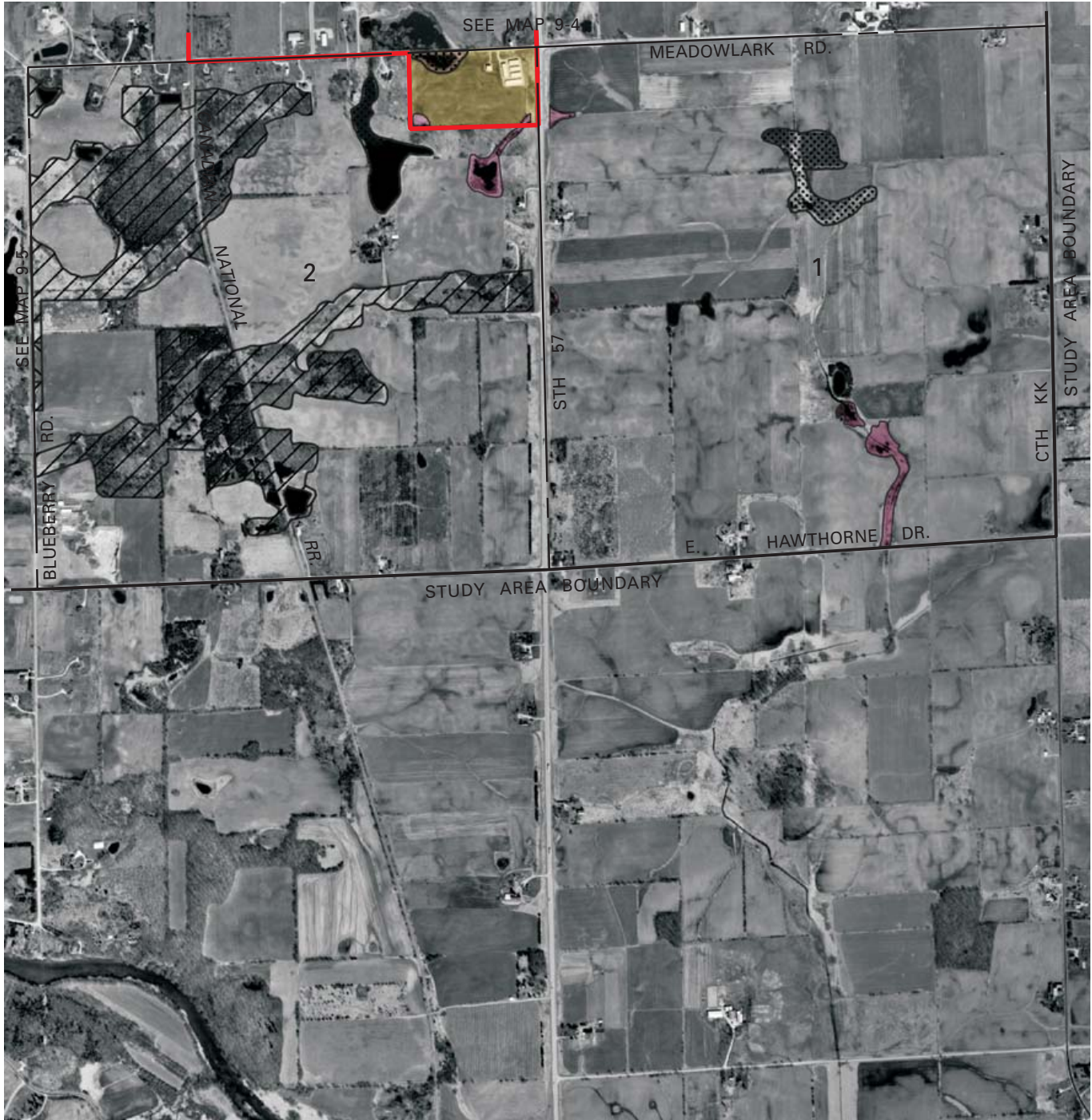
-  PRIMARY ENVIRONMENTAL CORRIDOR
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
-  SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS








Source: SEWRPC.

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF FREDONIA

**U. S. Public Land Survey Sections 1 and 2
Township 11 North, Range 21 East**




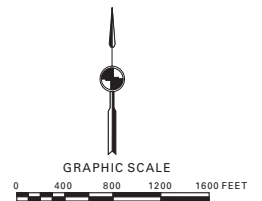
Photography Date: March 2000

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
-  SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

 PLANNED SANITARY SEWER SERVICE AREA

RESTRICTIONS ON SEWERED DEVELOPMENT

 PORTIONS OF SECONDARY ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA WHICH ARE COMPRISED OF WETLANDS, FLOODLANDS, SHORELANDS, AND STEEP SLOPES: THE EXTENSION OF SEWERS TO SERVE NEW DEVELOPMENT IN THESE AREAS IS NOT PERMITTED.



APPENDIX

**VILLAGE OF FREDONIA
VILLAGE BOARD MEETING
February 5, 2004**

Present: Bob Rath sack, Rick Buetow, Bill Hamm, Ken Kontny, Lew Robinson, Joe Short, Larry Waskiewicz, and Io Ann Wagner. Also present: Gary Buntrock, Robert and Sandra Thiel, Carla Thistle, Bill Stauber (from S.E.W.R-P.C.), Bruce Keyes, and Peter DeTuncq. Arriving later: Chris Kunstmann, Dorothy Thompson, Maxine Schwinn, Ron Ansay, and Al Eischstaedt.

Public Hearing on Proposed Revisions to Sanitary Sewer Service Area

The public hearing on the proposed revisions to the sanitary sewer service area for the Village of Fredonia was called to order at 7:00 p.m. President Rath sack stated that the village is looking at revising its sanitary sewer service area. Bill Stauber, from the Southeastern Wisconsin Regional Planning Commission, stated that their agency is the water quality planning agency for a seven county area which includes Ozaukee County. SEWRPC has prepared the draft of the sanitary sewer service area for the Village of Fredonia. Certain standards must be met and include: establishing the outer boundary for sanitary sewer service; and providing a measure of protection to environmentally sensitive areas within the plan area. The plan is advisory but is used in regulating sewer extensions. The first sanitary sewer service area plan was adopted in 1984. A small amendment to the plan was made in 2002. The village requested that the sanitary sewer service area be revised to reflect the comprehensive plan. The Waubeka area is also a part of the sanitary sewer service area and has been part of the plan since 1984. This has not changed. About 530 acres are proposed to be added to the sanitary sewer service area. This includes about 37 acres of environmentally sensitive areas- 460 acres of ag land and other open space, and 35 acres of urban land and street right-of-way. The environmentally significant land consist of 28 acres of primary environmental corridor, 6 acres of isolated natural resource areas, and 3 acres of small wetlands less than five acres in size. The sanitary sewer service area would increase by .8 square miles to 2.5 square miles - an increase of 47%. The revised sanitary sewer service area would accommodate a population of about 4,400. The environmentally sensitive areas, including the primary and secondary environmental corridors, wetlands and woodlands, are under state oversight and the following restrictions apply:

- The extension of sanitary sewers to serve new development in primary environmental corridors is confined to limited recreational and institutional uses and rural-density residential development (maximum of one dwelling unit per five acres) in areas other than wetlands, floodlands, shorelands, and steep slope.
- The extension of sanitary sewers to serve development in portions of secondary environmental corridors and isolated natural resource areas comprised of wetlands, floodlands, shorelands, or steep slopes is not permitted.

The Fredonia Wastewater Treatment Plant has a design capacity of .6 million gallons per day. With development of the land within the sewer service area it is estimated that the flow rate will be .45 to .55 mgd. Robert Thiel questioned if the village will be annexing his land into the village. Rath sack stated that the village does not annex property unless a petition is received from the property owner. Two letters from Kendall and Carla Thistle and one letter from JBJ Development (Scott Bence, agent) were read into the record (letters are attached and part of these minutes). Kendall and Carla Thistle requested that their 7.25 acre parcel be removed from the sanitary sewer service area. Scott Bence, on behalf of Wayne and Judy Wolff supported the inclusion of their total property in the sanitary sewer service area. Ron Ansay questioned if this regulates storm water also. Rath sack stated that the sanitary sewer service area plan only addresses areas where sewer service can be provided. As part of any plat approval, storm water issues would be addressed. Ansay questioned the purpose of the changes to the sanitary sewer service area. Rath sack stated that the village knew annexation petitions were coming so put a moratorium on development while a comprehensive land use plan was created. The sanitary sewer service area now needs to be changed to accommodate expected growth areas.

Close of Public Hearing and Call to Order of Village Board Meeting

With no further comments or questions, the public hearing was closed and the regular village board meeting was called to order by President Rath sack at 7:28 p.m.

Kendall and Carla Thistle
N5549 Hwy 57
Belgium, WI 53004
(Mailing Address)
P.O. Box 7
Fredonia, WI 53021

To: SEWRPC Representative
RE: Sanitary Sewer Plan

We have received your letter informing us of the proposal to amend the Fredonia sanitary sewer service area. We will not be able to attend the public hearing on February 5, 2004. We are not sure what impact this has on our property. However, we do have some questions.

We have 7.25 acres in the S.E. corner of the parcel shown directly north of Fredonia. We are in the township of Fredonia. Our parcel is not being annexed into the village. Our little hobby farm is currently serviced by a well and septic system. The septic system is fairly new and according to the Ozaukee Co. Reps. It should remain working for up to 20-30 more years.

Some of our questions are as follows:

What does this mean to us to be included in this area?

Do we have to be included in this area?

How would we opt out if this is an option?

Will there be any costs to us to be in this area?

A one time fee or annual fee such as a tax increase?

Do we have to connect to sewer and water when available?

Does being included in this area give the village any ability to claim the right of way's through our property for sewer and water easements?

Thank you for your cooperation,
Kendall and Carla Thistle

Kendall and Carla Thistle
N5549 Hwy 57
Belgium, WI 53004
(Mailing Address)
P.O. Box 7
Fredonia, WI 53021

To: SEWRPC Representative
RE: Sanitary Sewer Plan

We will exercise our right to not be included in this Sanitary Sewer Plan Area
We want to have our 7.25 acres in the S.E. comer of the parcel shown directly north of
Fredonia removed from the planning area.

Thank you for your cooperation,

Kendall and Carla Thistle



J.B.J. Development
A division of J.B.J. Companies, Inc.

W178 N9912 Rivercrest Drive, Suite 101
Germantown, WI 53022-4645
Phone: 262-255-1800
Fax: 262-255-2234
www.jbjcompanies.com

February 5, 2004
Village of Fredonia
416 Fredonia Avenue
Fredonia, WI 53021

Re: Public hearing on the proposed revisions to the sanitary sewer service area for the Village of Fredonia, February 5, 2004.

To: The Fredonia Village Board

We request that this letter be read into the minutes for the above public hearing.

J.B.J. Development as agent for Wayne and Judy Wolff have filed an annexation petition for the property at N5390 Hwy 57 (Tax Key#040250900000). It is the Wolff's desire to develop their property in accordance with the Village's Comprehensive Plan-2020. In order to develop the Wolff farm the sanitary sewer district line must be expanded.

We request that the sanitary sewer district be expanded to include the **entire parcel** of land owned by the Wolff's. It is our understanding that the proposed sanitary sewer district plan includes the entire Wolff panel.

On behalf of Wayne and Judy Wolff we support the sanitary sewer district expansion.

Sincerely,

Scott J. Bence, agent
J.B.J. Development

cc: Bill Stauber, SEWRPC, (wstauber@sewrpc.org)