

BROOKFIELD

AMENDMENT TO THE

REGIONAL WATER QUALITY MANAGEMENT PLAN

CITY OF BROOKFIELD

AS ADOPTED BY THE

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

JUNE 1998

GREENFIELD

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Kenneth R. Yunker, PE Assistant Director
Robert P. Biebel, PE Chief Environmental Engineer
Monica C. Drowniany, AICP Chief Community Assistance Planner
Leland H. Kreblin, RLS Chief Planning Illustrator
Elizabeth A. Larsen Administrative Officer
Donald R. Martinson, PE Chief Transportation Planner
John G. McDougall Geographic Information Systems Manager
John R. Meland Chief Economic Development Planner
Donald M. Reed Chief Biologist
Bruce P. Rubin Chief Land Use Planner

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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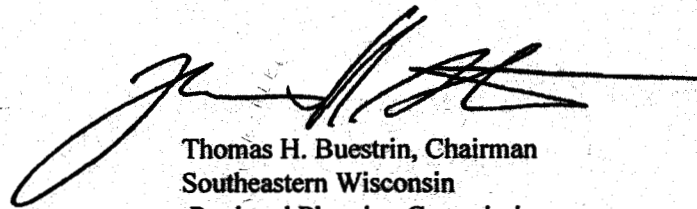
KENOSHA
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SUBJECT: Certification of Amendment to the Adopted Regional Water Quality Management Plan (Brookfield/Elm Grove Sanitary Sewer Service Area)

TO: The Legislative Bodies of Concerned Local Units of Government within the Southeastern Wisconsin Region, namely: the County of Waukesha, the City of Brookfield, and the Milwaukee Metropolitan Sewerage District

This is to certify that at the meeting of the Southeastern Wisconsin Regional Planning Commission, held at the Washington County Courthouse, West Bend, Wisconsin, on the 17th day of June 1998, the Commission did by unanimous vote by all Commissioners present, being 15 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 Brookfield/Elm Grove 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 Waukesha, Wisconsin, this 18th day of June 1998.



Thomas H. Buestrin, Chairman
Southeastern Wisconsin
Regional Planning Commission

ATTEST:

Philip C. Evenson
Philip C. Evenson, Deputy Secretary

RESOLUTION NO. 98-5

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 (BROOKFIELD/ELM GROVE SANITARY SEWER SERVICE AREA)

WHEREAS, pursuant to Section 66.945(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 12th day of December 1991, the Commission duly adopted an amendment to the regional water quality management plan refining and detailing the Brookfield/Elm Grove sanitary sewer service area as documented in SEWRPC Community Assistance Planning Report No. 109, Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin, November 1991; and

WHEREAS, by letter dated February 23, 1998, the City of Brookfield requested that the Commission amend the Brookfield sanitary sewer service area to remove certain lands from the portion of the sewer service area tributary to the Fox River Water Pollution Control Center sewage treatment plant, and add those lands to the portion of the sewer service area tributary to the Milwaukee Metropolitan Sewerage District sewerage system; and

WHEREAS, the proposed amendment to the regional water quality management plan is documented in a Commission staff memorandum entitled, "Response to Request by the City of Brookfield to Amend the Brookfield Sanitary Sewer Service Area," attached hereto and made a part hereof; and

WHEREAS, the requested change to the regional water quality management plan, as documented in the aforementioned staff memorandum, was the subject of a public hearing held jointly by the City of Brookfield and the Regional Planning Commission on May 28, 1998; and

WHEREAS, Section 66.945(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;

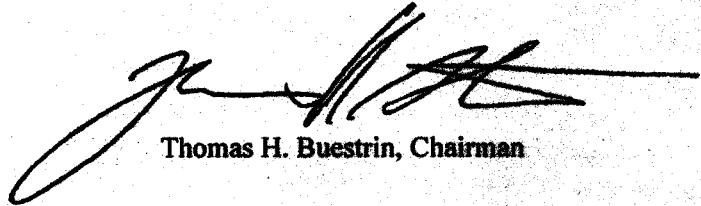
NOW, THEREFORE, BE IT HEREBY RESOLVED:

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 12th day of December 1991 as set forth in SEWRPC Community Assistance Planning Report No. 109, be and the same hereby is amended in the manner identified on Map 1 of the aforementioned SEWRPC staff memorandum.

SECOND: That the Executive Director is authorized to submit findings to the Wisconsin Department of Natural Resources and the Wisconsin Department of Commerce that public and private sanitary sewer extensions necessary to serve the lands concerned are in conformance with, and would serve to implement, the adopted regional water quality management plan as herein amended.

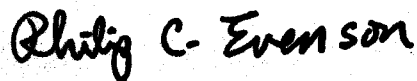
THIRD: That a true, correct, and exact copy of this resolution, together with the aforereferenced SEWRPC staff memorandum, shall be forthwith distributed to each of the local legislative bodies of the local governmental units within the Region entitled thereto and to such other bodies, agencies, or individuals 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 17th day of June 1998, the vote being: Ayes 15; Nays 0.



Thomas H. Buestrin, Chairman

ATTEST:



Philip C. Evenson, Deputy Secretary

SEWRPC STAFF MEMORANDUM

RESPONSE TO REQUEST BY THE CITY OF BROOKFIELD TO AMEND THE BROOKFIELD SANITARY SEWER SERVICE AREA

INTRODUCTION AND BACKGROUND

By letter dated February 23, 1998, the City of Brookfield requested that the Southeastern Wisconsin Regional Planning Commission amend the Brookfield sanitary sewer service area as that area is currently documented in SEWRPC Community Assistance Planning Report No. 109, Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin, dated November 1991. The basic purpose of the amendment would be to remove certain lands from the portion of the sewer service area tributary to the Fox River Water Pollution Control Center (FRWPCC) sewage treatment plant, and add those lands to the portion of the sewer service area tributary to the Milwaukee Metropolitan Sewerage District (MMSD) sewerage system.

AREA DESCRIPTION

As shown on Map 1, the area proposed to be removed from the area tributary to the FRWPCC and added to the area tributary to the MMSD encompasses approximately 190 acres and is bounded by Bluemound Road (STH 18) on the north; I-94 on the south; Rosedale Road on the west; and by Sunnyslope Road, Stockton Court, and Concord Drive on the east. This area is located in U.S. Public Land Survey Sections 26 (south half) and 35 (north half), Town 7 North, Range 20 East, in the City of Brookfield, Waukesha County, Wisconsin. This area represents less than one percent of the currently adopted sewer service area, and does not contain any environmentally sensitive lands. The subject area is fully developed for residential use and contains 277 existing housing units, with an estimated population of about 770 persons. The subject area has recently experienced sanitary surcharging, causing sewage to back up into basements.

WATER QUALITY IMPACTS

Since the amendment is concerned only with an exchange of a fully developed urbanized area already served by public sanitary sewers from one sanitary sewer service area to another, and since there are no environmentally significant lands located within the subject area, there are no adverse water quality impacts attributable to this proposed action. Indeed, positive water quality benefits could result because the proposed change would eliminate the necessity of pumping polluted water from basements of homes experiencing sewage back-ups to surrounding surface areas, ditches, and tributary streams.

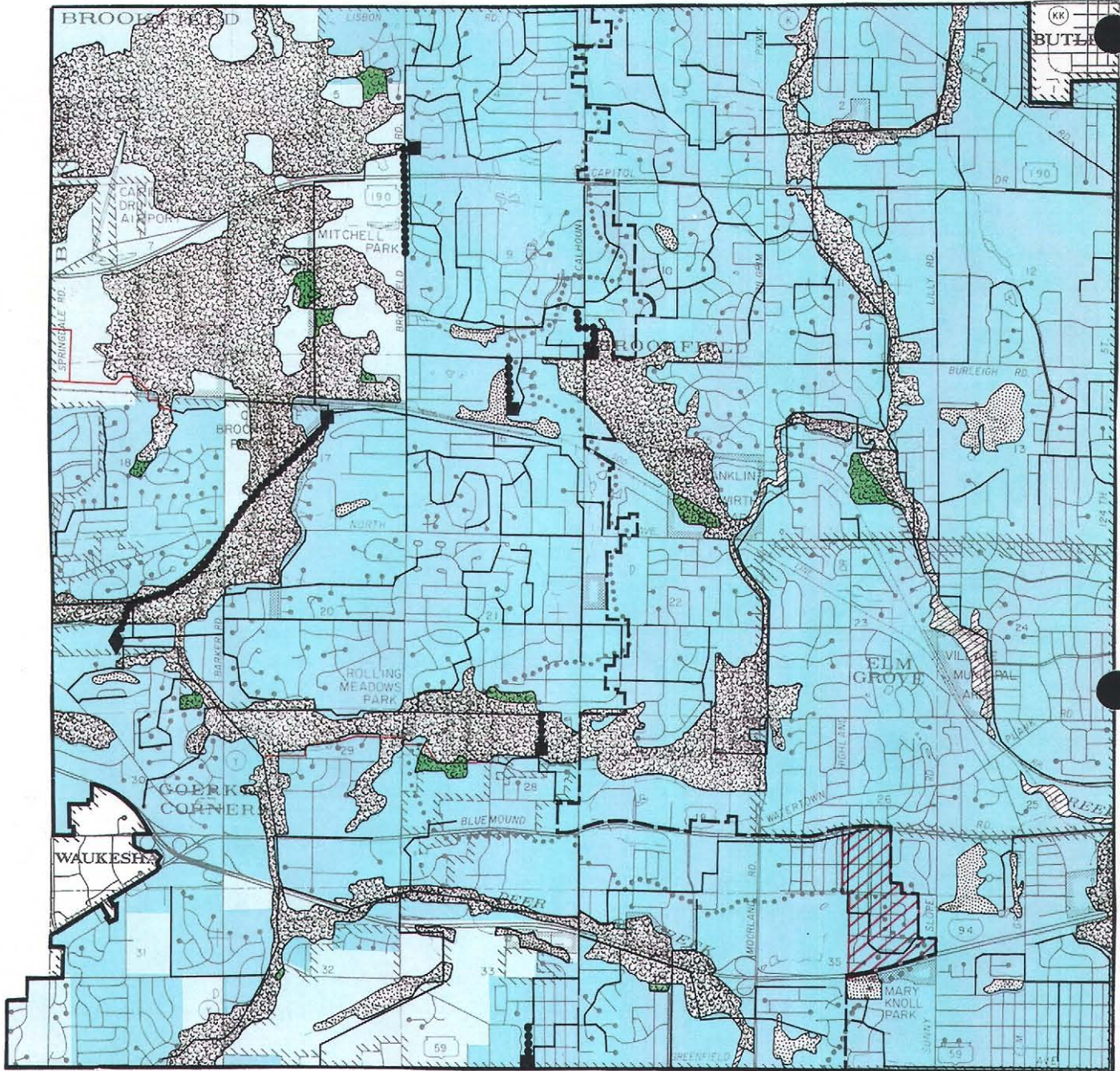
COST-EFFECTIVENESS ANALYSIS

The lands in question lie completely within the currently approved Brookfield/Elm Grove sanitary sewer service area and are fully developed. The sewer system currently drains westerly to the City's Fox River Water Pollution Control Center sewage treatment plant through sewers traversing the Brookfield Square shopping center and then through sewers located in local street rights-of-way to Calhoun Road, where the sewer connects to the Deer Creek trunk sewer. Portions of the downstream sewer system are undersized for the current loadings during wet weather periods, resulting in sanitary sewer surcharging causing sewage to back up into the basements of a number of residences in the area. The City and its consultant have evaluated alternative means of resolving the identified problems. Three of the alternatives entail continued conveyance to the west by providing for sanitary sewer relief and replacement projects. These alternatives involve capital costs ranging from about \$575,000 to \$1,400,000. One alternative entails construction of selected sewers to convey sewage from the subject area to the east with a connection to an existing sewer in the Blue Mound Road right-of-way, just east of Sunnyslope Road, which drains to the Milwaukee Metropolitan Sewerage District sewerage system. The capital cost of this alternative plan is about \$400,000.

Based upon review and analysis of the costs and the anticipated effectiveness of the alternatives considered, the alternative which provides for conveyance to the Milwaukee Metropolitan Sewerage District sewerage system was selected by the City and is considered to be the most cost-effective.

Map 1

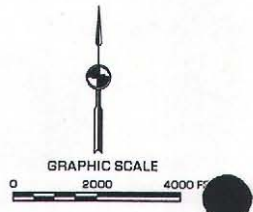
RECOMMENDED REVISION TO THE BROOKFIELD/ELM GROVE SANITARY SEWER SERVICE AREA



R 19 E, R 20 E

LEGEND

- | | | | |
|--|--|--|--|
| | PRIMARY ENVIRONMENTAL CORRIDOR | | EXISTING PUMPING STATION |
| | SECONDARY ENVIRONMENTAL CORRIDOR | | EXISTING INTERCEPTOR AND TRUNK SEWERS |
| | ISOLATED NATURAL RESOURCE AREA | | EXISTING FORCE MAIN |
| | NET SANITARY SEWER SERVICE AREA (EXISTING) | | PROPOSED INTERCEPTOR AND TRUNK SEWERS |
| | NET SANITARY SEWER SERVICE AREA (2000) | | UPLAND WOODS PORTION OF THE PRIMARY ENVIRONMENTAL CORRIDOR IN THE CITY OF BROOKFIELD; SUCH LANDS ARE ELIGIBLE FOR SANITARY SEWER SERVICE IF THE DEVELOPMENT PROPOSED MEETS THE TERMS OF THE UPLAND CONSERVANCY ZONING DISTRICT OR THE UPLAND PRESERVATION OVERLAY DISTRICT IN THE CITY OF BROOKFIELD ZONING ORDINANCE AS ADOPTED BY THE COMMON COUNCIL ON JUNE 18, 1991. |
| | BOUNDARY BETWEEN THE BROOKFIELD AND MMSD SEWAGE TREATMENT FACILITIES | | AREA SERVED BY THE FOX RIVER WATER POLLUTION CONTROL CENTER - PROPOSED TO BECOME TRIBUTARY TO THE MILWAUKEE METROPOLITAN SEWERAGE DISTRICT |
| | GROSS SANITARY SEWER SERVICE AREA BOUNDARY | | |
| | EXISTING PUBLIC SEWAGE TREATMENT FACILITY | | |



Source: SEWRPC.

SEWERAGE SYSTEM CAPACITY IMPACT ANALYSIS

The size and capacity of the Milwaukee Metropolitan Sewerage District sewerage facilities were developed as part of the District's facility planning program.¹ That plan was based upon an estimated year 2005 sewer service area population of 21,600 persons in the City of Brookfield. The Milwaukee Metropolitan Sewerage District, with cooperation from the City and the Regional Planning Commission in their recently completed year 2010 facilities planning work,² is planning for a resident population level of 19,400 persons for the Brookfield sewer service area by the year 2010. The area proposed to be added has an estimated population of 770 persons. As part of the 1998 facility planning program, the District specifically evaluated the capacity of its system to handle the additional service area proposed to be connected to the District as proposed in this amendment. That evaluation concluded that the District's system has the capacity to convey and treat the sewage flow from the subject area, as reported in February 24, 1998 and April 24, 1998 letters from the Milwaukee Metropolitan Sewerage District both attached hereto as Appendix A.

PUBLIC REACTION TO THE PLAN AMENDMENT

A public hearing was held on May 28, 1998, at the Brookfield City Hall to receive public comment on, and reaction to, the proposed plan amendment. The hearing was sponsored by the City of Brookfield and the Regional Planning Commission.

A review of the hearing record indicates that no substantive concerns were raised at the hearing. Accordingly, no changes were made to the proposed plan amendment as presented at the public hearing.

LOCAL GOVERNMENT SUPPORT FOR THE PLAN AMENDMENT

The Common Council of the City of Brookfield adopted the plan amendment on June 2, 1998.

CONCLUDING RECOMMENDATION

Based upon the foregoing, it is recommended that the Southeastern Wisconsin Regional Planning Commission formally amend the Brookfield/Elm Grove sanitary sewer service area as documented in SEWRPC Community Assistance Planning Report No. 109 in the manner identified on Map 1. A more detailed delineation of the revised sewer service area and of the environmentally significant lands within is shown on an aerial photograph reproduced as Map 2.

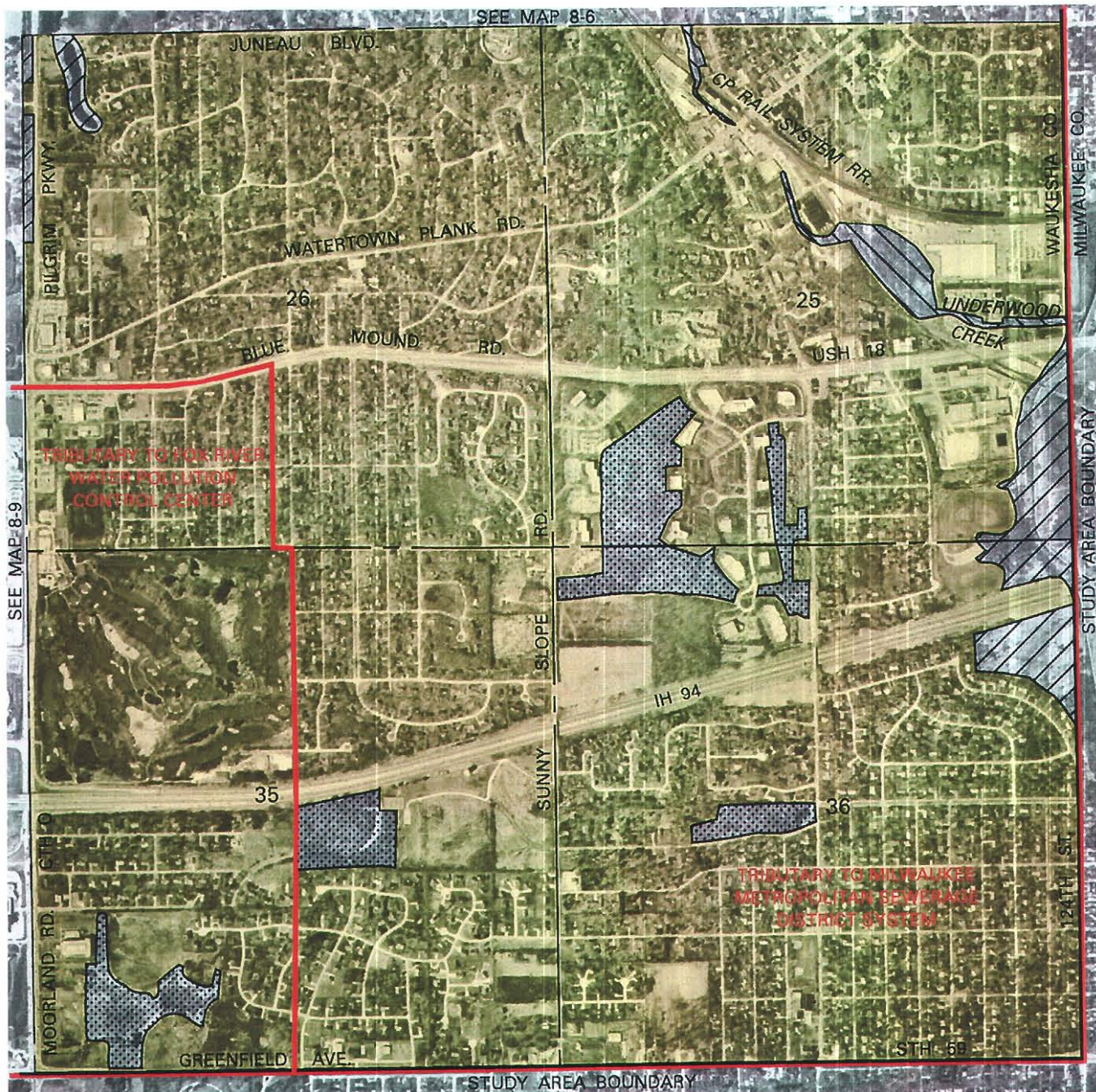
¹*Milwaukee Metropolitan Sewerage District, Wastewater System Plan, June 1980.*

²*Milwaukee Metropolitan Sewerage District, 2010 Facilities Plan, May 1998.*


Map 2



ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE CITY OF BROOKFIELD, VILLAGE OF ELM GROVE, AND TOWN OF BROOKFIELD

U. S. Public Land Survey Sections 25, 26, 35, and 36
Township 7 North, Range 20 East

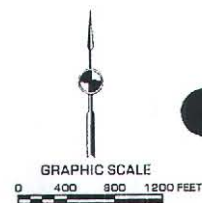


LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA

-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

NOTE: This map replaces Map 8-10, page 34, SEWRPC Community Assistance Planning Report No. 109, Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin, November 1991.



Source: SEWRPC.

APPENDIX

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT CORRESPONDENCE

Milwaukee Metropolitan Sewerage District
260 West Seeboth Street; P.O. Box 3049
Milwaukee, Wisconsin 53201-3049

Office of the Executive Director
414-225-2088

February 24, 1998

Mr. William Muth, P.E.
Director of Public Works
City of Brookfield
2000 N. Calhoun Road
Brookfield, WI 53005

Re: Amendment of Basin BR-3 Boundary

Dear Mr. Muth:

District staff has reviewed the City of Brookfield's request to amend the Milwaukee Metropolitan Sewerage District's sewer service area for sanitary sewer Basin BR-3, to include an area that is currently tributary to the Fox River Water Pollution Control Center.

The boundary amendment would amend Basin BR-3 to include an area just west of Rosedale Road from West Blue Mound Road to Interstate I-94. This area consists of 277 residences, which amounts to 773 people based on the current occupancy factor for Brookfield. This area is fully developed and has been experiencing local sanitary sewer back-up problems which prompted this request from the City of Brookfield.

The District has confirmed that it has capacity to convey and treat the wastewater flow projected from this area. However, before the MMSD Commission can consider this request, there are some requirements of the City of Brookfield that must be fulfilled.

1. Since the proposed boundary amendment is a change to the draft 2010 Facilities Plan planning area boundary, the City of Brookfield must petition the Southeastern Wisconsin Regional Planning Commission for a change in the Section 208 Water Quality Management Plan.
2. After SEWRPC adopts the proposed boundary revision, the City of Brookfield should petition the District to approve this revised boundary as the new sewer service area boundary for Brookfield.

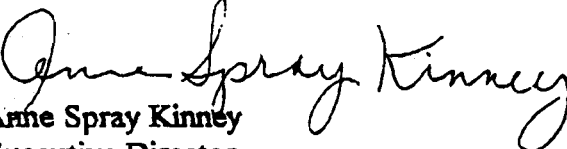
3. The MMSD Commission would then consider Brookfield's request and, if approved, sanitary sewer construction plans could then be submitted to the District for approval in accordance with the District's Rules and Regulations.

These requirements must be done in the order listed in this letter. Although at this time there are too many variables to be able to give an approximate time frame on this process, the District will do whatever possible to expedite your request.

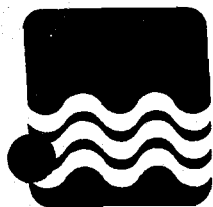
The District would also like a clarification on Brookfield's plan to secede from MMSD. In September 1997, the District was notified of the City of Brookfield's and the Village of Elm Grove's intent to secede from MMSD. Recently, Brookfield Mayor Kathryn Bloomberg made statements to the contrary, now stating that plan was not being pursued, but the District has never been notified of this.

If you should have any questions, please contact Mr. Bill Farmer at 225-2148.

Sincerely,


Anne Spray Kinney
Executive Director

cc: Donald Voith



Milwaukee Metropolitan Sewerage District
260 West Seeboth Street
P.O. Box 3049
Milwaukee, Wisconsin 53201-3049
(414) 272-5100

April 24, 1998

Mr. Howard Young
Engineering & Operations Administrator
City of Wauwatosa
7725 West North Avenue
Wauwatosa, Wisconsin 53213

Dear Howard:

Thank you for your letter of April 13, 1998, requesting information as to where the Brookfield neighborhoods, referenced in an article appearing in the April 4, 1998 issue of the *Milwaukee Journal Sentinel*, are connected to the MMSD system. You also requested information on what impact these flows may have on the City of Wauwatosa.

The three Brookfield areas referenced in the *Milwaukee Journal Sentinel* article were the Rosedale, Robinwood and Burlawn neighborhoods.

The Rosedale area, if approved by SEWRPC and the Commission, would be connected to an existing Brookfield sewer that now connects to the 48 inch MIS at 124th and Highland Avenue, which is just south of Blue Mound Road at 124th. The MMSD staff performed a hydraulic analysis of the impact the additional population would have on the existing sewer system without reinforcement of the MIS. The results of the analysis showed only very minor changes in flow and water levels in the MIS serving this sewer basin. No local connections in Wauwatosa or other communities would be impacted by the increase in flow.


The Robinwood and Burlawn areas are already connected to the MMSD system. Brookfield has requested to relay a sewer serving the Robinwood area. The basin connects directly to a 48 inch MIS at 123rd and Schlinger Avenue. This is an extension to the south of the 48 inch MIS at Blue Mound Road and 124th. The 2010 Facility Plan anticipates a much greater flow coming from this area and shows no surcharging at this time.

The Burlawn area connects to an existing 15 inch City of Brookfield sewer at 124th Street. This sewer connects to a 21 inch MIS in Lisbon Road at 124th Street. The City of Brookfield plans to relay with increased size various gravity sewers within the Burlawn service area, but the sewer size at 124th Street remains the same, thus the hydraulic capacity at the connecting points remains the same.

In all three areas, the MMSD has required the City of Brookfield to continue its aggressive inflow and infiltration reduction programs. Furthermore, growth in the identified areas can not exceed the projected amounts established in the 2010 Facilities Plan.

I hope that this information satisfies your concerns. If you have any further questions, please do not hesitate in contacting me.

Sincerely,



Bill Farmer
Director of Technical Services

c. Mayor Walsh
Mayor Bloomberg
Anne Spray Kinney
Bill Muth