



VILLAGE OF THIENSVILLE
Board of Trustees
AGENDA

DATE: Monday, January 23, 2023

COMBINED COMMITTEE OF THE WHOLE
AND BOARD OF TRUSTEES
LOCATION: 250 Elm Street, Thiensville, WI

TIME: 6:00 PM

I. CALL TO ORDER

II. ROLL CALL

PRESIDENT:	VAN MOBLEY
TRUSTEES:	JENNIFER ABRAHAM ANGELINA APOSTOLOS KRISTINA ECKERT ROB HOLYOKE KENNETH KUCHARSKI DAVID LANGE
ADMINISTRATOR:	COLLEEN LANDISCH-HANSEN
ATTORNEY:	TIM SCHOONENBERG
STAFF:	DIRECTOR OF COMMUNITY SERVICES/PUBLIC WORKS ANDY LAFOND POLICE CHIEF CURT KLEPPIN VILLAGE CLERK AMY LANGLOIS

III. PLEDGE OF ALLEGIANCE

A. Trustee Lange to lead the Recitation of the Pledge of Allegiance

IV. CITIZENS TO BE HEARD

A. Open to any resident or taxpayer on items not subject to a public hearing: Please be advised per Wis. Stats 19.84(2), information will be received from the public. Village policy limits a three (3) minute time period per person, with time extension by the presiding official's discretion or a vote of 2/3 of the Board or Committee; be further advised that there may be limited discussion on the information received, however, no action will be taken under public comments. Written comments on agenda items are encouraged to be sent and addressed to the intended body by noon on the day of the meeting. Comments received timely will be forwarded to all members of the body. If you wish to speak, you must pre-register by emailing the Village Clerk at alanglois@village.thiensville.wi.us by 4:00 PM on the day of the meeting or by signing in immediately prior to the meeting.

CONSENT AGENDA

Upon request of any Trustee, any item may be removed from the Consent Agenda for special consideration.

V. APPROVAL OF MINUTES

A. Board of Trustees

1. December 19, 2022 (att)

VI. DEPARTMENT REPORTS

A. Police Department

1. TPD DEC Report, 2022 (att)

B. Public Works Department

VII. COMMITTEE REPORTS

VIII. REPORTS AND COMMUNICATIONS

A. Mequon-Thiensville Bike and Pedestrian Way Commission

1. November 10, 2022 (att)

B. Plan Commission

1. December 13, 2022 (att)

C. Southern Ozaukee Fire & Emergency Medical Services Board

1. November 30, 2022 (att)

BUSINESS AGENDA

IX. FINANCIAL REPORTS AND ACCOUNTS PAYABLE

A. Accounts Payable

1. December 19, 2022 through January 20, 2023 (att)

B. Financial Report (Receipt)

1. December, 2022 (att)

X. PRESIDENT'S REPORT

A. Appointments

1. Operator's License - New - Village BP, 246 South Main Street, Daniel C. Cenzoll

XI. ADMINISTRATOR'S REPORT

A. Department Reports

1. Administrator's Report (att)

B. Building Inspection Report (Receipt)

1. December, 2022 (att)

XII. ATTORNEY'S REPORT

XIII. COMMITTEE REPORTS

A. Review and action regarding December, 2022 Preliminary Capital Expenditure Report and January, 2023 Preliminary Capital Expenditure Report (att)

B. Presentation from Parkitecture + Planning, Blake Theisen, regarding Park and Open Space Plan and Review and action regarding Resolution 2023-01 Approving Park and Open Space Plan (att)

C. Review and discussion regarding Tennis and Pickleball Court Reconstruction Design (att)

D. Presentation from Wachtel Tree Science & Service, Nate Shuettpelez, Thiensville Urban Forestry Management Plan and Emerald Ash Borer Plan and Review and action regarding Resolution No. 2023-02 A Resolution Approving Urban Forestry Management Plan and Emerald Ash Borer Plan (att)

E. Review and action of an Agreement Between the Village of Thiensville and Wachtel Tree Science and Service for Professional Arbicultural Consulting Services for 2023 (att)

F. Presentation from Ruekert & Mielke, Chrisy Poniewaz, regarding Stormwater Management Plan and Review and action regarding Resolution No. 2023-03 A Resolution Approving Stormwater Management Plan (att)

G. Review and action regarding Resolution No. 2023-04 Authorizing the Submission of a Vibrant Spaces Grant Application to the Wisconsin Economic Development Corporation (WEDC) for the Thiensville Village Park (att)

H. Review and action to Award the Freistadt Road and Main Street Water Main Extension to Kruczek Construction, Inc. Including the Alternate Bid, Contingent on DNR Approval of Project in the Amount of \$1,248,450.00 (att)

I. Review and action regarding Use of Force Annual Report, Thiensville Police Department, Presented by Chief Kleppin (att)

J. Review and discussion regarding Constructing a Paved Shoulder Bike Lane, West Side of River Road from Freistadt Road to Heidel Road During City of Mequon's 2023 Road Improvement Program

K. Discussion and possible action regarding Funding Options for RFP, Mequon-Thiensville Bike and Pedestrian Way (Trustee Holyoke) (att)

XIV. REPORTS AND COMMUNICATIONS

XV. UNFINISHED BUSINESS

XVI. ANY OTHER MISCELLANEOUS BUSINESS BY THE TRUSTEES AS MAY BE BROUGHT BEFORE THE BOARD, OR CARRIED OVER FROM THE PREVIOUS VILLAGE BOARD MEETING.

A. Acceptance/Report Of Gifts Received

1. \$50.00 to the Thiensville Fire Department from Henry and Elizabeth Bjorkman
2. \$10,000.00 to Village Park Reimagined from Thiensville Business Association
3. \$1,000.00 to Thiensville Police Department for e-Bike Equipment from Mequon-Thiensville Optimist Club
4. \$10.00 to Thiensville Fire Department for Car Seat Installation, Anonymous

B. Review meeting date schedule:

1. February 6, 2023 - Committee of the Whole at 6:00 PM
2. February 20, 2023 - Board of Trustees at 6:00 PM
3. March 6, 2023 - Committee of the Whole at 6:00 PM
4. March 20, 2023 - Board of Trustees at 6:00 PM
5. April 3, 2023 - Committee of the Whole at 6:00 PM
6. April 17, 2023 - Board of Trustees at 6:00 PM

XVII. MOTION TO ADJOURN TO CLOSED SESSION

A. Deliberating or negotiating the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a Closed Session. Such Closed Session is authorized pursuant to Wis. Statutes 19.85(1)(e) and Pursuant to Wis. Statutes 19.85(1)(e) considering employment, promotion, compensation or performance evaluation data of any public employee over which the governmental body has jurisdiction or exercises responsibility regarding Village Clerk/Deputy Treasurer.

1. Roll Call Vote

B. MOTION TO RECONVENE IN OPEN SESSION

1. Vote of Board to Reconvene in Open Session

XVIII. ADJOURNMENT

Amy L. Langlois, Village Clerk

January 20, 2023

Please advise the Thiensville Municipal Hall, 250 Elm Street (262-242-3720) at least 24 hours prior to the start of this meeting if you have disabilities and desire special accommodations.



VILLAGE OF THIENSVILLE
Board of Trustees
MINUTES

DATE: Monday, December 19, 2022

LOCATION: 250 Elm Street, Thiensville, WI

TIME: 6:00 PM

I. CALL TO ORDER

President Mobley called the meeting to order at 6:00 PM.

II. ROLL CALL

PRESIDENT:	VAN MOBLEY
TRUSTEES:	JENNIFER ABRAHAM ANGELINA APOSTOLOS KRISTINA ECKERT ROB HOLYOKE KENNETH KUCHARSKI DAVID LANGE
ADMINISTRATOR:	COLLEEN LANDISCH-HANSEN
ATTORNEY:	TIM SCHOONENBERG
STAFF:	ASSISTANT CHIEF JOEL DEUTSCH DIRECTOR OF COMMUNITY SERVICES/PUBLIC WORKS ANDY LAFOND POLICE CHIEF CURT KLEPPIN VILLAGE CLERK AMY LANGLOIS

Trustee Kucharski was not in attendance.

III. PLEDGE OF ALLEGIANCE

A. Trustee Apostolos to lead the recitation of the Pledge of Allegiance.

Trustee Apostolos lead the recitation of the Pledge of Allegiance.

CONSENT AGENDA

Upon request of any Trustee, any item may be removed from the Consent Agenda for special consideration.

IV. APPROVAL OF MINUTES

A. Board of Trustees

1. November 21, 2022 (att)

B. Special Board of Trustees

1. December 5, 2022 (att)

V. DEPARTMENT REPORTS

A. Fire Department

1. N/A

B. Police Department

1. NOV 2022, TPD Report (att)

C. Public Works Department

VI. COMMITTEE REPORTS

A. Committee of the Whole

1. December 5, 2022 (att)

VII. REPORTS AND COMMUNICATIONS

A. Historic Preservation Commission

1. November 1, 2022 (att)

B. Plan Commission

1. November 15, 2022 (att)

C. Southern Ozaukee Fire & Emergency Medical Services Board

1. October 26, 2022 (att)

D. Capital Expenditures (att)

MOTION by Trustee Holyoke, **SECONDED** by Trustee Apostolos to approve the Consent Agenda. **MOTION CARRIED UNANIMOUSLY.**

BUSINESS AGENDA

VIII. FINANCIAL REPORTS AND ACCOUNTS PAYABLE

A. Accounts Payable

1. November 21, 2022 through December 16, 2022 (att)

MOTION by Trustee Eckert, **SECONDED** by Trustee Abraham to approve the November 21, 2022 through December 16, 2022 Accounts Payable in the amount of \$251,235.58. **MOTION CARRIED UNANIMOUSLY.**

B. Financial Report (Receipt)

1. November, 2022 (att)

The November, 2022 Financial Report was received.

IX. PRESIDENT'S REPORT

A. Appointments

1. Class "A" License

a. Village BP, Maa Maalika Petroleum, Inc., Sangeeta Pant, Agent, 246 South Main Street

MOTION by Trustee Holyoke, **SECONDED** by Trustee Apostolos to approve Class "A" License, Village BP, Maa Malika Petroleum, Inc., Sangeeta Pant, Agent, 246 South Main Street. **MOTION CARRIED UNANIMOUSLY.**

X. ADMINISTRATOR'S REPORT

A. Department Reports

1. Administrator's Report (att)

Administrator Landisch-Hansen shared that Trustee nomination papers are due on Tuesday, January 3, 2023 by 5:00 PM. The terms for Trustee Abraham and Trustee Holyoke are up in April, 2023.

The annual Christmas luncheon is Wednesday, December 21, 2022 at 12:00 PM.

Incoming revenues include \$3,763.69 for the monthly cell tower lease, \$3,549.87 for 3rd quarter franchise fees from Charter Communications, \$7,852.26 for sewer connection fees from The Hoff Group, \$3,797.25 for Shared Revenues WI Health Services from the State of Wisconsin, \$1,280.00 for 24 HR Recertification Grant from the State of Wisconsin, \$34,097.91 for state shared revenue from the State of Wisconsin and \$33,867.50 for the EMS Flex Grant from the State of Wisconsin.

B. Building Inspection Report (Receipt)

1. November, 2022 (att)

The November, 2022 Building Inspection Report was received.

XI. ATTORNEY'S REPORT

No Attorney's report.

XII. COMMITTEE REPORTS

A. Review and action regarding 2021 Thiensville Police Department Annual Report Presented by Chief Kleppin (att)

Chief Kleppin presented to the Board the 2021 Police Department Annual Report.

MOTION by Trustee Eckert, **SECONDED** by Trustee Abraham to accept the 2021 Thiensville Police Department Annual Report Presented by Chief Kleppin. **MOTION CARRIED UNANIMOUSLY.**

B. Review and action regarding Resolution No. 2022-19 A Resolution Approving Water Services Agreement Between the Village of Thiensville and the Mequon Water Utility for TIF#2 (att)

Director LaFond shared that Resolution 2022-19 is a resolution approving a Water Services Agreement with the Mequon Water Utility. The Village will construct the water main. Upon completion, a Resolution will then be passed to turn over the facilities to the City of Mequon. The water main extension will be on Main Street from Willowbrook north to Grand Avenue, then west to the Village limits on Freistadt Road. The engineer's estimate is about \$1.2 million that is being funded by the bond for the TIF District. The bid opening is at 10:00 AM on Thursday, December 22, 2022. Construction is anticipated to start in early spring.

MOTION by Trustee Abraham, **SECONDED** by Trustee Lange to approve Resolution 2022-19 A Resolution Approving Water Services Agreement Between the Village of Thiensville and the Mequon Water Utility for TIF#2. **MOTION CARRIED UNANIMOUSLY.**

C. Review and action regarding Resolution No. 2022-18 A Resolution Approving a Vehicle Usage Agreement Between The Village of Thiensville and the City of Mequon (att)

Administrator Landisch-Hansen shared that the proposed Vehicle Usage Agreement is for 2023; vehicles will still belong to Thiensville and Mequon respectively and be used by the combined fire departments. The agreement also outlines coverage for insurance.

MOTION by Trustee Holyoke, **SECONDED** by Trustee Eckert to approve Resolution 2022-18 A Resolution Approving a Vehicle Usage Agreement Between the Village of Thiensville and the City of Mequon. **MOTION CARRIED UNANIMOUSLY.**

D. Review and action regarding Ordinance No. 2022-04 An Ordinance Conforming Code to Reflect Merged Fire Departments (att)

MOTION by Trustee Holyoke, **SECONDED** by Trustee Abraham to approve Ordinance 2022-04 An Ordinance Conforming Code to Reflect Merged Fire Departments. **MOTION CARRIED UNANIMOUSLY.**

XIII. REPORTS AND COMMUNICATIONS

XIV. UNFINISHED BUSINESS

XV. ANY OTHER MISCELLANEOUS BUSINESS BY THE TRUSTEES AS MAY BE BROUGHT BEFORE THE BOARD, OR CARRIED OVER FROM THE PREVIOUS VILLAGE BOARD MEETING.

A. Acceptance/Report Of Gifts Received

1. \$10,000.00 to Thiensville Village Park Reimagined, Splash Pad from the Mequon-Thiensville Community Foundation
2. \$8,340.00 to Thiensville Police Department, Two e-bikes, Helmets and Training, Mequon-Thiensville Community Foundation
3. \$5,100.00 to Village of Thiensville, Veterans Memorial in Molyneaux Park, Mequon-Thiensville Community Foundation
4. \$1,000.00 to Village of Thiensville, Concrete Fossil Dig T-Rex Bones in Village Park, Mequon-Thiensville Community Foundation

Lori Lorenz, President of the Mequon-Thiensville Community Foundation, was present and shared that the Mequon Community Foundation has existed since 1999. In the spring, the Foundation officially became the Mequon-Thiensville Community Foundation to spread their mission into Thiensville. The Board thanked Ms. Lorenz for the donations

to Thiensville.

MOTION by Trustee Lange, **SECONDED** by Trustee Eckert to accept the following Gifts with Much Gratitude: \$10,000.00 to Thiensville Village Park Reimagined, Splash Pad from the Mequon-Thiensville Community Foundation; \$8,340.00 to Thiensville Police Department, Two e-bikes, Helmets and Training, Mequon-Thiensville Community Foundation; \$5,100.00 to Village of Thiensville, Veterans Memorial in Molyneaux Park, Mequon-Thiensville Community Foundation; and \$1,000.00 to Village of Thiensville, Concrete Fossil Dig T-Rex Bones in Village Park, Mequon-Thiensville Community Foundation. **MOTION CARRIED UNANIMOUSLY.**

B. Review Meeting Date Schedule:

1. January 23, 2023 - Combined Committee of the Whole and Board of Trustees at 6:00 PM
2. February 6, 2023 - Committee of the Whole at 6:00 PM
3. February 20, 2023 - Board of Trustees at 6:00 PM
4. March 6, 2023 - Committee of the Whole at 6:00 PM
5. March 20, 2023 - Board of Trustees at 6:00 PM

XVI. MOTION TO ADJOURN TO CLOSED SESSION

A. Considering employment, promotion, compensation or performance evaluation data of any public employee over which the governmental body has jurisdiction or exercises responsibility regarding Administrator Annual Review. Such Closed Session is authorized pursuant to Wis. Statutes 19.85(1)(c) and Deliberating or negotiating the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a Closed Session. Such Closed Session is authorized pursuant to Wis. Statutes 19.85(1)(e).

MOTION by Trustee Eckert, **SECONDED** by Trustee Abraham to adjourn to Closed Session at 6:26 PM.

1. Role Call Vote

Ayes: Trustees Abraham, Apostolos, Eckert, Holyoke, Lange and President Mobley

Naes: None

MOTION CARRIED UNANIMOUSLY.

B. MOTION TO RECONVENE IN OPEN SESSION

1. Vote of Board to Reconvene in Open Session

MOTION by Trustee Lange, **SECONDED** by Trustee Apostolos to Reonvene in Open Session at 7:33 PM. **MOTION CARRIED UNANIMOUSLY.**

XVII. ADJOURNMENT

MOTION by Trustee Lange, **SECONDED** by Trustee Abraham to adjourn the Meeting at 7:33 PM. **MOTION CARRIED UNANIMOUSLY.**

Submitted by,

Amy L. Langlois
Village Clerk



Thiensville Police Department Monthly Report December 2022

Reporting Period: 12/01/2022 - 12/31/2022

<i>This report contains all citations.</i>	Total	Traffic Violation	Warning Citation/15 Day
341.03(1) - Operate after Rev/Suspension of Reg	1	1	0
341.04(1) - NON-REGISTRATION OF AUTO, ETC	6	1	5
343.05(3)(a) - OPERATE W/O VALID LIC (2ND W/IN 3 YRS)	1	1	0
343.085(2m)(a)1 - PROB LICENSEE OPER CLASS D VEH W/OTHER PERSON IN VEH	1	1	0
343.22(1) - Fail/Notify DMV of Address/Name change	1	0	1
343.22(2)(b) - Fail/Notify Address Change	2	0	2
346.14(1m) - Automobile Following Too Close	2	1	1
346.18(3) - FYR - From Stop Sign	1	0	1
346.37(1)(c)1 - Violate Red Traffic Signal	1	0	1
346.57(2) - Unreason and Imprudent Speed	5	1	4
346.57(5) - EXCEEDING SPEED ZONES, ETC. (1-10 MPH)	1	0	1
346.57(5) - EXCEEDING SPEED ZONES, ETC. (11-15 MPH)	3	1	2
346.69 - HIT AND RUN-PROPERTY ADJACENT TO HIGHWAY	1	1	0
347.06(1) - Operation w/o Required Lamps	3	0	3
347.06(3) - Unclean/Defective Lights or Reflector	1	1	0
347.13(1) - No Tail Lamp/Defective Tail Lamp	1	0	1
Total	31	9	22



Thiensville Police Department Monthly Report

December 2022

Parking Tickets Issued 12/1/22 – 12/31/22

Parking Tickets	18
TOTAL	18

Business Checks	368
House Checks	6
Doors Open	3
Fingerprints Taken	0
Warrants	0
Ordinance Violations	4

PDO (Property Damage Only Accidents)

Date	Call#	CFS	Location
12/24/22 18:55	22.007966	PDO	112 N Highland Ave;TH, Thiensville, WI 53092
12/16/22 14:50	22.007788	PDO	N Main St/Concord Pl, Thiensville, WI 53092
12/11/22 15:13	22.007692	PDO	100BLK W Freistadt Rd;TH, Thiensville, WI 53092
12/09/22 10:47	22.007654	PDO	100BLK Green Bay Rd;TH, Thiensville, WI 53092
12/09/22 10:36	22.007653	PDO	Green Bay Rd/Elm St, Thiensville, WI 53092

PI (Personal Injury Accidents)

Date	Call#	CFS	Location
12/07/22 14:41	22.007620	PI	102 E Freistadt Rd,BLDG;TH, Thiensville, WI 53092



11333 N. Cedarburg Road
Mequon, WI 53092
Phone: 262-236-2934
Fax: 262-242-9655



www.ci.mequon.wi.us

Public Works Department

Joint Mequon-Thiensville Bike and Pedestrian Way Commission
Thursday, November 10, 2022
9:00 AM
North Conference Room

Minutes

1. Call to Order, Roll Call

Acting Chair Holyoke called the meeting to order at 9:05 AM.

Present:

Commissioner Kenneth Maciolek
Commissioner Jim Doornek
Commissioner Rob Holyoke
Commissioner John Liegeois
Commissioner Kristin Wade

Absent:

Chair T. Azinger
Commissioner Ron Heinritz

Also present were Assistant City Engineer McCraw and Administrative Assistant Leach.

2. Approval of Meeting Minutes
October 13, 2022 Minutes

RESULT: **Approved by Voice Acclamation [Unanimous]**
MOVED BY: Commissioner Maciolek
SECONDED BY: Commissioner Wade

AYES: Maciolek, Doornek, Holyoke, Liegeois, Wade

3. Resident Communications

Acting Chair Holyoke acknowledged that no residents were in attendance.

4. Discussion/Action Items

a. Master Plan RFP Update

Assistant City Engineer McCraw provided the Board with an update on response to the RFP. McCraw advised that he direct-sent the RFP to four or five consultants, as well as contacted some other municipalities with similar projects. Four consultants advised they will not be submitting proposals. Only one of the consultants had questions regarding the RFP, but they did not indicate one way or another regarding submitting a proposal. Commissioner Maciolek asked if the RFP was asking for too much. McCraw said he didn't feel that was the case and that this is a relatively specific scope and there aren't a ton of consultants who do these. McCraw reminded the Board that once the RFP deadline has passed, if there is a lack of proposal submission we can reach out separately and work directly with a consultant and ask for a different or reduced scope.

b. Bonniwell Road OIT Crossing

Assistant City Engineer McCraw informed the Board that an email was sent to the City Administrator regarding concerns about the Bonniwell Road crossing. Commissioner Doornek said that there is a sign to alert travelers on Bonniwell Road to the crossing ahead, as well as a stop sign. Doornek felt the signage is consistent with that of other crossings. Commissioner Wade stated that she and her husband walked the area. Wade mentioned that there is some brush on private property that could potentially reduce visibility. The Board came to the conclusion that the crossing is properly marked with signs and hatched crossing, and is consistent with other crossings. Commissioner Maciolek offered to draft a response to the citizen on behalf of the Board. Prior to sending the response, it will be reviewed by the Board at the December meeting.

c. Bikeway Future Agenda Topics

Assistant City Engineer McCraw asked the Board for future meeting topic suggestions. Commissioner Holyoke would like to discuss the Bonniwell OIT. Commissioner Liegeois suggested an update on the Highland Road Spur. Commissioner Doornek advised he is involved in that project and offered to contact someone from the Trails Group to present an update at a future meeting. Commissioner Wade said she would like to revisit discussions of a pedestrian/bike bridges over the Milwaukee River. Some of the desired locations are on Green Bay Road west of the dam, River Road, or on Donges Bay Road by Wolf's Island. Wade advised that an addition of bridges would provide greater accessibility to the schools. Commissioner Doornek would like to discuss the long-term plan for Mequon Road, specifically safety of bike and pedestrian travel. Commissioner Liegeois would like to discuss better coordination of this Board's long-term plans with other groups' master plans.

5. Other Business

Acting Chair Holyoke asked if there was any other business. No other business was brought forth.

6. Adjourn
Motion to Adjourn at 9:48 AM.

RESULT: **Approved by Voice Acclamation [Unanimous]**
MOVED BY: Commissioner Wade
SECONDED BY: Commissioner Maciolek

AYES: Maciolek, Doornek, Holyoke, Liegeois, Wade

Respectfully Submitted,

Kris Leach



VILLAGE OF THIENSVILLE
Plan Commission
MINUTES

DATE: Tuesday, December 13, 2022

LOCATION: 250 Elm Street, Thiensville, WI

TIME: 6:00 PM

I. CALL TO ORDER

Chairman Mobley called the meeting to order at 6:00 PM.

II. ROLL CALL

CHAIRMAN:	VAN MOBLEY
COMMISSIONERS:	DOUGLAS CHIMENTI
	MIKE DYER
	RICK GATTONI
	CAROL GENGLER
	JEFF HERSHBERGER
	KEN KUCHARSKI
PLANNER:	JON CENSKY
DIRECTOR OF	ANDY LAFOND
COMMUNITY	
SERVICES/PUBLIC	
WORKS:	

III. CITIZENS TO BE HEARD

A. Open to any resident or taxpayer on items not subject to a public hearing: Please be advised per §19.84(2), information will be received from the public. Village policy limits a three (3) minute time period per person, with time extension by the presiding official's discretion or a vote of 2/3 of the Board or Committee; be further advised that there may be limited discussion on the information received, however, no action will be taken under public comments. Written comments on agenda items are encouraged to be sent and addressed to the intended body by noon on the day of the meeting. Comments received timely will be forwarded to all members of the body. If you wish to speak, you must pre-register by emailing the Village Clerk at alangois@village.thiensville.wi.us by 4:00 PM on the day of the meeting or by signing in immediately prior to the meeting.

There was no communication received or citizens present to be heard.

IV. BUSINESS

A. Approval of Minutes

1. November 15, 2022 (att)

MOTION by Commissioner Kucharski, **SECONDED** by Commissioner Gattoni to approve the November 15, 2022 Minutes. **MOTION CARRIED UNANIMOUSLY.**

B. Review and action regarding Sign Plan Approval, Vinyl Window Decal Sign, ALME Design Co., Carrie Alme, 161 Green Bay Road (att)

The applicant was not present. Director LaFond noted that a Certificate of Appropriateness was unanimously approved by the Historic Preservation Commission on December 6, 2022. The sign complies with all requirements.

MOTION by Commissioner Kucharski, **SECONDED** by Commissioner Gengler to approve Sign Plan, Vinyl Window Decal Sign, ALME Design Co., Carrie Alme, 161 Green Bay Road. **MOTION CARRIED UNANIMOUSLY.**

C. Review and action regarding Pool Fence Requirement Modification, Dale Borowiak, 400 Susan Lane (att)

Dale Borowiak, 400 Susan Lane, noted that the Plan Commission approved his pool plan at the October 11, 2022 meeting. There was a tie vote on the matter of allowing a pool covering instead of a fence. Mr. Borowiak's homeowner's insurance will provide coverage for the pool covering if there is no diving board or slide.

Mr. Borowiak noted that the cover is automated and opens and closes by pressing a button. The cover would be closed whenever the pool is not in use. There is a separate winter cover that remains in place and does not open or close. Director LaFond noted that some other communities that have adopted an ordinance allowing pool covers include a requirement for someone older than 15 to be within 10 feet of the pool any time the cover is open.

Commissioner Gattoni has dealt with many swimming pools over the years as part of his employment and noted it is a liability if a pool is open and not guarded. Mr. Borowiak stated that the pool will be covered when it is not in use. Commissioner Dyer noted that the pool will remain if the Borowiaks sell the property and there could be a compliance issue with the next property owner. Also, it was noted this is a mechanical device that could fail.

Commissioner Chimenti noted there are many bodies of water in the Village that are not fenced, including the pond near Willowbrook Place, the Milwaukee River adjacent to Village Park and Pigeon Creek. Chairman Mobley prefers requiring a fence because of the potential danger to small children.

MOTION by Commissioner Chimenti, **SECONDED** by Commissioner Kucharski to Approve

Pool Fence Requirement Modification, No Fence, Dale Borowiak, 400 Susan Lane.
Ayes: Commissioners Chimenti, Kucharski and Gengler
Naes: Commissioners Dyer, Gattoni, Hershberger and Chairman Mobley
MOTION FAILED.

V. STAFF REPORT

A. Staff Report (att)

Director LaFond noted staff has approved a sign at Fiddleheads, 192 South Main Street. The 48" x 30" blade sign is an exact replacement by the same manufacturer. Staff approved a Certificate of Appropriateness for a roof that was replaced at 163 South Main Street. Staff is addressing complaints about garbage blowing around from a dumpster at 122 Green Bay Road. The owner is working with Waste Management about issues with the dumpster being emptied in a timely manner. The Police Department issued a warning about illegal dumping at the Village yard waste site, removed signs from the right-of-way along Green Bay Road and Freistadt Road and spoke with the homeowner at 610 Oakwood Drive about a dumpster that had been at the property for more than 30 days. Director LaFond is working on a property maintenance issue in the 500 block of Green Bay Road related to grass and weeds on the property.

Director LaFond provided an update on development. Bids will be opened December 22, 2022 for a water main in TIF#2. Construction will take place in spring or summer of 2023.

VI. ADJOURNMENT

MOTION by Commissioner Gengler, **SECONDED** by Commissioner Gattoni to adjourn the meeting at 6:26 PM. **MOTION CARRIED UNANIMOUSLY.**

Submitted by,

Gary Achterberg
Administrative Assistant

Signed by,

Amy L. Langlois
Village Clerk/Deputy Treasurer



VILLAGE OF THIENSVILLE
Southern Ozaukee Fire & EMS Board
MINUTES

DATE: Wednesday, November 30, 2022

LOCATION: 250 Elm Street, Thiensville, WI

TIME: 5:30 PM

I. CALL TO ORDER

President Mobley called the meeting to order at 5:30 PM.

II. ROLL CALL

MEQUON MAYOR ANDREW NERBUN
MEQUON ADMINISTRATOR WILL JONES
MEQUON ALDERMAN BRIAN PARRISH
MEQUON ALDERWOMAN KATHLEEN SCHNEIDER (EXCUSED)

THIENSVILLE PRESIDENT VAN MOBLEY
THIENSVILLE ADMINISTRATOR COLLEEN LANDISCH-HANSEN
THIENSVILLE TRUSTEE KRISTINA ECKERT

III. APPROVAL OF MINUTES

A. October 26, 2022 (att)

MOTION by Alderman Parrish, **SECONDED** by Mayor Nerbun to approve the October 26, 2022, Minutes. **MOTION CARRIED UNANIMOUSLY.**

IV. SWEARING IN OF FIRE CHIEF

Thiensville Village Clerk Amy L. Langlois swore in David Bialk as Fire Chief for the Southern Ozaukee Fire & Emergency Services Department (SOFD); term to begin on January 1, 2023.

V. REVIEW AND DISCUSSION ITEMS

A. Operation Accomplishments Since October 26, 2022

Chief Bialk shared department accomplishments since the prior meeting on October 26, 2022. An intercept agreement between SOFD and the Cedarburg Fire Department effective January 1, 2023 is on tonight's agenda.

B. Merger Related Action Items to be Completed Prior to January 1, 2023

Chief Bialk shared action items to be completed by January 1, 2023 and noted that SOFD and Ozaukee County have been working together on the transition to county dispatch. The employee handbook will be completed during the first quarter of 2023.

C. Staffing/Battalion Chief Update

Chief Bialk noted the posting for the open Battalion Chief position resulted in 16 applicants. The Mequon Police & Fire Commission will consider approval of the finalists on Tuesday, December 6, 2022. Chief Bialk will select one with an offer made in December. The SOFD Board will certify candidates for positions after January 1, 2023.

D. Department of Health Flex Grant Award Update

The Flex Grant award totalling \$202,100 between both communities will be used for uniforms, durable medical supplies, partial payment on a new ambulance, monitors, dispatch terminals for ambulances and software for tracking narcotics.

E. Staffing Trendline

Deputy Chief Zellman presented a report on staffing levels that included July, 2022. The departments are currently filling approximately 80% of shifts.

VI. REVIEW AND APPROVE

A. Meeting Schedule Beginning 2023 (att)

The meeting schedule for 2023 is as follows: January 11, March 8, May 10, July 12, September 13 and November 8. Meetings will begin at 5:30 PM and be held at Thiensville Village Hall, 250 Elm Street.

MOTION by Trustee Eckert, **SECONDED** by Mayor Nerbun to approve the 2023 Meeting Schedule, Meeting Dates to Include January 11, March 8, May 10, July 12, September 13 and November 8, 2023. **MOTION CARRIED UNANIMOUSLY.**

B. Letter of Engagement for Attorney Services (att)

The law firm of Wesolowski, Reidenbach & Sajdak, S.C. has been proposed to provide general legal representation to the SOFD.

MOTION by Trustee Eckert, **SECONDED** by Mayor Nerbun to approve Letter of

Engagement for Attorney Services for the Southern Ozaukee Fire & EMS Department with Wesolowski, Reidenbach & Sajdak, S.C. **MOTION CARRIED UNANIMOUSLY.**

C. Subrecipient Agreement between Ozaukee County and SOFD (att)

The proposed Subrecipient Agreement has been reviewed by lawyers for Ozaukee County and SOFD. The Agreement will allow SOFD to begin obtaining funds from the ARPA Grant.

MOTION by Alderman Parrish, **SECONDED** by Mayor Nerbun to approve Subrecipient Agreement between Ozaukee County and SOFD with Attorney Sajdak Clarifying the Language Pertaining to Payroll Record Submission Requirement. **MOTION CARRIED UNANIMOUSLY.**

D. Paramedic Intercept Agreement with the City of Cedarburg Fire Department (att)

The Paramedic Intercept Agreement between the Cedarburg Fire Department and Village of Thiensville split revenue. The new agreement between SOFD and the Cedarburg Fire Department provides a flat rate to SOFD for each call whether or not Cedarburg recovers funds.

MOTION by Administrator Jones, **SECONDED** by Trustee Eckert to authorize Chief Bialk to Execute Paramedic Intercept Services Agreement with the Cedarburg Fire Department. **MOTION CARRIED UNANIMOUSLY.**

E. Approval of SOFD Logo (att)

A new SOFD logo was developed by Mequon Battalion Chief Brandon Boettcher and Thiensville Assistant Chief Joel Deutsch with assistance from local graphic designers and input from numerous members from the Mequon and Thiensville departments. The date established will be moved to the bottom and the department name to the top of the design. The Board thanked Mequon Battalion Chief Boettcher and Thiensville Assistant Chief Deutsch.

MOTION by Administrator Jones, **SECONDED** by Mayor Nerbun to approve SOFD Logo with Date Established at the Bottom and Department Name at the Top of Logo. **MOTION CARRIED UNANIMOUSLY.**

F. Approval of Registration Process and Fee for Mobile Kitchens (att)

The proposed \$20 annual fee for a kitchen permit would apply to mobile kitchen vendors at Taste of Mequon, Thiensville Village Market, food truck events and other similar events.

MOTION by Mayor Nerbun, **SECONDED** by Alderman Parrish to approve Mobile Kitchen Yearly Registration Process and Approve a \$20 Annual Fee. **MOTION CARRIED UNANIMOUSLY.**

G. Approval of Vehicle Usage Agreement Between City of Mequon, Village of Thiensville

and SOFD (att)

Attorney Sajdak noted the proposed Vehicle Usage Agreement formalizes measures already in the Intergovernmental Agreement between the City of Mequon and the Village of Thiensville.

MOTION by Mayor Nerbun, **SECONDED** by Alderman Parrish to approve Vehicle Usage Agreement Between City of Mequon, Village of Thiensville and Southern Ozaukee Fire & EMS Department. **MOTION CARRIED UNANIMOUSLY.**

H. Approval of Work Plan for 2023 (att)

The work plan for 2023 was discussed.

MOTION by Alderman Parrish, **SECONDED** by Trustee Eckert to Approve Work Plan for 2023 With Noted Assignments for Attorney Sajdak to Develop a Building Rental Agreement and Administrator Landisch-Hansen to Develop the 2024 Budget. **MOTION CARRIED UNANIMOUSLY.**

VII. NEXT MEETING DATE/TIME

A. January 11, 2023

The next SOFD meeting will take place at Thiensville Village Hall at 5:30 PM Wednesday, January 11, 2023.

VIII. ADJOURNMENT

MOTION by Mayor Nerbun, **SECONDED** by Alderman Parrish to adjourn the Meeting at 6:34 PM. **MOTION CARRIED UNANIMOUSLY.**

Submitted by,

Gary Achterberg
Village of Thiensville
Administrative Assistant

Signed by,

Amy L. Langlois
Village of Thiensville
Village Clerk/Deputy Treasurer

DISBURSEMENTS FOR APPROVAL

Checks Issued December 2022, Manual	\$70,893.88
Checks Issued January 2023, Manual	\$2,311,338.37
Checks Issued December, 2022	\$165,962.93
Checks Issued December, 2022 (Amended-Approved \$251,235.58 in DEC)	\$252,155.43
Checks Issued December, 2022, Tax Refunds	\$1,548.37
Checks Issued December, 2022, Tax Refunds	\$854.43
Checks Issued January, 2023, Tax Refunds	\$5,543.34
Checks Issued January, 2023 Tax Refunds	\$51.47
Checks To Be Issued Period 13 - Close, 2022	\$102,797.18
Checks To Be Issued January, 2023	\$476,457.15

GRAND TOTAL	\$3,387,602.55
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Library: Information Only

Checks Issued December 2022, Manual	\$41,891.53
Checks Issued January 2023, Manual	\$49,456.81
Checks Issued December, 2022	\$21,630.85
Checks To Be Issued Period 13 - Close, 2022	\$96,133.71
Checks To Be Issued January, 2023	\$18,981.01

\$228,093.91

Van A. Mobley, Village President

Colleen Landisch-Hansen, Administrator



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Batch: 1222 VOT MN2

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
1023 e	12/30/22	PAYCHEX LOC #54			
E 01-01-511-2-210		DATA PROCESSING	\$222.30	2022122701	Processing 12-30-22 Payroll
		Total	\$222.30		
1024 e 12/30/22 ICMA RETIREMENT TRUST					
G 01-21260		ICMA - RC	\$299.51		MIKYSKA ICMA/Wages Pd 12-30-22
G 01-21260		ICMA - RC	\$107.50		WILLIAMS ICMA/Wages Pd 12-30-22
G 01-21260		ICMA - RC	\$87.42		NEUMAN, P. ICMA/Wages Pd 12-30-22
G 01-21260		ICMA - RC	\$50.00		LANDISCH-HANSEN ICMA/Wages Pd 12-30-22
		Total	\$544.43		
1025 e 12/30/22 WI DEFERRED COMP PROGRAM					
G 01-21258		WISCONSIN DEFERRED	\$32.00		LAFOND.WI DEF COMP/Wages Pd 12-30-22
G 01-21258		WISCONSIN DEFERRED	\$270.00		KLEPPIN WI DEF COMP/Wages Pd 12-30-22
G 01-21258		WISCONSIN DEFERRED	\$100.00		ACHTERBERG WI DEF COMP/Wages Pd 12-30-22
G 01-21258		WISCONSIN DEFERRED	\$125.00		NEUMAN, B. WI DEF COMP/Wages Pd 12-30-22
G 01-21258		WISCONSIN DEFERRED	\$100.00		DECHANT WI DEF COMP/Wages Pd 12-30-22
		Total	\$627.00		
1026 e 12/30/22 PAYCHEX					
G 01-21220		FEDERAL WITHHOLDIN	\$4,391.38		FED/Wages Pd 12-30-22
G 01-21210		WISCONSIN WITHHOLDI	\$2,207.11		WI/Wages Pd 12-30-22
G 01-21230		SOCIAL SECURITY TAX	\$4,040.13		SS & MED/Wages Pd 12-30-22
E 01-01-511-1-196		ADMINISTRATOR FRING	\$221.73		ADM/Wages Pd 12-30-22
E 01-01-511-1-199		FRINGE BENEFITS	\$220.73		ADM Staff/Wages Pd 12-30-22
E 01-03-521-1-197		POLICE CHIEF FRINGE	\$270.48		TPD Chief/Wages Pd 12-30-22
E 01-03-521-1-199		FRINGE BENEFITS	\$1,637.79		TPD/Wages Pd 12-30-22
E 01-03-522-1-199		FRINGE BENEFITS	\$151.34		TFD/Wages Pd 12-30-22
E 06-09-522-1-199		FRINGE BENEFITS	\$216.09		HOH/Wages Pd 12-30-22
E 01-04-541-1-199		FRINGE BENEFITS	\$822.84		DPW/Wages Pd 12-30-22
E 01-04-542-1-199		FRINGE BENEFITS	\$159.94		VP/Wages Pd 12-30-22
E 21-05-610-1-199		FRINGE BENEFITS	\$288.31		SWR/Wages Pd 12-30-22
E 19-18-541-1-199		FRINGE BENEFITS	\$50.85		STM WTR/Wages Pd 12-30-22
G 01-11160		SPECIAL CLEARING AC	\$37,571.24		DirectDep/Wages Pd 12-30-22
		Total	\$52,249.96		
1027 e 12/30/22 V-T PAYROL ACCT. #3531102790					
E 01-01-511-1-108		ADMINISTRATOR	\$2,927.89		ADM/Wages Pd 12-30-22
E 01-01-511-1-100		SALARIES & WAGES	\$2,909.62		ADM Staff/Wages Pd 12-30-22
E 01-03-521-1-113		POLICE CHIEF SALARY	\$3,550.00		TPD Chief/Wages Pd 12-30-22
E 01-03-521-1-100		SALARIES & WAGES	\$21,758.85		TPD/Wages Pd 12-30-22
E 01-03-521-1-101		OVERTIME	\$109.88		TPD OT/Wages Pd 12-30-22
E 01-03-521-1-109		DPW EQUIPMENT MAIN	\$114.96		TPD/DPW/Wages Pd 12-30-22
E 01-03-522-1-100		SALARIES & WAGES	\$1,878.23		TFD/Wages Pd 12-30-22
E 01-03-522-1-109		DPW EQUIPMENT MAIN	\$114.96		TFDF/DPW/Wages Pd 12-30-22
E 06-09-522-1-100		SALARIES & WAGES	\$2,837.92		HOH/Wages Pd 12-30-22
E 01-04-541-1-100		SALARIES & WAGES	\$10,422.96		DPW/Wages Pd 12-30-22
E 01-04-541-1-101		OVERTIME	\$399.62		DPW OT/Wages Pd 12-30-22



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
E 01-04-542-1-100		SALARIES & WAGES	\$1,974.76		VP/Wages Pd 12-30-22
E 01-04-542-1-101		OVERTIME	\$133.21		VP OT/Wages Pd 12-30-22
E 21-05-610-1-100		SALARIES & WAGES	\$3,710.25		SWR/Wages Pd 12-30-22
E 21-05-610-1-101		OVERTIME	\$99.91		SWR OT/Wages Pd 12-30-22
E 19-18-541-1-100		SALARIES & WAGES	\$636.47		STM WTR/Wages Pd 12-30-22
E 19-18-541-1-101		OVERTIME	\$33.30		STM WTR OT/Wages Pd 12-30-22
G 01-11160		SPECIAL CLEARING AC	\$170.00		LAFOND Corr/Wages Pd 12-30-22
E 01-01-511-1-196		ADMINISTRATOR FRING	(\$190.67)		ADM WRS/Wages Pd 12-30-22
E 01-01-511-1-199		FRINGE BENEFITS	(\$189.17)		ADM Staff WRS/Wages Pd 12-30-22
E 01-03-521-1-197		POLICE CHIEF FRINGE	(\$230.75)		TPD Chief WRS/Wages Pd 12-30-22
E 01-03-521-1-199		FRINGE BENEFITS	(\$1,428.95)		TPD WRS/Wages Pd 12-30-22
E 01-03-522-1-199		FRINGE BENEFITS	(\$129.61)		TFD WRS/Wages Pd 12-30-22
E 06-09-522-1-199		FRINGE BENEFITS	(\$184.40)		HOH WRS/Wages Pd 12-30-22
E 01-04-541-1-199		FRINGE BENEFITS	(\$704.31)		DPW WRS/Wages Pd 12-30-22
E 01-04-542-1-199		FRINGE BENEFITS	(\$136.72)		DPW WRS VP/Wages Pd 12-30-22
E 21-05-610-1-199		FRINGE BENEFITS	(\$246.85)		SWR WRS/Wages Pd 12-30-22
E 19-18-541-1-199		FRINGE BENEFITS	(\$43.44)		STM WTR WRS SWR/Wages Pd 12-30-22
G 01-21220		FEDERAL WITHHOLDIN	(\$4,391.38)		FED/Wages Pd 12-30-22
G 01-21210		WISCONSIN WITHHOLDI	(\$2,207.11)		WI/Wages Pd 12-30-22
G 01-21230		SOCIAL SECURITY TAX	(\$4,040.13)		SS & MED/Wages Pd 12-30-22
G 01-21245		FLEX BENEFIT	(\$200.75)		FLEX BEN/Wages Pd 12-30-22
G 01-21280		HEALTH INSURANCE WI	(\$592.08)		HEALTH/Wages Pd 12-30-22
G 01-21260		ICMA - RC	(\$544.43)		ICMA/Wages Pd 12-30-22
G 01-21258		WISCONSIN DEFERRED	(\$627.00)		WI Def Comp/Wages Pd 12-30-22
G 01-21275		DENTAL INSURANCE WI	(\$65.63)		DENTAL/Wages Pd 12-30-22
G 01-21286		ACCIDENTAL INS WITH	(\$20.05)		ACCIDENTAL/Wages Pd 12-30-22
G 01-21276		VISION INSURANCE WIT	(\$38.12)		VISION/Wages Pd 12-30-22
G 01-11160		SPECIAL CLEARING AC	(\$37,571.24)		DirectDep/Wages Pd 12-30-22
Total			\$0.00		
1028 e	12/29/22	CARDMEMBER SERVICE			
E 01-03-521-3-398		OTHER SUPPLIES	\$25.00		Piggly Wiggly: Chief's meeting 11-8-2022
E 01-03-521-3-314		INVESTIGATIONS	\$105.00		Amazon: Bonvoisin Lab scale for evidence
E 01-03-521-3-314		INVESTIGATIONS	\$95.90		Amazon: industrial gloves
E 01-03-521-3-314		INVESTIGATIONS	\$95.90		Amazon: industrial gloves
E 01-03-521-2-201		POSTAGE	\$5.40		USPS: Case 22-7199
E 01-03-521-3-300		OFFICE SUPPLIES	\$21.86		Amazon: cork board
E 01-03-521-3-300		OFFICE SUPPLIES	\$16.99		Amazon: sticky notes
E 01-03-521-3-300		OFFICE SUPPLIES	\$12.24		Amazon: note pads
E 01-03-521-3-300		OFFICE SUPPLIES	\$10.37		Amazon: note pads
E 01-03-521-3-300		OFFICE SUPPLIES	\$7.99		Amazon: mouse pad
E 01-03-521-3-300		OFFICE SUPPLIES	\$32.46		Amazon: 2023 desk calendars
E 01-03-521-2-215		TRAINING - POLICE	\$250.00		WI Chief's Assn Conf Reg Fees
G 01-13110		DEFERRED EXPENDITU	\$150.00		WI Chief's Assn 2023 Membership Renewal
E 01-01-511-3-300		OFFICE SUPPLIES	\$132.50		Office Depot: office supplies
E 01-01-511-3-300		OFFICE SUPPLIES	\$55.02		Deluxe: GF deposit slips
E 01-03-522-3-327		MEDICAL SUPPLIES	\$607.05		CPR Savers: pediatric bags
E 21-05-610-2-203		TRAINING & MEETINGS	\$102.67		Foxtown Brewing: engineering mtg
E 01-04-541-3-331		REPAIR PARTS/CUSHM	\$50.00		Amazon: #13 Cushman



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Batch: 1222 VOT MN2

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
E 01-01-511-3-308		BUILDING SUPPLIES	\$54.90		Amazon: power over ethernet injector
E 01-01-554-7-710		CONTINGENCY	\$31.63		Zoom: two monthly subscriptions
E 01-04-541-3-399		MISCELLANEOUS	\$137.10		UPS Store: equipment shipment for repair
E 01-04-541-3-308		BUILDING SUPPLIES	\$87.44		Amazon: carbon monoxide detector
E 01-04-541-3-309		BUILDING REPAIRS	\$36.65		Amazon: LED flood light
		Total	\$2,124.07		
26857	12/19/22	WE ENERGIES			
E 42-10-042-4-209		ENGINEERING SERVICE	\$720.00	4830293	115 W Freistadt-Gas Disconnect
		Total	\$720.00		
26858	12/19/22	POSTMASTER			
E 01-01-510-2-201		POSTAGE	\$457.65		2022 Winter Newsletter - Acct. 8168
		Total	\$457.65		
26945	12/27/22	DELTA DENTAL OF WISCONSIN			
G 01-13110		DEFERRED EXPENDITU	\$1,800.06	1875287	JAN 2023 GF Dental
G 21-13110		DEFERRED EXPENDITU	\$145.62	1875287	JAN 2023 SWR Dental
G 42-13110		DEFERRED EXPENDITU	\$52.93	1875287	JAN 2023 TIF #2 Dental
G 19-13110		DEFERRED EXPENDITU	\$42.34	1875287	JAN 2023 STM SWR Dental
G 01-21275		DENTAL INSURANCE WI	\$38.96	1885350	JAN 2023 LAFOND Supp Dental
G 01-21275		DENTAL INSURANCE WI	\$38.96	1885350	JAN 2023 LANDISCH-HANSEN Supp Dental
G 01-21275		DENTAL INSURANCE WI	\$64.28	1885350	JAN 2023 ROGERS Supp Dental
G 01-21276		VISION INSURANCE WIT	\$12.88	1888324	JAN 2023 MIKYSKA Vision
G 01-21276		VISION INSURANCE WIT	\$20.58	1888324	JAN 2023 WILLIAMS Vision
G 01-21276		VISION INSURANCE WIT	\$20.58	1888324	JAN 2023 DECHANT Vision
G 01-21276		VISION INSURANCE WIT	\$11.42	1888324	JAN 2023 SCHMIT Vision
		Total	\$2,248.61		
26946	12/27/22	PORT WASHINGTON STATE BANK			
E 01-01-553-6-620		INTEREST	\$3,386.11		Loan #250933 4th Qtr Int-Buntrock
		Total	\$3,386.11		
26984	12/29/22	BIG FROG CUSTOM TSHIRTS & MORE			
E 14-16-522-4-499		OTHER	\$5,953.75	11956	EMS Flex Grant-Uniform
		Total	\$5,953.75		
26985	12/29/22	JEFFERSON FIRE & SAFETY, INC			
E 14-16-522-4-499		OTHER	\$2,360.00	PB001275	Turnout Gear
		Total	\$2,360.00		
11110		HARRIS GF -CHECKING	\$70,893.88		



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
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Fund Summary

11110 HARRIS GF -CHECKING

01 GENERAL FUND	\$54,118.16
06 EQUITY RESERVE ACCOUNT	\$2,869.61
14 CAPITAL IMPROVEMENT/EQUIPMENT	\$8,313.75
19 STORM WATER MANAGEMENT	\$719.52
21 SEWER UTILITY	\$4,099.91
42 TAX INCREMENT DISTRICT #2	\$772.93
	\$70,893.88



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Batch: 0123 VOT MN1

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
1036 e	01/13/23	MATC			
G 80-21420		DUE TO MATC	\$207,647.65		DEC 2022 Tax Settlement
		Total	\$207,647.65		
1037 e	01/13/23	MEQUON-THIENSVILLE SCHOOL DIST			
G 80-21410		DUE TO M-T SCHOOL DI	\$1,633,127.12		DEC 2022 Tax Settlement
		Total	\$1,633,127.12		
1038 e	01/13/23	OZAUKEE COUNTY TREASURER			
G 80-21430		DUE TO OZAUKEE COU	\$322,203.87		DEC 2022 Tax Settlement
		Total	\$322,203.87		
1039 e	01/13/23	PAYCHEX LOC #54			
E 01-01-511-2-210		DATA PROCESSING	\$276.40	2023011101	Processing 1-13-23 Payroll
E 01-01-511-2-210		DATA PROCESSING	\$451.26	2023011101	Process 2022 W-2's
		Total	\$727.66		
1040 e	01/13/23	PAYCHEX			
G 01-21220		FEDERAL WITHHOLDIN	\$1,777.98		FED/Wages Pd 1-13-23
G 01-21210		WISCONSIN WITHHOLDI	\$586.66		WI/Wages Pd 1-13-23
G 01-21230		SOCIAL SECURITY TAX	\$965.68		SS & MED/Wages Pd 1-13-23
E 01-03-522-1-199		FRINGE BENEFITS	\$355.52		TFD/Wages Pd 1-13-23
E 06-09-522-1-199		FRINGE BENEFITS	\$610.16		HOH/Wages Pd 1-13-23
G 01-11160		SPECIAL CLEARING AC	\$2,543.09		DirectDep/Wages Pd 1-13-23
		Total	\$6,839.09		
1041 e	01/13/23	V-T PAYROL ACCT. #3531102790			
E 01-03-522-1-100		SALARIES & WAGES	\$4,647.11		TFD Chief/Wages Pd 1-13-23
E 06-09-522-1-100		SALARIES & WAGES	\$7,976.17		HOH/Wages Pd 1-13-23
E 01-03-522-1-199		FRINGE BENEFITS	(\$114.59)		TFD WRS/Wages Pd 1-13-23
E 06-09-522-1-199		FRINGE BENEFITS	(\$118.24)		HOH WRS/Wages Pd 1-13-23
G 01-21220		FEDERAL WITHHOLDIN	(\$1,777.98)		FED/Wages Pd 1-13-23
G 01-21210		WISCONSIN WITHHOLDI	(\$586.66)		WI/Wages Pd 1-13-23
G 01-21230		SOCIAL SECURITY TAX	(\$965.68)		SS & MED/Wages Pd 1-13-23
G 01-11160		SPECIAL CLEARING AC	(\$2,543.09)		DirectDep/Wages Pd 1-13-23
		Total	\$6,517.04		
1042 e	01/24/23	DEPT. OF EMPLOYEE TRUST FUNDS			
E 01-01-511-1-196		ADMINISTRATOR FRING	\$1,165.95		FEB ADM Health
E 01-01-511-1-199		FRINGE BENEFITS	\$2,235.78		FEB ADM Staff Health
E 01-03-521-1-197		POLICE CHIEF FRINGE	\$2,119.90		FEB TPD Chief Health
E 01-03-521-1-199		FRINGE BENEFITS	\$18,134.36		FEB TPD Health
E 01-04-541-1-199		FRINGE BENEFITS	\$8,140.40		FEB DPW Health
E 01-04-542-1-199		FRINGE BENEFITS	\$1,695.92		FEB VP Health
E 19-18-541-1-199		FRINGE BENEFITS	\$763.16		FEB STM Health
E 21-05-610-1-199		FRINGE BENEFITS	\$2,653.17		FEB SWR Health
E 42-10-042-1-199		FRINGE BENEFITS	\$953.96		FEB TIF #2 Health
E 01-03-522-1-199		FRINGE BENEFITS	\$106.00		FEB TFD Health
E 01-03-521-1-195		ANNUITANT FRINGE	\$441.08		FEB TPD Annuitant Health



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
E 01-01-511-1-195		ANNUITANT FRINGE	\$606.90		FEB ADM Annuitant Health
		Total	\$39,016.58		
1043 e	01/20/23	ADP, LLC			
E 01-01-511-2-210		DATA PROCESSING	\$86.78	623092108	Processaing 1-13-23 Payroll
		Total	\$86.78		
1044 e	01/13/23	ICMA RETIREMENT TRUST			
G 01-21260		ICMA - RC	\$260.07		MIKYSKA ICMA/Wages Pd 1-13-23
G 01-21260		ICMA - RC	\$117.84		WILLILAMS ICMA/Wages Pd 1-13-23
G 01-21260		ICMA - RC	\$50.00		LANDISCH-HANSEN/Wages Pd 1-13-23
		Total	\$427.91		
1045 e	01/13/23	WI DEFERRED COMP PROGRAM			
G 01-21258		WISCONSIN DEFERRED	\$32.00		LAFOND WI DEF COMP/Wages Pd 1-13-23
G 01-21258		WISCONSIN DEFERRED	\$270.00		KLEPPIN WI DEF COMP/Wages Pd 1-13-23
G 01-21258		WISCONSIN DEFERRED	\$100.00		ACHTERBERG WI DEF COMP/Wages Pd 1-13-23
G 01-21258		WISCONSIN DEFERRED	\$125.00		NEUMAN WI DEF COMP/Wages Pd 1-13-23
G 01-21258		WISCONSIN DEFERRED	\$100.00		DECHANT WI DEF COMP/Wages Pd 1-13-23
		Total	\$627.00		
1046 e	01/13/23	ADP			
G 01-21220		FEDERAL WITHHOLDIN	\$3,527.71		FED/Wages Pd 1-13-23
G 01-21210		WISCONSIN WITHHOLDI	\$2,030.72		WI/Wages Pd 1-13-23
G 01-21230		SOCIAL SECURITY TAX	\$3,682.68		SS & MED/Wages Pd 1-13-23
E 01-01-511-1-196		ADMINISTRATOR FRING	\$444.45		ADM/Wages Pd 1-13-23
E 01-01-511-1-199		FRINGE BENEFITS	\$452.46		ADM Staff/Wages Pd 1-13-23
E 01-03-521-1-197		POLICE CHIEF FRINGE	\$416.20		TPD Chief/Wages Pd 1-13-23
E 01-03-521-1-199		FRINGE BENEFITS	\$2,469.08		TPD/Wages Pd 1-13-23
E 01-04-541-1-199		FRINGE BENEFITS	\$1,751.22		DPW/Wages Pd 1-13-23
G 01-11160		SPECIAL CLEARING AC	\$34,267.49		DirectDep/Wages Pd 1-13-23
		Total	\$49,042.01		
1047 e	01/13/23	V-T PAYROL ACCT. #3531102790			
E 01-01-511-1-108		ADMINISTRATOR	\$4,000.00		ADM/Wages Pd 1-13-23
E 01-01-511-1-100		SALARIES & WAGES	\$3,978.40		ADM Staff/Wages Pd 1-13-23
E 01-03-521-1-113		POLICE CHIEF SALARY	\$3,640.40		TPD Chief/Wages Pd 1-13-23
E 01-03-521-1-100		SALARIES & WAGES	\$22,316.67		TPD Chief/Wages Pd 1-13-23
E 01-04-541-1-100		SALARIES & WAGES	\$15,407.37		DPW/Wages Pd 1-13-23
E 01-01-511-1-196		ADMINISTRATOR FRING	(\$272.00)		ADM WRS/Wages Pd 1-13-23
E 01-01-511-1-199		FRINGE BENEFITS	(\$270.52)		ADM Staff WRS/Wages Pd 1-13-23
E 01-03-521-1-197		POLICE CHIEF FRINGE	(\$247.54)		TPD Chief WRS/Wages Pd 1-13-23
E 01-03-521-1-199		FRINGE BENEFITS	(\$1,517.49)		TPD WRS/Wages Pd 1-13-23
E 01-04-541-1-199		FRINGE BENEFITS	(\$1,047.67)		DPW WRS/Wages Pd 1-13-23
G 01-21220		FEDERAL WITHHOLDIN	(\$3,527.71)		FED/Wages Pd 1-13-23
G 01-21210		WISCONSIN WITHHOLDI	(\$2,030.72)		WI/Wages Pd 1-13-23
G 01-21230		SOCIAL SECURITY TAX	(\$3,682.68)		SS & MED/Wages Pd 1-13-23
G 01-21245		FLEX BENEFIT	(\$312.00)		FLEX BEN/Wages Pd 1-13-23
G 01-21280		HEALTH INSURANCE WI	(\$864.11)		HEALTH/Wages Pd 1-13-23
G 01-21260		ICMA - RC	(\$427.91)		ICMA/Wages Pd 1-13-23



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
G 01-21258		WISCONSIN DEFERRED	(\$627.00)		WI Def Comp/Wages Pd 1-13-23
G 01-21250		PROFESSIONAL POLICE	(\$135.00)		TPPA/Wages Pd 1-13-23
G 01-21275		DENTAL INSURANCE WI	(\$65.63)		DENTAL/Wages Pd 1-13-23
G 01-21286		ACCIDENTAL INS WITH	(\$17.16)		ACCIDENTAL/Wages Pd 1-13-23
G 01-21276		VISION INSURANCE WIT	(\$30.21)		VISION/Wages Pd 1-13-23
G 01-11160		SPECIAL CLEARING AC	(\$34,267.49)		DirectDep/Wages Pd 1-13-23
		Total	\$0.00		
1049 e	01/31/23	WISCONSIN RETIREMENT SYSTEM			
G 01-21110		ACCOUNTS PAYABLE	\$27,088.53		DEC ADM WRS
G 06-21110		ACCOUNTS PAYABLE	\$1,188.38		DEC TFD WRS
G 19-21110		ACCOUNTS PAYABLE	\$254.11		DEC STM SWR WRS
G 21-21110		ACCOUNTS PAYABLE	\$1,461.55		DEC SWR WRS
		Total	\$29,992.57		
26986	01/04/23	ART BELOW ZERO INC.			
E 07-07-542-7-293		DOG DAYS OF WINTER	\$1,060.00	5230B	Cleaned and boxed ice blocks
		Total	\$1,060.00		
26992	01/09/23	SECURIAN FINANCIAL GROUP, INC			
E 01-01-511-1-196		ADMINISTRATOR FRING	\$25.10		FEB ADM Life
E 01-01-511-1-199		FRINGE BENEFITS	\$109.58		FEB ADM Staff Life
E 01-03-521-1-197		POLICE CHIEF FRINGE	\$24.29		FEB TPD Chief Life
E 01-03-521-1-199		FRINGE BENEFITS	\$250.15		FEB TPD Life
E 01-03-522-1-199		FRINGE BENEFITS	\$3.84		FEB TFD Life
E 01-04-541-1-199		FRINGE BENEFITS	\$172.08		FEB DPW Life
E 01-04-542-1-199		FRINGE BENEFITS	\$30.25		FEB VP Life
E 21-05-610-1-199		FRINGE BENEFITS	\$77.00		FEB SWR Life
E 19-18-541-1-199		FRINGE BENEFITS	\$16.02		FEB STM WTR Life
E 42-10-042-1-199		FRINGE BENEFITS	\$21.52		FEB TIF #2 Life
		Total	\$729.83		
26993	01/16/23	DIGITAL EDGE OF GRAFTON			
E 07-07-542-7-293		DOG DAYS OF WINTER	\$208.00	20863	Dog Days of Winter Signs
		Total	\$208.00		
26994	01/19/23	WE ENERGIES			
G 01-21110		ACCOUNTS PAYABLE	\$1,502.53	4421468096	DEC VH Electric
G 01-21110		ACCOUNTS PAYABLE	\$1,849.88	4421468096	DEC VH Gas
G 01-21110		ACCOUNTS PAYABLE	\$455.14	4421468096	DEC DPW Electric
G 01-21110		ACCOUNTS PAYABLE	\$1,538.73	4421468096	DEC DPW Gas
G 21-21110		ACCOUNTS PAYABLE	\$1,716.43	4421468096	DEC SWR Electric
G 21-21110		ACCOUNTS PAYABLE	\$9.90	4421468096	DEC SWR Gas
G 16-21110		ACCOUNTS PAYABLE	\$96.10	4421468096	DEC OLD VH Electric
G 16-21110		ACCOUNTS PAYABLE	\$175.99	4421468096	DEC OLD VH Gas
G 01-21110		ACCOUNTS PAYABLE	\$697.31	4421468096	DEC VP Electric
G 01-21110		ACCOUNTS PAYABLE	\$168.94	4421468096	DEC VP Gas
G 01-21110		ACCOUNTS PAYABLE	\$3,358.95	4421468096	DEC Street Lighting
G 21-21110		ACCOUNTS PAYABLE	\$67.95	4421468096	DEC Emerg Siren Warn Sys
		Total	\$11,637.85		



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
26995	01/19/23	US CELLULAR			
E 01-03-522-3-303		TELEPHONE	\$222.18	0554323544	JAN TFD Cellular Charges
E 01-03-521-3-303		TELEPHONE	\$372.75	0554323544	JAN TPD Cellular Charges
E 01-04-541-3-303		TELEPHONE	\$114.65	0554323544	JAN DPW Cellular Charges
E 01-01-511-3-303		TELEPHONE	\$89.91	0554323544	JAN ADM Cellular Charges
Total			\$799.49		
26996	01/19/23	MID-MORAINES MUNICIPAL ASSOC.			
E 01-01-510-2-203		TRAINING & MEETINGS	\$30.00		MOBLEY/Mid-Moraine Dinner
Total			\$30.00		
26997	01/20/23	CHARTER COMMUNICATIONS			
E 01-04-541-3-303		TELEPHONE	\$113.99	18169011023	DPW Internet 12-22-22 to 1-21-23
E 21-05-610-3-303		TELEPHONE	\$113.98	18169011023	DPW Internet 12-22-22 to 1-21-23
E 01-01-511-3-303		TELEPHONE	\$97.49	18169011023	ADM Internet 1-6-23 to 2-5-23
E 01-03-521-3-303		TELEPHONE	\$194.97	18169011023	TPD Internet 1-6-23 to 2-5-23
E 01-04-541-3-303		TELEPHONE	\$58.49	18169011023	DPW Internet 1-6-23 to 2-5-23
E 21-05-610-3-303		TELEPHONE	\$39.00	18169011023	SWR Internet 1-6-23 to 2-5-23
Total			\$617.92		
11110 HARRIS GF -CHECKING			\$2,311,338.37		

Fund Summary

11110 HARRIS GF -CHECKING

01 GENERAL FUND	\$129,015.42
06 EQUITY RESERVE ACCOUNT	\$9,656.47
07 PARK IMPROVEMENT FUND	\$1,268.00
16 OLD VILLAGE HALL	\$272.09
19 STORM WATER MANAGEMENT	\$1,033.29
21 SEWER UTILITY	\$6,138.98
42 TAX INCREMENT DISTRICT #2	\$975.48
80 TAX COLLECTION FUND	\$2,162,978.64
	\$2,311,338.37



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Batch: 1222 VOT AP2

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
26947	12/29/22	ABT MAILCOM INC			
E 01-01-511-3-399		MISCELLANEOUS	\$264.44	43987	Processing 2022 Tax Bills
		Total	\$264.44		
26948	12/29/22	AIR ONE EQUIPMENT, INC			
E 14-16-522-4-499		OTHER	\$4,205.70	188369	Turnout Gear Replacement
		Total	\$4,205.70		
26949	12/29/22	AIRGAS USA, LLC			
E 01-03-522-3-322		AIR & OXYGEN	\$273.99	9133130876	Refill D Size Oxygen
		Total	\$273.99		
26950	12/29/22	AMAZON CAPITAL SERVICES			
E 01-03-522-3-399		MISCELLANEOUS	\$599.90		Turnout Gear Bag
		Total	\$599.90		
26951	12/29/22	BAKER TILLY VIRCHOW KRAUSE LLP			
E 01-01-510-2-206		AUDIT	\$3,775.00	BT2269764	GAAS FS Audit - GAAP
		Total	\$3,775.00		
26952	12/29/22	BEYER'S TRUE VALUE			
E 01-04-541-2-227		STREET MAINTENANCE	\$17.94	176009	15 amp vinyl cube
E 01-04-541-2-228		SANITARY LANDFILL	(\$16.99)	176180	CREDIT: return stretch wrap
E 01-04-541-2-228		SANITARY LANDFILL	\$77.98	176180	Stretch film
E 01-04-541-3-333		TOOLS	\$4.99	176244	Masonry bit
E 01-04-541-3-333		TOOLS	\$6.49	176244	Hardware
		Total	\$90.41		
26953	12/29/22	BUDIAC PLUMBING INC			
G 01-21550		MISCELLANEOUS REFU	\$100.00		184 & 188 S Main-Street Opening Refund
		Total	\$100.00		
26954	12/29/22	CHARTER COMMUNICATIONS			
E 01-04-541-3-303		TELEPHONE	\$113.99	18169121022	DPW Internet 11-22-22 - 12-21-22
E 21-05-610-3-303		TELEPHONE	\$113.98	18169121022	DPW Internet 11-22-22 - 12-21-22
E 01-01-511-3-303		TELEPHONE	\$84.81	18169121022	ADM Internet 12-6-22 - 1-5-23
E 01-03-521-3-303		TELEPHONE	\$118.66	18169121022	TPD Internet 12-6-22 - 1-5-23
E 01-04-541-3-303		TELEPHONE	\$50.85	18169121022	DPW Internet 12-6-22 - 1-5-23
E 21-05-610-3-303		TELEPHONE	\$16.97	18169121022	SWR Internet 12-6-22 - 1-5-23
E 01-03-522-3-303		TELEPHONE	\$118.66	18169121022	TFD Internet 12-6-22 - 1-5-23
E 01-01-511-3-303		TELEPHONE	\$46.68	32125121322	DEC ADM Telephone
E 01-03-521-3-303		TELEPHONE	\$65.30	32125121322	DEC TPD Telephone
E 01-03-522-3-303		TELEPHONE	\$65.30	32125121322	DEC TFD Telephone
E 01-04-541-3-303		TELEPHONE	\$27.98	32125121322	DEC DPW Telephone
E 21-05-610-3-303		TELEPHONE	\$9.34	32125121322	DEC SWR Telephone
		Total	\$832.52		
26955	12/29/22	CHRIS DECHANT			
E 01-04-541-3-310		FUEL	\$20.72		DECHANT gasoline reimbursement



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
Total			\$20.72		
26956	12/29/22	CINTAS CORPORATION			
E 01-01-511-3-308		BUILDING SUPPLIES	\$311.53	4141082248	DEC VH mats
Total			\$311.53		
26957	12/29/22	DIVERSIFIED BENEFIT SERVICES			
E 01-01-554-7-715		FLEX BENEFIT	\$125.00	369837	DEC FSA Health Reimb Admin Svcs
Total			\$125.00		
26958	12/29/22	EMERGENCY MEDICAL PRODUCTS			
E 01-03-522-3-327		MEDICAL SUPPLIES	\$494.91	2510057	EMS Flex Grant-stethoscopes
E 01-03-522-3-327		MEDICAL SUPPLIES	\$990.87	2510057	EMS Flex Grant-thermometer
E 01-03-522-3-327		MEDICAL SUPPLIES	\$1,169.95	2510057	EMS Flex Grant-adult BP set
E 01-03-522-3-327		MEDICAL SUPPLIES	\$418.47	2510058	EMS Flex Grant-surgical clipper kit
Total			\$3,074.20		
26959	12/29/22	GFL ENVIRONMENTAL			
E 01-04-541-2-228		SANITARY LANDFILL	\$1,693.82	VC-5261	DEC Landfill-Late
Total			\$1,693.82		
26960	12/29/22	JEFFERSON FIRE & SAFETY, INC			
E 14-16-522-4-499		OTHER	\$9,360.00	PB001271	Turnout Gear Replacement
Total			\$9,360.00		
26961	12/29/22	JONATHAN CENSKY, PLANNER			
E 01-01-510-2-205		PLANNER SERVICES	\$40.00	22-0024	400 Susan/Pool
G 01-21525		DEPOSIT-DEVELP. APPL	\$62.50	22-0024	400 Susan/Pool
E 01-01-510-2-205		PLANNER SERVICES	\$45.30	22-0025	250 South Main Street/Sign
G 01-21525		DEPOSIT-DEVELP. APPL	\$12.50	22-0025	250 South Main Street/Sign
E 01-01-510-2-205		PLANNER SERVICES	\$45.30	22-0026	221 W Alta Loma/Shed
G 01-21525		DEPOSIT-DEVELP. APPL	\$12.50	22-0026	221 W Alta Loma/Shed
E 01-01-510-2-205		PLANNER SERVICES	\$82.80	22-0027	105 W Freistadt-Meeting
E 01-01-510-2-205		PLANNER SERVICES	\$63.80	22-0028	Board of Appeals Meeting
E 01-01-510-2-205		PLANNER SERVICES	\$45.30	22-0029	161 Green Bay/Sign
G 01-21525		DEPOSIT-DEVELP. APPL	\$12.50	22-0029	161 Green Bay/Sign
E 01-01-510-2-205		PLANNER SERVICES	\$37.50	22-0030	192 S Main/Sign
Total			\$460.00		
26962	12/29/22	MICHAEL SCHACTNER			
E 01-04-541-3-329		CLOTHING	\$194.50		SCHACTNER/Boots
Total			\$194.50		
26963	12/29/22	MILE ROCK SITE SOLUTIONS			
G 01-21550		MISCELLANEOUS REFU	\$300.00		140-146 S Main-Street Opening Refund
Total			\$300.00		
26964	12/29/22	MINUTEMAN PRESS			
E 01-01-510-2-200		PRINTING & PUBLISHIN	\$2,029.40	44420	Winter 2022 Newsletter
Total			\$2,029.40		



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
26965	12/29/22	NAPA AUTO PARTS-GRAFTON			
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$7.49	199516	Tape, shop supplies
E 01-03-521-3-316		REPAIRS & MAINTENAN	(\$131.86)	199518	WARRANTY: TPD #1 battery
E 01-03-521-3-316		REPAIRS & MAINTENAN	\$137.87	199518	TPD #1 battery
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$15.76	203632	DPW Oil filter
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$33.76	203632	DPW Oil filter
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$13.68	203632	DPW Oil filter
E 01-03-521-3-316		REPAIRS & MAINTENAN	\$13.68	203632	TPD Oil filter
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$22.40	203632	DPW transmission filter
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$33.90	203632	DPW Peak anti-freeze
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$64.99	204786	Torque wrench
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	(\$64.99)	205019	RETURN torque wrench
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$9.42	207022	Oil filter-bobcat service
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$38.98	207022	Fuel filter-bobcat service
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$48.84	207022	Hydraulic filter-bobcat service
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$32.47	207022	Air filter-bobcat service
E 01-04-541-3-331		REPAIR PARTS/CUSHM	\$13.68	212701	Flasher for Cushman
E 01-03-521-3-316		REPAIRS & MAINTENAN	\$24.33	212709	TPD #1 wiper blade
E 01-03-521-3-316		REPAIRS & MAINTENAN	\$19.91	212709	TPD #1 wiper blad
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$8.59	212709	Oil filter, shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$26.62	212709	Oil filter,shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$17.75	212709	Oil filter, shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$16.26	212709	Oil filter, shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$19.78	212709	Oil filter, shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$116.12	212709	Oil filter, shop supplies
E 01-04-541-3-331		REPAIR PARTS/CUSHM	\$7.30	212746	Light socket for Cushman
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$9.42	213344	Oil filter, shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$29.70	215407	Miniature lamps, shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$39.96	215407	Power service diesel, shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$11.18	215407	Starter fluid, shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$6.49	215407	Miniature lamps, shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$10.98	215407	Miniature lamps, shop supplies
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$14.99	215407	Nut set, shop supplies
E 01-03-522-3-320		TRUCK MAINTENANCE	(\$458.44)	215407	CREDIT: #561 batteries
		Total	\$211.01		
26966	12/29/22	PARKITECTURE + PLANNING			
E 14-16-542-4-499		OTHER	\$830.00	6	POSP Plan
		Total	\$830.00		
26967	12/29/22	PROPERTY SOLUTIONS CONTRACTING			
E 14-16-541-4-499		OTHER	\$8,750.00	1601	Emerald Ash Borer Program
		Total	\$8,750.00		
26968	12/29/22	QUALITY STATE OIL CO., INC			
E 01-04-541-3-310		FUEL	\$1,371.74		DPW Gasoline
E 01-03-521-3-310		FUEL	\$978.94		TPD Gasoline
E 01-03-522-3-310		FUEL	\$435.14		TFD Gasoline
		Total	\$2,785.82		



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
26969	12/29/22	R & R INSURANCE SERVICES, INC.			
G 01-13110		DEFERRED EXPENDITU	\$1,100.00	2758148	Crime Policy #1835290 1-1-23 - 1-1-24
G 01-13110		DEFERRED EXPENDITU	\$10,072.00	2765617	Workers Comp 1-1-23 - 1-1-24
G 01-13110		DEFERRED EXPENDITU	\$15,333.75	2765768	LWMMI #45186 Pkg C 1-1-23 - 1-1-24
		Total	\$26,505.75		
26970	12/29/22	RICOH USA, INC			
E 01-01-510-2-200		PRINTING & PUBLISHIN	\$237.27	5066388575	NOV Copies
		Total	\$237.27		
26971	12/29/22	RUEKERT & MIELKE			
E 42-10-042-4-209		ENGINEERING SERVICE	\$364.00	144626	Hawthorn Square Infiltration Discussions
G 14-13110		DEFERRED EXPENDITU	\$1,820.00	144626	2023 Road Program
G 21-13110		DEFERRED EXPENDITU	\$4,439.75	144626	2023 SWR Program
E 01-01-511-2-209		ENGINEERING SERVICE	\$172.00	144626	601 N Main Water Estimate
E 01-01-511-2-209		ENGINEERING SERVICE	\$182.00	144626	ATT Utility Mat
E 21-05-610-2-209		ENGINEERING SERVICE	\$528.00	144627	2022 GIS Data Maintenance
E 01-01-554-7-754		HISTORIC PRESERVATI	\$2,500.00	144627	Historic District story map
E 19-18-541-2-776		STORMWATER PLANNIN	\$150.00	144629	DPW yard site plan
E 19-18-541-2-776		STORMWATER PLANNIN	\$3,580.00	144630	STM WTR mgmt plan
E 19-18-541-2-776		STORMWATER PLANNIN	\$1,786.50	144631	STM WTR mgmt plan exhibits
E 19-18-541-2-776		STORMWATER PLANNIN	\$402.75	144632	STM WTR plan-alternatives
E 19-18-541-2-776		STORMWATER PLANNIN	\$591.08	144633	STM WTR plan-modeling
E 42-10-042-4-209		ENGINEERING SERVICE	\$933.00	144634	TID2 engineering svcs
E 42-10-042-4-803		TIF #2 WATERMAINS	\$20,775.72	144635	Main-Freistadt water main survey/design
		Total	\$38,224.80		
26972	12/29/22	SAFETYMART			
E 01-03-522-3-323		PROTECTIVE GEAR	\$4,298.28	8689	Jackets
		Total	\$4,298.28		
26973	12/29/22	SHRED-IT			
E 01-03-521-3-398		OTHER SUPPLIES	\$44.86	8003004289	DEC Monthly Shredding
		Total	\$44.86		
26974	12/29/22	SPENCER KOENIG			
E 01-01-554-7-753		SCREEN ON THE GREE	\$250.00		Screen on the Green--1 event
		Total	\$250.00		
26975	12/29/22	TAYLORS TINS			
E 14-16-522-4-499		OTHER	\$3,828.00		Turnout Gear Replacement
		Total	\$3,828.00		
26976	12/29/22	US CELLULAR			
E 01-03-522-3-303		TELEPHONE	\$219.56	0548227405	DEC TFD Cellular Charges
E 01-03-521-3-303		TELEPHONE	\$372.76	0548227405	DEC TPD Cellular Charges
E 01-04-541-3-303		TELEPHONE	\$114.66	0548227405	DEC DPW Cellular Charges
E 01-01-511-3-303		TELEPHONE	\$89.91	0548227405	DEC ADM Cellular Charges
		Total	\$796.89		
26977	12/29/22	UTILITY SALES & SERVICE, INC			



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Batch: 1222 VOT AP2

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$5,883.46	0075055-IN	Bucket Truck Repair
		Total	\$5,883.46		
26978	12/29/22	VILLAGE OF THIENSVILLE			
E 42-10-042-4-801		PROPERTY ACQUISITIO	\$255.00	11-126-00-3	4th Qtr Swr/11-126-00-3
		Total	\$255.00		
26979	12/29/22	ZOLL MEDICAL CORPORATION			
E 14-16-522-4-402		EQUIPMENT	\$43,090.66	3635080	EMS Flex Grant
E 14-16-522-4-402		EQUIPMENT	\$2,260.00	3635080	EMS Flex Grant-CaseReview Sub-5 yr
		Total	\$45,350.66		
		11110 HARRIS GF -CHECKING	\$165,962.93		

Fund Summary

11110 HARRIS GF -CHECKING

01 GENERAL FUND	\$57,872.48
14 CAPITAL IMPROVEMENT/EQUIPMENT	\$74,144.36
19 STORM WATER MANAGEMENT	\$6,510.33
21 SEWER UTILITY	\$5,108.04
42 TAX INCREMENT DISTRICT #2	\$22,327.72
	\$165,962.93



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Batch: 1222 VOT AP

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
26859	12/20/22	3 RIVERS BILLING, INC			
E 06-09-522-2-276		BILLING SERVICES	\$669.85	6128	NOV 2022 EMS Billing
		Total	\$669.85		
26860	12/20/22	AIRGAS USA, LLC			
E 01-04-541-3-308		BUILDING SUPPLIES	\$82.96	9992936410	Argon, oxygen cylinder rental
		Total	\$82.96		
26861	12/20/22	AMAZON CAPITAL SERVICES			
E 01-03-522-3-399		MISCELLANEOUS	\$42.34		3M stripe wheel
E 01-03-522-3-399		MISCELLANEOUS	\$9.59		USB cable for pager programmer
		Total	\$51.93		
26862	12/20/22	AMERICAN SIGNAL CORPORATION			
E 01-03-521-2-222		EMERGENCY GOVERNMENT	\$1,721.65	11725-1-IN	Repairs to Thiensville Siren
		Total	\$1,721.65		
26863	12/20/22	AMY LANGLOIS			
E 01-01-511-1-115		TRAVEL/TRAINING/SEMI	\$70.00		Mileage
E 01-01-511-1-115		TRAVEL/TRAINING/SEMI	\$17.50		Mileage
		Total	\$87.50		
26864	12/20/22	ASSESSMENT TECHNOLOGIES OF WI, LLC			
G 01-13110		DEFERRED EXPENDITURE	\$1,650.00	4314961	JAN-MAR 2023 Maint of Assess Records
		Total	\$1,650.00		
26865	12/20/22	BEAR GRAPHICS, INC.			
E 01-01-510-3-302		ELECTION EXPENSE	\$56.93	0908264	Voter Tally Slips
		Total	\$56.93		
26866	12/20/22	BEYER'S TRUE VALUE			
E 01-04-542-2-230		REPAIRS & MAINTENANCE	\$59.88	175636	Anti-freeze
E 01-04-541-3-399		MISCELLANEOUS	\$55.98	175712	Stretch film, stretch wrap
E 01-04-542-2-230		REPAIRS & MAINTENANCE	\$23.45	175754	Galvanized wire
E 01-04-541-3-308		BUILDING SUPPLIES	\$11.37	175825	Clear bulbs
		Total	\$150.68		
26867	12/20/22	BUBLITZ PLUMBING & HEATING			
E 21-05-610-2-251		BUILDING REPAIRS	\$1,225.09	24974	SWR lift station-water heater
		Total	\$1,225.09		
26868	12/20/22	BUELOW VETTER BUIKEMA			
E 01-01-510-2-207		LEGAL COUNSEL	\$162.50	168	NOV DPW
		Total	\$162.50		
26869	12/20/22	CDW-G			
E 01-01-511-3-308		BUILDING SUPPLIES	\$27.82	FB13685	Ubiquiti POE Injector
E 01-01-511-3-308		BUILDING SUPPLIES	\$17.60	FB13685	Belkin cable
		Total	\$45.42		



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Batch: 1222 VOT AP

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
26870	12/20/22	CENTURY SPRINGS			
E 01-04-541-3-308		BUILDING SUPPLIES	\$18.57	5292175	NOV DPW bottled water
		Total	\$18.57		
26871	12/20/22	CHARLES R. HEFLIN			
G 01-11160		SPECIAL CLEARING AC	\$37.87		Payroll Ck from 6-17-22 Payroll
		Total	\$37.87		
26872	12/20/22	CINTAS CORPORATION			
E 01-01-511-3-308		BUILDING SUPPLIES	\$311.53	4138267231	NOV VH mats
		Total	\$311.53		
26873	12/20/22	CIVICPLUS			
G 21-13110		DEFERRED EXPENDITU	\$250.00	244437	Municode Admin Support
		Total	\$250.00		
26874	12/20/22	CLIFF BERGIN & ASSOC., INC.			
E 01-01-511-3-308		BUILDING SUPPLIES	\$618.00	43660	Training Room heat
		Total	\$618.00		
26875	12/20/22	COLLEEN LANDISCH-HANSEN			
E 01-01-511-1-115		TRAVEL/TRAINING/SEMI	\$3.13		Mileage
E 01-01-511-1-115		TRAVEL/TRAINING/SEMI	\$20.00		Mileage
		Total	\$23.13		
26876	12/20/22	CONLEY MEDIA, LLC			
E 01-01-510-2-200		PRINTING & PUBLISHIN	\$10.78	1672361122	Ordinance 2022-03 Notice/Affidavit
E 01-01-510-3-302		ELECTION EXPENSE	\$29.93	1672361122	Type D Notice/Affidavit
E 01-01-510-3-302		ELECTION EXPENSE	\$22.18	1672361122	Type A Notice/Affidavit
		Total	\$62.89		
26877	12/20/22	DIGITAL EDGE OF GRAFTON			
E 07-07-542-7-293		DOG DAYS OF WINTER	\$30.00	20706	Dog Days of Winter Yard Signs
E 07-07-542-7-293		DOG DAYS OF WINTER	\$54.00	20766	Dog Days of Winter flyers
E 07-07-542-7-293		DOG DAYS OF WINTER	\$120.00	20766	Dog Days of Winter signs
E 07-07-542-7-293		DOG DAYS OF WINTER	\$32.00	20766	Dog Days of Winter posters
		Total	\$236.00		
26878	12/20/22	DIVERSIFIED BENEFIT SERVICES			
E 01-01-554-7-715		FLEX BENEFIT	\$100.00	368825	DEC HRA Health Reimb Admin Svcs
		Total	\$100.00		
26879	12/20/22	ELEMENTS MASSAGE			
G 01-21540		REFUNDS - PARK DEPO	\$100.00		VP Deposit Refund/8-28-21
		Total	\$100.00		
26880	12/20/22	ELMER C. PRENZLOW			
E 01-01-510-1-112		ELECTION WORKERS	\$55.00		August 9, 2022 Partisan Primary
		Total	\$55.00		
26881	12/20/22	EMERGENCY MEDICAL PRODUCTS			

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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
E 01-03-522-3-327		MEDICAL SUPPLIES	\$95.10	2501859	Various BLS medical supplies
E 06-09-522-3-327		MEDICAL SUPPLIES	\$168.00	2501859	Various ALS medical supplies
E 01-03-522-3-327		MEDICAL SUPPLIES	\$26.80	2508372	Various BLS medical supplies
		Total	\$289.90		
26882	12/20/22	GALLS, LLC			
E 01-03-521-3-312		UNIFORM ALLOWANCE	\$21.89	022791950	NEUMAN/flashligh
E 01-03-521-3-312		UNIFORM ALLOWANCE	\$32.87	022821894	MEJCHAR/glove
E 01-03-521-3-312		UNIFORM ALLOWANCE	\$53.18	022839919	MEJCHAR/gloves
		Total	\$107.94		
26883	12/20/22	GFL ENVIRONMENTAL			
E 01-04-541-2-228		SANITARY LANDFILL	\$1,912.41	VC5216	NOV Landfill-Late
		Total	\$1,912.41		
26884	12/20/22	GIERACH'S SERVICE			
E 01-03-521-3-315		TIRES	\$186.23		#2 Squad Tires
E 01-03-522-3-320		TRUCK MAINTENANCE	\$43.40		#556 reseal tire
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$63.40		#12 tires
		Total	\$293.03		
26885	12/20/22	GORDIE BOUCHER FORD			
E 01-03-521-3-316		REPAIRS & MAINTENAN	\$557.32	132159	#1 air bag
E 01-03-521-3-316		REPAIRS & MAINTENAN	\$312.49	43392	#2 coolant, tire pressure monitors
		Total	\$869.81		
26886	12/20/22	GRAYBAR			
E 01-04-541-3-308		BUILDING SUPPLIES	\$643.52	9329911130	DPW building lights
		Total	\$643.52		
26887	12/20/22	HEATHER BOESCH			
E 01-03-521-3-312		UNIFORM ALLOWANCE	\$63.28		BOESCH/Boots
		Total	\$63.28		
26888	12/20/22	HOUSEMAN & FEIND, LLP			
E 01-01-510-2-207		LEGAL COUNSEL	\$728.50	79118	NOV Legal-Traffic
E 01-01-510-2-207		LEGAL COUNSEL	\$746.00	79354	NOV Legal
E 42-10-042-4-207		LEGAL COUNSEL	\$234.00	79354	NOV Legal
E 01-01-510-2-207		LEGAL COUNSEL	\$516.25	79354	NOV Legal
E 06-09-522-2-207		LEGAL COUNSEL	\$516.25	79354	NOV Legal
		Total	\$2,741.00		
26889	12/20/22	JOIN THE FIRE SERVICE LLC			
E 01-03-522-3-311		RECRUITMENT	\$229.00	1153	DEC monthly subscription
		Total	\$229.00		
26890	12/20/22	LEAGUE OF WI MUNICIPALITIES			
G 01-13110		DEFERRED EXPENDITU	\$1,725.00		Dues 1-1-23 - 12-31-23
		Total	\$1,725.00		
26891	12/20/22	LIBERTY MUTUAL SURETY			



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
G 01-13110		DEFERRED EXPENDITU	\$675.00		WI ADM/Treas Bond #999084193
		Total	\$675.00		
26892	12/20/22	MID-MORAINÉ MUNICIPAL ASSOC.			
G 01-13110		DEFERRED EXPENDITU	\$324.84		2023 Membership Dues
		Total	\$324.84		
26893	12/20/22	MILWAUKEE AREA TECHNICAL			
E 01-03-522-2-225		SCHOOLING	\$906.75		AZINGER/EMT Basic Course
		Total	\$906.75		
26894	12/20/22	OZAUKEE COUNTY CLERK			
E 01-01-510-3-302		ELECTION EXPENSE	\$862.25		ICE Annual Maintenance
E 01-01-510-3-302		ELECTION EXPENSE	\$64.57		AUG notices/ICE ink cartridge
		Total	\$926.82		
26895	12/20/22	PARKITECTURE + PLANNING			
E 14-16-542-4-499		OTHER	\$2,282.00		Tennis Court Resurf-Concept Design
		Total	\$2,282.00		
26896	12/20/22	POMPS TIRE SERVICE, INC.			
E 01-03-522-3-320		TRUCK MAINTENANCE	\$692.32	430131617	#555 Tires
		Total	\$692.32		
26897	12/20/22	QUALITY STATE OIL CO., INC			
E 01-04-541-3-310		FUEL	\$1,043.02		DPW Gasoline
E 01-03-521-3-310		FUEL	\$744.35		TPD Gasoline
E 01-03-522-3-310		FUEL	\$330.86		TFD Gasoline
		Total	\$2,118.23		
26898	12/20/22	RICOH USA, INC			
E 01-01-510-2-200		PRINTING & PUBLISHIN	\$296.95	5066140954	Copies 10-19-22 - 11-18-22
E 01-03-522-3-307		SUPPLIES-COPY MACHI	\$163.92	5066259119	Copies
E 01-03-521-3-307		SUPPLIES-COPY MACHI	\$302.29	5066271361	Copy Charges
		Total	\$763.16		
26899	12/20/22	ROBINSON BROTHERS ENVIRONMENTAL			
E 42-10-042-4-802		REMEDIATION/SITE DEV	\$48,300.00		102-120 W Freistadt/Demolition
G 42-21110		ACCOUNTS PAYABLE	(\$1,207.50)		102-120 W Freistadt/Retainage
		Total	\$47,092.50		
26900	12/20/22	RUEKERT & MIELKE			
E 19-18-541-2-209		ENGINEERING SERVICE	\$2,639.00	144248	FEMA floodplain maps
E 21-05-610-2-209		ENGINEERING SERVICE	\$364.00	144248	MMSD TAT meeting
E 42-10-042-4-209		ENGINEERING SERVICE	\$682.50	144248	Hawthorn Square infiltration discussions
E 01-01-511-2-209		ENGINEERING SERVICE	\$2,197.00	144248	Project coordination meeting
E 14-14-554-7-737		ROAD PROGRAM RESE	\$409.50	144248	Road Program Reserves
E 21-05-610-2-209		ENGINEERING SERVICE	\$955.50	144248	2023 SWR program
E 19-18-541-2-776		STORMWATER PLANNIN	\$132.00	144248	Pigeon Creek restoration meeting
E 21-05-610-2-209		ENGINEERING SERVICE	\$594.00	144249	GIS data maintenance
E 19-18-541-2-776		STORMWATER PLANNIN	\$8,932.50	144250	STM WTR management plan exhibits



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
E 19-18-541-2-776		STORMWATER PLANNIN	\$4,356.90	144251	STM WTR management plan update
E 21-05-610-2-209		ENGINEERING SERVICE	\$1,161.00	144252	2021 PP I/I project management
E 42-10-042-4-803		TIF #2 WATERMAINS	\$12,340.50	144253	Main-Freistadt water main
E 19-18-541-2-776		STORMWATER PLANNIN	\$12,673.75	144254	Pigeon Creek: grant, surveys, analysis
E 19-18-541-2-257		MAINTENANCE & REPAI	\$1,140.00	144255	IDDE inspections
E 21-05-610-2-209		ENGINEERING SERVICE	\$516.00	144256	2022 PP I/I
Total			\$49,094.15		
26901	12/20/22	SAFEUILT			
E 01-03-523-2-272		BUILDING INSPECTION	\$1,203.77	94182-IN	NOV BLD Permits
E 01-03-523-2-273		PLUMBING INSPECTION	\$396.00	94182-IN	NOV PLBG Permits
E 01-03-523-2-274		ELECTRICAL INSPECTIO	\$180.00	94182-IN	NOV ELEC Permits
E 01-03-523-2-272		BUILDING INSPECTION	\$45.00	94182-IN	NOV ZONING Permits
E 01-03-523-2-272		BUILDING INSPECTION	\$126.00	94182-IN	NOV OCC Permits
Total			\$1,950.77		
26902	12/20/22	SCOTT GAD			
G 01-21525		DEPOSIT-DEVELP. APPL	\$292.15		Development Deposit Refund
Total			\$292.15		
26903	12/20/22	SECURIAN FINANCIAL GROUP, INC			
G 01-21286		ACCIDENTAL INS WITH	\$37.16		JAN Accidental
Total			\$37.16		
26904	12/20/22	SHRED-IT			
E 01-03-521-3-398		OTHER SUPPLIES	\$88.68	8002808668	OCT and NOV Shredding Service
Total			\$88.68		
26905	12/20/22	SHULLY CATERING, INC.			
E 01-01-510-3-397		AWARDS PROGRAM	\$2,625.00	19916	Employee-Volunteer Recognition Dinner
Total			\$2,625.00		
26906	12/20/22	SOUTHERN OZAUKEE FIRE & EMS			
G 14-13110		DEFERRED EXPENDITU	\$21,798.00		2023 1st Qtr SOFD Capital
G 01-13110		DEFERRED EXPENDITU	\$61,970.74		2023 1st Qtr SOFD Expditures
Total			\$83,768.74		
26907	12/20/22	STREICHER'S			
E 01-03-522-3-312		UNIFORM ALLOWANCE	\$79.76	11601888	Uniform items
Total			\$79.76		
26908	12/20/22	TAPCO			
E 14-16-542-4-499		OTHER	\$22,050.00	1743096	Park Lights, r ing of fire lights
E 14-16-542-4-499		OTHER	\$2,450.00	1743096	Park Lights, globe adapter ring
Total			\$24,500.00		
26909	12/20/22	THIENSVILLE HARDWARE			
E 01-04-541-3-335		STREET LIGHTING	\$9.89	185630	Electrical tape
E 21-05-610-2-251		BUILDING REPAIRS	\$19.75	185656	Brass coupling, tape, external bar set
E 01-04-541-3-335		STREET LIGHTING	\$55.56	186279	Polarized cube tap
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$14.99	186474	HTH test strips



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Batch: 1222 VOT AP

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
Total			\$100.19		
26910	12/20/22	WI PROFESSIONAL POLICE ASSOC			
G 01-21250		PROFESSIONAL POLICE	\$45.00		DEC JANZER TPPA Dues
G 01-21250		PROFESSIONAL POLICE	\$45.00		DEC MEJCHAR TPPA Dues
G 01-21250		PROFESSIONAL POLICE	\$45.00		DEC NEUMAN TPPA Dues
G 01-21250		PROFESSIONAL POLICE	\$45.00		DEC STONE TPPA Dues
G 01-21250		PROFESSIONAL POLICE	\$45.00		DEC SCHMIT TPPA Dues
G 01-21250		PROFESSIONAL POLICE	\$45.00		DEC ROGERS TPPA Dues
Total			\$270.00		
26911	12/20/22	VEOLIA ES TECHNICAL SOLUTIONS			
E 01-04-541-2-266		RECYCLING	\$648.39	EW1656722	Electronics recycling
Total			\$648.39		
26912	12/20/22	VILLAGE OF THIENSVILLE			
E 42-10-042-4-801		PROPERTY ACQUISITIO	\$7,936.51	526258	102-120 W Freistadt/2022 Property Taxes
E 42-10-042-4-801		PROPERTY ACQUISITIO	\$3,227.57	526391	115 W Freistadt/2022 Property Taxes
Total			\$11,164.08		
26913	12/20/22	WACHTEL TREE SCIENCE, INC			
E 14-16-541-4-499		OTHER	\$1,250.00	110640	Emerald Ash Borer Program
E 14-16-541-4-499		OTHER	\$750.00	110640	Emerald Ash Borer Program
Total			\$2,000.00		
26914	12/20/22	WASTE MANAGEMENT OF WI-MN			
E 01-04-541-2-266		RECYCLING	\$3,002.60	6834387-227	NOV Curbside Recycling
Total			\$3,002.60		
26915	12/20/22	WCMA			
G 01-13110		DEFERRED EXPENDITU	\$159.75		LANDISCH-HANSEN 2023 Membership
Total			\$159.75		
11110 HARRIS GF -CHECKING			\$252,155.43		

Fund Summary

11110 HARRIS GF -CHECKING

01 GENERAL FUND	\$93,102.76
06 EQUITY RESERVE ACCOUNT	\$1,354.10
07 PARK IMPROVEMENT FUND	\$236.00
14 CAPITAL IMPROVEMENT/EQUIPMENT	\$50,989.50
19 STORM WATER MANAGEMENT	\$29,874.15
21 SEWER UTILITY	\$5,085.34
42 TAX INCREMENT DISTRICT #2	\$71,513.58
	\$252,155.43



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Batch: 1222 TX REF1

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
26939	12/22/22	CYNTHIA GALLUN			
G 01-21530		REFUNDS R E TAX OVE	\$40.23	12055130800	Batch #10/Overpay Real Estate Taxes
G 01-21530		REFUNDS R E TAX OVE	(\$40.23)	12055130800	Batch #10/Overpay Real Estate Taxes
G 80-21530		REFUNDS R E TAX OVE	\$40.23	12055130800	Batch #10/Overpay Real Estate Taxes
		Total	\$40.23		
26940	12/22/22	GRAL PROPERTIES, LLC			
G 01-21530		REFUNDS R E TAX OVE	\$263.08	12077000200	Batch #13/Overpay Real Estate Taxes
G 01-21530		REFUNDS R E TAX OVE	(\$263.08)	12077000200	Batch #13/Overpay Real Estate Taxes
G 80-21530		REFUNDS R E TAX OVE	\$263.08	12077000200	Batch #13/Overpay Real Estate Taxes
		Total	\$263.08		
26941	12/22/22	LDG INVESTMENTS LLC			
G 01-21530		REFUNDS R E TAX OVE	\$113.75	12078001600	Batch #13/Overpay Real Estate Taxes
G 01-21530		REFUNDS R E TAX OVE	(\$113.75)	12078001600	Batch #13/Overpay Real Estate Taxes
G 80-21530		REFUNDS R E TAX OVE	\$113.75	12078001600	Batch #13/Overpay Real Estate Taxes
		Total	\$113.75		
26942	12/22/22	LDG INVESTMENTS, LLC			
G 01-21530		REFUNDS R E TAX OVE	\$113.75	12078001500	Batch #13/Overpay Real Estate Taxes
G 01-21530		REFUNDS R E TAX OVE	(\$113.75)	12078001500	Batch #13/Overpay Real Estate Taxes
G 80-21530		REFUNDS R E TAX OVE	\$113.75	12078001500	Batch #13/Overpay Real Estate Taxes
		Total	\$113.75		
26943	12/22/22	MATTHEW & COLLEEN KRUEGER			
G 01-21530		REFUNDS R E TAX OVE	\$61.10	12076001500	Batch #10/Overpay Real Estate Taxes
G 01-21530		REFUNDS R E TAX OVE	(\$61.10)	12076001500	Batch #10/Overpay Real Estate Taxes
G 80-21530		REFUNDS R E TAX OVE	\$61.10	12076001500	Batch #10/Overpay Real Estate Taxes
		Total	\$61.10		
26944	12/22/22	MICHAEL & NADINE OKANE			
G 01-21530		REFUNDS R E TAX OVE	\$956.46	12057191400	Batch #13/Overpay Real Estate Taxes
G 01-21530		REFUNDS R E TAX OVE	(\$956.46)	12057191400	Batch #13/Overpay Real Estate Taxes
G 80-21530		REFUNDS R E TAX OVE	\$956.46	12057191400	Batch #13/Overpay Real Estate Taxes
		Total	\$956.46		
11110 HARRIS GF -CHECKING			\$1,548.37		

Fund Summary

11110 HARRIS GF -CHECKING

01 GENERAL FUND	\$0.00
80 TAX COLLECTION FUND	\$1,548.37
	<u>\$1,548.37</u>



VILLAGE OF THIENSVILLE

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Batch: 1222 TX REF2

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
26980	12/29/22	CARDINAL INVESTMENTS			
G 01-21530		REFUNDS R E TAX OVE	\$455.00		120770005000 Batch #22/Overpay RE Taxes
G 01-21530		REFUNDS R E TAX OVE	(\$455.00)		120770005000 Batch #22/Overpay RE Taxes
G 80-21530		REFUNDS R E TAX OVE	\$455.00		120770005000 Batch #22/Overpay RE Taxes
		Total	\$455.00		
26981	12/29/22	JHL INVESTMENTS LLC			
G 01-21530		REFUNDS R E TAX OVE	\$249.49		120770009000 Batch #22/Overpay RE Taxes
G 01-21530		REFUNDS R E TAX OVE	(\$249.49)		120770009000 Batch #22/Overpay RE Taxes
G 80-21530		REFUNDS R E TAX OVE	\$249.49		120770009000 Batch #22/Overpay RE Taxes
		Total	\$249.49		
26982	12/29/22	MEHRDAD NOVIN			
G 01-21530		REFUNDS R E TAX OVE	\$13.75		120950401001 Batch #29/Overpay RE Taxes
G 01-21530		REFUNDS R E TAX OVE	(\$13.75)		120950401001 Batch #29/Overpay RE Taxes
G 80-21530		REFUNDS R E TAX OVE	\$13.75		120950401001 Batch #29/Overpay RE Taxes
		Total	\$13.75		
26983	12/29/22	SESDER LLC			
G 01-21530		REFUNDS R E TAX OVE	\$136.19		120780008000 Batch #29/Overpay RE Taxes
G 01-21530		REFUNDS R E TAX OVE	(\$136.19)		120780008000 Batch #29/Overpay RE Taxes
G 80-21530		REFUNDS R E TAX OVE	\$136.19		120780008000 Batch #29/Overpay RE Taxes
		Total	\$136.19		
11110 HARRIS GF -CHECKING			\$854.43		

Fund Summary

11110 HARRIS GF -CHECKING	
01 GENERAL FUND	\$0.00
80 TAX COLLECTION FUND	\$854.43
	\$854.43



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Batch: 0123 TX REF1

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
26987	01/06/23	JOHN WESTBROOKE			
G 80-21530		REFUNDS R E TAX OVE	\$14.88		120500407004/Batch #38 Overpay RE Taxes
		Total	\$14.88		
26988	01/06/23	MORGAN SCHMITT			
G 80-21530		REFUNDS R E TAX OVE	\$1,848.64		120950399006/Batch #33 Overpay RE Taxes
		Total	\$1,848.64		
26989	01/06/23	THOMAS & DAWN BOBB			
G 80-21530		REFUNDS R E TAX OVE	\$3,679.82		120500217000/Batch #33 Overpay RE Taxes
		Total	\$3,679.82		
		11110 HARRIS GF -CHECKING	\$5,543.34		

Fund Summary

11110 HARRIS GF -CHECKING

80 TAX COLLECTION FUND	\$5,543.34
	\$5,543.34



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Batch: 0123 TX REF2

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
26998	01/20/23	ELLIOT D. UNKEFER			
G 80-21530		REFUNDS R E TAX OVE		\$10.81	120790116007 Batch #50/Overpay RE Taxes
		Total		\$10.81	
26999	01/20/23	FAT BEAGLE INVESTMENTS LLC			
G 80-21530		REFUNDS R E TAX OVE		\$40.66	120500507000 Batch #43/Overpay RE Taxes
		Total		\$40.66	
		11110 HARRIS GF -CHECKING		\$51.47	

Fund Summary

11110 HARRIS GF -CHECKING	
80 TAX COLLECTION FUND	\$51.47
	\$51.47



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
0	01/20/23	3 RIVERS BILLING, INC			
	E 06-09-522-2-276	BILLING SERVICES	\$168.65	6152	DEC 2022 EMS Billing
		Total	\$168.65		
0	01/19/23	AIRGAS USA, LLC			
	E 01-04-541-3-308	BUILDING SUPPLIES	\$85.06	9993643548	Argon and oxygen rental
		Total	\$85.06		
0	01/16/23	BIG FROG CUSTOM TSHIRTS & MORE			
	E 14-16-522-4-499	OTHER	\$7,600.00	11965	EMS Flex Grant-uniform embroidery
		Total	\$7,600.00		
0	01/19/23	BOEHLKE BOTTLED GAS CORP.			
	E 01-04-541-3-337	SALT & ICE CONTROL	\$119.85	45665	Tree post, snow plow markers
		Total	\$119.85		
0	01/19/23	CENTURY SPRINGS			
	E 01-04-541-3-308	BUILDING SUPPLIES	\$11.78	5313552	DEC bottled water/DPW
		Total	\$11.78		
0	01/16/23	CITY OF CEDARBURG			
	R 06-09-032-272	AMBULANCE FEES	\$243.40		AMB Refund Call No CEW122-1100
		Total	\$243.40		
0	01/18/23	COLLEEN LANDISCH-HANSEN			
	E 01-01-511-1-115	TRAVEL/TRAINING/SEMI	\$6.88		Mileage
		Total	\$6.88		
0	01/16/23	CONLEY MEDIA			
	E 01-01-510-2-200	PRINTING & PUBLISHIN	\$51.52	1672361222-	Condensed Board minutes/Affidavit
	E 01-01-510-2-200	PRINTING & PUBLISHIN	\$42.56	1672361222-	ZBOA 2nd Notice/Affidavit
	E 42-10-042-4-200	PRINTING & PUBLISHIN	\$114.03	1672361222-	TIF Water Project Ad for Bids/Affidavit
	E 01-01-510-2-200	PRINTING & PUBLISHIN	\$10.78	1672361222-	Ord 2022-04/Affidavit
		Total	\$218.89		
0	01/19/23	CUMMINS SALES AND SERVICE			
	E 01-03-521-2-222	EMERGENCY GOVERNMENT	\$451.51	F6-46165	Generator standard full service
		Total	\$451.51		
0	01/16/23	EMERGENCY MEDICAL PRODUCTS			
	E 01-03-522-3-327	MEDICAL SUPPLIES	\$69.00	2513706	Various BLS medical supp-nose clip
	E 06-09-522-3-327	MEDICAL SUPPLIES	\$482.82	2513706	Various ALS medical supp-IV and airway
	E 06-09-522-3-327	MEDICAL SUPPLIES	(\$40.00)	2513706	Discount
		Total	\$511.82		
0	01/16/23	EMR, LLC			
	E 01-03-522-3-320	TRUCK MAINTENANCE	\$2,327.89	18066	#551 repair
		Total	\$2,327.89		
0	01/18/23	FIRST ADVANTAGE			



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
E 01-04-541-3-399		MISCELLANEOUS	\$5.00	2505442212	Random drug/collection surcharge
		Total	\$5.00		
0	01/16/23	GALLS, LLC			
E 01-03-521-3-312		UNIFORM ALLOWANCE	\$86.98	022977385	MEJCHAR/multi-tool
E 01-03-521-3-312		UNIFORM ALLOWANCE	\$112.17	022977402	MEJCHAR/pants
		Total	\$199.15		
0	01/20/23	GFL ENVIRONMENTAL			
E 01-04-541-2-228		SANITARY LANDFILL	\$1,455.82	VC5295	Landfill/Late DEC
		Total	\$1,455.82		
0	01/10/23	HOUSEMAN & FEIND, LLP			
E 01-01-510-2-207		LEGAL COUNSEL	\$216.00	79595	DEC ADM Legal
E 42-10-042-4-207		LEGAL COUNSEL	\$180.00	79595	DEC TIF Watermain Legal
G 01-21525		DEPOSIT-DEVELP. APPL	\$375.00	79595	DEC ZBOA-Heim Legal
G 01-21525		DEPOSIT-DEVELP. APPL	\$675.00	79595	DEC ZBOA-Daily Legal
E 42-10-042-4-207		LEGAL COUNSEL	\$360.00	79595	DEC TIF Legal
E 01-01-510-2-207		LEGAL COUNSEL	\$186.00	79779	DEC Legal Fees
		Total	\$1,992.00		
0	01/16/23	JESSICA HEIM			
G 01-21525		DEPOSIT-DEVELP. APPL	\$322.17		Refund Develop Deposit-Shed
		Total	\$322.17		
0	01/06/23	JONATHAN CENSKY, PLANNER			
E 01-01-510-2-205		PLANNER SERVICES	\$32.80	23-00001	202 Woodside-Shed
G 01-21525		DEPOSIT-DEVELP. APPL	\$47.50	23-00001	202 Woodside-Shed
		Total	\$80.30		
0	01/20/23	KAPUR & ASSOCIATES, INC			
E 42-10-042-4-209		ENGINEERING SERVICE	\$795.00	116975	115 W Freistadt - Pre-demo Inspection
		Total	\$795.00		
0	01/16/23	M&M OFFICE INTERIORS CORP.			
E 14-16-521-4-402		EQUIPMENT	\$113.79	167080	Office Furniture/KLEPPIN
		Total	\$113.79		
0	01/18/23	MEQUON WATER UTILITY			
E 01-01-511-3-308		BUILDING SUPPLIES	\$257.01	402704	4th Qtr VH water
E 01-04-542-2-230		REPAIRS & MAINTENAN	\$336.33	402711	4th Qtr VP water
		Total	\$593.34		
0	01/20/23	MMSD			
E 21-07-610-9-650		MMSD O/M	\$58,594.76	314-22	4th Qtr 2022 O&M
		Total	\$58,594.76		
0	01/19/23	NAPA AUTO PARTS			
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$13.18	217632	Clear silicone, silicone tube
E 01-03-521-3-316		REPAIRS & MAINTENAN	\$195.52	218167	#1 brake pads, brake tool set rental
E 01-03-521-3-316		REPAIRS & MAINTENAN	\$119.00	218656	#1 brake rotor



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
E 01-03-521-3-316		REPAIRS & MAINTENAN	(\$63.43)	218760	CREDIT: brake tool set rental
		Total	\$264.27		
0	01/18/23	ONECAUSE			
E 07-07-542-7-293		DOG DAYS OF WINTER	\$8.75	232238	Dog Days of Winter DEC ticketing fees
		Total	\$8.75		
0	01/20/23	OZAUKEE COUNTY CLERK			
E 01-01-510-3-302		ELECTION EXPENSE	\$82.15		NOV 2022 Election Expenses
		Total	\$82.15		
0	01/20/23	OZAUKEE COUNTY HIGHWAY DEPT.			
E 01-04-541-3-337		SALT & ICE CONTROL	\$13,764.27	31898	Salt, records & reports
		Total	\$13,764.27		
0	01/16/23	RICOH USA, INC			
E 01-03-522-3-307		SUPPLIES-COPY MACHI	\$92.96	5066445686	Copies
		Total	\$92.96		
0	01/19/23	RUEKERT & MIELKE			
E 21-05-610-2-209		ENGINEERING SERVICE	\$1,935.00	144663	MMSD PP I/I work plan
E 21-05-610-2-209		ENGINEERING SERVICE	\$2,171.00	144664	Sanitary SWR proposed improvements
		Total	\$4,106.00		
0	01/16/23	SAFEBUILT			
E 01-03-523-2-272		BUILDING INSPECTION	\$1,786.23	0095175-IN	DEC BLDG Permits
E 01-03-523-2-273		PLUMBING INSPECTION	\$427.50	0095175-IN	DEC PLBG Permits
E 01-03-523-2-274		ELECTRICAL INSPECTIO	\$612.00	0095175-IN	DEC ELEC Permits
E 01-03-523-2-272		BUILDING INSPECTION	\$112.50	0095175-IN	DEC ZONING Permits
E 01-03-523-2-272		BUILDING INSPECTION	\$70.20	0095175-IN	DEC SIGN Permits
		Total	\$3,008.43		
0	01/19/23	THIENSVILLE HARDWARE			
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$4.79	187126	Windshield d-icer
		Total	\$4.79		
0	01/19/23	WACHTEL TREE SCIENCE, INC			
E 14-16-541-4-499		OTHER	\$333.50	110829	EAP Program-consulting tree risk assess
		Total	\$333.50		
0	01/19/23	WASTE MANAGEMENT			
E 01-04-541-2-266		RECYCLING	\$2,947.00	6842076-227	DEC curbside recycling
		Total	\$2,947.00		
0	01/16/23	WI DEPT. OF JUSTICE-CIB			
E 01-03-521-2-219		TELETYPE	\$28.00		Criminal Checks
		Total	\$28.00		
0	01/16/23	ZOLL MEDICAL CORPORATION			
E 14-16-522-4-499		OTHER	\$2,260.00	90070780	EMS Flex Grant-CaseReview Sub
		Total	\$2,260.00		



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110		HARRIS GF -CHECKING	\$102,797.18		

Fund Summary

11110 HARRIS GF -CHECKING

01 GENERAL FUND	\$27,476.48
06 EQUITY RESERVE ACCOUNT	\$854.87
07 PARK IMPROVEMENT FUND	\$8.75
14 CAPITAL IMPROVEMENT/EQUIPMENT	\$10,307.29
21 SEWER UTILITY	\$62,700.76
42 TAX INCREMENT DISTRICT #2	\$1,449.03
	\$102,797.18



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
0	01/06/23	AURORA EAP			
	E 01-02-512-2-243	ALL OTHER INSURANCE	\$510.00	581-CI00022	JAN-MAR 2023 EAP Admin Fees
		Total	\$510.00		
0	01/16/23	BANYON DATA SYSTEMS			
	E 01-01-511-2-210	DATA PROCESSING	\$840.00	00163659	Fund Support
	E 21-05-610-3-399	MISCELLANEOUS	\$840.00	00163659	Utility Billing Support
	E 01-01-511-2-210	DATA PROCESSING	\$119.00	00163659	Vault Backup
		Total	\$1,799.00		
0	01/20/23	CHARTER COMMUNICATIONS			
	E 01-01-511-3-303	TELEPHONE	\$53.54	32125011323	JAN ADM Telephone
	E 01-03-521-3-303	TELEPHONE	\$107.08	32125011323	JAN TPD Telephone
	E 01-04-541-3-303	TELEPHONE	\$32.12	32125011323	JAN DPW Telephone
	E 21-05-610-3-303	TELEPHONE	\$21.42	32125011323	JAN SWR Telephone
		Total	\$214.16		
0	01/06/23	CHUCK GASSESRT			
	R 01-43-010-260	RECYCLING PROCEEDS	\$1.50		Refund Gate Card Overpayment
		Total	\$1.50		
0	01/20/23	CINTAS CORPORATION			
	E 01-01-511-3-308	BUILDING SUPPLIES	\$311.53	4143994225	JAN VH Mats
		Total	\$311.53		
0	01/16/23	CITY OF MEQUON			
	G 80-21400	DUE TO CITY OF MEQU	\$231.99		328 E Freistadt Del Water
	G 80-21400	DUE TO CITY OF MEQU	\$93.17		224 Heidel Del Water
	G 80-21400	DUE TO CITY OF MEQU	\$568.96		533 Rosedale Del Water
	G 80-21400	DUE TO CITY OF MEQU	\$1,065.01		519 Lilac Del Water
	G 80-21400	DUE TO CITY OF MEQU	\$80.30		125 Ellenbecker Del Water
	G 80-21400	DUE TO CITY OF MEQU	\$133.43		764 Grand Del Water
	G 80-21400	DUE TO CITY OF MEQU	\$951.79		510 Crescent Del Water
	G 80-21400	DUE TO CITY OF MEQU	\$305.36		328 Woodside Del Water
	G 80-21400	DUE TO CITY OF MEQU	\$251.31		334 Woodside Del Water
	E 42-10-042-4-803	TIF #2 WATERMAINS	\$1,187.50	7593	Engineering Services-Water
		Total	\$4,868.82		
0	01/16/23	CIVICPLUS			
	E 21-05-610-4-499	OTHER	\$900.00		Online hosting
	E 21-05-610-4-499	OTHER	\$4,946.45		CivicClerk fees
		Total	\$5,846.45		
0	01/20/23	COMMUNITY FUN EVENTS, INC.			
	E 01-01-554-7-750	JULY 4TH ACTIVITY	\$4,000.00		2023 Budget Allocation
		Total	\$4,000.00		
0	01/18/23	DEER CREEK TECHNOLOGIES			
	E 01-03-521-2-215	TRAINING - POLICE	\$250.00	2023-264	Training Doc Mgmt Software 2023



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
		Total	\$250.00		
0	01/20/23	DIGGERS HOTLINE			
E 01-04-541-3-357		DIGGERS HOT LINE	\$400.00	230	Prepayment fees
		Total	\$400.00		
0	01/10/23	DIVERSIFIED BENEFIT SERVICES			
E 01-01-554-7-715		FLEX BENEFIT	\$211.71	371238	JAN HRA Reimb Admin Svcs
E 01-01-554-7-715		FLEX BENEFIT	\$90.00	372226	JAN FSA Admin Svcs
E 01-01-554-7-715		FLEX BENEFIT	\$35.00	372226	JAN Debit Card participation fee
E 01-01-554-7-715		FLEX BENEFIT	\$22.50	372226	FSA Prior Year Run Out Period
E 01-01-554-7-715		FLEX BENEFIT	\$110.00	372226	Benefit Enrollment Services
		Total	\$469.21		
0	01/20/23	GFL ENVIRONMENTAL			
E 01-04-541-2-228		SANITARY LANDFILL	\$1,980.42	VC5331	Landfill Mid-January 2023
		Total	\$1,980.42		
0	01/19/23	HEIN ELECTRIC SUPPLY COMPANY			
E 01-01-511-3-308		BUILDING SUPPLIES	\$113.77	100009297.0	36 flourescent tubes
E 21-05-610-3-308		BUILDING SUPPLIES	\$33.17	100009297.0	LED exit light
		Total	\$146.94		
0	01/19/23	HYDRA-SEAL			
E 01-04-541-3-330		REPAIR PARTS/EQUIPM	\$966.18	73885	Snow plow repair
		Total	\$966.18		
0	01/19/23	JOHNSON CONTROLS SECURITY SOLU			
E 01-01-511-3-308		BUILDING SUPPLIES	\$2,412.69	38340783	Panic alarm qtly chgs 2-1-23 - 4-30-23
		Total	\$2,412.69		
0	01/06/23	MICHAEL SCHACTNER			
E 01-04-541-3-329		CLOTHING	\$212.20		SCHACTNER/clothing
		Total	\$212.20		
0	01/05/23	MMSD			
E 21-07-610-9-640		MMSD PAYMENT	\$426,714.00	CC-10-22	2022 Capital Charge-Village Portion
E 21-07-610-9-640		MMSD PAYMENT	(\$21,294.00)	CC-10-22	2021 Adjustment-Village Portion
E 21-07-610-9-640		MMSD PAYMENT	\$11,212.00	CC-10-22	2021 Capital Charge-Mequon Portion
		Total	\$416,632.00		
0	01/16/23	MUNICIPAL PROPERTY INSURANCE C			
E 01-02-512-2-242		BUSINESS PROPERTY	\$11,757.00		Pkg Renewal #5000259 1-1-23 - 1-1-24
		Total	\$11,757.00		
0	01/20/23	OZAUKEE FAMILY SERVICES			
E 01-01-554-7-740		FAMILY SERVICE	\$2,500.00		2023 Budget Allocation
		Total	\$2,500.00		
0	01/18/23	PURCHASE POWER			
E 01-01-510-2-201		POSTAGE	\$1,008.50		Postage



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
Total			\$1,008.50		
0	01/19/23	QUALITY STATE OIL CO., INC			
E 01-04-541-3-310		FUEL	\$1,255.98	1800366	DPW diesel
E 01-04-541-3-310		FUEL	\$459.98	1800376	DPW gasoline
E 01-03-521-3-310		FUEL	\$977.43	1800376	TPD gasoline
Total			\$2,693.39		
0	01/03/23	RUEKERT & MIELKE			
E 21-05-610-2-209		ENGINEERING SERVICE	\$10,970.00	144545	2023 GIS Annual Services
Total			\$10,970.00		
0	01/16/23	SECURIAN FINANCIAL GROUP, INC			
G 01-21286		ACCIDENTAL INS WITH	\$37.16		FEB Accidental
Total			\$37.16		
0	01/20/23	SWITCHNET TECHNOLOGIES CORP			
E 01-04-541-3-308		BUILDING SUPPLIES	\$97.50	1031	Redirected TFD telephone numbers
Total			\$97.50		
0	01/20/23	TAPCO			
E 01-04-541-2-227		STREET MAINTENANCE	\$323.40	1745285	Signs-20 ton bridge, weight limit
Total			\$323.40		
0	01/20/23	THIENSVILLE BUSINESS ASSOC.			
E 01-01-554-7-735		THIENSVILLE BUSINESS	\$5,000.00		2023 Budget Allocation
Total			\$5,000.00		
0	01/05/23	THIENSVILLE PROFESSIONAL POLIC			
G 01-21250		PROFESSIONAL POLICE	\$45.00		JANZER/JAN 2023 TPPA Dues
G 01-21250		PROFESSIONAL POLICE	\$45.00		MEJCHAR/JAN 2023 TPPA Dues
G 01-21250		PROFESSIONAL POLICE	\$45.00		NEUMAN/JAN 2023 TPPA Dues
G 01-21250		PROFESSIONAL POLICE	\$45.00		STONE/JAN 2023 TPPA Dues
G 01-21250		PROFESSIONAL POLICE	\$45.00		SCHMIT/JAN 2023 TPPA Dues
G 01-21250		PROFESSIONAL POLICE	\$45.00		ROGERS/JAN 2023 TPPA Dues
Total			\$270.00		
0	01/16/23	THIENSVILLE-MEQUON ROTARY CLUB			
E 01-01-511-1-115		TRAVEL/TRAINING/SEMI	\$297.10		1st Qtr Dues
Total			\$297.10		
0	01/16/23	VILLAGE OF THIENSVILLE			
E 07-07-542-7-293		DOG DAYS OF WINTER	\$100.00		Dog Days of Winter-Behrs-Ice Artist
E 07-07-542-7-293		DOG DAYS OF WINTER	\$100.00		Dog Days of Winter-Strohmenger-Ice Artist
Total			\$200.00		
0	01/18/23	WI DEPARTMENT OF JUSTICE-TIME			
E 01-03-521-2-219		TELETYPE	\$282.00	13735	1st Qtr Time Access Chgs
Total			\$282.00		

11110 HARRIS GF -CHECKING \$476,457.15



VILLAGE OF THIENSVILLE

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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
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Fund Summary

11110 HARRIS GF -CHECKING

01 GENERAL FUND	\$37,045.29
07 PARK IMPROVEMENT FUND	\$200.00
21 SEWER UTILITY	\$434,343.04
42 TAX INCREMENT DISTRICT #2	\$1,187.50
80 TAX COLLECTION FUND	\$3,681.32
	\$476,457.15



VILLAGE OF THIENSVILLE

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Batch: 1222 LIB MN2

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
1019 e	12/30/22	WISCONSIN RETIREMENT SYSTEM			
E 99-91-551-1-199		FRINGE BENEFITS	\$2,820.61	277685	NOV 2022 WRS-Employer
G 99-21265		WI RETIREMENT	\$2,820.61	277685	NOV 2022 WRS-Employee
		Total	\$5,641.22		
1020 e	12/27/22	DEPT. OF EMPLOYEE TRUST FUNDS			
E 99-91-551-1-199		FRINGE BENEFITS	\$10,513.50	202301	JAN Health-Employer
G 99-21280		HEALTH INSURANCE WI	\$1,433.70	202301	JAN Health-Employee
		Total	\$11,947.20		
1021 e	12/23/22	ADP, LLC			
E 99-92-551-2-289		PAYROLL PROCESSING	\$93.57	621309918	Processing 12-16-22 Payroll
		Total	\$93.57		
1022 e	12/30/22	ADP, LLC			
E 99-92-551-2-289		PAYROLL PROCESSING	\$73.35	622141282	Time and Attendance Monthly
		Total	\$73.35		
1029 e	12/30/22	ADP			
G 99-21220		FEDERAL WITHHOLDIN	\$1,665.79		FED/Wages Pd 12-30-22
G 99-21210		WISCONSIN WITHHOLDI	\$834.80		WI/Wages Pd 12-30-22
G 99-21230		SOCIAL SECURITY TAX	\$1,809.27		SS & MED/Wages Pd 12-30-22
E 99-91-551-1-199		FRINGE BENEFITS	\$1,809.27		SS Employer/Wages Pd 12-30-22
G 99-11160		SPECIAL CLEARING AC	\$18,017.06		DirectDep/Wages Pd 12-30-22
		Total	\$24,136.19		
1030 e	12/30/22	LIBRARY PAYROLL			
E 99-91-551-1-100		SALARIES & WAGES	\$24,081.85		Salaries & Wages/Wages Pd 12-30-22
E 99-92-551-2-287		MILEAGE	\$85.25		MUCHIN YOUNG Mileage/Wages Pd 12-30-22
G 99-21265		WI RETIREMENT	(\$1,408.73)		WRS Employees/Wages Pd 12-30-22
G 99-21220		FEDERAL WITHHOLDIN	(\$1,665.79)		FED/Wages Pd 12-30-22
G 99-21210		WISCONSIN WITHHOLDI	(\$834.80)		WI/Wages Pd 12-30-22
G 99-21230		SOCIAL SECURITY TAX	(\$1,809.27)		SS & MED/Wages Pd 12-30-22
G 99-21245		FLEX BENEFIT	(\$431.45)		FLEX BEN/Wages Pd 12-30-22
G 99-11160		SPECIAL CLEARING AC	(\$18,017.06)		Net Pay/Wages Pd 12-30-22
		Total	\$0.00		
11110 HARRIS GF -CHECKING			\$41,891.53		

Fund Summary

11110 HARRIS GF -CHECKING

99 F. L. WEYENBERG LIBRARY FUND	\$41,891.53
	<u>\$41,891.53</u>



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Batch: 0123 LIB MN1

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
1031 e	01/06/23	ADP, LLC			
E 99-92-551-2-289		PAYROLL PROCESSING	\$93.57	622426249	Processing 12-30-22 Payroll
		Total	\$93.57		
1032 e	01/10/23	CARDMEMBER SERVICE			
G 99-21110		ACCOUNTS PAYABLE	\$28.00		Wisconsin Library Association
G 99-21110		ACCOUNTS PAYABLE	\$87.00		Mailchimp
G 99-21110		ACCOUNTS PAYABLE	\$77.02		Breakout Inc.
G 99-21110		ACCOUNTS PAYABLE	\$1.34		Amazon Web Services-NOV
G 99-21110		ACCOUNTS PAYABLE	\$5.26		Apple
G 99-21110		ACCOUNTS PAYABLE	\$104.00		Techsoup
G 99-21110		ACCOUNTS PAYABLE	\$55.37		AT&T
G 99-21110		ACCOUNTS PAYABLE	\$1.34		Amazaon Web Services-DEC
		Total	\$359.33		
1033 e	01/10/23	AT&T			
E 99-92-551-3-303		TELEPHONE	\$172.62		JAN 2023 Phone Service
		Total	\$172.62		
1034 e	01/13/23	ADP			
G 99-21220		FEDERAL WITHHOLDIN	\$1,964.67		FED/Wages Pd 1-13-23
G 99-21210		WISCONSIN WITHHOLDI	\$942.85		WI/Wages Pd 1-13-23
G 99-21230		SOCIAL SECURITY TAX	\$1,974.66		SS & MED/Wages Pd 1-13-23
E 99-91-551-1-199		FRINGE BENEFITS	\$1,974.66		SS Employer/Wages Pd 1-13-23
G 99-11160		SPECIAL CLEARING AC	\$19,236.37		DirectDep/Wages Pd 1-13-23
		Total	\$26,093.21		
1035 e	01/13/23	LIBRARY PAYROLL			
E 99-91-551-1-100		SALARIES & WAGES	\$11,633.43		2022 Salaries & Wages/Wages Pd 1-13-23
E 99-91-551-1-100		SALARIES & WAGES	\$15,101.57		2023 Salaries & Wages/Wages Pd 1-13-23
G 99-21265		WI RETIREMENT	(\$1,668.29)		WRS Employees/Wages Pd 1-13-23
G 99-21220		FEDERAL WITHHOLDIN	(\$1,964.67)		FED/Wages Pd 1-13-23
G 99-21210		WISCONSIN WITHHOLDI	(\$942.85)		WI/Wages Pd 1-13-23
G 99-21230		SOCIAL SECURITY TAX	(\$1,974.66)		SS & MED/Wages Pd 1-13-23
G 99-21245		FLEX BENEFIT	(\$240.92)		FLEX BEN/Wages Pd 1-13-23
G 99-21280		HEALTH INSURANCE WI	(\$584.98)		HEALTH/Wages Pd 1-13-23
G 99-21285		LIFE INSURANCE WITH	(\$3.20)		LIFE/Wages Pd 1-13-23
G 99-21275		DENTAL INSURANCE WI	(\$41.96)		DENTAL/Wages Pd 1-13-23
G 99-21276		VISION INSURANCE WIT	(\$51.44)		VISION/Wages Pd 1-13-23
G 99-21286		ACCIDENTAL INS WITH	(\$25.66)		ACCIDENT/Wages Pd 1-13-23
G 99-11160		SPECIAL CLEARING AC	(\$19,236.37)		Net Pay/Wages Pd 1-13-23
		Total	\$0.00		
1048 e	01/20/23	ADP, LLC			
E 99-92-551-2-289		PAYROLL PROCESSING	\$93.57	623440573	Processing 1-13-23 Payroll
		Total	\$93.57		
1050 e	01/24/23	DEPT. OF EMPLOYEE TRUST FUNDS			
E 99-91-551-1-199		FRINGE BENEFITS	\$8,579.44	202302	FEB Health-Employer



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Batch: 0123 LIB MN1

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
G 99-21280		HEALTH INSURANCE WI	\$1,169.96	202302	FEB Health-Employee
		Total	\$9,749.40		
1051 e	01/31/23	WISCONSIN RETIREMENT SYSTEM			
E 99-91-551-1-199		FRINGE BENEFITS	\$4,241.10	279111	DEC 2022 WRS Contribution-Employer
G 99-21265		WI RETIREMENT	\$4,241.10	279111	DEC 2022 WRS Contribution-Employee
		Total	\$8,482.20		
26990	01/09/23	GREATAMERICA			
E 99-92-551-3-307		SUPPLIES-COPY MACHI	\$169.88	33144850	Monthly Admin Copier Lease
E 99-92-551-3-307		SUPPLIES-COPY MACHI	\$118.85	33144851	Monthly 2 Copiers Lease
		Total	\$288.73		
26991	01/09/23	WE ENERGIES			
E 99-94-551-3-360		UTILITIES	\$4,124.18	4421475575	JAN 2023 Electrical & Gas
		Total	\$4,124.18		
11110		HARRIS GF -CHECKING	\$49,456.81		

Fund Summary

11110 HARRIS GF -CHECKING	
99 F. L. WEYENBERG LIBRARY FUND	\$49,456.81
	\$49,456.81



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Batch: 1222 LIB AP

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
26916	12/21/22	ADVANCED CHILLER SERVICES			
E 99-94-551-3-308		BUILDING SUPPLIES	\$963.79	4586	HVAC Repair
		Total	\$963.79		
26917	12/21/22	BAKER & TAYLOR			
E 99-93-551-3-373		PRINT	\$998.12	2037104928	Print Collection Materials
E 99-93-551-3-373		PRINT	\$304.91	2037113046	Print Collection Materials
E 99-93-551-3-373		PRINT	\$514.11	2037116173	Print Collection Materials
E 98-95-551-7-298		LIB GIFTS & GRANTS RE	\$89.49	2037118999	Lions Club Donation
E 99-93-551-3-371		MEDIA	\$283.26	2037126015	Spoken Word Collection
E 99-93-551-3-373		PRINT	\$199.78	2037127777	Print Collection Materials
E 99-93-551-3-373		PRINT	\$361.26	2037130486	Print Collection Materials
E 99-93-551-3-373		PRINT	\$143.43	2037139221	Print Collection Materials
E 99-93-551-3-373		PRINT	\$297.04	2037143218	Print Collection Materials
E 99-93-551-3-373		PRINT	\$1,502.57	2037145644	Print Collection Materials
E 99-93-551-3-371		MEDIA	\$117.75	2037152031	Spoken Word Collection
E 99-93-551-3-373		PRINT	\$341.21	2037154435	Print Collection Materials
E 98-95-551-7-298		LIB GIFTS & GRANTS RE	\$31.35	2037158356	Lions Club Donation
E 99-93-551-3-371		MEDIA	\$51.14	H62815110	Media Collection
E 99-93-551-3-371		MEDIA	\$16.61	H62861740	Media Collection
E 99-93-551-3-371		MEDIA	\$17.30	H62876710	Media Collection
E 99-93-551-3-371		MEDIA	\$47.67	H62885460	Media Collection
E 99-93-551-3-371		MEDIA	\$85.92	H62909100	Media Collection
E 99-93-551-3-371		MEDIA	\$16.61	H62913670	Media Collection
E 99-93-551-3-371		MEDIA	\$198.28	H62921900	Media Collection
E 99-93-551-3-371		MEDIA	\$21.65	H62963140	Media Collection
E 99-93-551-3-371		MEDIA	\$119.72	H62982300	Media Collection
E 99-93-551-3-371		MEDIA	\$66.35	H62983140	Media Collection
E 99-93-551-3-371		MEDIA	\$88.01	H63055310	Media Collection
		Total	\$5,913.54		
26918	12/21/22	CENTURY LINK			
E 99-92-551-3-303		TELEPHONE	\$2.45	620469635	NOV 2022 long distance
		Total	\$2.45		
26919	12/21/22	CLEAN SOURCE LLC			
E 99-94-551-2-282		JANITORIAL SERVICE	\$3,600.00	113122-FLW	Final Janitorial Service
		Total	\$3,600.00		
26920	12/21/22	DELTA DENTAL OF WISCONSIN			
G 99-21275		DENTAL INSURANCE WI	\$72.02	188339	JAN Vision Insurance-Employee
G 99-21275		DENTAL INSURANCE WI	(\$72.02)	188339	JAN Vision Insurance-Employee
G 99-21276		VISION INSURANCE WIT	\$72.02	188339	JAN Vision Insurance-Employee
G 99-21276		VISION INSURANCE WIT	\$41.96	1885366	JAN Dental Insurance-Employee
G 99-21276		VISION INSURANCE WIT	(\$41.96)	1885366	JAN Dental Insurance-Employee
G 99-21275		DENTAL INSURANCE WI	\$41.96	1885366	JAN Dental Insurance-Employee
		Total	\$113.98		
26921	12/21/22	DEPARTMENT OF ADMINISTRATION			



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Batch: 1222 LIB AP

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
E 99-92-551-2-284		CONTRACTED SERVICE	\$600.00	505-74893	TEACH Data Service 7-1 - 12-31-22
		Total	\$600.00		
26922	12/21/22	FORWARD TS			
E 99-92-551-3-307		SUPPLIES-COPY MACHI	\$21.26	AR184435	Final Copy Charges-4070N
E 99-92-551-3-307		SUPPLIES-COPY MACHI	\$216.18	AR185542	NOV Copy Charges
		Total	\$237.44		
26923	12/21/22	FRIENDS OF THE CCBC, INC.			
E 99-93-551-3-370		PROGRAMMING	\$182.00		CCBC book sale items-for prizes
		Total	\$182.00		
26924	12/21/22	GECRB/AMAZON			
E 99-93-551-3-373		PRINT	\$13.99	43345436997	Kindle Titles
E 99-93-551-3-371		MEDIA	\$34.99	43398497549	Video Game Collection
E 99-93-551-3-373		PRINT	\$14.99	43845737993	Kindle Titles
E 99-92-551-2-286		COMPUTERS	\$57.99	44668838439	Technology
E 99-93-551-3-373		PRINT	\$14.99	45734848559	Kindle Titles
E 99-92-551-3-300		OFFICE SUPPLIES	\$10.05	47768363588	Office Supplies
E 99-92-551-2-286		COMPUTERS	\$25.98	48764586799	Technology
E 99-93-551-3-371		MEDIA	\$47.38	48884764968	Video Game Collection
E 99-93-551-3-371		MEDIA	(\$0.11)	53977848359	Video Game Collection
E 99-93-551-3-373		PRINT	\$14.99	55384395833	Kindle Titles
E 99-93-551-3-371		MEDIA	\$47.29	64945487379	Video Game Collection
E 99-93-551-3-371		MEDIA	(\$0.08)	66778338566	Video Game Collection
E 99-92-551-2-286		COMPUTERS	\$35.88	67449386367	Technology
E 99-93-551-3-371		MEDIA	\$86.13	69793473995	Video Game Collection
E 99-93-551-3-373		PRINT	\$14.99	74474596874	Kindle Titles
E 99-93-551-3-371		MEDIA	\$119.76	74969694856	Video Game Collection
E 99-93-551-3-370		PROGRAMMING	\$61.64	75364598643	Programming
E 99-93-551-3-371		MEDIA	(\$0.08)	78444984494	Video Game Collection
E 99-93-551-3-373		PRINT	\$14.99	83569677389	Kindle Titles
E 99-92-551-2-286		COMPUTERS	\$15.19	83898576986	Technology
E 99-92-551-3-300		OFFICE SUPPLIES	\$8.99	85684566453	Office Supplies
E 99-93-551-3-373		PRINT	\$31.18	88446486645	Print Collection
E 99-92-551-3-300		OFFICE SUPPLIES	\$13.05	94685367655	Office Supplies
E 99-92-551-2-286		COMPUTERS	\$16.51	99925512286	Technology
E 99-93-551-3-373		PRINT	\$17.95	BofmfWwnvq	Print Collection
E 99-93-551-3-371		MEDIA	\$39.99	CThkpaHkEA	Video Game Collection
E 99-93-551-3-370		PROGRAMMING	\$13.85	XilJgNaObDA	Programming
		Total	\$772.47		
26925	12/21/22	INFOCOR			
E 99-92-551-2-284		CONTRACTED SERVICE	\$495.00	15016-IN	Brightsign Annual Subscription
		Total	\$495.00		
26926	12/21/22	JEWISH DATA			
E 99-93-551-3-372		E CONTENT	\$500.00	191	1 Yr Database Sub (1-1 - 12-31-22)
		Total	\$500.00		



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Batch: 1222 LIB AP

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
26927	12/21/22	MEICHER TECHNICAL SERVICES			
E 99-92-551-2-286		COMPUTERS	\$412.50	16263	Unitrends Support
		Total	\$412.50		
26928	12/21/22	MEQUON-THIENSVILLE HISTORICAL			
E 99-91-551-2-202		DUES & SUBSCRIPTION	\$80.00	12202022	Annual Membership
		Total	\$80.00		
26929	12/21/22	MIDWEST TAPE			
E 99-93-551-3-372		E CONTENT	\$1,546.57	503038976	Hoopla - NOV 2022
		Total	\$1,546.57		
26930	12/21/22	MONARCH LIBRARY SYSTEM			
E 98-95-551-7-299		LIB GIFTS & GRANTS UN	\$143.08	415807	Summer Reading T-shirts
E 99-92-551-3-359		MONARCH FEES	\$11.77	415821	Telephony Charges (Q2)
		Total	\$154.85		
26931	12/21/22	PIEPER POWER			
E 99-94-551-3-308		BUILDING SUPPLIES	\$166.16	853309	Electrical Service
		Total	\$166.16		
26932	12/21/22	PIGGLY WIGGLY			
E 99-93-551-3-370		PROGRAMMING	\$5.98	1070980838	Programming Supplies
		Total	\$5.98		
26933	12/21/22	QUILL.COM			
E 99-92-551-3-300		OFFICE SUPPLIES	\$281.92	29345547	Office Supplies
E 99-92-551-3-300		OFFICE SUPPLIES	\$86.98	29636592	Office Supplies
E 99-92-551-3-300		OFFICE SUPPLIES	\$151.54	29678460	Office Supplies
		Total	\$520.44		
26934	12/21/22	REGENTS OF THE UNIVERSITY			
E 99-92-551-3-301		PROCESSING SUPPLIES	\$2,155.00	2170000439	RFID Hub Tags
		Total	\$2,155.00		
26935	12/21/22	SECURIAN FINANCIAL GROUP, INC			
G 99-21286		ACCIDENTAL INS WITH	\$37.98	012023-A	JAN Accident-Employee
E 99-91-551-1-199		FRINGE BENEFITS	\$93.90	012023-L	JAN Life Insurance-Employer
G 99-21285		LIFE INSURANCE WITH	\$17.95	012023-L	JAN Life Insurance-Employee
		Total	\$149.83		
26936	12/21/22	UNIQUE MANAGEMENT SERVICES			
E 99-92-551-3-358		DEBT COLLECTION	\$104.85	6107185	DEC 2022 Placements
		Total	\$104.85		
26937	12/21/22	VANGUARD CLEANING SYSTEMS			
E 99-94-551-2-282		JANITORIAL SERVICE	\$1,755.00	404	NOV Partial Janitorial Svc
		Total	\$1,755.00		
26938	12/21/22	WORLD BOOK, INC			
E 99-93-551-3-373		PRINT	\$1,199.00	1645543	Reference Collection



VILLAGE OF THIENSVILLE

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Batch: 1222 LIB AP

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
Total			\$1,199.00		
11110 HARRIS GF -CHECKING			\$21,630.85		

Fund Summary

11110 HARRIS GF -CHECKING

98 FLW LIB GIFTS & GRANTS FUND	\$263.92
99 F. L. WEYENBERG LIBRARY FUND	\$21,366.93
	\$21,630.85



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Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
0	01/20/23	ADVANCED CHILLER SERVICES			
E 99-94-551-3-308		BUILDING SUPPLIES	\$14,281.16	4609	Valve Repair & Replacement
E 99-94-551-3-308		BUILDING SUPPLIES	\$4,046.00	4612	Cicuitry Repairs
E 99-94-551-7-700		BUILDING PROJECTS	\$59,950.00	4632	HVAC Controls Replacement Contract
		Total	\$78,277.16		
0	01/20/23	ASCEND ELEVATOR LLC			
E 99-94-551-2-283		CONTRACTED-BUILDIN	\$247.50	5331	Elevator Service (3 of 3)
		Total	\$247.50		
0	01/20/23	BAKER & TAYLOR			
E 99-93-551-3-373		PRINT	\$1,207.79	2037161096	Print Collection Materials
E 99-93-551-3-373		PRINT	\$218.65	2037171226	Print Collection Materials
E 99-93-551-3-373		PRINT	\$360.84	2037171510	Print Collection Materials
E 99-93-551-3-371		MEDIA	\$24.71	2037172254	Spoken Word Collection
E 99-93-551-3-373		PRINT	\$897.65	2037181813	Print Collection Materials
E 99-93-551-3-373		PRINT	\$157.52	2037184877	Print Collection Materials
E 99-93-551-3-371		MEDIA	\$162.18	2037185756	Spoken Word Collection
E 99-93-551-3-373		PRINT	\$349.05	2037193855	Print Collection Materials
E 99-93-551-3-371		MEDIA	\$19.49	H62990570	Media Collection
E 99-93-551-3-371		MEDIA	\$89.47	H63132910	Media Collection
E 99-93-551-3-371		MEDIA	\$24.53	H63170790	Media Collection
		Total	\$3,511.88		
0	01/20/23	CENTURY LINK			
E 99-92-551-3-303		TELEPHONE	\$2.34	624298200	DEC 2022 Long Distance
		Total	\$2.34		
0	01/20/23	FORWARD TS			
E 99-92-551-3-307		SUPPLIES-COPY MACHI	\$129.82	AR187687	DEC 2022 Copy Charges
		Total	\$129.82		
0	01/20/23	GECRB/AMAZON			
E 99-92-551-2-286		COMPUTERS	\$179.18	BcycrUYCIR	Technology
E 99-92-551-3-300		OFFICE SUPPLIES	\$8.41	BDdOljAOJz	Office Supplies
E 99-93-551-3-373		PRINT	\$91.87	BDtJbKyxJXa	Print Collection
E 99-92-551-2-286		COMPUTERS	(\$292.05)	BeddUBbmY	Technology
E 99-93-551-3-371		MEDIA	\$39.99	BGpZiCGDC	Video Game Collection
E 99-92-551-2-286		COMPUTERS	\$244.90	BMdtrZNFVD	Technology
E 99-92-551-2-286		COMPUTERS	\$343.53	CbESuMyiTle	Technology
E 99-93-551-3-371		MEDIA	\$59.99	CbRnSfaDW	Video Game Collection
E 99-93-551-3-371		MEDIA	\$25.63	CDFbQubQu	Video Game Collection
E 99-93-551-3-371		MEDIA	\$99.93	CtPoxGDcy	Video Game Collection
E 99-93-551-3-371		MEDIA	\$119.76	CUGFfjOtvDlt	Video Game Collection
E 99-93-551-3-373		PRINT	\$9.99	CvDoHwHhq	Print Collection
E 99-93-551-3-371		MEDIA	\$99.98	CwDeBuMcY	Video Game Collection
E 99-93-551-3-371		MEDIA	\$27.62	cylhcrIFncoN	Video Game Collection
E 99-93-551-3-370		PROGRAMMING	\$63.21	EzKPXIoRRD	Programming
E 99-92-551-2-286		COMPUTERS	\$292.05	jmCULCslCz	Technology



VILLAGE OF THIENSVILLE

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11110 Unposted

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
E 99-94-551-3-306		JANITOR SUPPLIES	\$13.86	jSsKNOqnRN	Janitor Supplies
E 99-93-551-3-370		PROGRAMMING	\$37.42	tBeKkjBklhnK	Programming
E 99-93-551-3-371		MEDIA	\$49.94	UgxZtJwnUU	Video Game Collection
E 99-93-551-3-370		PROGRAMMING	\$17.81	xdTIEqNooB	Programming
Total			\$1,533.02		
0	01/20/23	JOHN LAMM OF JACKSON, INC			
E 99-94-551-2-283		CONTRACTED-BUILDIN	\$1,397.00	09-19631	Final Fall Service
Total			\$1,397.00		
0	01/20/23	MEQUON WATER UTILITY			
E 99-94-551-3-361		SEWER & WATER	\$422.36	403221	Qtly Water and SWR (Q4 2022)
Total			\$422.36		
0	01/20/23	MIDWEST TAPE			
E 99-93-551-3-372		E CONTENT	\$1,559.59	503175206	DEC 2022 Hoopla
Total			\$1,559.59		
0	01/20/23	MONARCH LIBRARY SYSTEM			
E 99-92-551-2-286		COMPUTERS	\$3,406.86	122030	Computers
E 99-92-551-2-286		COMPUTERS	\$708.63	122031	Computers
E 99-92-551-3-359		MONARCH FEES	\$592.00	415847	2022 Movie Licensing
E 99-92-551-3-359		MONARCH FEES	\$12.34	415861	3rd Qtr Telephony
Total			\$4,719.83		
0	01/20/23	NATIONAL ELEVATOR INSPECTION			
E 99-94-551-2-283		CONTRACTED-BUILDIN	\$88.00	22034944	Annual Elevator Inspection
Total			\$88.00		
0	01/20/23	PITNEY BOWES, INC.			
E 99-92-551-2-201		POSTAGE	\$33.75	1022188725	Smart Postage Sub (Q4 2022)
Total			\$33.75		
0	01/20/23	UNIQUE MANAGEMENT SERVICES			
E 99-92-551-3-358		DEBT COLLECTION	\$151.45	6108169	DEC 2022 Placements
Total			\$151.45		
0	01/20/23	VANGUARD CLEANING SYSTEMS			
E 99-94-551-2-282		JANITORIAL SERVICE	\$3,510.00	445	DEC 2022 Janitorial Service
Total			\$3,510.00		
0	01/20/23	WI DEPARTMENT OF REVENUE			
R 99-45-014-904		BOOK SALES	\$550.01	12312022	1-1-22 - 12-31-22 Sales Tax Due
Total			\$550.01		
11110 HARRIS GF -CHECKING			\$96,133.71		



VILLAGE OF THIENSVILLE

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***Check Detail Register©**
11110 Unposted

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
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Fund Summary

11110 HARRIS GF -CHECKING

99 F. L. WEYENBERG LIBRARY FUND	\$96,133.71
	<u>\$96,133.71</u>



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*Check Detail Register© 11110 Unposted

Check #	Check Date	Vendor Name	Amount	Invoice	Comment
11110 HARRIS GF -CHECKING					
0	01/20/23	AMAZON CAPITAL SERVICES			
E 99-93-551-3-373		PRINT	\$127.45		1DLR-HQ9V- Print Collection
E 99-92-551-2-286		COMPUTERS	\$34.19		1DMK-9PW7- Technology
E 99-92-551-2-286		COMPUTERS	\$68.00		1PTK-FN9L-L Technology
E 99-92-551-3-300		OFFICE SUPPLIES	\$7.88		1TD7-HMGK- Office Supplies
		Total	\$237.52		
0	01/20/23	MILWAUKEE ALARM COMPANY			
E 99-94-551-2-283		CONTRACTED-BUILDIN	\$840.00	247149	Central Station Monitoring-Annual
E 99-94-551-3-308		BUILDING SUPPLIES	(\$175.25)	247149	Credit Memo
		Total	\$664.75		
0	01/20/23	MUNICIPAL PROPERTY INSURANCE C			
E 99-92-551-2-243		ALL OTHER INSURANCE	\$11,315.00	01042023	2023 Property & Equipment Insurance
		Total	\$11,315.00		
0	01/20/23	R & R INSURANCE SERVICES, INC.			
E 99-92-551-2-243		ALL OTHER INSURANCE	\$465.00	2758160	Crime Insurance
E 99-91-551-2-237		WORKER S COMPENSA	\$663.00	2760545	Workers Comp Insurance (1 of 2)
E 99-92-551-2-243		ALL OTHER INSURANCE	\$4,872.50	2760612	Liability Insurance (1 of 2)
		Total	\$6,000.50		
0	01/20/23	SECURIAN FINANCIAL GROUP, INC			
G 99-21286		ACCIDENTAL INS WITH	\$25.66	022023-A	FEB Accident Insurance-Employee
E 99-91-551-1-199		FRINGE BENEFITS	\$89.28	022023-L	FEB Life Insurance-Employer
G 99-21285		LIFE INSURANCE WITH	\$3.20	022023-L	FEB Life Insurance-Employee
		Total	\$118.14		
0	01/20/23	SIDECAR PUBLICATIONS LLC			
E 99-92-551-2-284		CONTRACTED SERVICE	\$348.00	3017	Gimlet Reference Service Yearly
		Total	\$348.00		
0	01/20/23	THIENSVILLE-MEQUON ROTARY CLUB			
E 99-91-551-2-202		DUES & SUBSCRIPTION	\$297.10	01012023	Quarterly Dues (1 of 4)
		Total	\$297.10		
11110 HARRIS GF -CHECKING			\$18,981.01		

Fund Summary

11110 HARRIS GF -CHECKING	
99 F. L. WEYENBERG LIBRARY FUND	\$18,981.01
	\$18,981.01

VILLAGE OF THIENSVILLE

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Balance Sheet

FUND	Account Descr	Begin Yr	YTD Debit	YTD Credit	Current Balance
FUND 01 GENERAL FUND					
01	G 01-11110 CHECKING - PWSB/BMO GENERAL	-\$4,469,014.87	\$17,490,100.65	\$18,389,757.07	-\$5,368,671.29
01	G 01-11111 ALLOCATED CASH BETWEEN FUNDS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11113 FLEX-BANCORP	\$2,500.00	\$2,392.22	\$2,392.22	\$2,500.00
01	G 01-11115 CHECKING - HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11120 SAVINGS - HARRIS/TAXES	\$22.80	\$92,159.00	\$92,057.65	\$124.15
01	G 01-11125 FLEX BENEFIT - HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11140 SAVINGS - PWBS/HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11150 PAYROLL - HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11155 PORT WASHINGTON STATE BANK/CD	\$500,000.00	\$0.00	\$0.00	\$500,000.00
01	G 01-11160 SPECIAL CLEARING ACCOUNT	\$0.00	\$1,058,249.30	\$1,058,249.30	\$0.00
01	G 01-11180 SPECIAL ASSESSMENT B-BONDS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11181 SPC REDEMPTION INT & PRINCIPAL	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11183 SPC. REDEMPTION RESERVE FUND	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11200 MMSD SETTLEMENT INVESTMENT	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11210 INVESTMENTS	\$5,141,032.44	\$8,600,230.73	\$7,582,855.12	\$6,158,408.05
01	G 01-11213 PARK IMPROVEMENT FUND	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11214 HISTORY BOOK/SAVINGS-HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11215 TAX STABILIZATION INVESTMENT	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11230 FIRE EQUIPMENT REPLACEMENT	\$109,895.44	\$288.77	\$110,184.21	\$0.00
01	G 01-11231 FIRE DEPT. PUMPER/PIERCE	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11240 INVESTMENTS - DPW TRUCK	\$126,169.05	\$20,377.67	\$146,546.72	\$0.00
01	G 01-11250 RESERVE FUND/SP ASSESS B BONDS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-11310 PETTY CASH	\$500.00	\$0.00	\$0.00	\$500.00
01	G 01-12000 SPECIAL ASSESS RECEIVABLE	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-12110 CURRENT YEAR TAX ROLL	\$0.00	\$1,997,081.59	\$1,997,081.59	\$0.00
01	G 01-12115 DEL. SWR. BILLS DUE FROM CTY.	\$3,863.84	\$6,192.86	\$3,277.61	\$6,779.09
01	G 01-12120 DELINQUENT PERSONAL PROPERTY	\$3,625.86	\$1,279.66	\$540.08	\$4,365.44
01	G 01-12125 TAXES RECEIVABLE	\$1,945,067.16	\$1,998,497.31	\$1,945,067.16	\$1,998,497.31
01	G 01-12200 SPECIAL ASSESSMENTS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-12310 ACCOUNTS RECEIVABLE	\$28,922.34	\$3,386.70	\$16,666.78	\$15,642.26
01	G 01-12311 DISASTER RECOVERY AID	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-12320 ACCRUED INTEREST RECEIVABLE	\$2,441.94	\$0.00	\$2,441.94	\$0.00
01	G 01-12330 ACCRUED INTEREST	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-12340 LOAN RECEIVABLE - CHEEL	\$34,250.00	\$0.00	\$34,250.00	\$0.00
01	G 01-12410 DUE FROM SEWER FUND	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-12480 DUE FROM TAX COLLECTION FUND	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-13110 DEFERRED EXPENDITURE	\$46,734.87	\$131,652.65	\$46,734.87	\$131,652.65
01	G 01-14105 MUSEUM ITEM - FIRE TRUCK	\$47,197.00	\$0.00	\$0.00	\$47,197.00
01	G 01-14110 LAND	\$416,177.00	\$0.00	\$0.00	\$416,177.00
01	G 01-14115 EASEMENTS	\$12,925.00	\$0.00	\$0.00	\$12,925.00
01	G 01-14120 BUILDINGS	\$1,275,890.00	\$0.00	\$0.00	\$1,275,890.00
01	G 01-14130 IMPROVEMENTS OTHER THAN BLDG	\$1,123,885.00	\$0.00	\$0.00	\$1,123,885.00
01	G 01-14140 MACHINERY AND EQUIPMENT	\$1,532,875.00	\$0.00	\$0.00	\$1,532,875.00
01	G 01-14145 INTANGIBLE ASSETS	\$18,091.00	\$0.00	\$0.00	\$18,091.00
01	G 01-14150 FURNITURE AND FIXTURES	\$29,054.00	\$0.00	\$0.00	\$29,054.00
01	G 01-14160 GASOLINE INVENTORY	\$3,100.00	\$0.00	\$0.00	\$3,100.00
01	G 01-14170 INFRASTRUCTURE	\$3,376,851.00	\$0.00	\$0.00	\$3,376,851.00
01	G 01-14180 STORMWATER INFRASTRUCTURE	\$4,420,208.00	\$0.00	\$0.00	\$4,420,208.00
01	G 01-14190 CONSTRUCTION IN PROGRESS	\$380,801.00	\$0.00	\$0.00	\$380,801.00
01	G 01-14999 LAND HELD FOR RESALE	\$647,000.00	\$0.00	\$0.00	\$647,000.00
01	G 01-15110 DEFERRED OUTFLOW	\$193,124.58	\$0.00	\$0.00	\$193,124.58
01	G 01-16110 NET PENSION ASSET	\$0.00	\$0.00	\$0.00	\$0.00

FUND	Account Descr	Begin Yr	YTD Debit	YTD Credit	Current Balance
01	G 01-21110 ACCOUNTS PAYABLE	-\$72,571.37	\$73,782.37	\$1,211.00	\$0.00
01	G 01-21210 WISCONSIN WITHHOLDING	\$0.00	\$59,683.29	\$59,683.29	\$0.00
01	G 01-21220 FEDERAL WITHHOLDING TAX	\$0.00	\$118,856.33	\$118,856.33	\$0.00
01	G 01-21230 SOCIAL SECURITY TAX	\$0.00	\$114,016.75	\$114,016.75	\$0.00
01	G 01-21235 GARNISHMENT	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21245 FLEX BENEFIT	-\$8,094.60	\$22,268.05	\$24,376.41	-\$10,202.96
01	G 01-21250 PROFESSIONAL POLICE ASSOC.	\$0.00	\$3,240.00	\$3,240.00	\$0.00
01	G 01-21258 WISCONSIN DEFERRED COMP	\$0.00	\$14,879.00	\$14,879.00	\$0.00
01	G 01-21260 ICMA - RC	\$0.00	\$14,093.45	\$14,093.45	\$0.00
01	G 01-21265 WI RETIREMENT	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21275 DENTAL INSURANCE WITHHOLDING	\$142.20	\$1,706.40	\$1,706.38	\$142.22
01	G 01-21276 VISION INSURANCE WITHHOLDING	\$82.78	\$974.06	\$991.12	\$65.72
01	G 01-21280 HEALTH INSURANCE WITHHOLDING	\$0.00	\$15,153.06	\$15,239.21	-\$86.15
01	G 01-21285 LIFE INSURANCE WITHHOLDING	\$0.01	\$4,357.41	\$4,357.42	\$0.00
01	G 01-21286 ACCIDENTAL INS WITHHOLDING	\$39.26	\$489.74	\$489.98	\$39.02
01	G 01-21290 MISCELLANEOUS DEDUCTIONS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21291 ACCRUED PAYROLL	-\$21,697.90	\$21,697.90	\$0.00	\$0.00
01	G 01-21310 DUE TO SEWER FUND	\$0.00	\$812.47	\$812.47	\$0.00
01	G 01-21320 DUE TO TIF FUND	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21350 DUE TO CPF	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21360 DUE TO SPECIAL ASSESSMENT FUND	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21380 DUE TO EQUITY RES ACCOUNT	\$0.00	\$268.36	\$268.36	\$0.00
01	G 01-21390 DUE TO STORMWATER FUND	\$0.00	\$150.15	\$150.15	\$0.00
01	G 01-21400 DUE TO CITY OF MEQUON	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21410 DUE TO M-T SCHOOL DISTRICT	\$0.00	\$2,463,708.25	\$2,463,708.25	\$0.00
01	G 01-21420 DUE TO MATC	\$0.00	\$318,278.50	\$318,278.50	\$0.00
01	G 01-21430 DUE TO OZAUKEE COUNTY	\$0.00	\$472,674.05	\$472,674.05	\$0.00
01	G 01-21435 DUE TO STATE OF WISCONSIN	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21510 DEFERRED REVENUES	-\$1,947,507.80	\$1,947,507.80	\$2,002,260.52	-\$2,002,260.52
01	G 01-21520 ADVANCE TAX COLLECTIONS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21525 DEPOSIT-DEVELP. APPLICATION	-\$276.81	\$2,643.53	\$2,935.80	-\$569.08
01	G 01-21530 REFUNDS R E TAX OVERPAY	\$0.00	\$15,878.06	\$15,878.06	\$0.00
01	G 01-21540 REFUNDS - PARK DEPOSIT	-\$500.00	\$3,100.00	\$3,200.00	-\$600.00
01	G 01-21550 MISCELLANEOUS REFUNDS	-\$1,000.00	\$400.00	\$1,400.00	-\$2,000.00
01	G 01-21555 CABLE TELEVISION TRUST	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21580 SOFTBALL ASSOC. PARK DEPOSIT	-\$1,000.00	\$0.00	\$0.00	-\$1,000.00
01	G 01-21585 ACT 102 FUNDS	-\$11,158.38	\$1,535.00	\$18,374.36	-\$27,997.74
01	G 01-21640 WARRANTS IN TRUST	\$0.00	\$100.00	\$100.00	\$0.00
01	G 01-21660 OZ. CTY. PORTION DOG LICENSE	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-21670 POLICE DONATION FUND	-\$13,050.73	\$14,761.89	\$19,071.92	-\$17,360.76
01	G 01-21675 FIRE DONATION FUND	-\$17,462.46	\$1,154.42	\$3,205.00	-\$19,513.04
01	G 01-21690 DONATIONS FOR PARK RESTROOMS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-22000 DEFERRED REVENUE ON SPEC ASSES	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-22110 G. O. NOTES	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-22120 UNFUNDED RETIREMENT LIABILITY	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-22130 ACCRUED COMPENSATORY TIME	-\$193,124.58	\$0.00	\$0.00	-\$193,124.58
01	G 01-31110 UNAPPROPRIATED	-\$139,141.79	\$0.00	\$0.00	-\$139,141.79
01	G 01-31111 REVENUE SUMMARY	\$0.00	\$85,372.86	\$2,860,017.82	-\$2,774,644.96
01	G 01-31112 EXPENDITURE SUMMARY	\$0.00	\$2,956,807.27	\$168,661.61	\$2,788,145.66
01	G 01-31120 APPROPRIATED-WRKG CAPITAL	-\$467,506.00	\$0.00	\$0.00	-\$467,506.00
01	G 01-31125 SEWER EQUIP. REPLACEMENT RES	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-31126 APPROP.-CORPORATE RESERVES	-\$574,692.00	\$0.00	\$0.00	-\$574,692.00
01	G 01-31127 APPROP.-TAX STABILIZATION	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-31128 APPROP.-B BONDS	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-31130 RESERVE INCUMBRENCES	\$0.00	\$0.00	\$0.00	\$0.00

FUND	Account Descr	Begin Yr	YTD Debit	YTD Credit	Current Balance
01	G 01-31140 ENCUMBERED PRIOR YEAR	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-31150 DESIGNATED FEDERAL REVENUE	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-31160 DESIGNATED/COMPENSATED ABSENCE	-\$193,124.58	\$0.00	\$0.00	-\$193,124.58
01	G 01-31165 RESERVED/HISTORY BOOK	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-31170 RESERVED/DELINQUENT PERS PROP	-\$3,625.86	\$0.00	\$0.00	-\$3,625.86
01	G 01-31175 RESERVED/DELINQUENT SEWER BILL	-\$3,863.84	\$0.00	\$0.00	-\$3,863.84
01	G 01-31180 RESERVED/DEFERRED EXPENDITURES	\$0.00	\$0.00	\$0.00	\$0.00
01	G 01-31185 RESERVED/INVENTORIES	-\$3,100.00	\$0.00	\$0.00	-\$3,100.00
01	G 01-39100 INVESTMENTS IN FIXED ASSETS	\$13,280,955.00	\$0.00	\$0.00	-\$13,280,955.00
01	G 01-50000 UNRESERVED/DESIGNATED FD BAL	\$0.00	\$0.00	\$0.00	\$0.00
FUND 01 GENERAL FUND		\$0.00	\$40,152,239.53	\$40,152,239.53	\$0.00
FUND 06 EQUITY RESERVE ACCOUNT					
06	G 06-11110 CHECKING - PWSB/BMO GENERAL	\$124,362.07	\$158,347.62	\$194,453.66	\$88,256.03
06	G 06-11155 PORT WASHINGTON STATE BANK/CD	\$0.00	\$0.00	\$0.00	\$0.00
06	G 06-12310 ACCOUNTS RECEIVABLE	\$162,916.29	\$232,588.37	\$337,050.45	\$58,454.21
06	G 06-12440 DUE FROM GENERAL FUND	\$0.00	\$268.36	\$268.36	\$0.00
06	G 06-13110 DEFERRED EXPENDITURE	\$684.48	\$0.00	\$684.48	\$0.00
06	G 06-21110 ACCOUNTS PAYABLE	-\$31,134.98	\$31,134.98	\$0.00	\$0.00
06	G 06-21291 ACCRUED PAYROLL	-\$960.33	\$960.33	\$0.00	\$0.00
06	G 06-21510 DEFERRED REVENUES	-\$160,970.22	\$334,243.83	\$231,727.82	-\$58,454.21
06	G 06-31110 UNAPPROPRIATED	-\$94,897.31	\$0.00	\$0.00	-\$94,897.31
06	G 06-31111 REVENUE SUMMARY	\$0.00	\$8,067.74	\$145,491.07	-\$137,423.33
06	G 06-31112 EXPENDITURE SUMMARY	\$0.00	\$155,074.87	\$11,010.26	\$144,064.61
06	G 06-31130 RESERVE INCUMBRENCES	\$0.00	\$0.00	\$0.00	\$0.00
06	G 06-31140 ENCUMBERED PRIOR YEAR	\$0.00	\$0.00	\$0.00	\$0.00
FUND 06 EQUITY RESERVE ACCOUNT		\$0.00	\$920,686.10	\$920,686.10	\$0.00
FUND 07 PARK IMPROVEMENT FUND					
07	G 07-11110 CHECKING - PWSB/BMO GENERAL	\$19,791.72	\$70,340.24	\$84,547.31	\$5,584.65
07	G 07-11120 SAVINGS - HARRIS/TAXES	\$0.00	\$0.00	\$0.00	\$0.00
07	G 07-11155 PORT WASHINGTON STATE BANK/CD	\$0.00	\$0.00	\$0.00	\$0.00
07	G 07-11213 PARK IMPROVEMENT FUND	\$119,216.52	\$65,130.42	\$1,939.80	\$182,407.14
07	G 07-12310 ACCOUNTS RECEIVABLE	\$2,992.91	\$0.00	\$2,992.91	\$0.00
07	G 07-12520 PREPAID EXPENSES	\$0.00	\$0.00	\$0.00	\$0.00
07	G 07-13110 DEFERRED EXPENDITURE	\$0.00	\$0.00	\$0.00	\$0.00
07	G 07-21110 ACCOUNTS PAYABLE	\$0.00	\$0.00	\$0.00	\$0.00
07	G 07-21350 DUE TO CPF	\$0.00	\$0.00	\$0.00	\$0.00
07	G 07-31110 UNAPPROPRIATED	-\$56,501.15	\$45,243.00	\$0.00	-\$11,258.15
07	G 07-31111 REVENUE SUMMARY	\$0.00	\$15,500.00	\$110,246.70	-\$94,746.70
07	G 07-31112 EXPENDITURE SUMMARY	\$0.00	\$57,047.11	\$8,291.05	\$48,756.06
07	G 07-31176 RESERVED/ICE SKATING	-\$53,500.00	\$0.00	\$0.00	-\$53,500.00
07	G 07-31177 RESERVED/BAND SHELL	\$0.00	\$0.00	\$0.00	\$0.00
07	G 07-31178 RESERVED/WATER FEATURE	-\$30,000.00	\$0.00	\$45,243.00	-\$75,243.00
07	G 07-31179 RESERVED/PAVILION	-\$2,000.00	\$0.00	\$0.00	-\$2,000.00
07	G 07-31190 GIFTS & GRANTS RESTRICTED	\$0.00	\$0.00	\$0.00	\$0.00
FUND 07 PARK IMPROVEMENT FUND		\$0.00	\$253,260.77	\$253,260.77	\$0.00
FUND 08 AMERICAN RESCUE PLAN ACT FUND					
08	G 08-11100 SPECIAL ASSESS RECEIVABLE CASH	\$0.00	\$0.00	\$0.00	\$0.00
08	G 08-11110 CHECKING - PWSB/BMO GENERAL	\$0.00	\$163,544.62	\$163,544.62	\$0.00
08	G 08-21110 ACCOUNTS PAYABLE	\$0.00	\$0.00	\$0.00	\$0.00
08	G 08-31110 UNAPPROPRIATED	\$0.00	\$0.00	\$0.00	\$0.00
08	G 08-31111 REVENUE SUMMARY	\$0.00	\$0.00	\$163,544.62	-\$163,544.62
08	G 08-31112 EXPENDITURE SUMMARY	\$0.00	\$163,544.62	\$0.00	\$163,544.62

FUND	Account Descr	Begin Yr	YTD Debit	YTD Credit	Current Balance
FUND 08	AMERICAN RESCUE PLAN ACT FUND	\$0.00	\$327,089.24	\$327,089.24	\$0.00
FUND 14	CAPITAL IMPROVEMENT/EQUIPMENT				
14	G 14-11110 CHECKING - PWSB/BMO GENERAL	\$674,243.99	\$620,750.19	\$836,798.89	\$458,195.29
14	G 14-11125 FLEX BENEFIT - HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-11130 CHECKING - HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-11150 PAYROLL - HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-11210 INVESTMENTS	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-11230 FIRE EQUIPMENT REPLACEMENT	\$0.00	\$111,154.92	\$0.00	\$111,154.92
14	G 14-11240 INVESTMENTS - DPW TRUCK	\$0.00	\$147,837.78	\$0.00	\$147,837.78
14	G 14-12000 SPECIAL ASSES RECEIVABLE	\$179,171.06	\$0.00	\$37,580.36	\$141,590.70
14	G 14-12125 TAXES RECEIVABLE	\$445,588.97	\$399,089.97	\$445,588.97	\$399,089.97
14	G 14-12310 ACCOUNTS RECEIVABLE	\$67,398.93	\$0.00	\$67,398.93	\$0.00
14	G 14-12330 ACCRUED INTEREST	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-12410 DUE FROM SEWER FUND	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-12430 DUE FROM CAPITAL IMPROVEMENT	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-12440 DUE FROM GENERAL FUND	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-12480 DUE FROM TAX COLLECTION FUND	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-13110 DEFERRED EXPENDITURE	\$0.00	\$23,618.00	\$0.00	\$23,618.00
14	G 14-14110 LAND	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-14120 BUILDINGS	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-14130 IMPROVEMENTS OTHER THAN BLDG	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-14140 MACHINERY AND EQUIPMENT	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-14150 FURNITURE AND FIXTURES	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-14999 LAND HELD FOR RESALE	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-15120 FEDERAL & STATE GRANTS RECV.	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-21110 ACCOUNTS PAYABLE	-\$14,953.02	\$14,953.02	\$0.00	\$0.00
14	G 14-21310 DUE TO SEWER FUND	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-21330 DUE TO GENERAL FUND	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-21440 DUE TO FIRE DEPARTMENT	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-21510 DEFERRED REVENUES	-\$400,000.00	\$400,000.00	\$357,000.00	-\$357,000.00
14	G 14-21511 DEFERRED REVENUES - OLD	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-21560 DEFERRED CREDITS/STATE GRANTS	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-21690 DONATIONS FOR PARK RESTROOMS	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-22000 DEFERRED REVENUE ON SPEC ASSES	-\$224,760.03	\$45,588.97	\$4,509.61	-\$183,680.67
14	G 14-31110 UNAPPROPRIATED	-\$726,689.90	\$0.00	\$0.00	-\$726,689.90
14	G 14-31111 REVENUE SUMMARY	\$0.00	\$27,991.87	\$508,970.19	-\$480,978.32
14	G 14-31112 EXPENDITURE SUMMARY	\$0.00	\$531,344.15	\$64,481.92	\$466,862.23
14	G 14-31120 APPROPRIATED-WRKG CAPITAL	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-31130 RESERVE INCUMBRENCES	\$0.00	\$0.00	\$0.00	\$0.00
14	G 14-31140 ENCUMBERED PRIOR YEAR	\$0.00	\$0.00	\$0.00	\$0.00
FUND 14	CAPITAL IMPROVEMENT/EQUIPMENT	\$0.00	\$2,322,328.87	\$2,322,328.87	\$0.00
FUND 16	OLD VILLAGE HALL				
16	G 16-11110 CHECKING - PWSB/BMO GENERAL	\$14,657.06	\$2,685.78	\$2,292.36	\$15,050.48
16	G 16-12125 TAXES RECEIVABLE	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
16	G 16-12480 DUE FROM TAX COLLECTION FUND	\$0.00	\$0.00	\$0.00	\$0.00
16	G 16-13110 DEFERRED EXPENDITURE	\$0.00	\$16.02	\$0.00	\$16.02
16	G 16-21110 ACCOUNTS PAYABLE	-\$185.78	\$185.78	\$0.00	\$0.00
16	G 16-21510 DEFERRED REVENUES	-\$2,500.00	\$2,500.00	\$2,500.00	-\$2,500.00
16	G 16-31110 UNAPPROPRIATED	-\$14,471.28	\$0.00	\$0.00	-\$14,471.28
16	G 16-31111 REVENUE SUMMARY	\$0.00	\$0.00	\$2,500.00	-\$2,500.00
16	G 16-31112 EXPENDITURE SUMMARY	\$0.00	\$2,090.56	\$185.78	\$1,904.78
FUND 16	OLD VILLAGE HALL	\$0.00	\$9,978.14	\$9,978.14	\$0.00
FUND 19	STORM WATER MANAGEMENT				

FUND	Account Descr	Begin Yr	YTD Debit	YTD Credit	Current Balance
19	G 19-11110 CHECKING - PWSB/BMO GENERAL	\$128,402.54	\$45,448.30	\$108,279.48	\$65,571.36
19	G 19-11120 SAVINGS - HARRIS/TAXES	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-11155 PORT WASHINGTON STATE BANK/CD	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-11210 INVESTMENTS	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-12125 TAXES RECEIVABLE	\$42,000.00	\$47,000.00	\$42,000.00	\$47,000.00
19	G 19-12310 ACCOUNTS RECEIVABLE	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-12330 ACCRUED INTEREST	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-12440 DUE FROM GENERAL FUND	\$0.00	\$150.15	\$150.15	\$0.00
19	G 19-12480 DUE FROM TAX COLLECTION FUND	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-13110 DEFERRED EXPENDITURE	\$536.15	\$805.50	\$536.15	\$805.50
19	G 19-14180 STORMWATER INFRASTRUCTURE	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-21110 ACCOUNTS PAYABLE	-\$9,509.40	\$1,111.49	\$0.00	-\$8,397.91
19	G 19-21291 ACCRUED PAYROLL	-\$316.15	\$316.15	\$0.00	\$0.00
19	G 19-21330 DUE TO GENERAL FUND	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-21390 DUE TO STORMWATER FUND	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-21510 DEFERRED REVENUES	-\$42,000.00	\$42,000.00	\$47,000.00	-\$47,000.00
19	G 19-31110 UNAPPROPRIATED	-\$119,113.14	\$0.00	\$0.00	-\$119,113.14
19	G 19-31111 REVENUE SUMMARY	\$0.00	\$0.00	\$42,000.00	-\$42,000.00
19	G 19-31112 EXPENDITURE SUMMARY	\$0.00	\$106,898.64	\$3,764.45	\$103,134.19
19	G 19-31120 APPROPRIATED-WRKG CAPITAL	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-31130 RESERVE INCUMBRENCES	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-31140 ENCUMBERED PRIOR YEAR	\$0.00	\$0.00	\$0.00	\$0.00
19	G 19-39100 INVESTMENTS IN FIXED ASSETS	\$0.00	\$0.00	\$0.00	\$0.00
FUND 19 STORM WATER MANAGEMENT		\$0.00	\$243,730.23	\$243,730.23	\$0.00
FUND 21 SEWER UTILITY					
21	G 21-11110 CHECKING - PWSB/BMO GENERAL	-\$68,956.88	\$1,036,720.14	\$931,501.67	\$36,261.59
21	G 21-11130 CHECKING - HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-11140 SAVINGS - PWBS/HARRIS	\$20.23	\$940,248.37	\$893,656.97	\$46,611.63
21	G 21-11150 PAYROLL - HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-11155 PORT WASHINGTON STATE BANK/CD	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-11190 SEWER EQUIPMENT REPLACEMENT FD	\$233,825.25	\$13,005.84	\$0.00	\$246,831.09
21	G 21-11200 MMSD SETTLEMENT INVESTMENT	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-11210 INVESTMENTS	\$742,330.21	\$1,602.68	\$24.00	\$743,908.89
21	G 21-12125 TAXES RECEIVABLE	\$33,867.48	\$40,471.61	\$33,867.48	\$40,471.61
21	G 21-12310 ACCOUNTS RECEIVABLE	\$188,698.60	\$1,086,493.31	\$1,057,868.22	\$217,323.69
21	G 21-12320 ACCRUED INTEREST RECEIVABLE	\$2,228.83	\$0.00	\$2,228.83	\$0.00
21	G 21-12340 LOAN RECEIVABLE - CHEEL	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-12410 DUE FROM SEWER FUND	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-12420 DUE FROM MEQUON	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-12440 DUE FROM GENERAL FUND	\$0.00	\$812.47	\$812.47	\$0.00
21	G 21-12445 DUE FROM OTHER FUND-OTHER	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-12480 DUE FROM TAX COLLECTION FUND	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-13110 DEFERRED EXPENDITURE	\$23,722.86	\$7,565.54	\$20,722.86	\$10,565.54
21	G 21-13130 ACCUMULATED DEPRECIATION	-\$2,583,074.21	\$0.00	\$0.00	-\$2,583,074.21
21	G 21-13313 COLLECTING SEWERS	\$3,167,675.84	\$0.00	\$0.00	\$3,167,675.84
21	G 21-13314 INTERCEPTOR MAIN	\$2,873,897.57	\$0.00	\$0.00	\$2,873,897.57
21	G 21-13321 STRUCTURES & IMPROVEMENT	\$755,270.14	\$0.00	\$0.00	\$755,270.14
21	G 21-13323 ELECTRIC PUMPING EQUIPMENT	\$754,896.06	\$0.00	\$0.00	\$754,896.06
21	G 21-13330 LAND AND LAND RIGHTS	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-13341 OTHER TREAT. & DISPOSAL/EQP	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-13372 OFFICE EQUIPMENT	\$78,049.78	\$0.00	\$0.00	\$78,049.78
21	G 21-13373 VEHICLES	\$49,192.99	\$0.00	\$0.00	\$49,192.99
21	G 21-13374 CONSTRUCTION IN PROGRESS	\$9,918.75	\$0.00	\$0.00	\$9,918.75
21	G 21-13390 INTANGIBLE ASSET (GIS SYSTEM)	\$100,618.23	\$0.00	\$0.00	\$100,618.23

FUND	Account Descr	Begin Yr	YTD Debit	YTD Credit	Current Balance
21	G 21-15110 DEFERRED OUTFLOW	\$38,692.00	\$0.00	\$0.00	\$38,692.00
21	G 21-16110 NET PENSION ASSET	\$36,508.00	\$0.00	\$0.00	\$36,508.00
21	G 21-16120 NET OPEB ASSET	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-21110 ACCOUNTS PAYABLE	-\$60,848.36	\$60,848.36	\$0.00	\$0.00
21	G 21-21291 ACCRUED PAYROLL	-\$1,871.12	\$1,871.12	\$0.00	\$0.00
21	G 21-21330 DUE TO GENERAL FUND	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-21340 DUE TO EQUIPMENT REPLACEMENT	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-22230 REFUND/OVERPAYMENT SEWER	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-25110 DEFERRED INFLOW	-\$47,144.00	\$0.00	\$0.00	-\$47,144.00
21	G 21-26110 NET PENSION LIABILITY	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-26120 NET OPEB LIABILITY	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-31110 UNAPPROPRIATED	-\$2,799,740.00	\$0.00	\$0.00	-\$2,799,740.00
21	G 21-31111 REVENUE SUMMARY	\$0.00	\$6,586.95	\$1,112,579.70	-\$1,105,992.75
21	G 21-31112 EXPENDITURE SUMMARY	\$0.00	\$869,830.63	\$12,794.82	\$857,035.81
21	G 21-31125 SEWER EQUIP. REPLACEMENT RES	-\$233,825.25	\$0.00	\$0.00	-\$233,825.25
21	G 21-31130 RESERVE INCUMBRENCES	\$0.00	\$0.00	\$0.00	\$0.00
21	G 21-32000 CONTRIBU. IN AID OF CONSTRUCT.	-\$2,511,545.13	\$0.00	\$0.00	-\$2,511,545.13
21	G 21-33000 CAPITAL PAID-IN BY MUNICIPAL	-\$782,407.87	\$0.00	\$0.00	-\$782,407.87
FUND 21 SEWER UTILITY		\$0.00	\$4,066,057.02	\$4,066,057.02	\$0.00
FUND 30 DEBT SERVICE FUND					
30	G 30-11110 CHECKING - PWSB/BMO GENERAL	\$0.00	\$0.00	\$0.00	\$0.00
30	G 30-11210 INVESTMENTS	\$0.00	\$0.00	\$0.00	\$0.00
30	G 30-31110 UNAPPROPRIATED	\$0.00	\$0.00	\$0.00	\$0.00
30	G 30-31111 REVENUE SUMMARY	\$0.00	\$0.00	\$0.00	\$0.00
30	G 30-31112 EXPENDITURE SUMMARY	\$0.00	\$0.00	\$0.00	\$0.00
30	G 30-34000 RESTRICTED FOR DEBT SERVICE	\$0.00	\$0.00	\$0.00	\$0.00
FUND 30 DEBT SERVICE FUND		\$0.00	\$0.00	\$0.00	\$0.00
FUND 42 TAX INCREMENT DISTRICT #2					
42	G 42-11110 CHECKING - PWSB/BMO GENERAL	\$465,246.01	\$6,118,155.01	\$4,942,221.43	\$1,641,179.59
42	G 42-11155 PORT WASHINGTON STATE BANK/CD	\$0.00	\$0.00	\$0.00	\$0.00
42	G 42-11185 TIF #2 DEBT SERVICE RESERVE	\$0.00	\$342,838.36	\$0.00	\$342,838.36
42	G 42-12125 TAXES RECEIVABLE	\$0.00	\$7,414.30	\$0.00	\$7,414.30
42	G 42-13110 DEFERRED EXPENDITURE	\$0.00	\$1,028.41	\$0.00	\$1,028.41
42	G 42-14999 LAND HELD FOR RESALE	\$0.00	\$0.00	\$0.00	\$0.00
42	G 42-21110 ACCOUNTS PAYABLE	-\$38,922.81	\$38,377.83	\$1,207.50	-\$1,752.48
42	G 42-21510 DEFERRED REVENUES	\$0.00	\$0.00	\$7,414.30	-\$7,414.30
42	G 42-31110 UNAPPROPRIATED	-\$426,323.20	\$337,699.81	\$0.00	-\$88,623.39
42	G 42-31111 REVENUE SUMMARY	\$0.00	\$0.00	\$4,395,138.55	-\$4,395,138.55
42	G 42-31112 EXPENDITURE SUMMARY	\$0.00	\$4,675,458.80	\$1,837,290.93	\$2,838,167.87
42	G 42-34000 RESTRICTED FOR DEBT SERVICE	\$0.00	\$0.00	\$337,699.81	-\$337,699.81
FUND 42 TAX INCREMENT DISTRICT #2		\$0.00	\$11,520,972.52	\$11,520,972.52	\$0.00
FUND 51 SPECIAL ASSESS CE#3 TAX COLLEC					
51	G 51-11110 CHECKING - PWSB/BMO GENERAL	\$0.00	\$0.00	\$0.00	\$0.00
51	G 51-11111 ALLOCATED CASH BETWEEN FUNDS	\$0.00	\$0.00	\$0.00	\$0.00
51	G 51-11180 SPECIAL ASSESSMENT B-BONDS	\$0.00	\$0.00	\$0.00	\$0.00
51	G 51-12000 SPECIAL ASSESS RECEIVABLE	\$0.00	\$0.00	\$0.00	\$0.00
51	G 51-12110 CURRENT YEAR TAX ROLL	\$0.00	\$0.00	\$0.00	\$0.00
51	G 51-12125 TAXES RECEIVABLE	\$0.00	\$0.00	\$0.00	\$0.00
51	G 51-12440 DUE FROM GENERAL FUND	\$0.00	\$0.00	\$0.00	\$0.00
51	G 51-21510 DEFERRED REVENUES	\$0.00	\$0.00	\$0.00	\$0.00
51	G 51-22000 DEFERRED REVENUE ON SPEC ASSES	\$0.00	\$0.00	\$0.00	\$0.00
51	G 51-31110 UNAPPROPRIATED	\$0.00	\$0.00	\$0.00	\$0.00
51	G 51-31111 REVENUE SUMMARY	\$0.00	\$0.00	\$0.00	\$0.00

FUND	Account Descr	Begin Yr	YTD Debit	YTD Credit	Current Balance
51	G 51-31112 EXPENDITURE SUMMARY	\$0.00	\$0.00	\$0.00	\$0.00
FUND 51	SPECIAL ASSESS CE#3 TAX COLLEC	\$0.00	\$0.00	\$0.00	\$0.00
FUND 52	SPECIAL ASSESS LAWDS TAX COLLE				
52	G 52-11110 CHECKING - PWSB/BMO GENERAL	\$10,018.30	\$19,209.49	\$27,214.00	\$2,013.79
52	G 52-11180 SPECIAL ASSESSMENT B-BONDS	\$0.00	\$0.00	\$0.00	\$0.00
52	G 52-12000 SPECIAL ASSESS RECEIVABLE	\$16,663.19	\$0.00	\$15,991.39	\$671.80
52	G 52-12125 TAXES RECEIVABLE	\$18,533.83	\$16,543.15	\$18,533.83	\$16,543.15
52	G 52-12440 DUE FROM GENERAL FUND	\$0.00	\$0.00	\$0.00	\$0.00
52	G 52-12480 DUE FROM TAX COLLECTION FUND	\$0.00	\$0.00	\$0.00	\$0.00
52	G 52-22000 DEFERRED REVENUE ON SPEC ASSES	-\$35,197.02	\$18,533.83	\$551.76	-\$17,214.95
52	G 52-31110 UNAPPROPRIATED	-\$10,018.30	\$0.00	\$0.00	-\$10,018.30
52	G 52-31111 REVENUE SUMMARY	\$0.00	\$0.00	\$19,209.49	-\$19,209.49
52	G 52-31112 EXPENDITURE SUMMARY	\$0.00	\$27,214.00	\$0.00	\$27,214.00
FUND 52	SPECIAL ASSESS LAWDS TAX COLLE	\$0.00	\$81,500.47	\$81,500.47	\$0.00
FUND 80	TAX COLLECTION FUND				
80	G 80-11110 CHECKING - PWSB/BMO GENERAL	\$3,185,678.82	\$5,712,986.18	\$5,747,121.04	\$3,151,543.96
80	G 80-11120 SAVINGS - HARRIS/TAXES	\$0.00	\$311,512.59	\$0.00	\$311,512.59
80	G 80-12110 CURRENT YEAR TAX ROLL	\$6,720,867.39	\$6,704,204.63	\$6,720,867.39	\$6,704,204.63
80	G 80-21310 DUE TO SEWER FUND	-\$33,867.48	\$33,867.48	\$40,471.61	-\$40,471.61
80	G 80-21320 DUE TO TIF FUND	\$0.00	\$0.00	\$7,414.30	-\$7,414.30
80	G 80-21330 DUE TO GENERAL FUND	-\$1,945,067.16	\$1,945,067.16	\$1,998,497.31	-\$1,998,497.31
80	G 80-21350 DUE TO CPF	-\$445,588.97	\$445,588.97	\$399,089.97	-\$399,089.97
80	G 80-21360 DUE TO SPECIAL ASSESSMENT FUND	-\$18,533.83	\$18,533.83	\$16,543.15	-\$16,543.15
80	G 80-21390 DUE TO STORMWATER FUND	-\$42,000.00	\$42,000.00	\$47,000.00	-\$47,000.00
80	G 80-21395 DUE TO OLD VILLAGE HALL FUND	-\$2,500.00	\$2,500.00	\$2,500.00	-\$2,500.00
80	G 80-21400 DUE TO CITY OF MEQUON	\$0.00	\$0.00	\$3,681.32	-\$3,681.32
80	G 80-21410 DUE TO M-T SCHOOL DISTRICT	-\$3,202,523.00	\$3,202,523.00	\$3,162,851.80	-\$3,162,851.80
80	G 80-21420 DUE TO MATC	-\$413,723.59	\$413,723.59	\$402,147.97	-\$402,147.97
80	G 80-21430 DUE TO OZAUKEE COUNTY	-\$614,419.15	\$614,419.15	\$624,007.20	-\$624,007.20
80	G 80-21520 ADVANCE TAX COLLECTIONS	-\$3,189,395.02	\$3,189,395.02	\$3,459,076.72	-\$3,459,076.72
80	G 80-21530 REFUNDS R E TAX OVERPAY	\$1,071.99	\$4,902.80	\$9,954.62	-\$3,979.83
80	G 80-31110 UNAPPROPRIATED	\$0.00	\$0.00	\$0.00	\$0.00
80	G 80-31111 REVENUE SUMMARY	\$0.00	\$0.00	\$0.00	\$0.00
80	G 80-31112 EXPENDITURE SUMMARY	\$0.00	\$0.00	\$0.00	\$0.00
FUND 80	TAX COLLECTION FUND	\$0.00	\$22,641,224.40	\$22,641,224.40	\$0.00
FUND 98	FLW LIB GIFTS & GRANTS FUND				
98	G 98-11110 CHECKING - PWSB/BMO GENERAL	\$60,156.53	\$41,921.96	\$96,958.24	\$5,120.25
98	G 98-11210 INVESTMENTS	\$0.00	\$85,000.00	\$5,000.00	\$80,000.00
98	G 98-12310 ACCOUNTS RECEIVABLE	\$0.00	\$0.00	\$0.00	\$0.00
98	G 98-21110 ACCOUNTS PAYABLE	-\$5,763.74	\$5,763.74	\$0.00	\$0.00
98	G 98-31111 REVENUE SUMMARY	\$0.00	\$0.00	\$36,921.96	-\$36,921.96
98	G 98-31112 EXPENDITURE SUMMARY	\$0.00	\$6,314.50	\$120.00	\$6,194.50
98	G 98-31190 GIFTS & GRANTS RESTRICTED	-\$3,600.51	\$0.00	\$0.00	-\$3,600.51
98	G 98-31191 GIFTS & GRANTS UNRESTRICTED	-\$50,792.28	\$0.00	\$0.00	-\$50,792.28
FUND 98	FLW LIB GIFTS & GRANTS FUND	\$0.00	\$139,000.20	\$139,000.20	\$0.00
FUND 99	F. L. WEYENBERG LIBRARY FUND				
99	G 99-11110 CHECKING - PWSB/BMO GENERAL	\$1,664.66	\$2,786,282.70	\$2,784,478.51	\$3,468.85
99	G 99-11113 FLEX-BANCORP	\$2,500.00	\$4,518.76	\$4,518.76	\$2,500.00
99	G 99-11140 SAVINGS - PWBS/HARRIS	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-11155 PORT WASHINGTON STATE BANK/CD	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-11160 SPECIAL CLEARING ACCOUNT	\$0.00	\$429,128.81	\$429,128.81	\$0.00
99	G 99-11210 INVESTMENTS	\$258,505.03	\$999,497.42	\$970,500.00	\$287,502.45

FUND	Account Descr	Begin Yr	YTD Debit	YTD Credit	Current Balance
99	G 99-11310 PETTY CASH	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-12310 ACCOUNTS RECEIVABLE	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-12315 ALLOWANCE FOR DOUBTFUL ACCTS	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-12320 ACCRUED INTEREST RECEIVABLE	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-12520 PREPAID EXPENSES	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-13110 DEFERRED EXPENDITURE	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-14110 LAND	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-14120 BUILDINGS	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-14130 IMPROVEMENTS OTHER THAN BLDG	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-14150 FURNITURE AND FIXTURES	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-21110 ACCOUNTS PAYABLE	-\$28,817.05	\$28,817.05	\$0.00	\$0.00
99	G 99-21210 WISCONSIN WITHHOLDING	\$0.00	\$19,508.08	\$19,508.08	\$0.00
99	G 99-21220 FEDERAL WITHHOLDING TAX	\$0.00	\$39,443.18	\$39,443.18	\$0.00
99	G 99-21230 SOCIAL SECURITY TAX	\$0.00	\$43,227.93	\$43,227.93	\$0.00
99	G 99-21245 FLEX BENEFIT	-\$5,516.48	\$12,117.99	\$11,339.64	-\$4,738.13
99	G 99-21258 WISCONSIN DEFERRED COMP	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-21265 WI RETIREMENT	-\$4,237.32	\$34,736.38	\$34,740.16	-\$4,241.10
99	G 99-21275 DENTAL INSURANCE WITHHOLDING	\$0.00	\$596.52	\$596.52	\$0.00
99	G 99-21276 VISION INSURANCE WITHHOLDING	\$0.00	\$831.84	\$831.84	\$0.00
99	G 99-21280 HEALTH INSURANCE WITHHOLDING	\$0.00	\$16,105.26	\$16,105.26	\$0.00
99	G 99-21285 LIFE INSURANCE WITHHOLDING	\$0.00	\$230.85	\$230.85	\$0.00
99	G 99-21286 ACCIDENTAL INS WITHHOLDING	\$0.00	\$398.82	\$398.82	\$0.00
99	G 99-21291 ACCRUED PAYROLL	-\$9,681.75	\$9,681.75	\$0.00	\$0.00
99	G 99-21370 DUE TO LIBRARY FUND	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-21510 DEFERRED REVENUES	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-21680 LIBRARY DONATION FUND	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-31110 UNAPPROPRIATED	-\$214,417.09	\$0.00	\$0.00	-\$214,417.09
99	G 99-31111 REVENUE SUMMARY	\$0.00	\$0.00	\$1,220,043.14	-\$1,220,043.14
99	G 99-31112 EXPENDITURE SUMMARY	\$0.00	\$1,170,176.24	\$20,208.08	\$1,149,968.16
99	G 99-31190 GIFTS & GRANTS RESTRICTED	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-31191 GIFTS & GRANTS UNRESTRICTED	\$0.00	\$0.00	\$0.00	\$0.00
99	G 99-39100 INVESTMENTS IN FIXED ASSETS	\$0.00	\$0.00	\$0.00	\$0.00
FUND 99 F. L. WEYENBERG LIBRARY FUND		\$0.00	\$5,595,299.58	\$5,595,299.58	\$0.00
		\$0.00	\$88,273,367.07	\$88,273,367.07	\$0.00



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Account Descr	2022 YTD Budget	2022 YTD Amt	DECEMBER 2022 Amt	Balance	2022 % of Budget
FUND 01 GENERAL FUND					
MAJ CLS 40 TAXES					
DEPT 001 LOCAL PROPERTY TAXES					
R 01-40-001-100 GENERAL OPERATIONS	\$1,943,667.00	\$1,943,667.00	\$0.00	\$0.00	100.00%
DEPT 001 LOCAL PROPERTY TAXES	\$1,943,667.00	\$1,943,667.00	\$0.00	\$0.00	100.00%
MAJ CLS 40 TAXES	\$1,943,667.00	\$1,943,667.00	\$0.00	\$0.00	100.00%
MAJ CLS 41 INTER-GOVERNMENTAL REVENUES					
DEPT 002 SHARED REVENUES					
R 01-41-002-110 STATE SHARED REVENUE	\$90,849.00	\$90,849.33	\$3,797.25	-\$0.33	100.00%
DEPT 002 SHARED REVENUES	\$90,849.00	\$90,849.33	\$3,797.25	-\$0.33	100.00%
DEPT 003 GRANTS & AIDS					
R 01-41-003-120 LOCAL TRANSPORTATION AIDS	\$200,248.00	\$199,693.70	\$0.00	\$554.30	99.72%
R 01-41-003-122 EXEMPT COMPUTER AID	\$4,179.00	\$4,178.66	\$0.00	\$0.34	99.99%
R 01-41-003-123 FIRE INSURANCE DUES	\$16,000.00	\$16,130.72	\$0.00	-\$130.72	100.82%
R 01-41-003-125 VIDEO SERVICE PROVIDER AIDS	\$9,471.00	\$9,470.83	\$0.00	\$0.17	100.00%
R 01-41-003-127 RECYCLING GRANT	\$9,550.00	\$9,511.50	\$0.00	\$38.50	99.60%
R 01-41-003-128 LAW ENFORCEMENT GRANT	\$1,120.00	\$1,280.00	\$0.00	-\$160.00	114.29%
R 01-41-003-129 FEDERAL CARES ACT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 01-41-003-130 ROUTES TO RECOVERY STATE AI	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 01-41-003-131 ARPA LOCAL RECOVERY FUNDS	\$110,000.00	\$0.00	\$0.00	\$110,000.00	0.00%
R 01-41-003-132 EMS FLEX GRANT	\$0.00	\$33,867.50	\$0.00	-\$33,867.50	0.00%
DEPT 003 GRANTS & AIDS	\$350,568.00	\$274,132.91	\$0.00	\$76,435.09	78.20%
DEPT 007 OTHER					
R 01-41-007-531 OTHER SVCS TO OTHER LOCAL G	\$9,000.00	\$13,345.47	\$0.00	-\$4,345.47	148.28%
DEPT 007 OTHER	\$9,000.00	\$13,345.47	\$0.00	-\$4,345.47	148.28%
DEPT 011 PARK & RECREATION					
R 01-41-011-530 FISCAL AGENT FEES - LIBRARY	\$7,000.00	\$7,000.00	\$0.00	\$0.00	100.00%
DEPT 011 PARK & RECREATION	\$7,000.00	\$7,000.00	\$0.00	\$0.00	100.00%
MAJ CLS 41 INTER-GOVERNMENTAL REVEN	\$457,417.00	\$385,327.71	\$3,797.25	\$72,089.29	84.24%
MAJ CLS 42 REGULATION & COMPLIANCE					
DEPT 004 LICENSES					
R 01-42-004-200 LIQUOR & MALT BEVERAGE	\$9,500.00	\$8,795.88	\$52.88	\$704.12	92.59%
R 01-42-004-210 CIGARETTE	\$100.00	\$75.00	\$25.00	\$25.00	75.00%
R 01-42-004-212 DOG	\$2,000.00	\$1,487.00	\$20.00	\$513.00	74.35%
R 01-42-004-213 ELECTRICAL LICENSES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 01-42-004-214 CAT LICENSES	\$300.00	\$175.00	\$0.00	\$125.00	58.33%
R 01-42-004-215 SUNDRY	\$500.00	\$185.00	\$10.00	\$315.00	37.00%
R 01-42-004-234 CELL TOWER LEASE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 004 LICENSES	\$12,400.00	\$10,717.88	\$107.88	\$1,682.12	86.43%
DEPT 005 PERMITS					
R 01-42-005-220 BUILDING	\$40,000.00	\$40,385.74	\$2,898.53	-\$385.74	100.96%
R 01-42-005-221 ELECTRICAL	\$15,000.00	\$8,203.90	\$780.00	\$6,796.10	54.69%
R 01-42-005-222 PLUMBING	\$15,000.00	\$10,200.12	\$525.00	\$4,799.88	68.00%
R 01-42-005-223 SUNDRY	\$2,500.00	\$905.00	\$50.00	\$1,595.00	36.20%
DEPT 005 PERMITS	\$72,500.00	\$59,694.76	\$4,253.53	\$12,805.24	82.34%
DEPT 006 FINES & FORFEITURES					



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R 01-42-006-230 COURT FINES	\$27,000.00	\$11,713.36	\$1,455.00	\$15,286.64	43.38%
R 01-42-006-231 PARKING FINES	\$15,000.00	\$10,904.26	\$635.00	\$4,095.74	72.70%
DEPT 006 FINES & FORFEITURES	\$42,000.00	\$22,617.62	\$2,090.00	\$19,382.38	53.85%
DEPT 007 OTHER					
R 01-42-007-234 CELL TOWER LEASE	\$29,710.00	\$38,267.56	\$0.00	-\$8,557.56	128.80%
R 01-42-007-235 CABLE TV	\$25,000.00	\$13,880.48	\$3,549.87	\$11,119.52	55.52%
DEPT 007 OTHER	\$54,710.00	\$52,148.04	\$3,549.87	\$2,561.96	95.32%
MAJ CLS 42 REGULATION & COMPLIANCE	\$181,610.00	\$145,178.30	\$10,001.28	\$36,431.70	79.94%
MAJ CLS 43 PUBLIC CHARGES FOR SERVICE					
DEPT 001 LOCAL PROPERTY TAXES					
R 01-43-001-265 PARK LAND DEDICATION	\$12,000.00	\$2,000.00	\$0.00	\$10,000.00	16.67%
DEPT 001 LOCAL PROPERTY TAXES	\$12,000.00	\$2,000.00	\$0.00	\$10,000.00	16.67%
DEPT 008 GENERAL GOVERNMENT					
R 01-43-008-240 GENERAL GOVERNMENT	\$5,000.00	\$3,171.75	\$729.50	\$1,828.25	63.44%
R 01-43-008-241 MUNICIPAL CENTER	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 01-43-008-242 ASSESSMENT LETTERS	\$4,000.00	\$2,400.00	\$200.00	\$1,600.00	60.00%
DEPT 008 GENERAL GOVERNMENT	\$9,000.00	\$5,571.75	\$929.50	\$3,428.25	61.91%
DEPT 009 PROTECTION-PERSONS & PROPERTY					
R 01-43-009-250 POLICE DEPARTMENT FEES	\$2,500.00	\$2,154.18	\$30.80	\$345.82	86.17%
DEPT 009 PROTECTION-PERSONS & PR	\$2,500.00	\$2,154.18	\$30.80	\$345.82	86.17%
DEPT 010 HEALTH & SANITATION					
R 01-43-010-260 RECYCLING PROCEEDS	\$18,000.00	\$12,510.00	\$60.00	\$5,490.00	69.50%
R 01-43-010-261 DUMPSTER RENTAL	\$10,000.00	\$11,375.00	\$375.00	-\$1,375.00	113.75%
DEPT 010 HEALTH & SANITATION	\$28,000.00	\$23,885.00	\$435.00	\$4,115.00	85.30%
DEPT 011 PARK & RECREATION					
R 01-43-011-270 PARK FEES	\$9,000.00	\$5,170.00	\$0.00	\$3,830.00	57.44%
R 01-43-011-271 SOFTBALL ASSOCIATION PARK FE	\$2,000.00	\$1,350.00	\$0.00	\$650.00	67.50%
DEPT 011 PARK & RECREATION	\$11,000.00	\$6,520.00	\$0.00	\$4,480.00	59.27%
DEPT 012 UNCLASSIFIED					
R 01-43-012-280 MISCELLANEOUS	\$7,850.00	\$1,500.70	\$185.00	\$6,349.30	19.12%
R 01-43-012-597 SPECIAL ASSESSMENT COLLECTE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 012 UNCLASSIFIED	\$7,850.00	\$1,500.70	\$185.00	\$6,349.30	19.12%
MAJ CLS 43 PUBLIC CHARGES FOR SERVICE	\$70,350.00	\$41,631.63	\$1,580.30	\$28,718.37	59.18%
MAJ CLS 44 COMMERCIAL REVENUES					
DEPT 013 INTEREST INCOME					
R 01-44-013-300 INVESTMENT INTEREST	\$55,000.00	\$42,749.39	\$9,489.74	\$12,250.61	77.73%
DEPT 013 INTEREST INCOME	\$55,000.00	\$42,749.39	\$9,489.74	\$12,250.61	77.73%
DEPT 014 SALE INCOME					
R 01-44-014-320 SALE - VILLAGE PROPERTY	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 01-44-014-330 SALE - VILLAGE EQUIPMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 014 SALE INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 44 COMMERCIAL REVENUES	\$55,000.00	\$42,749.39	\$9,489.74	\$12,250.61	77.73%
MAJ CLS 45 MISCELLANEOUS REVENUES					
DEPT 008 GENERAL GOVERNMENT					
R 01-45-008-252 NATIONAL NIGHT OUT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%



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DEPT 008 GENERAL GOVERNMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 015 OTHER INCOME					
R 01-45-015-509 PROCEEDS-LONG TERM DEBT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 01-45-015-510 ADMIN. CHARGE TO SEWER UTILI	\$40,000.00	\$0.00	\$0.00	\$40,000.00	0.00%
R 01-45-015-520 FUND BALANCE APPLIED	\$140,000.00	\$0.00	\$0.00	\$140,000.00	0.00%
R 01-45-015-535 OTHER INCOME	\$35,000.00	\$25,332.31	\$32.35	\$9,667.69	72.38%
R 01-45-015-590 TRANSFER FROM OTHER FUNDS	\$27,214.00	\$190,758.62	\$0.00	-\$163,544.62	700.96%
DEPT 015 OTHER INCOME	\$242,214.00	\$216,090.93	\$32.35	\$26,123.07	89.21%
MAJ CLS 45 MISCELLANEOUS REVENUES	\$242,214.00	\$216,090.93	\$32.35	\$26,123.07	89.21%
FUND 01 GENERAL FUND	\$2,950,258.00	\$2,774,644.96	\$24,900.92	\$175,613.04	94.05%
FUND 06 EQUITY RESERVE ACCOUNT					
MAJ CLS 09 RESCUE, AMBULANCE, FIRE DEPT.					
DEPT 032 FIRE DEPARTMENT					
R 06-09-032-272 AMBULANCE FEES	\$160,000.00	\$137,423.33	\$7,370.67	\$22,576.67	85.89%
DEPT 032 FIRE DEPARTMENT	\$160,000.00	\$137,423.33	\$7,370.67	\$22,576.67	85.89%
MAJ CLS 09 RESCUE, AMBULANCE, FIRE DE	\$160,000.00	\$137,423.33	\$7,370.67	\$22,576.67	85.89%
FUND 06 EQUITY RESERVE ACCOUNT	\$160,000.00	\$137,423.33	\$7,370.67	\$22,576.67	85.89%
FUND 07 PARK IMPROVEMENT FUND					
MAJ CLS 44 COMMERCIAL REVENUES					
DEPT 013 INTEREST INCOME					
R 07-44-013-300 INVESTMENT INTEREST	\$100.00	\$1,920.42	\$496.08	-\$1,820.42	1920.42%
DEPT 013 INTEREST INCOME	\$100.00	\$1,920.42	\$496.08	-\$1,820.42	1920.42%
MAJ CLS 44 COMMERCIAL REVENUES	\$100.00	\$1,920.42	\$496.08	-\$1,820.42	1920.42%
MAJ CLS 45 MISCELLANEOUS REVENUES					
DEPT 011 PARK & RECREATION					
R 07-45-011-126 GRANTS AND AIDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 07-45-011-280 MISCELLANEOUS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 07-45-011-430 DONATION REVENUE	\$25,000.00	\$17,006.28	\$11,030.00	\$7,993.72	68.03%
R 07-45-011-535 OTHER INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 07-45-011-540 GRANTS RECEIVED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 07-45-011-541 GALA TICKET SALES	\$15,000.00	\$11,650.00	\$0.00	\$3,350.00	77.67%
R 07-45-011-542 GALA SPONSORSHIPS	\$24,000.00	\$22,500.00	\$0.00	\$1,500.00	93.75%
R 07-45-011-543 GIVING TREE LEAVES	\$2,500.00	\$500.00	\$0.00	\$2,000.00	20.00%
R 07-45-011-544 GALA PROCEEDS	\$35,000.00	\$36,950.00	\$0.00	-\$1,950.00	105.57%
R 07-45-011-546 DOG DAYS TICKET SALES	\$0.00	\$320.00	\$260.00	-\$320.00	0.00%
R 07-45-011-547 DOG DAYS SPONSORSHIPS	\$0.00	\$3,900.00	\$3,700.00	-\$3,900.00	0.00%
R 07-45-011-548 DOG DAYS PROCEEDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 07-45-011-590 TRANSFER FROM OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 011 PARK & RECREATION	\$101,500.00	\$92,826.28	\$14,990.00	\$8,673.72	91.45%
DEPT 013 INTEREST INCOME					
R 07-45-013-126 GRANTS AND AIDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 013 INTEREST INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 45 MISCELLANEOUS REVENUES	\$101,500.00	\$92,826.28	\$14,990.00	\$8,673.72	91.45%
FUND 07 PARK IMPROVEMENT FUND	\$101,600.00	\$94,746.70	\$15,486.08	\$6,853.30	93.25%
FUND 08 AMERICAN RESCUE PLAN ACT FUND					



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MAJ CLS 41 INTER-GOVERNMENTAL REVENUES					
DEPT 003 GRANTS & AIDS					
R 08-41-003-131 ARPA LOCAL RECOVERY FUNDS	\$0.00	\$163,544.62	\$0.00	-\$163,544.62	0.00%
DEPT 003 GRANTS & AIDS	\$0.00	\$163,544.62	\$0.00	-\$163,544.62	0.00%
MAJ CLS 41 INTER-GOVERNMENTAL REVEN	\$0.00	\$163,544.62	\$0.00	-\$163,544.62	0.00%
FUND 08 AMERICAN RESCUE PLAN ACT FUND	\$0.00	\$163,544.62	\$0.00	-\$163,544.62	0.00%
FUND 14 CAPITAL IMPROVEMENT/EQUIPMENT					
MAJ CLS 13 CAPITAL IMPROVEMENT FUND					
DEPT 012 UNCLASSIFIED					
R 14-13-012-597 SPECIAL ASSESSMENT COLLECTE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 012 UNCLASSIFIED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 013 INTEREST INCOME					
R 14-13-013-300 INVESTMENT INTEREST	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 013 INTEREST INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 019 CAPITAL IMPROVEMENT FUND					
R 14-13-019-100 GENERAL OPERATIONS	\$400,000.00	\$400,000.00	\$0.00	\$0.00	100.00%
R 14-13-019-126 GRANTS AND AIDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 14-13-019-131 ARPA LOCAL RECOVERY FUNDS	\$53,545.00	\$0.00	\$0.00	\$53,545.00	0.00%
R 14-13-019-280 MISCELLANEOUS	\$0.00	\$750.00	\$0.00	-\$750.00	0.00%
R 14-13-019-300 INVESTMENT INTEREST	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 14-13-019-520 FUND BALANCE APPLIED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 14-13-019-531 OTHER SVCS TO OTHER LOCAL G	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 14-13-019-568 TRANSFER FROM TIF	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 14-13-019-597 SPECIAL ASSESSMENT COLLECTE	\$0.00	\$3,401.25	\$3,401.25	-\$3,401.25	0.00%
DEPT 019 CAPITAL IMPROVEMENT FUN	\$453,545.00	\$404,151.25	\$3,401.25	\$49,393.75	89.11%
DEPT 554 UNCLASSIFIED					
R 14-13-554-590 TRANSFER FROM OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 554 UNCLASSIFIED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 13 CAPITAL IMPROVEMENT FUND	\$453,545.00	\$404,151.25	\$3,401.25	\$49,393.75	89.11%
MAJ CLS 14 CAPITAL IMPROVEMENT					
DEPT 007 OTHER					
R 14-14-007-430 DONATION REVENUE	\$0.00	\$20,600.00	\$5,100.00	-\$20,600.00	0.00%
DEPT 007 OTHER	\$0.00	\$20,600.00	\$5,100.00	-\$20,600.00	0.00%
MAJ CLS 14 CAPITAL IMPROVEMENT	\$0.00	\$20,600.00	\$5,100.00	-\$20,600.00	0.00%
MAJ CLS 30 DEBT SERVICE					
DEPT 553 DEBT SERVICE					
R 14-30-553-490 BOND PROCEEDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 553 DEBT SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 30 DEBT SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 43 PUBLIC CHARGES FOR SERVICE					
DEPT 012 UNCLASSIFIED					
R 14-43-012-104 CAPITAL EQUIP/IMPROVEMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 14-43-012-300 INVESTMENT INTEREST	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 14-43-012-597 SPECIAL ASSESSMENT COLLECTE	\$39,643.00	\$47,891.45	\$0.00	-\$8,248.45	120.81%
DEPT 012 UNCLASSIFIED	\$39,643.00	\$47,891.45	\$0.00	-\$8,248.45	120.81%



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MAJ CLS 43 PUBLIC CHARGES FOR SERVICE	\$39,643.00	\$47,891.45	\$0.00	-\$8,248.45	120.81%
MAJ CLS 44 COMMERCIAL REVENUES					
DEPT 013 INTEREST INCOME					
R 14-44-013-104 CAPITAL EQUIP/IMPROVEMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 14-44-013-300 INVESTMENT INTEREST	\$6,239.00	\$8,335.62	\$743.76	-\$2,096.62	133.61%
DEPT 013 INTEREST INCOME	\$6,239.00	\$8,335.62	\$743.76	-\$2,096.62	133.61%
DEPT 014 SALE INCOME					
R 14-44-014-320 SALE - VILLAGE PROPERTY	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 14-44-014-330 SALE - VILLAGE EQUIPMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 014 SALE INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 44 COMMERCIAL REVENUES	\$6,239.00	\$8,335.62	\$743.76	-\$2,096.62	133.61%
FUND 14 CAPITAL IMPROVEMENT/EQUIPMEN	\$499,427.00	\$480,978.32	\$9,245.01	\$18,448.68	96.31%
FUND 16 OLD VILLAGE HALL					
MAJ CLS 40 TAXES					
DEPT 001 LOCAL PROPERTY TAXES					
R 16-40-001-100 GENERAL OPERATIONS	\$2,500.00	\$2,500.00	\$0.00	\$0.00	100.00%
DEPT 001 LOCAL PROPERTY TAXES	\$2,500.00	\$2,500.00	\$0.00	\$0.00	100.00%
MAJ CLS 40 TAXES	\$2,500.00	\$2,500.00	\$0.00	\$0.00	100.00%
FUND 16 OLD VILLAGE HALL	\$2,500.00	\$2,500.00	\$0.00	\$0.00	100.00%
FUND 19 STORM WATER MANAGEMENT					
MAJ CLS 13 CAPITAL IMPROVEMENT FUND					
DEPT 019 CAPITAL IMPROVEMENT FUND					
R 19-13-019-126 GRANTS AND AIDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 019 CAPITAL IMPROVEMENT FUN	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 13 CAPITAL IMPROVEMENT FUND	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 18 STORM WATER MANAGEMENT					
DEPT 003 GRANTS & AIDS					
R 19-18-003-126 GRANTS AND AIDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 003 GRANTS & AIDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 023 STORM WATER MANAGEMENT					
R 19-18-023-100 GENERAL OPERATIONS	\$42,000.00	\$42,000.00	\$0.00	\$0.00	100.00%
DEPT 023 STORM WATER MANAGEMENT	\$42,000.00	\$42,000.00	\$0.00	\$0.00	100.00%
MAJ CLS 18 STORM WATER MANAGEMENT	\$42,000.00	\$42,000.00	\$0.00	\$0.00	100.00%
MAJ CLS 40 TAXES					
DEPT 001 LOCAL PROPERTY TAXES					
R 19-40-001-568 TRANSFER FROM TIF	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 001 LOCAL PROPERTY TAXES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 40 TAXES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 19 STORM WATER MANAGEMENT	\$42,000.00	\$42,000.00	\$0.00	\$0.00	100.00%
FUND 21 SEWER UTILITY					
MAJ CLS 44 COMMERCIAL REVENUES					
DEPT 014 SALE INCOME					
R 21-44-014-330 SALE - VILLAGE EQUIPMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%



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DEPT 014 SALE INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 44 COMMERCIAL REVENUES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 46 OPERATING REVENUES					
DEPT 016 SEWER					
R 21-46-016-400 SEWER SERVICE CHARGE	\$1,075,173.00	\$1,072,279.04	\$266,839.53	\$2,893.96	99.73%
R 21-46-016-410 SEWER SERVICE PENALTY	\$10,000.00	\$9,949.15	\$0.00	\$50.85	99.49%
R 21-46-016-420 INTEREST ON REVENUES	\$15,000.00	\$6,860.04	\$1,137.69	\$8,139.96	45.73%
R 21-46-016-460 SEWER CONNECTION FEE	\$46,369.00	\$16,904.52	\$7,852.26	\$29,464.48	36.46%
R 21-46-016-520 FUND BALANCE APPLIED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 21-46-016-590 TRANSFER FROM OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 016 SEWER	\$1,146,542.00	\$1,105,992.75	\$275,829.48	\$40,549.25	96.46%
MAJ CLS 46 OPERATING REVENUES	\$1,146,542.00	\$1,105,992.75	\$275,829.48	\$40,549.25	96.46%
FUND 21 SEWER UTILITY	\$1,146,542.00	\$1,105,992.75	\$275,829.48	\$40,549.25	96.46%
FUND 30 DEBT SERVICE FUND					
MAJ CLS 30 DEBT SERVICE					
DEPT 553 DEBT SERVICE					
R 30-30-553-490 BOND PROCEEDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 30-30-553-565 TRANSFER FROM GENERAL FUND	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 30-30-553-568 TRANSFER FROM TIF	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 553 DEBT SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 30 DEBT SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 30 DEBT SERVICE FUND	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 42 TAX INCREMENT DISTRICT #2					
MAJ CLS 30 DEBT SERVICE					
DEPT 553 DEBT SERVICE					
R 42-30-553-490 BOND PROCEEDS	\$3,600,000.00	\$4,390,000.00	\$0.00	-\$790,000.00	121.94%
DEPT 553 DEBT SERVICE	\$3,600,000.00	\$4,390,000.00	\$0.00	-\$790,000.00	121.94%
MAJ CLS 30 DEBT SERVICE	\$3,600,000.00	\$4,390,000.00	\$0.00	-\$790,000.00	121.94%
MAJ CLS 40 TAXES					
DEPT 001 LOCAL PROPERTY TAXES					
R 42-40-001-100 GENERAL OPERATIONS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 001 LOCAL PROPERTY TAXES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 40 TAXES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 44 COMMERCIAL REVENUES					
DEPT 013 INTEREST INCOME					
R 42-44-013-300 INVESTMENT INTEREST	\$0.00	\$5,138.55	\$1,175.74	-\$5,138.55	0.00%
DEPT 013 INTEREST INCOME	\$0.00	\$5,138.55	\$1,175.74	-\$5,138.55	0.00%
MAJ CLS 44 COMMERCIAL REVENUES	\$0.00	\$5,138.55	\$1,175.74	-\$5,138.55	0.00%
MAJ CLS 45 MISCELLANEOUS REVENUES					
DEPT 015 OTHER INCOME					
R 42-45-015-565 TRANSFER FROM GENERAL FUND	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 015 OTHER INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 554 UNCLASSIFIED					
R 42-45-554-590 TRANSFER FROM OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%



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DEPT 554 UNCLASSIFIED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 45 MISCELLANEOUS REVENUES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 42 TAX INCREMENT DISTRICT #2	\$3,600,000.00	\$4,395,138.55	\$1,175.74	-\$795,138.55	122.09%
FUND 51 SPECIAL ASSESS CE#3 TAX COLLEC					
MAJ CLS 43 PUBLIC CHARGES FOR SERVICE					
DEPT 012 UNCLASSIFIED					
R 51-43-012-300 INVESTMENT INTEREST	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 51-43-012-569 RESERVES APPLIED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 51-43-012-597 SPECIAL ASSESSMENT COLLECTE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 012 UNCLASSIFIED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 015 OTHER INCOME					
R 51-43-015-799 SPECIAL ASSESSMENT REFUND	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 015 OTHER INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 43 PUBLIC CHARGES FOR SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 45 MISCELLANEOUS REVENUES					
DEPT 015 OTHER INCOME					
R 51-45-015-569 RESERVES APPLIED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 015 OTHER INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 45 MISCELLANEOUS REVENUES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 51 SPECIAL ASSESS CE#3 TAX COLLEC	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 52 SPECIAL ASSESS LAWDS TAX COLLE					
MAJ CLS 43 PUBLIC CHARGES FOR SERVICE					
DEPT 012 UNCLASSIFIED					
R 52-43-012-300 INVESTMENT INTEREST	\$1,243.00	\$1,200.12	\$0.00	\$42.88	96.55%
R 52-43-012-590 TRANSFER FROM OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 52-43-012-597 SPECIAL ASSESSMENT COLLECTE	\$18,009.00	\$18,009.37	\$0.00	-\$0.37	100.00%
DEPT 012 UNCLASSIFIED	\$19,252.00	\$19,209.49	\$0.00	\$42.51	99.78%
DEPT 015 OTHER INCOME					
R 52-43-015-799 SPECIAL ASSESSMENT REFUND	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 015 OTHER INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 43 PUBLIC CHARGES FOR SERVICE	\$19,252.00	\$19,209.49	\$0.00	\$42.51	99.78%
MAJ CLS 45 MISCELLANEOUS REVENUES					
DEPT 015 OTHER INCOME					
R 52-45-015-569 RESERVES APPLIED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 015 OTHER INCOME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 45 MISCELLANEOUS REVENUES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 52 SPECIAL ASSESS LAWDS TAX COLLE	\$19,252.00	\$19,209.49	\$0.00	\$42.51	99.78%
FUND 98 FLW LIB GIFTS & GRANTS FUND					
MAJ CLS 45 MISCELLANEOUS REVENUES					
DEPT 015 OTHER INCOME					
R 98-45-015-290 LIB GIFTS & GRANTS RESTRICTE	\$0.00	\$1,290.00	\$790.00	-\$1,290.00	0.00%
R 98-45-015-291 LIB GIFTS & GRANTS UNRESTRIC	\$0.00	\$35,631.96	\$0.00	-\$35,631.96	0.00%
DEPT 015 OTHER INCOME	\$0.00	\$36,921.96	\$790.00	-\$36,921.96	0.00%



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MAJ CLS 45 MISCELLANEOUS REVENUES	\$0.00	\$36,921.96	\$790.00	-\$36,921.96	0.00%
FUND 98 FLW LIB GIFTS & GRANTS FUND	\$0.00	\$36,921.96	\$790.00	-\$36,921.96	0.00%
FUND 99 F. L. WEYENBERG LIBRARY FUND					
MAJ CLS 40 TAXES					
DEPT 001 LOCAL PROPERTY TAXES					
R 99-40-001-900 MEQUON TAXES	\$1,061,000.00	\$1,061,000.00	\$0.00	\$0.00	100.00%
R 99-40-001-901 THIENSVILLE TAXES	\$110,740.00	\$110,740.00	\$0.00	\$0.00	100.00%
R 99-40-001-902 COUNTY REIMBURSEMENT	\$12,994.00	\$12,994.94	\$0.00	-\$0.94	100.01%
DEPT 001 LOCAL PROPERTY TAXES	\$1,184,734.00	\$1,184,734.94	\$0.00	-\$0.94	100.00%
MAJ CLS 40 TAXES	\$1,184,734.00	\$1,184,734.94	\$0.00	-\$0.94	100.00%
MAJ CLS 41 INTER-GOVERNMENTAL REVENUES					
DEPT 003 GRANTS & AIDS					
R 99-41-003-131 ARPA LOCAL RECOVERY FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 003 GRANTS & AIDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 41 INTER-GOVERNMENTAL REVEN	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 42 REGULATION & COMPLIANCE					
DEPT 006 FINES & FORFEITURES					
R 99-42-006-903 FINES & FEES	\$18,000.00	\$16,795.66	\$940.72	\$1,204.34	93.31%
DEPT 006 FINES & FORFEITURES	\$18,000.00	\$16,795.66	\$940.72	\$1,204.34	93.31%
MAJ CLS 42 REGULATION & COMPLIANCE	\$18,000.00	\$16,795.66	\$940.72	\$1,204.34	93.31%
MAJ CLS 44 COMMERCIAL REVENUES					
DEPT 013 INTEREST INCOME					
R 99-44-013-300 INVESTMENT INTEREST	\$500.00	\$4,497.42	\$849.17	-\$3,997.42	899.48%
DEPT 013 INTEREST INCOME	\$500.00	\$4,497.42	\$849.17	-\$3,997.42	899.48%
MAJ CLS 44 COMMERCIAL REVENUES	\$500.00	\$4,497.42	\$849.17	-\$3,997.42	899.48%
MAJ CLS 45 MISCELLANEOUS REVENUES					
DEPT 014 SALE INCOME					
R 99-45-014-904 BOOK SALES	\$7,500.00	\$10,182.05	\$862.75	-\$2,682.05	135.76%
R 99-45-014-906 PHOTOCOPIER	\$0.00	\$2,342.35	\$136.50	-\$2,342.35	0.00%
DEPT 014 SALE INCOME	\$7,500.00	\$12,524.40	\$999.25	-\$5,024.40	166.99%
DEPT 015 OTHER INCOME					
R 99-45-015-280 MISCELLANEOUS	\$2,266.00	\$1,490.72	\$0.00	\$775.28	65.79%
R 99-45-015-299 LIBRARY GIFTS & GRANTS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
R 99-45-015-520 FUND BALANCE APPLIED	\$70,350.00	\$0.00	\$0.00	\$70,350.00	0.00%
R 99-45-015-905 GIFTS & GRANTS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 015 OTHER INCOME	\$72,616.00	\$1,490.72	\$0.00	\$71,125.28	2.05%
MAJ CLS 45 MISCELLANEOUS REVENUES	\$80,116.00	\$14,015.12	\$999.25	\$66,100.88	17.49%
FUND 99 F. L. WEYENBERG LIBRARY FUND	\$1,283,350.00	\$1,220,043.14	\$2,789.14	\$63,306.86	95.07%
	\$9,804,929.00	\$10,473,143.82	\$337,587.04	-\$668,214.82	106.82%



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FUND 01 GENERAL FUND					
MAJ CLS 01 GENERAL GOVERNMENT					
DEPT 510 VILLAGE REPRESENTATION					
E 01-01-510-1-106 VILLAGE BOARD	\$20,000.00	\$20,000.00	\$0.00	\$0.00	100.00%
E 01-01-510-1-112 ELECTION WORKERS	\$4,000.00	\$4,417.50	\$0.00	-\$417.50	110.44%
E 01-01-510-1-199 FRINGE BENEFITS	\$1,530.00	\$1,530.00	\$0.00	\$0.00	100.00%
E 01-01-510-2-200 PRINTING & PUBLISHING	\$7,000.00	\$6,465.19	\$2,574.40	\$534.81	92.36%
E 01-01-510-2-201 POSTAGE	\$3,000.00	\$3,462.65	-\$52.50	-\$462.65	115.42%
E 01-01-510-2-202 DUES & SUBSCRIPTIONS	\$3,300.00	\$3,323.88	\$0.00	-\$23.88	100.72%
E 01-01-510-2-203 TRAINING & MEETINGS	\$1,500.00	\$1,465.71	\$0.00	\$34.29	97.71%
E 01-01-510-2-205 PLANNER SERVICES	\$2,000.00	\$1,419.00	\$360.00	\$581.00	70.95%
E 01-01-510-2-206 AUDIT	\$22,700.00	\$23,825.00	\$3,775.00	-\$1,125.00	104.96%
E 01-01-510-2-207 LEGAL COUNSEL	\$15,000.00	\$13,578.75	\$2,153.25	\$1,421.25	90.53%
E 01-01-510-2-208 ASSESSOR	\$6,600.00	\$6,600.00	\$0.00	\$0.00	100.00%
E 01-01-510-3-301 PROCESSING SUPPLIES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-01-510-3-302 ELECTION EXPENSE	\$4,000.00	\$3,804.85	\$1,115.69	\$195.15	95.12%
E 01-01-510-3-397 AWARDS PROGRAM	\$3,000.00	\$3,838.02	\$2,625.00	-\$838.02	127.93%
E 01-01-510-3-399 MISCELLANEOUS	\$1,000.00	\$801.47	\$0.00	\$198.53	80.15%
DEPT 510 VILLAGE REPRESENTATION	\$94,630.00	\$94,532.02	\$12,550.84	\$97.98	99.90%
DEPT 511 VILLAGE ADMINISTRATION					
E 01-01-511-1-100 SALARIES & WAGES	\$75,650.00	\$74,195.36	\$8,728.87	\$1,454.64	98.08%
E 01-01-511-1-101 OVERTIME	\$464.00	\$0.00	\$0.00	\$464.00	0.00%
E 01-01-511-1-102 PART-TIME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-01-511-1-104 EDUCATIONAL INCENTIVE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-01-511-1-108 ADMINISTRATOR	\$76,125.00	\$74,471.63	\$8,783.67	\$1,653.37	97.83%
E 01-01-511-1-115 TRAVEL/TRAINING/SEMINARS	\$3,500.00	\$2,876.09	\$110.63	\$623.91	82.17%
E 01-01-511-1-195 ANNUITANT FRINGE	\$5,760.00	\$5,759.52	\$0.00	\$0.48	99.99%
E 01-01-511-1-196 ADMINISTRATOR FRINGE	\$32,111.00	\$30,791.20	\$779.09	\$1,319.80	95.89%
E 01-01-511-1-199 FRINGE BENEFITS	\$39,542.00	\$37,053.67	\$558.91	\$2,488.33	93.71%
E 01-01-511-2-202 DUES & SUBSCRIPTIONS	\$500.00	\$115.00	\$0.00	\$385.00	23.00%
E 01-01-511-2-203 TRAINING & MEETINGS	\$500.00	\$421.35	\$0.00	\$78.65	84.27%
E 01-01-511-2-209 ENGINEERING SERVICES	\$10,000.00	\$7,610.48	\$2,551.00	\$2,389.52	76.10%
E 01-01-511-2-210 DATA PROCESSING	\$8,000.00	\$8,627.85	\$738.86	-\$627.85	107.85%
E 01-01-511-2-211 CODIFICATION	\$1,150.00	\$1,150.00	\$0.00	\$0.00	100.00%
E 01-01-511-2-212 CLEANING SERVICES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-01-511-2-213 OFFICE EQUIPMENT/MAINTENANCE	\$250.00	\$0.00	\$0.00	\$250.00	0.00%
E 01-01-511-3-300 OFFICE SUPPLIES	\$3,000.00	\$2,661.13	\$557.52	\$338.87	88.70%
E 01-01-511-3-303 TELEPHONE	\$1,500.00	\$2,827.03	\$221.40	-\$1,327.03	188.47%
E 01-01-511-3-304 ELECTRICITY	\$15,000.00	\$19,442.80	\$3,228.93	-\$4,442.80	129.62%
E 01-01-511-3-305 HEAT	\$6,500.00	\$7,000.75	\$1,236.33	-\$500.75	107.70%
E 01-01-511-3-306 JANITOR SUPPLIES	\$1,500.00	\$2,609.39	\$0.00	-\$1,109.39	173.96%
E 01-01-511-3-308 BUILDING SUPPLIES	\$18,000.00	\$23,242.41	\$1,341.38	-\$5,242.41	129.12%
E 01-01-511-3-311 RECRUITMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-01-511-3-399 MISCELLANEOUS	\$250.00	\$1,358.63	\$264.44	-\$1,108.63	543.45%
DEPT 511 VILLAGE ADMINISTRATION	\$299,302.00	\$302,214.29	\$29,101.03	-\$2,912.29	100.97%
DEPT 551 LIBRARY					
E 01-01-551-2-246 WEYENBERG LIBRARY	\$110,740.00	\$110,740.00	\$0.00	\$0.00	100.00%
DEPT 551 LIBRARY	\$110,740.00	\$110,740.00	\$0.00	\$0.00	100.00%
DEPT 552 COMMUNITY SRO PROGRAM					
E 01-01-552-2-235 COMMUNITY SRO PROGRAM	\$12,660.00	\$12,660.00	\$0.00	\$0.00	100.00%
DEPT 552 COMMUNITY SRO PROGRAM	\$12,660.00	\$12,660.00	\$0.00	\$0.00	100.00%



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DEPT 553 DEBT SERVICE					
E 01-01-553-6-620 INTEREST	\$13,250.00	\$13,434.02	\$3,386.11	-\$184.02	101.39%
DEPT 553 DEBT SERVICE	\$13,250.00	\$13,434.02	\$3,386.11	-\$184.02	101.39%
DEPT 554 UNCLASSIFIED					
E 01-01-554-7-710 CONTINGENCY	\$100,000.00	\$379.56	\$63.26	\$99,620.44	0.38%
E 01-01-554-7-715 FLEX BENEFIT	\$3,000.00	\$2,948.55	\$225.00	\$51.45	98.29%
E 01-01-554-7-718 LOGEMAN CENTER	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-01-554-7-730 UNEMPLOYMENT COMPENSATION	\$1,000.00	\$0.00	\$0.00	\$1,000.00	0.00%
E 01-01-554-7-735 THIENSVILLE BUSINESS ASSOC	\$5,000.00	\$5,000.00	\$0.00	\$0.00	100.00%
E 01-01-554-7-740 FAMILY SERVICE	\$2,500.00	\$2,500.00	\$0.00	\$0.00	100.00%
E 01-01-554-7-750 JULY 4TH ACTIVITY	\$4,250.00	\$4,329.25	\$0.00	-\$79.25	101.86%
E 01-01-554-7-753 SCREEN ON THE GREEN	\$1,500.00	\$750.00	\$250.00	\$750.00	50.00%
E 01-01-554-7-754 HISTORIC PRESERVATION	\$1,500.00	\$2,500.00	\$2,500.00	-\$1,000.00	166.67%
E 01-01-554-7-756 PERSONAL PROPERTY TAXES	\$250.00	\$0.00	\$0.00	\$250.00	0.00%
DEPT 554 UNCLASSIFIED	\$119,000.00	\$18,407.36	\$3,038.26	\$100,592.64	15.47%
MAJ CLS 01 GENERAL GOVERNMENT	\$649,582.00	\$551,987.69	\$48,076.24	\$97,594.31	84.98%
MAJ CLS 02 PROPERTY & LIABILITY INSURANCE					
DEPT 512 INSURANCE					
E 01-02-512-2-237 WORKER S COMPENSATION	\$34,700.00	\$32,888.00	\$0.00	\$1,812.00	94.78%
E 01-02-512-2-238 GENERAL LIABILITY/FIRE PROF.	\$1,528.00	\$1,528.00	\$0.00	\$0.00	100.00%
E 01-02-512-2-242 BUSINESS PROPERTY	\$11,100.00	\$10,749.00	\$0.00	\$351.00	96.84%
E 01-02-512-2-243 ALL OTHER INSURANCE	\$63,000.00	\$64,279.75	-\$510.00	-\$1,279.75	102.03%
DEPT 512 INSURANCE	\$110,328.00	\$109,444.75	-\$510.00	\$883.25	99.20%
MAJ CLS 02 PROPERTY & LIABILITY INSURANCE	\$110,328.00	\$109,444.75	-\$510.00	\$883.25	99.20%
MAJ CLS 03 PROTECTION/PROPERTY & PERSONS					
DEPT 521 POLICE DEPARTMENT					
E 01-03-521-1-100 SALARIES & WAGES	\$569,876.00	\$550,587.51	\$67,451.56	\$19,288.49	96.62%
E 01-03-521-1-101 OVERTIME	\$11,087.00	\$9,467.93	\$569.15	\$1,619.07	85.40%
E 01-03-521-1-104 EDUCATIONAL INCENTIVE	\$1,000.00	\$1,000.00	\$0.00	\$0.00	100.00%
E 01-03-521-1-105 HOLIDAY PAY	\$15,689.00	\$15,015.40	\$15,015.40	\$673.60	95.71%
E 01-03-521-1-109 DPW EQUIPMENT MAINTENANCE CAL	\$2,989.00	\$2,885.73	\$344.89	\$103.27	96.55%
E 01-03-521-1-113 POLICE CHIEF SALARY	\$92,300.00	\$90,573.00	\$10,698.00	\$1,727.00	98.13%
E 01-03-521-1-115 TRAVEL/TRAINING/SEMINARS	\$1,500.00	\$233.30	\$0.00	\$1,266.70	15.55%
E 01-03-521-1-116 POLICE CHIEF HOLIDAY	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-03-521-1-117 CONTRACT LABOR	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-03-521-1-195 ANNUITANT FRINGE	\$12,470.00	\$12,467.76	\$0.00	\$2.24	99.98%
E 01-03-521-1-197 POLICE CHIEF FRINGE	\$45,352.00	\$41,383.34	\$1,335.57	\$3,968.66	91.25%
E 01-03-521-1-199 FRINGE BENEFITS	\$339,142.00	\$303,697.40	\$5,325.46	\$35,444.60	89.55%
E 01-03-521-2-200 PRINTING & PUBLISHING	\$100.00	\$0.00	\$0.00	\$100.00	0.00%
E 01-03-521-2-201 POSTAGE	\$500.00	\$41.40	\$5.40	\$458.60	8.28%
E 01-03-521-2-202 DUES & SUBSCRIPTIONS	\$400.00	\$225.00	\$0.00	\$175.00	56.25%
E 01-03-521-2-213 OFFICE EQUIPMENT/MAINTENANCE	\$100.00	\$30.15	\$30.15	\$69.85	30.15%
E 01-03-521-2-215 TRAINING - POLICE	\$6,000.00	\$4,037.47	\$250.00	\$1,962.53	67.29%
E 01-03-521-2-216 ANIMAL BOARDING	\$300.00	\$175.00	\$0.00	\$125.00	58.33%
E 01-03-521-2-217 STATE CITATION REQUEST	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-03-521-2-218 SPECIAL POLICE	\$2,500.00	\$3,521.94	\$0.00	-\$1,021.94	140.88%
E 01-03-521-2-219 TELETYPE	\$1,800.00	\$1,296.00	\$0.00	\$504.00	72.00%
E 01-03-521-2-220 RADAR/SIREN MAINTENANCE	\$300.00	\$0.00	\$0.00	\$300.00	0.00%
E 01-03-521-2-221 JUVENILE PROGRAM	\$2,000.00	\$1,479.44	\$0.00	\$520.56	73.97%
E 01-03-521-2-222 EMERGENCY GOVERNMENT	\$2,000.00	\$2,010.65	\$1,721.65	-\$10.65	100.53%
E 01-03-521-2-223 RADIO MAINTENANCE	\$2,000.00	\$214.00	\$0.00	\$1,786.00	10.70%



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E 01-03-521-3-300 OFFICE SUPPLIES	\$1,000.00	\$814.70	\$125.90	\$185.30	81.47%
E 01-03-521-3-301 PROCESSING SUPPLIES	\$200.00	\$0.00	\$0.00	\$200.00	0.00%
E 01-03-521-3-303 TELEPHONE	\$3,000.00	\$6,927.85	\$556.72	-\$3,927.85	230.93%
E 01-03-521-3-307 SUPPLIES-COPY MACHINE	\$700.00	\$1,414.86	\$302.29	-\$714.86	202.12%
E 01-03-521-3-310 FUEL	\$12,000.00	\$19,319.42	\$1,723.29	-\$7,319.42	161.00%
E 01-03-521-3-311 RECRUITMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-03-521-3-312 UNIFORM ALLOWANCES	\$3,869.00	\$2,862.35	\$339.53	\$1,006.65	73.98%
E 01-03-521-3-313 PHOTO SUPPLIES	\$200.00	\$0.00	\$0.00	\$200.00	0.00%
E 01-03-521-3-314 INVESTIGATIONS	\$1,000.00	\$813.68	\$395.70	\$186.32	81.37%
E 01-03-521-3-315 TIRES	\$1,900.00	\$974.64	\$186.23	\$925.36	51.30%
E 01-03-521-3-316 REPAIRS & MAINTENANCE	\$2,500.00	\$2,869.68	\$1,240.46	-\$369.68	114.79%
E 01-03-521-3-317 AMMUNITION	\$2,500.00	\$1,877.36	\$0.00	\$622.64	75.09%
E 01-03-521-3-350 BODY ARMOR/LEATHER GEAR	\$2,000.00	\$1,000.98	\$0.00	\$999.02	50.05%
E 01-03-521-3-398 OTHER SUPPLIES	\$2,000.00	\$1,517.76	\$244.61	\$482.24	75.89%
DEPT 521 POLICE DEPARTMENT	\$1,142,274.00	\$1,080,735.70	\$107,861.96	\$61,538.30	94.61%
DEPT 522 FIRE DEPARTMENT					
E 01-03-522-1-100 SALARIES & WAGES	\$98,150.00	\$116,682.11	\$12,654.60	-\$18,532.11	118.88%
E 01-03-522-1-102 PART-TIME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 01-03-522-1-109 DPW EQUIPMENT MAINTENANCE CAL	\$2,989.00	\$2,931.72	\$344.89	\$57.28	98.08%
E 01-03-522-1-110 FIRE CHIEF WAGES	\$20,200.00	\$11,741.65	\$0.00	\$8,458.35	58.13%
E 01-03-522-1-115 TRAVEL/TRAINING/SEMINARS	\$1,000.00	\$870.95	\$0.00	\$129.05	87.10%
E 01-03-522-1-198 FIRE CHIEF FRINGE	\$3,977.00	\$2,311.92	\$0.00	\$1,665.08	58.13%
E 01-03-522-1-199 FRINGE BENEFITS	\$13,006.00	\$29,289.21	\$995.32	-\$16,283.21	225.20%
E 01-03-522-2-200 PRINTING & PUBLISHING	\$75.00	\$0.00	\$0.00	\$75.00	0.00%
E 01-03-522-2-201 POSTAGE	\$70.00	\$0.00	\$0.00	\$70.00	0.00%
E 01-03-522-2-202 DUES & SUBSCRIPTIONS	\$4,000.00	\$3,405.50	\$0.00	\$594.50	85.14%
E 01-03-522-2-223 RADIO MAINTENANCE	\$2,000.00	\$2,913.68	\$0.00	-\$913.68	145.68%
E 01-03-522-2-224 EXTINGUISHER SERVICES	\$500.00	\$2,939.03	\$0.00	-\$2,439.03	587.81%
E 01-03-522-2-225 SCHOOLING	\$3,000.00	\$4,731.51	\$906.75	-\$1,731.51	157.72%
E 01-03-522-2-270 MAINTENANCE CONTRACT	\$7,500.00	\$4,547.09	\$0.00	\$2,952.91	60.63%
E 01-03-522-3-300 OFFICE SUPPLIES	\$1,000.00	\$829.90	\$0.00	\$170.10	82.99%
E 01-03-522-3-303 TELEPHONE	\$3,000.00	\$5,069.96	\$403.52	-\$2,069.96	169.00%
E 01-03-522-3-307 SUPPLIES-COPY MACHINE	\$500.00	\$739.31	\$163.92	-\$239.31	147.86%
E 01-03-522-3-310 FUEL	\$5,500.00	\$8,740.37	\$766.00	-\$3,240.37	158.92%
E 01-03-522-3-311 RECRUITMENT	\$5,000.00	\$2,799.00	\$229.00	\$2,201.00	55.98%
E 01-03-522-3-312 UNIFORM ALLOWANCES	\$5,000.00	\$5,335.27	\$79.76	-\$335.27	106.71%
E 01-03-522-3-319 BADGES & TAGS	\$500.00	\$0.00	\$0.00	\$500.00	0.00%
E 01-03-522-3-320 TRUCK MAINTENANCE	\$10,000.00	\$8,021.13	\$277.28	\$1,978.87	80.21%
E 01-03-522-3-321 TRAINING SUPPLIES	\$1,000.00	\$269.87	\$0.00	\$730.13	26.99%
E 01-03-522-3-322 AIR & OXYGEN	\$2,300.00	\$848.64	\$273.99	\$1,451.36	36.90%
E 01-03-522-3-323 PROTECTIVE GEAR	\$5,000.00	\$5,464.27	\$4,298.28	-\$464.27	109.29%
E 01-03-522-3-324 CHEMICALS	\$1,000.00	\$787.55	\$0.00	\$212.45	78.76%
E 01-03-522-3-325 FIRE PREVENTION	\$1,500.00	\$382.90	\$0.00	\$1,117.10	25.53%
E 01-03-522-3-327 MEDICAL SUPPLIES	\$18,000.00	\$20,540.25	\$2,639.58	-\$2,540.25	114.11%
E 01-03-522-3-352 CLEANING SUPPLIES	\$1,000.00	\$912.90	\$0.00	\$87.10	91.29%
E 01-03-522-3-353 EQUIPMENT REPAIRS	\$2,000.00	\$2,780.40	\$0.00	-\$780.40	139.02%
E 01-03-522-3-355 HEALTH MAINTENANCE	\$2,500.00	\$2,789.00	\$0.00	-\$289.00	111.56%
E 01-03-522-3-399 MISCELLANEOUS	\$2,500.00	\$1,958.08	\$651.83	\$541.92	78.32%
DEPT 522 FIRE DEPARTMENT	\$223,767.00	\$250,633.17	\$24,684.72	-\$26,866.17	112.01%
DEPT 523 INSPECTION					
E 01-03-523-2-272 BUILDING INSPECTION	\$25,000.00	\$34,094.70	\$1,374.77	-\$9,094.70	136.38%
E 01-03-523-2-273 PLUMBING INSPECTION	\$6,000.00	\$9,071.08	\$396.00	-\$3,071.08	151.18%
E 01-03-523-2-274 ELECTRICAL INSPECTION	\$7,000.00	\$6,680.53	\$180.00	\$319.47	95.44%



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DEPT 523 INSPECTION	\$38,000.00	\$49,846.31	\$1,950.77	-\$11,846.31	131.17%
MAJ CLS 03 PROTECTION/PROPERTY & PERSON	\$1,404,041.00	\$1,381,215.18	\$134,497.45	\$22,825.82	98.37%
MAJ CLS 04 HEALTH & SANITATION					
DEPT 541 PUBLIC WORKS - STREET					
E 01-04-541-1-100 SALARIES & WAGES	\$256,223.00	\$259,534.90	\$31,460.87	-\$3,311.90	101.29%
E 01-04-541-1-101 OVERTIME	\$1,138.00	\$705.27	\$399.62	\$432.73	61.97%
E 01-04-541-1-102 PART-TIME	\$11,700.00	\$4,545.45	\$0.00	\$7,154.55	38.85%
E 01-04-541-1-199 FRINGE BENEFITS	\$143,360.00	\$143,655.83	\$2,414.95	-\$295.83	100.21%
E 01-04-541-2-203 TRAINING & MEETINGS	\$500.00	\$192.56	\$192.56	\$307.44	38.51%
E 01-04-541-2-223 RADIO MAINTENANCE	\$500.00	\$39.99	\$0.00	\$460.01	8.00%
E 01-04-541-2-227 STREET MAINTENANCE	\$28,000.00	\$14,607.51	\$17.94	\$13,392.49	52.17%
E 01-04-541-2-228 SANITARY LANDFILL	\$42,000.00	\$48,435.21	\$3,667.22	-\$6,435.21	115.32%
E 01-04-541-2-266 RECYCLING	\$49,000.00	\$50,361.96	\$3,650.99	-\$1,361.96	102.78%
E 01-04-541-3-300 OFFICE SUPPLIES	\$200.00	\$163.38	\$0.00	\$36.62	81.69%
E 01-04-541-3-303 TELEPHONE	\$2,000.00	\$4,602.56	\$307.48	-\$2,602.56	230.13%
E 01-04-541-3-304 ELECTRICITY	\$4,000.00	\$4,543.28	\$474.53	-\$543.28	113.58%
E 01-04-541-3-305 HEAT	\$5,500.00	\$5,907.45	\$611.52	-\$407.45	107.41%
E 01-04-541-3-308 BUILDING SUPPLIES	\$3,000.00	\$2,908.68	\$843.86	\$91.32	96.96%
E 01-04-541-3-309 BUILDING REPAIRS	\$4,000.00	\$2,832.64	\$36.65	\$1,167.36	70.82%
E 01-04-541-3-310 FUEL	\$16,000.00	\$27,284.84	\$2,435.48	-\$11,284.84	170.53%
E 01-04-541-3-311 RECRUITMENT	\$0.00	\$872.00	\$0.00	-\$872.00	0.00%
E 01-04-541-3-323 PROTECTIVE GEAR	\$500.00	\$1,119.94	\$0.00	-\$619.94	223.99%
E 01-04-541-3-329 CLOTHING	\$2,250.00	\$1,232.39	\$194.50	\$1,017.61	54.77%
E 01-04-541-3-330 REPAIR PARTS/EQUIPMENT	\$17,000.00	\$33,732.90	\$6,546.39	-\$16,732.90	198.43%
E 01-04-541-3-331 REPAIR PARTS/CUSHMAN	\$1,500.00	\$721.55	\$70.98	\$778.45	48.10%
E 01-04-541-3-332 NUTS & BOLTS	\$100.00	\$91.59	\$0.00	\$8.41	91.59%
E 01-04-541-3-333 TOOLS	\$1,000.00	\$1,045.04	\$11.48	-\$45.04	104.50%
E 01-04-541-3-334 STREET SIGNS	\$3,000.00	\$0.00	\$0.00	\$3,000.00	0.00%
E 01-04-541-3-335 STREET LIGHTING	\$31,000.00	\$23,175.74	\$2,261.98	\$7,824.26	74.76%
E 01-04-541-3-337 SALT & ICE CONTROL	\$31,000.00	\$5,314.96	\$0.00	\$25,685.04	17.15%
E 01-04-541-3-338 TREE & BRUSH CONTROL	\$1,200.00	\$450.66	\$0.00	\$749.34	37.56%
E 01-04-541-3-357 DIGGERS HOT LINE	\$1,500.00	\$603.20	\$0.00	\$896.80	40.21%
E 01-04-541-3-399 MISCELLANEOUS	\$1,000.00	\$457.12	\$193.08	\$542.88	45.71%
DEPT 541 PUBLIC WORKS - STREET	\$658,171.00	\$639,138.60	\$55,792.08	\$19,032.40	97.11%
DEPT 542 PARK					
E 01-04-542-1-100 SALARIES & WAGES	\$61,684.00	\$49,391.67	\$5,948.31	\$12,292.33	80.07%
E 01-04-542-1-101 OVERTIME	\$446.00	\$231.89	\$133.21	\$214.11	51.99%
E 01-04-542-1-102 PART-TIME	\$6,300.00	\$1,948.05	\$0.00	\$4,351.95	30.92%
E 01-04-542-1-199 FRINGE BENEFITS	\$35,356.00	\$26,537.45	\$463.31	\$8,818.55	75.06%
E 01-04-542-2-230 REPAIRS & MAINTENANCE	\$15,000.00	\$17,656.46	\$83.33	-\$2,656.46	117.71%
E 01-04-542-2-285 WEPKO LEASE	\$350.00	\$350.00	\$0.00	\$0.00	100.00%
E 01-04-542-3-304 ELECTRICITY	\$7,500.00	\$8,533.85	\$804.28	-\$1,033.85	113.78%
E 01-04-542-3-305 HEAT	\$1,500.00	\$1,710.07	\$116.66	-\$210.07	114.00%
DEPT 542 PARK	\$128,136.00	\$106,359.44	\$7,549.10	\$21,776.56	83.01%
MAJ CLS 04 HEALTH & SANITATION	\$786,307.00	\$745,498.04	\$63,341.18	\$40,808.96	94.81%
MAJ CLS 07 NON-OPERATING EXPENSES					
DEPT 554 UNCLASSIFIED					
E 01-07-554-7-790 TRANSFERS TO OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 554 UNCLASSIFIED	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 07 NON-OPERATING EXPENSES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 01 GENERAL FUND	\$2,950,258.00	\$2,788,145.66	\$245,404.87	\$162,112.34	94.51%



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FUND 06 EQUITY RESERVE ACCOUNT					
MAJ CLS 09 RESCUE, AMBULANCE, FIRE DEPT.					
DEPT 522 FIRE DEPARTMENT					
E 06-09-522-1-100 SALARIES & WAGES	\$93,300.00	\$88,708.99	\$11,147.15	\$4,591.01	95.08%
E 06-09-522-1-199 FRINGE BENEFITS	\$21,919.00	\$26,548.95	\$1,174.83	-\$4,629.95	121.12%
E 06-09-522-2-206 AUDIT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 06-09-522-2-207 LEGAL COUNSEL	\$100.00	\$552.25	\$516.25	-\$452.25	552.25%
E 06-09-522-2-225 SCHOOLING	\$5,000.00	\$2,940.50	\$0.00	\$2,059.50	58.81%
E 06-09-522-2-276 BILLING SERVICES	\$10,000.00	\$10,335.78	\$669.85	-\$335.78	103.36%
E 06-09-522-3-327 MEDICAL SUPPLIES	\$15,000.00	\$14,978.14	\$168.00	\$21.86	99.85%
E 06-09-522-4-499 OTHER	\$14,681.00	\$0.00	\$0.00	\$14,681.00	0.00%
E 06-09-522-7-790 TRANSFERS TO OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 522 FIRE DEPARTMENT	\$160,000.00	\$144,064.61	\$13,676.08	\$15,935.39	90.04%
MAJ CLS 09 RESCUE, AMBULANCE, FIRE DEPT.	\$160,000.00	\$144,064.61	\$13,676.08	\$15,935.39	90.04%
FUND 06 EQUITY RESERVE ACCOUNT	\$160,000.00	\$144,064.61	\$13,676.08	\$15,935.39	90.04%
FUND 07 PARK IMPROVEMENT FUND					
MAJ CLS 07 NON-OPERATING EXPENSES					
DEPT 011 PARK & RECREATION					
E 07-07-011-7-291 ADVERTISING	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 011 PARK & RECREATION	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 542 PARK					
E 07-07-542-1-100 SALARIES & WAGES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 07-07-542-1-101 OVERTIME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 07-07-542-1-102 PART-TIME	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 07-07-542-1-115 TRAVEL/TRAINING/SEMINARS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 07-07-542-2-200 PRINTING & PUBLISHING	\$500.00	\$359.73	\$0.00	\$140.27	71.95%
E 07-07-542-2-201 POSTAGE	\$300.00	\$0.00	\$0.00	\$300.00	0.00%
E 07-07-542-2-203 TRAINING & MEETINGS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 07-07-542-2-205 PLANNER SERVICES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 07-07-542-2-206 AUDIT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 07-07-542-2-207 LEGAL COUNSEL	\$200.00	\$0.00	\$0.00	\$200.00	0.00%
E 07-07-542-2-209 ENGINEERING SERVICES	\$2,600.00	\$0.00	\$0.00	\$2,600.00	0.00%
E 07-07-542-2-291 ADVERTISING	\$2,000.00	\$2,495.00	\$0.00	-\$495.00	124.75%
E 07-07-542-7-292 PARK GALA	\$45,000.00	\$45,340.73	\$0.00	-\$340.73	100.76%
E 07-07-542-7-293 DOG DAYS OF WINTER	\$0.00	\$304.70	\$247.90	-\$304.70	0.00%
E 07-07-542-7-707 VILLAGE PARK IMPROVEMENTS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 07-07-542-7-720 MISCELLANEOUS	\$500.00	\$122.10	\$10.00	\$377.90	24.42%
E 07-07-542-7-771 GIVING TREE LEAVES	\$500.00	\$133.80	\$0.00	\$366.20	26.76%
E 07-07-542-7-790 TRANSFERS TO OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 542 PARK	\$51,600.00	\$48,756.06	\$257.90	\$2,843.94	94.49%
MAJ CLS 07 NON-OPERATING EXPENSES	\$51,600.00	\$48,756.06	\$257.90	\$2,843.94	94.49%
FUND 07 PARK IMPROVEMENT FUND	\$51,600.00	\$48,756.06	\$257.90	\$2,843.94	94.49%
FUND 08 AMERICAN RESCUE PLAN ACT FUND					
MAJ CLS 03 PROTECTION/PROPERTY & PERSONS					
DEPT 522 FIRE DEPARTMENT					
E 08-03-522-3-327 MEDICAL SUPPLIES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 522 FIRE DEPARTMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 03 PROTECTION/PROPERTY & PERSON	\$0.00	\$0.00	\$0.00	\$0.00	0.00%



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MAJ CLS 08 AMERICAN RESCUE PLAN ACT					
DEPT 007 OTHER					
E 08-08-007-7-790 TRANSFERS TO OTHER FUNDS	\$0.00	\$163,544.62	\$0.00	-\$163,544.62	0.00%
DEPT 007 OTHER	\$0.00	\$163,544.62	\$0.00	-\$163,544.62	0.00%
MAJ CLS 08 AMERICAN RESCUE PLAN ACT	\$0.00	\$163,544.62	\$0.00	-\$163,544.62	0.00%
MAJ CLS 16 CAPITAL OUTLAY					
DEPT 522 FIRE DEPARTMENT					
E 08-16-522-4-402 EQUIPMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 522 FIRE DEPARTMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 16 CAPITAL OUTLAY	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 08 AMERICAN RESCUE PLAN ACT FUND	\$0.00	\$163,544.62	\$0.00	-\$163,544.62	0.00%
FUND 14 CAPITAL IMPROVEMENT/EQUIPMENT					
MAJ CLS 14 CAPITAL IMPROVEMENT					
DEPT 554 UNCLASSIFIED					
E 14-14-554-7-500 DEPRECIATION	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-610 PRINCIPAL	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-701 TBA GRANT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-702 FIRE/PARAMEDIC STUDY	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-703 BUNTROCK LOT IMPROVEMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-704 HEIDEL RD (GREENBAY-PARKCREST)	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-705 DPW YARD REMEDIATION	\$10,000.00	\$18,696.57	\$0.00	-\$8,696.57	186.97%
E 14-14-554-7-706 CAMERA UPGRADE ALL DEPTS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-707 VILLAGE PARK IMPROVEMENTS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-708 MADERO DITCHING (RV TO FREIST)	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-709 SUNNY LN/MADERO STORMSEWER	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-710 CONTINGENCY	\$53,545.00	\$0.00	\$0.00	\$53,545.00	0.00%
E 14-14-554-7-711 FREISTADT ROAD RECONSTRUCTION	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-712 ASSESSMENT REVALUATION	\$7,560.00	\$0.00	\$0.00	\$7,560.00	0.00%
E 14-14-554-7-713 EMERGENCY MGMT - BARRICADES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-719 MOLYNEUX PARK	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-721 MAIN ST ENTRYWAY MONUMENTS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-723 OLD VILLAGE HALL/FIRE STATION	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-724 VILLAGE PARK BOAT LAUNCH	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-728 ALTA LOMA/RIVERVIEW STORM SWR	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-729 STORMWATER LAUREL/VERNON	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-731 ENTRYWAY FEATURE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-732 BUSINESS DISTRICT REDEVOP.	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-733 TBA EVENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-735 THIENSVILLE BUSINESS ASSOC	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-736 GREEN BAY ROAD	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-737 ROAD PROGRAM RESERVE	\$159,362.00	\$409.50	\$409.50	\$158,952.50	0.26%
E 14-14-554-7-739 CREEKSIDE/PARKING LOT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-741 MAIN ST WATER MAIN	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-744 PROFILE MAIN ST	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-745 BUNTROCK WATER MAIN LOOP	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-746 DEVELOPMENT INCENTIVE	\$0.00	\$15,000.00	\$0.00	-\$15,000.00	0.00%
E 14-14-554-7-751 ROAD PROJECTS-ALTA LOMA	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-752 BRIDGE ENHANCEMENTS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-757 REPLACE PARK RESTROOMS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-758 BRIDGE OVER PIGEON CREEK	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-14-554-7-761 SPRING STREET RECONSTRUCTION	\$0.00	\$0.00	\$0.00	\$0.00	0.00%



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E 14-14-554-7-763 PUBLIC PARKING RESERVE	\$100,000.00	\$4,365.25	\$0.00	\$95,634.75	4.37%
E 14-14-554-7-790 TRANSFERS TO OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 554 UNCLASSIFIED	\$330,467.00	\$38,471.32	\$409.50	\$291,995.68	11.64%
MAJ CLS 14 CAPITAL IMPROVEMENT	\$330,467.00	\$38,471.32	\$409.50	\$291,995.68	11.64%
MAJ CLS 16 CAPITAL OUTLAY					
DEPT 510 VILLAGE REPRESENTATION					
E 14-16-510-4-400 OFFICE EQUIPMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-16-510-4-402 EQUIPMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-16-510-4-499 OTHER	\$35,000.00	\$0.00	\$0.00	\$35,000.00	0.00%
DEPT 510 VILLAGE REPRESENTATION	\$35,000.00	\$0.00	\$0.00	\$35,000.00	0.00%
DEPT 511 VILLAGE ADMINISTRATION					
E 14-16-511-4-400 OFFICE EQUIPMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-16-511-4-499 OTHER	\$10,000.00	\$90.00	\$0.00	\$9,910.00	0.90%
DEPT 511 VILLAGE ADMINISTRATION	\$10,000.00	\$90.00	\$0.00	\$9,910.00	0.90%
DEPT 521 POLICE DEPARTMENT					
E 14-16-521-4-400 OFFICE EQUIPMENT	\$7,500.00	\$8,779.56	\$0.00	-\$1,279.56	117.06%
E 14-16-521-4-401 VEHICLES	\$22,000.00	\$0.00	\$0.00	\$22,000.00	0.00%
E 14-16-521-4-402 EQUIPMENT	\$3,360.00	\$16,003.00	\$0.00	-\$12,643.00	476.28%
E 14-16-521-4-403 RADIOS	\$0.00	\$6,010.67	\$0.00	-\$6,010.67	0.00%
E 14-16-521-4-499 OTHER	\$2,000.00	\$465.00	\$0.00	\$1,535.00	23.25%
DEPT 521 POLICE DEPARTMENT	\$34,860.00	\$31,258.23	\$0.00	\$3,601.77	89.67%
DEPT 522 FIRE DEPARTMENT					
E 14-16-522-4-400 OFFICE EQUIPMENT	\$6,500.00	\$5,853.00	\$0.00	\$647.00	90.05%
E 14-16-522-4-401 VEHICLES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-16-522-4-402 EQUIPMENT	\$9,600.00	\$52,955.82	\$45,350.66	-\$43,355.82	551.62%
E 14-16-522-4-403 RADIOS	\$2,000.00	\$3,983.78	\$0.00	-\$1,983.78	199.19%
E 14-16-522-4-404 FIRE APPARATUS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-16-522-4-499 OTHER	\$10,000.00	\$25,631.70	\$25,707.45	-\$15,631.70	256.32%
DEPT 522 FIRE DEPARTMENT	\$28,100.00	\$88,424.30	\$71,058.11	-\$60,324.30	314.68%
DEPT 541 PUBLIC WORKS - STREET					
E 14-16-541-4-401 VEHICLES	\$20,000.00	\$154,269.00	\$0.00	-\$134,269.00	771.35%
E 14-16-541-4-402 EQUIPMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-16-541-4-403 RADIOS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-16-541-4-499 OTHER	\$20,000.00	\$106,231.56	\$10,750.00	-\$86,231.56	531.16%
DEPT 541 PUBLIC WORKS - STREET	\$40,000.00	\$260,500.56	\$10,750.00	-\$220,500.56	651.25%
DEPT 542 PARK					
E 14-16-542-4-402 EQUIPMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 14-16-542-4-499 OTHER	\$21,000.00	\$48,117.82	\$27,612.00	-\$27,117.82	229.13%
DEPT 542 PARK	\$21,000.00	\$48,117.82	\$27,612.00	-\$27,117.82	229.13%
MAJ CLS 16 CAPITAL OUTLAY	\$168,960.00	\$428,390.91	\$109,420.11	-\$259,430.91	253.55%
FUND 14 CAPITAL IMPROVEMENT/EQUIPMENT	\$499,427.00	\$466,862.23	\$109,829.61	\$32,564.77	93.48%
FUND 16 OLD VILLAGE HALL					
MAJ CLS 05 OPERATING EXPENSE					
DEPT 541 PUBLIC WORKS - STREET					
E 16-05-541-3-304 ELECTRICITY	\$1,250.00	\$1,050.83	\$78.65	\$199.17	84.07%
E 16-05-541-3-305 HEAT	\$750.00	\$847.97	\$73.73	-\$97.97	113.06%
E 16-05-541-3-308 BUILDING SUPPLIES	\$500.00	\$5.98	\$0.00	\$494.02	1.20%



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DEPT 541 PUBLIC WORKS - STREET	\$2,500.00	\$1,904.78	\$152.38	\$595.22	76.19%
MAJ CLS 05 OPERATING EXPENSE	\$2,500.00	\$1,904.78	\$152.38	\$595.22	76.19%
FUND 16 OLD VILLAGE HALL	\$2,500.00	\$1,904.78	\$152.38	\$595.22	76.19%
FUND 19 STORM WATER MANAGEMENT					
MAJ CLS 18 STORM WATER MANAGEMENT					
DEPT 541 PUBLIC WORKS - STREET					
E 19-18-541-1-100 SALARIES & WAGES	\$17,079.00	\$15,832.92	\$1,921.36	\$1,246.08	92.70%
E 19-18-541-1-101 OVERTIME	\$112.00	\$53.83	\$33.30	\$58.17	48.06%
E 19-18-541-1-199 FRINGE BENEFITS	\$9,295.00	\$8,218.00	\$153.86	\$1,077.00	88.41%
E 19-18-541-2-209 ENGINEERING SERVICES	\$1,000.00	\$10,419.50	\$2,639.00	-\$9,419.50	1041.95%
E 19-18-541-2-229 STORM SEWER CLEANING	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 19-18-541-2-237 WORKER S COMPENSATION	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 19-18-541-2-243 ALL OTHER INSURANCE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 19-18-541-2-252 JOINT NR-216 PERMIT	\$500.00	\$500.00	\$0.00	\$0.00	100.00%
E 19-18-541-2-255 PIGEON CREEK MAINTENANCE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 19-18-541-2-257 MAINTENANCE & REPAIRS	\$10,000.00	\$1,658.00	\$1,140.00	\$8,342.00	16.58%
E 19-18-541-2-776 STORMWATER PLANNING	\$50,000.00	\$66,451.94	\$32,605.48	-\$16,451.94	132.90%
DEPT 541 PUBLIC WORKS - STREET	\$87,986.00	\$103,134.19	\$38,493.00	-\$15,148.19	117.22%
MAJ CLS 18 STORM WATER MANAGEMENT	\$87,986.00	\$103,134.19	\$38,493.00	-\$15,148.19	117.22%
FUND 19 STORM WATER MANAGEMENT	\$87,986.00	\$103,134.19	\$38,493.00	-\$15,148.19	117.22%
FUND 21 SEWER UTILITY					
MAJ CLS 02 PROPERTY & LIABILITY INSURANCE					
DEPT 610 SEWER					
E 21-02-610-2-237 WORKER S COMPENSATION	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 21-02-610-2-242 BUSINESS PROPERTY	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 21-02-610-2-243 ALL OTHER INSURANCE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 610 SEWER	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 02 PROPERTY & LIABILITY INSURANCE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 05 OPERATING EXPENSE					
DEPT 610 SEWER					
E 21-05-610-1-100 SALARIES & WAGES	\$109,405.00	\$94,586.64	\$11,142.75	\$14,818.36	86.46%
E 21-05-610-1-101 OVERTIME	\$489.00	\$153.73	\$99.91	\$335.27	31.44%
E 21-05-610-1-199 FRINGE BENEFITS	\$55,591.00	\$43,764.52	\$892.66	\$11,826.48	78.73%
E 21-05-610-2-200 PRINTING & PUBLISHING	\$600.00	\$0.00	\$0.00	\$600.00	0.00%
E 21-05-610-2-201 POSTAGE	\$1,500.00	\$2,230.58	\$510.15	-\$730.58	148.71%
E 21-05-610-2-202 DUES & SUBSCRIPTIONS	\$300.00	\$65.74	\$0.00	\$234.26	21.91%
E 21-05-610-2-203 TRAINING & MEETINGS	\$200.00	\$102.67	\$102.67	\$97.33	51.34%
E 21-05-610-2-204 TRANSPORTATION	\$200.00	\$0.00	\$0.00	\$200.00	0.00%
E 21-05-610-2-207 LEGAL COUNSEL	\$1,000.00	\$72.00	\$0.00	\$928.00	7.20%
E 21-05-610-2-209 ENGINEERING SERVICES	\$15,000.00	\$32,441.00	\$4,118.50	-\$17,441.00	216.27%
E 21-05-610-2-210 DATA PROCESSING	\$900.00	\$62.24	\$0.00	\$837.76	6.92%
E 21-05-610-2-223 RADIO MAINTENANCE	\$200.00	\$0.00	\$0.00	\$200.00	0.00%
E 21-05-610-2-226 EQUIPMENT RENTAL	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 21-05-610-2-248 SEWER REPAIR/MAINTENANCE	\$65,000.00	\$1,053.68	\$0.00	\$63,946.32	1.62%
E 21-05-610-2-249 SEWER CHARGE - GENERAL	\$40,000.00	\$0.00	\$0.00	\$40,000.00	0.00%
E 21-05-610-2-250 SEWER CLEANING	\$10,000.00	\$9,348.75	\$0.00	\$651.25	93.49%
E 21-05-610-2-251 BUILDING REPAIRS	\$5,500.00	\$1,441.28	\$1,244.84	\$4,058.72	26.21%
E 21-05-610-2-253 AUDIT	\$3,900.00	\$3,900.00	\$0.00	\$0.00	100.00%
E 21-05-610-3-300 OFFICE SUPPLIES	\$300.00	\$632.23	\$0.00	-\$332.23	210.74%



VILLAGE OF THIENSVILLE

Expenditure Guideline

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Account Descr	2022 YTD Budget	2022 YTD Amt	DECEMBER 2022 Amt	Balance	2022 % of Budget
E 21-05-610-3-303 TELEPHONE	\$1,500.00	\$1,490.75	\$140.29	\$9.25	99.38%
E 21-05-610-3-304 ELECTRICITY	\$13,000.00	\$14,382.89	\$1,363.04	-\$1,382.89	110.64%
E 21-05-610-3-305 HEAT	\$200.00	\$121.55	\$11.22	\$78.45	60.78%
E 21-05-610-3-308 BUILDING SUPPLIES	\$1,000.00	\$978.89	\$0.00	\$21.11	97.89%
E 21-05-610-3-329 CLOTHING	\$375.00	\$1,080.00	\$0.00	-\$705.00	288.00%
E 21-05-610-3-330 REPAIR PARTS/EQUIPMENT	\$1,000.00	\$546.85	\$0.00	\$453.15	54.69%
E 21-05-610-3-345 CHEMICALS	\$2,000.00	\$0.00	\$0.00	\$2,000.00	0.00%
E 21-05-610-3-399 MISCELLANEOUS	\$500.00	\$840.00	\$0.00	-\$340.00	168.00%
E 21-05-610-4-400 OFFICE EQUIPMENT	\$500.00	\$0.00	\$0.00	\$500.00	0.00%
E 21-05-610-4-401 VEHICLES	\$20,000.00	\$0.00	\$0.00	\$20,000.00	0.00%
E 21-05-610-4-402 EQUIPMENT	\$0.00	\$1,668.60	\$0.00	-\$1,668.60	0.00%
E 21-05-610-4-403 RADIOS	\$500.00	\$0.00	\$0.00	\$500.00	0.00%
E 21-05-610-4-499 OTHER	\$256,000.00	\$24,684.03	\$0.00	\$231,315.97	9.64%
DEPT 610 SEWER	\$606,660.00	\$235,648.62	\$19,626.03	\$371,011.38	38.84%
MAJ CLS 05 OPERATING EXPENSE	\$606,660.00	\$235,648.62	\$19,626.03	\$371,011.38	38.84%
MAJ CLS 06 DEPRECIATION					
DEPT 610 SEWER					
E 21-06-610-8-500 DEPRECIATION	\$90,000.00	\$0.00	\$0.00	\$90,000.00	0.00%
E 21-06-610-8-510 REPLACEMENT FUND	\$10,210.00	\$0.00	\$0.00	\$10,210.00	0.00%
DEPT 610 SEWER	\$100,210.00	\$0.00	\$0.00	\$100,210.00	0.00%
MAJ CLS 06 DEPRECIATION	\$100,210.00	\$0.00	\$0.00	\$100,210.00	0.00%
MAJ CLS 07 NON-OPERATING EXPENSES					
DEPT 610 SEWER					
E 21-07-610-7-790 TRANSFERS TO OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 21-07-610-9-640 MMSD PAYMENT	\$440,639.00	\$446,428.00	\$0.00	-\$5,789.00	101.31%
E 21-07-610-9-650 MMSD O/M	\$235,301.00	\$174,959.19	\$0.00	\$60,341.81	74.36%
DEPT 610 SEWER	\$675,940.00	\$621,387.19	\$0.00	\$54,552.81	91.93%
MAJ CLS 07 NON-OPERATING EXPENSES	\$675,940.00	\$621,387.19	\$0.00	\$54,552.81	91.93%
FUND 21 SEWER UTILITY	\$1,382,810.00	\$857,035.81	\$19,626.03	\$525,774.19	61.98%
FUND 30 DEBT SERVICE FUND					
MAJ CLS 30 DEBT SERVICE					
DEPT 553 DEBT SERVICE					
E 30-30-553-9-610 PRINCIPAL	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 30-30-553-9-620 INTEREST	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 30-30-553-9-625 BOND FEES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 30-30-553-9-635 PAYMENT TO ESCROW AGENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 30-30-553-9-790 TRANSFERS TO OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 30-30-553-9-900 TRANS TO CAP IMPROVE FUND	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 553 DEBT SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 30 DEBT SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 30 DEBT SERVICE FUND	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 42 TAX INCREMENT DISTRICT #2					
MAJ CLS 10 TAX INCREMENTAL					
DEPT 042 TAX INCREMENT DISTRICT #2					
E 42-10-042-1-100 SALARIES & WAGES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 42-10-042-1-199 FRINGE BENEFITS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 42-10-042-4-200 PRINTING & PUBLISHING	\$0.00	\$761.45	\$0.00	-\$761.45	0.00%
E 42-10-042-4-205 PLANNER SERVICES	\$2,000.00	\$0.00	\$0.00	\$2,000.00	0.00%



VILLAGE OF THIENSVILLE

Expenditure Guideline

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Account Descr	2022 YTD Budget	2022 YTD Amt	DECEMBER 2022 Amt	Balance	2022 % of Budget
E 42-10-042-4-206 AUDIT	\$5,500.00	\$0.00	\$0.00	\$5,500.00	0.00%
E 42-10-042-4-207 LEGAL COUNSEL	\$5,000.00	\$3,960.50	\$234.00	\$1,039.50	79.21%
E 42-10-042-4-209 ENGINEERING SERVICES	\$25,000.00	\$6,342.30	\$2,699.50	\$18,657.70	25.37%
E 42-10-042-4-245 ADMINISTRATIVE/SECRETARIAL	\$2,000.00	\$150.00	\$0.00	\$1,850.00	7.50%
E 42-10-042-4-290 CONSULTANTS	\$2,000.00	\$5,750.00	\$0.00	-\$3,750.00	287.50%
E 42-10-042-4-801 PROPERTY ACQUISITION	\$905,000.00	\$942,030.17	\$11,419.08	-\$37,030.17	104.09%
E 42-10-042-4-802 REMEDIATION/SITE DEVEL	\$40,000.00	\$112,097.19	\$48,300.00	-\$72,097.19	280.24%
E 42-10-042-4-803 TIF #2 WATERMAINS	\$1,000,000.00	\$90,713.69	\$33,116.22	\$909,286.31	9.07%
E 42-10-042-6-610 PRINCIPAL	\$1,630,000.00	\$1,630,000.00	\$0.00	\$0.00	100.00%
E 42-10-042-6-620 INTEREST	\$7,898.00	\$5,172.83	\$0.00	\$2,725.17	65.50%
E 42-10-042-6-625 BOND FEES	\$15,850.00	\$20.00	\$0.00	\$15,830.00	0.13%
E 42-10-042-6-630 AMORTIZATION DEBT DISCOUNT	\$45,000.00	-\$26,582.26	\$0.00	\$71,582.26	-59.07%
E 42-10-042-6-635 PAYMENT TO ESCROW AGENT	\$45,000.00	\$67,752.00	\$0.00	-\$22,752.00	150.56%
E 42-10-042-7-790 TRANSFERS TO OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 42-10-042-9-610 PRINCIPAL	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 42-10-042-9-620 INTEREST	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 42-10-042-9-625 BOND FEES	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 42-10-042-9-630 AMORTIZATION DEBT DISCOUNT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 42-10-042-9-635 PAYMENT TO ESCROW AGENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 042 TAX INCREMENT DISTRICT #2	\$3,730,248.00	\$2,838,167.87	\$95,768.80	\$892,080.13	76.09%
MAJ CLS 10 TAX INCREMENTAL	\$3,730,248.00	\$2,838,167.87	\$95,768.80	\$892,080.13	76.09%
FUND 42 TAX INCREMENT DISTRICT #2	\$3,730,248.00	\$2,838,167.87	\$95,768.80	\$892,080.13	76.09%
FUND 51 SPECIAL ASSESS CE#3 TAX COLLEC					
MAJ CLS 01 GENERAL GOVERNMENT					
DEPT 553 DEBT SERVICE					
E 51-01-553-4-499 OTHER	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 51-01-553-6-610 PRINCIPAL	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 51-01-553-6-620 INTEREST	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 51-01-553-7-714 TRANSFER TO OTHER FUNDS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 553 DEBT SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 01 GENERAL GOVERNMENT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 51 SPECIAL ASSESS CE#3 TAX COLLEC	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 52 SPECIAL ASSESS LAWDS TAX COLLE					
MAJ CLS 01 GENERAL GOVERNMENT					
DEPT 553 DEBT SERVICE					
E 52-01-553-4-499 OTHER	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 52-01-553-6-610 PRINCIPAL	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 52-01-553-6-620 INTEREST	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 52-01-553-7-714 TRANSFER TO OTHER FUNDS	\$27,214.00	\$27,214.00	\$0.00	\$0.00	100.00%
DEPT 553 DEBT SERVICE	\$27,214.00	\$27,214.00	\$0.00	\$0.00	100.00%
MAJ CLS 01 GENERAL GOVERNMENT	\$27,214.00	\$27,214.00	\$0.00	\$0.00	100.00%
FUND 52 SPECIAL ASSESS LAWDS TAX COLLE	\$27,214.00	\$27,214.00	\$0.00	\$0.00	100.00%
FUND 98 FLW LIB GIFTS & GRANTS FUND					
MAJ CLS 95 LIBRARY GIFTS & GRANTS					
DEPT 551 LIBRARY					
E 98-95-551-7-298 LIB GIFTS & GRANTS RESTRICTED	\$0.00	\$3,542.69	\$120.84	-\$3,542.69	0.00%
E 98-95-551-7-299 LIB GIFTS & GRANTS UNRESTRICT	\$0.00	\$2,651.81	\$143.08	-\$2,651.81	0.00%
DEPT 551 LIBRARY	\$0.00	\$6,194.50	\$263.92	-\$6,194.50	0.00%



VILLAGE OF THIENSVILLE

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Account Descr	2022 YTD Budget	2022 YTD Amt	DECEMBER 2022 Amt	Balance	2022 % of Budget
MAJ CLS 95 LIBRARY GIFTS & GRANTS	\$0.00	\$6,194.50	\$263.92	-\$6,194.50	0.00%
FUND 98 FLW LIB GIFTS & GRANTS FUND	\$0.00	\$6,194.50	\$263.92	-\$6,194.50	0.00%
FUND 99 F. L. WEYENBERG LIBRARY FUND					
MAJ CLS 91 LIBRARY STAFFING					
DEPT 551 LIBRARY					
E 99-91-551-1-100 SALARIES & WAGES	\$596,900.00	\$583,852.04	\$71,504.08	\$13,047.96	97.81%
E 99-91-551-1-115 TRAVEL/TRAINING/SEMINARS	\$3,500.00	\$4,456.16	\$1,611.59	-\$956.16	127.32%
E 99-91-551-1-199 FRINGE BENEFITS	\$197,500.00	\$192,114.59	\$18,709.94	\$5,385.41	97.27%
E 99-91-551-2-202 DUES & SUBSCRIPTIONS	\$3,500.00	\$3,169.95	\$80.00	\$330.05	90.57%
E 99-91-551-2-237 WORKER S COMPENSATION	\$1,500.00	\$1,416.00	\$0.00	\$84.00	94.40%
E 99-91-551-7-715 FLEX BENEFIT	\$1,900.00	\$2,004.60	\$0.00	-\$104.60	105.51%
E 99-91-551-7-730 UNEMPLOYMENT COMPENSATION	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 551 LIBRARY	\$804,800.00	\$787,013.34	\$91,905.61	\$17,786.66	97.79%
MAJ CLS 91 LIBRARY STAFFING	\$804,800.00	\$787,013.34	\$91,905.61	\$17,786.66	97.79%
MAJ CLS 92 LIBRARY ADMINISTRATION					
DEPT 551 LIBRARY					
E 99-92-551-2-201 POSTAGE	\$850.00	\$816.25	\$0.00	\$33.75	96.03%
E 99-92-551-2-206 AUDIT	\$6,650.00	\$6,550.00	\$0.00	\$100.00	98.50%
E 99-92-551-2-243 ALL OTHER INSURANCE	\$20,000.00	\$20,300.00	\$0.00	-\$300.00	101.50%
E 99-92-551-2-284 CONTRACTED SERVICES-TECHNOLOG	\$12,000.00	\$10,099.69	\$1,188.60	\$1,900.31	84.16%
E 99-92-551-2-285 WEPKO LEASE	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 99-92-551-2-286 COMPUTERS	\$10,000.00	\$7,834.39	\$548.24	\$2,165.61	78.34%
E 99-92-551-2-287 MILEAGE	\$1,500.00	\$1,022.94	\$85.25	\$477.06	68.20%
E 99-92-551-2-288 FISCAL AGENT FEE	\$7,000.00	\$7,000.00	\$0.00	\$0.00	100.00%
E 99-92-551-2-289 PAYROLL PROCESSING	\$3,750.00	\$3,357.33	\$260.49	\$392.67	89.53%
E 99-92-551-2-290 CONSULTANTS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
E 99-92-551-3-300 OFFICE SUPPLIES	\$6,500.00	\$4,173.47	\$552.53	\$2,326.53	64.21%
E 99-92-551-3-301 PROCESSING SUPPLIES	\$17,500.00	\$11,749.03	\$2,155.00	\$5,750.97	67.14%
E 99-92-551-3-303 TELEPHONE	\$2,750.00	\$2,454.91	\$230.41	\$295.09	89.27%
E 99-92-551-3-307 SUPPLIES-COPY MACHINE	\$5,500.00	\$6,579.93	\$615.67	-\$1,079.93	119.64%
E 99-92-551-3-358 DEBT COLLECTION	\$500.00	\$827.85	\$104.85	-\$327.85	165.57%
E 99-92-551-3-359 MONARCH FEES	\$15,500.00	\$15,811.96	\$11.77	-\$311.96	102.01%
DEPT 551 LIBRARY	\$110,000.00	\$98,577.75	\$5,752.81	\$11,422.25	89.62%
MAJ CLS 92 LIBRARY ADMINISTRATION	\$110,000.00	\$98,577.75	\$5,752.81	\$11,422.25	89.62%
MAJ CLS 93 LIBRARY PROGRAM & COLLECTION					
DEPT 551 LIBRARY					
E 99-93-551-3-370 PROGRAMMING	\$6,000.00	\$6,237.78	\$163.35	-\$237.78	103.96%
E 99-93-551-3-371 MEDIA	\$30,000.00	\$21,709.20	\$1,505.54	\$8,290.80	72.36%
E 99-93-551-3-372 E CONTENT	\$40,000.00	\$34,479.48	\$2,046.57	\$5,520.52	86.20%
E 99-93-551-3-373 PRINT	\$85,000.00	\$79,049.06	\$6,036.50	\$5,950.94	93.00%
DEPT 551 LIBRARY	\$161,000.00	\$141,475.52	\$9,751.96	\$19,524.48	87.87%
MAJ CLS 93 LIBRARY PROGRAM & COLLECTION	\$161,000.00	\$141,475.52	\$9,751.96	\$19,524.48	87.87%
MAJ CLS 94 LIBRARY BUILDING					
DEPT 551 LIBRARY					
E 99-94-551-2-282 JANITORIAL SERVICE	\$28,800.00	\$26,955.00	\$5,355.00	\$1,845.00	93.59%
E 99-94-551-2-283 CONTRACTED-BUILDING	\$22,000.00	\$20,896.81	\$0.00	\$1,103.19	94.99%
E 99-94-551-3-306 JANITOR SUPPLIES	\$2,500.00	\$2,649.59	\$0.00	-\$149.59	105.98%
E 99-94-551-3-308 BUILDING SUPPLIES	\$50,000.00	\$25,381.85	\$1,129.95	\$24,618.15	50.76%
E 99-94-551-3-360 UTILITIES	\$42,500.00	\$45,244.34	\$4,097.20	-\$2,744.34	106.46%



VILLAGE OF THIENSVILLE

Expenditure Guideline

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Account Descr	2022 YTD Budget	2022 YTD Amt	DECEMBER 2022 Amt	Balance	2022 % of Budget
E 99-94-551-3-361 SEWER & WATER	\$1,800.00	\$1,235.82	\$0.00	\$564.18	68.66%
E 99-94-551-3-374 HEALTH & SAFETY SUPPLIES	\$0.00	\$538.14	\$0.00	-\$538.14	0.00%
E 99-94-551-7-700 BUILDING PROJECTS	\$59,950.00	\$0.00	\$0.00	\$59,950.00	0.00%
DEPT 551 LIBRARY	\$207,550.00	\$122,901.55	\$10,582.15	\$84,648.45	59.22%
MAJ CLS 94 LIBRARY BUILDING	\$207,550.00	\$122,901.55	\$10,582.15	\$84,648.45	59.22%
MAJ CLS 95 LIBRARY GIFTS & GRANTS					
DEPT 551 LIBRARY					
E 99-95-551-7-299 LIB GIFTS & GRANTS UNRESTRICT	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
DEPT 551 LIBRARY	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
MAJ CLS 95 LIBRARY GIFTS & GRANTS	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
FUND 99 F. L. WEYENBERG LIBRARY FUND	\$1,283,350.00	\$1,149,968.16	\$117,992.53	\$133,381.84	89.61%
	\$10,175,393.00	\$8,594,992.49	\$641,465.12	\$1,580,400.51	84.47%



VILLAGE OF THIENSVILLE

250 Elm Street
Thiensville, WI 53092-1602

Phone (262) 242-3720
Fax (262) 242-4743

TO: Village President
Village Board
FROM: Colleen Landisch-Hansen, Village Administrator
SUBJECT: Administrator's Report
DATE: January 23, 2023

FEBRUARY ELECTION

There will be a primary election on Tuesday, February 21st for Justice of the Supreme Court and Village Trustee, along with a special election for State Senator District 8. For Village Trustee, there are 6 candidates running for 2 seats. This election will reduce the field from 6 to 4.

PROPERTY TAX COLLECTIONS

December tax collections yielded 51.60% of the total taxes due, compared to 47.46% last year. Final day for Village collections is Tuesday, January 31, 2023. There is also a 5-day walk in grace period.

THIENSVILLE BUSINESS ASSOCIATION ANNUAL MEETING

The Thiensville Business Association will be hosting their annual meeting on Tuesday, January 24th at 5:00 PM at Port Washington State Bank. All are welcome to attend.

ANNUAL AUDIT

We are busy getting ready for the 2022 audit, which is scheduled for the week of February 20th, 2023.

Incoming Revenue

\$ 49,058.93 1st Quarter 2022 General Transportation Aids – State of WI DOT

*Save
the Date!*

Thiensville Business Association

Annual Meeting
Tuesday, January 24, 2023
5:00pm - 6:30pm

Port Washington State Bank
197 S. Main St.

Open to all Thiensville businesses & the public

Light food and beverages will be served



Invoice

Invoice Number: 0095173-IN

Invoice Date: 12/31/22

Terms: Net 30 Days

Due Date: 01/30/23

Salesperson: 0000

Customer Number: 11-THIENVL

Customer P.O.:

VILLAGE of THIENSVILLE
250 ELM STREET
Thiensville, WI 53092-1602

SB_43683

Fee Type	Amount Paid	Paid Date	% Due to 3rd Party	Amount Due to 3rd Party
Permit # 22THNV-0229-22-12BEZ	738 Grand Avenue, Thiensville, WI 53092			Residential Alteration
Electrical - Replacement and Misc. I	280.00	12/06/22	90.00	252.00
Zoning Permit - Addition/Alteration F	75.00	12/06/22	90.00	67.50
Accessory Structure	75.00	12/06/22	90.00	67.50
22THNV-0229-22-12BEZ Subtotal				387.00
Permit # 22THNV-0230-22-12H	342 Riverview Drive, Thiensville, WI 53092			Residential Alteration
HVAC - New Building/Addition/Alter	50.00	12/06/22	90.00	45.00
22THNV-0230-22-12H Subtotal				45.00
Permit # 22THNV-0231-22-12BP	205 South Highland Avenue, Thiensville, WI 53			Residential Alteration
Residential Foundation Repair	50.00	12/07/22	90.00	45.00
Plumbing - Replacement & Misc Item	50.00	12/07/22	90.00	45.00
22THNV-0231-22-12BP Subtotal				90.00
Permit # 22THNV-0232-22-12P	212 South Highland Avenue, Thiensville, WI 53			Plumbing Only
Plumbing - Replacement & Misc Item	50.00	12/07/22	90.00	45.00
22THNV-0232-22-12P Subtotal				45.00
Permit # 22THNV-0233-22-12HE	607 Heidel Road, Thiensville, WI 53092			HVAC Only
HVAC - Replacement & Misc. Items	100.00	12/07/22	90.00	90.00
Electrical - Replacement and Misc. I	50.00	12/07/22	90.00	45.00
22THNV-0233-22-12HE Subtotal				135.00
Permit # 22THNV-0234-22-12B	163 South Main Street, Thiensville, WI 53092			Re-Roof
Commercial Remodel/Reroof/Residi	110.40	12/07/22	90.00	99.36
22THNV-0234-22-12B Subtotal				99.36
Permit # 22THNV-0235-22-12B	250 South Main Street, Thiensville, WI 53092			Sign Permit
Sign	78.00	12/09/22	90.00	70.20
22THNV-0235-22-12B Subtotal				70.20
Permit # 22THNV-0236-22-12EH	201 Park Crest Drive, Thiensville, WI 53092			HVAC Only
Electrical - Replacement and Misc. I	50.00	12/09/22	90.00	45.00
HVAC - Replacement & Misc. Items	110.00	12/09/22	90.00	99.00
22THNV-0236-22-12EH Subtotal				144.00

Continued



VILLAGE of THIENSVILLE

Invoice Number: 0095173-IN

Invoice Date: 12/31/22

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Fee Type	Amount Paid	Paid Date	% Due to 3rd Party	Amount Due to 3rd Party
Permit # 22THNV-0237-22-12P	707 Heidel Road, Thiensville, WI 53092			Plumbing Only
Plumbing - Replacement & Misc Item	50.00	12/09/22	90.00	45.00
22THNV-0237-22-12P Subtotal				45.00
Permit # 22THNV-0238-22-12B	503 Riverview Drive, Thiensville, WI 53092			Re-Roof
Residential Remodel	277.50	12/09/22	90.00	249.75
22THNV-0238-22-12B Subtotal				249.75
Permit # 22THNV-0239-22-12H	405 Vernon Avenue, Thiensville, WI 53092			HVAC Only
HVAC - Replacement & Misc. Items	50.00	12/09/22	90.00	45.00
22THNV-0239-22-12H Subtotal				45.00
Permit # 22THNV-0240-22-12E	514 Crescent Lane, Thiensville, WI 53092			Electrical Only
Electrical - Replacement and Misc. Items	50.00	12/09/22	90.00	45.00
22THNV-0240-22-12E Subtotal				45.00
Permit # 22THNV-0241-22-12B	251 Elm Street, Thiensville, WI 53092			Commercial Alteration
Commercial Remodel/Reroof/Residential	125.00	12/13/22	90.00	112.50
22THNV-0241-22-12B Subtotal				112.50
Permit # 22THNV-0242-22-12H	520 Park Crest Drive, Thiensville, WI 53092			HVAC Only
HVAC - Replacement & Misc. Items	60.00	12/13/22	90.00	54.00
22THNV-0242-22-12H Subtotal				54.00
Permit # 22THNV-0243-22-12P	112 East Freistadt Road #H, Thiensville, WI 5			Plumbing Permit - Commercial
Plumbing - Replacement & Misc Item	75.00	12/13/22	90.00	67.50
22THNV-0243-22-12P Subtotal				67.50
Permit # 22THNV-0244-22-12P	112 East Freistadt Road #G, Thiensville, WI 5			Plumbing Only
Plumbing - Replacement & Misc Item	75.00	12/13/22	90.00	67.50
22THNV-0244-22-12P Subtotal				67.50
Permit # 22THNV-0245-22-12P	116 Grand Avenue #B, Thiensville, WI 53092			Plumbing Permit - Commercial
Plumbing - Replacement & Misc Item	75.00	12/13/22	90.00	67.50
22THNV-0245-22-12P Subtotal				67.50
Permit # 22THNV-0246-22-12P	211 Riverview Drive, Thiensville, WI 53092			Plumbing Only
Plumbing - Replacement & Misc Item	50.00	12/13/22	90.00	45.00
22THNV-0246-22-12P Subtotal				45.00
Permit # 22THNV-0247-22-12BEPH	413 Oakwood Drive, THIENSVILLE, WI 53092			Residential Alteration
HVAC - Replacement & Misc. Items	50.00	12/27/22	90.00	45.00
Plumbing - Replacement & Misc Item	50.00	12/27/22	90.00	45.00
Electrical - New Building/Addition/Alteration	50.00	12/27/22	90.00	45.00
Residential Remodel	562.50	12/27/22	90.00	506.25
22THNV-0247-22-12BEPH Subtotal				641.25
Permit # 22THNV-0248-22-12EH	404 Woodside Lane, Thiensville, WI 53092			HVAC Only
HVAC - Replacement & Misc. Items	51.30	12/27/22	90.00	46.17

Continued



VILLAGE of THIENSVILLE

Invoice Number: 0095173-IN

Invoice Date: 12/31/22

Page: 3

Fee Type	Amount Paid	Paid Date	% Due to 3rd Party	Amount Due to 3rd Party
Electrical - Replacement and Misc. I	50.00	12/27/22	90.00	45.00
22THNV-0248-22-12EH Subtotal				91.17
Permit # 22THNV-0249-22-12BZ	221 West Alta Loma Circle, Thiensville, WI 53			Accessory Structure (Residenti
Residential Remodel	60.00	12/27/22	90.00	54.00
Zoning Permit - Acc. Bldg, Deck, Po	50.00	12/27/22	90.00	45.00
22THNV-0249-22-12BZ Subtotal				99.00
Permit # 22THNV-0250-22-12E	602 Alta Loma Drive, Thiensville, WI 53092			Electrical Only
Electrical - Replacement and Misc. I	50.00	12/28/22	90.00	45.00
22THNV-0250-22-12E Subtotal				45.00
Permit # 22THNV-0251-22-12E	250 Green Bay Road, Thiensville, WI 53092			Electrical Only
Electrical - Replacement and Misc. I	50.00	12/28/22	90.00	45.00
22THNV-0251-22-12E Subtotal				45.00
Permit # 22THNV-0252-22-12H	331 Woodside Lane, Thiensville, WI 53092			HVAC Only
HVAC - Replacement & Misc. Items	78.00	12/28/22	90.00	70.20
22THNV-0252-22-12H Subtotal				70.20
Permit # 22THNV-E00068	617 N MAIN STREET, THIENSVILLE, WI 53092			Electrical Only
Electrical - Replacement and Misc. I	50.00	12/29/22	90.00	45.00
22THNV-E00068 Subtotal				45.00
Permit # 22THNV-PR00006	107 Buntrock Avenue, Thiensville, WI 53092			PR Only - Delegated - BLDG - N
Revision to Approved Plans	75.00	12/12/22	90.00	67.50
Plan Entry Fee	100.00	12/12/22	90.00	90.00
22THNV-PR00006 Subtotal				157.50

SB_43683

Summary Fee Type		
ItemCode	Description	Amount
/PERMITS	Building Permits	2,850.93
/PLAN REVIEW	Plan Review Services	157.50
Total		3,008.43

Please remit to: SAFEbuilt LLC Lockbox #88135
PO Box 88135, Chicago, IL 60680-1135

Net Invoice:	3,008.43
Freight:	0.00
Sales Tax:	0.00
Invoice Total:	3,008.43

VILLAGE OF THIENSVILLE
2022 CAPITAL PROJECT EXPENDITURE REPORT
PRELIMINARY - DECEMBER 31, 2022

CLASSIFICATION/DEPARTMENT	AMOUNT IN RESERVES	AMOUNT BUDGETED	OUTSIDE CONTRIBUTIONS	TOTAL AMOUNT AVAILABLE	ACTUAL EXPENSE	DIFFERENCE
ADMINISTRATION						
Municipal Center Roof (Year 1 of 2 - Phase 1)	\$ 35,000.00	\$ 35,000.00	\$ -	\$ 70,000.00	\$ -	\$ 70,000.00
Replace Rooftop HVAC Board Room	\$ 14,500.00	\$ -	\$ -	\$ 14,500.00	\$ -	\$ 14,500.00
Village Hall Phone Upgrade	\$ -	\$ -	\$ -	\$ -	\$ 90.00	\$ (90.00)
Property File Digitization	\$ -	\$ 10,000.00	\$ -	\$ 10,000.00	\$ -	\$ 10,000.00
Front Office Security/Reception Upgrades	\$ 57,001.25	\$ -	\$ -	\$ 57,001.25	\$ -	\$ 57,001.25
	\$ 106,501.25	\$ 45,000.00	\$ -	\$ 151,501.25	\$ 90.00	\$ 151,411.25
POLICE DEPARTMENT						
Squad Replacement (Year 3 of 3)	\$ 22,785.63	\$ 22,000.00	\$ -	\$ 44,785.63	\$ -	\$ 44,785.63
(1) Desktop and (1) Laptop	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00	\$ 3,168.99	\$ (168.99)
Office Furniture (Chief's Office, Officer Work Station, & Locker)	\$ -	\$ 4,500.00	\$ -	\$ 4,500.00	\$ 5,610.57	\$ (1,110.57)
(4) Tasers, Batteries, & Cartridges (Year 3 of 5)	\$ -	\$ 3,360.00	\$ -	\$ 3,360.00	\$ 3,360.00	\$ -
(3) Squad and (7) Body Cameras (Year 2 of 5)	\$ 29,730.15	\$ -	\$ -	\$ 29,730.15	\$ 12,344.00	\$ 17,386.15
Ballistic Shield	\$ -	\$ -	\$ -	\$ -	\$ 299.00	\$ (299.00)
Metal and Cloth Badges	\$ -	\$ 2,000.00	\$ -	\$ 2,000.00	\$ 465.00	\$ 1,535.00
P25 Radio	\$ 26,000.00	\$ -	\$ -	\$ 26,000.00	\$ 6,010.67	\$ 19,989.33
	\$ 78,515.78	\$ 34,860.00	\$ -	\$ 113,375.78	\$ 31,258.23	\$ 82,117.55
FIRE DEPARTMENT						
Fire Department Tires	\$ 11,758.60	\$ -	\$ -	\$ 11,758.60	\$ (75.75)	\$ 11,834.35
Hose Replacement Program	\$ 15,280.00	\$ 3,000.00	\$ -	\$ 18,280.00	\$ -	\$ 18,280.00
Pager Replacement	\$ 3,622.43	\$ 2,000.00	\$ -	\$ 5,622.43	\$ 3,983.78	\$ 1,638.65
Extrication Cribbing	\$ 1,000.00	\$ -	\$ -	\$ 1,000.00	\$ -	\$ 1,000.00
Extrication Chocks	\$ 1,500.00	\$ -	\$ -	\$ 1,500.00	\$ -	\$ 1,500.00
Copy Machine	\$ -	\$ 6,500.00	\$ -	\$ 6,500.00	\$ 5,853.00	\$ 647.00
(2) Video Laryngoscopes	\$ -	\$ 5,100.00	\$ -	\$ 5,100.00	\$ 4,986.10	\$ 113.90
iPad	\$ -	\$ 1,500.00	\$ -	\$ 1,500.00	\$ 2,619.06	\$ (1,119.06)
(1) Battery Powered Positive Pressure Fan (Phase 1 of 2)	\$ 520.00	\$ -	\$ -	\$ 520.00	\$ -	\$ 520.00
TFD Training Ground Upgrades	\$ 8,000.00	\$ -	\$ -	\$ 8,000.00	\$ -	\$ 8,000.00
Training in Progress Sign	\$ 375.00	\$ -	\$ -	\$ 375.00	\$ -	\$ 375.00
Turnout Gear	\$ 26,667.05	\$ 10,000.00	\$ -	\$ 36,667.05	\$ 19,753.70	\$ 16,913.35
Hydro Testing	\$ 5,506.75	\$ -	\$ -	\$ 5,506.75	\$ -	\$ 5,506.75
EMS Flex Grant - Monitor	\$ -	\$ -	\$ -	\$ -	\$ 45,350.66	\$ (45,350.66)
EMS Flex Grant - Uniform	\$ -	\$ -	\$ -	\$ -	\$ 5,953.75	\$ (5,953.75)
Repair/Replace Apparatus Bay Floor	\$ 25,000.00	\$ -	\$ -	\$ 25,000.00	\$ -	\$ 25,000.00
Fire Equipment Replacement	\$ 109,895.44	\$ -	\$ 970.71	\$ 110,866.15	\$ -	\$ 110,866.15
Station Exhaust Modification	\$ 16,000.00	\$ -	\$ -	\$ 16,000.00	\$ -	\$ 16,000.00
	\$ 225,125.27	\$ 28,100.00	\$ 970.71	\$ 254,195.98	\$ 88,424.30	\$ 165,771.68
PUBLIC WORKS DEPARTMENT						
Vehicle Replacement Fund	\$ 126,169.05	\$ 20,000.00	\$ 1,291.06	\$ 147,460.11	\$ -	\$ 147,460.11
Garbage Truck & Cushman Replace Reserve	\$ 324,571.00	\$ -	\$ -	\$ 324,571.00	\$ 154,269.00	\$ 170,302.00
Garbage Cans (compatible with new truck)	\$ 100,000.00	\$ -	\$ -	\$ 100,000.00	\$ 75,547.61	\$ 24,452.39
Emerald Ash Borer Program	\$ -	\$ 20,000.00	\$ -	\$ 20,000.00	\$ 30,683.95	\$ (10,683.95)
Sidewalk Maintenance Program	\$ 12,000.00	\$ -	\$ -	\$ 12,000.00	\$ -	\$ 12,000.00
Radio Replacement	\$ 13,000.00	\$ -	\$ -	\$ 13,000.00	\$ -	\$ 13,000.00
Public Works Building Reserve	\$ 25,000.00	\$ -	\$ -	\$ 25,000.00	\$ -	\$ 25,000.00
Public Works Bldg Improvement-Architectural	\$ 81,863.00	\$ -	\$ -	\$ 81,863.00	\$ -	\$ 81,863.00
	\$ 682,603.05	\$ 40,000.00	\$ 1,291.06	\$ 723,894.11	\$ 260,500.56	\$ 463,393.55
DPW PARK DEPARTMENT						
Annual Pigeon Creek Maintenance	\$ 8,700.00	\$ -	\$ -	\$ 8,700.00	\$ 4,400.00	\$ 4,300.00
Annual Fishladder Maintenance	\$ 2,758.00	\$ -	\$ -	\$ 2,758.00	\$ -	\$ 2,758.00
Tennis Court Light Replacement	\$ 18,000.00	\$ -	\$ -	\$ 18,000.00	\$ -	\$ 18,000.00
Tennis Court Resurface (Year 1 of 2)	\$ 44,000.00	\$ 16,000.00	\$ -	\$ 60,000.00	\$ 3,423.00	\$ 56,577.00
Park Lights	\$ 26,000.00	\$ -	\$ -	\$ 26,000.00	\$ 24,500.00	\$ 1,500.00
Park and Open Space Plan	\$ 830.00	\$ -	\$ -	\$ 830.00	\$ 830.00	\$ -
Parade and Special Event Barricades	\$ -	\$ 5,000.00	\$ -	\$ 5,000.00	\$ -	\$ 5,000.00
Music Park	\$ -	\$ -	\$ 15,500.00	\$ 15,500.00	\$ 12,204.00	\$ 3,296.00
Octagon Building/Snack Shack Improvements	\$ 1,621.24	\$ -	\$ -	\$ 1,621.24	\$ 2,760.82	\$ (1,139.58)
	\$ 101,909.24	\$ 21,000.00	\$ 15,500.00	\$ 138,409.24	\$ 48,117.82	\$ 90,291.42
UNCLASSIFIED IMPROVEMENT FUND						
Old Village Hall Upper Floor Study	\$ 26,644.44	\$ -	\$ -	\$ 26,644.44	\$ -	\$ 26,644.44
Remediation DPW Yard	\$ 7,324.90	\$ 10,000.00	\$ -	\$ 17,324.90	\$ 18,696.57	\$ (1,371.67)
EMS/Paramedic Study	\$ 17,650.00	\$ -	\$ -	\$ 17,650.00	\$ -	\$ 17,650.00
Assessment Revaluation	\$ -	\$ 7,560.00	\$ -	\$ 7,560.00	\$ -	\$ 7,560.00
Village Park Improvement Plan (Water Feature)	\$ 40,234.50	\$ -	\$ -	\$ 40,234.50	\$ -	\$ 40,234.50
Alta Loma/Riverview Storm Water	\$ (7,049.59)	\$ -	\$ -	\$ (7,049.59)	\$ -	\$ (7,049.59)
North Main Street Bike Trail Spur	\$ 50,000.00	\$ -	\$ -	\$ 50,000.00	\$ -	\$ 50,000.00
Road Program Reserve	\$ 213,626.72	\$ 159,362.00	\$ -	\$ 372,988.72	\$ 409.50	\$ 372,579.22
Village Park Boat Launch	\$ 28,143.46	\$ -	\$ -	\$ 28,143.46	\$ -	\$ 28,143.46
Buntrock Water Main Loop	\$ (56,465.32)	\$ -	\$ -	\$ (56,465.32)	\$ -	\$ (56,465.32)
Orchard Street Development Incentive	\$ (430,000.00)	\$ -	\$ -	\$ (430,000.00)	\$ 15,000.00	\$ (445,000.00)
Two Hundred Green Development Incentive	\$ (204,277.31)	\$ -	\$ -	\$ (204,277.31)	\$ -	\$ (204,277.31)
Public Parking Reserve	\$ 817.00	\$ 100,000.00	\$ -	\$ 100,817.00	\$ 4,365.25	\$ 96,451.75
Molyneux Veterans Memorial	\$ -	\$ -	\$ 5,100.00	\$ 5,100.00	\$ -	\$ 5,100.00
CONTINGENCY	\$ 81,451.00	\$ 53,545.00	\$ 12,234.55	\$ 147,230.55	\$ -	\$ 147,230.55
	\$ (231,900.20)	\$ 330,467.00	\$ 17,334.55	\$ 115,901.35	\$ 38,471.32	\$ 77,430.03
TOTALS	\$ 962,754.39	\$ 499,427.00	\$ 35,096.32	\$ 1,497,277.71	\$ 466,862.23	\$ 1,030,415.48

VILLAGE OF THIENSVILLE
2022 CAPITAL PROJECT EXPENDITURE REPORT
JANUARY 23, 2023 (PRELIMINARY)

CLASSIFICATION/DEPARTMENT	AMOUNT IN RESERVES	AMOUNT BUDGETED	OUTSIDE CONTRIBUTIONS	TOTAL AMOUNT AVAILABLE	ACTUAL EXPENSE	DIFFERENCE
<u>ADMINISTRATION</u>						
Municipal Center Roof (Phase 1 Reserve)	\$ 70,000.00	\$ -	\$ -	\$ 70,000.00	\$ -	\$ 70,000.00
Replace Rooftop HVAC Board Room	\$ 14,500.00	\$ -	\$ -	\$ 14,500.00	\$ -	\$ 14,500.00
Property File Digitization	\$ 10,000.00	\$ -	\$ -	\$ 10,000.00	\$ -	\$ 10,000.00
Financial Software Package	\$ -	\$ 30,000.00	\$ -	\$ 30,000.00	\$ -	\$ 30,000.00
Village Hall Fire Alarm & Security System	\$ -	\$ 70,000.00	\$ -	\$ 70,000.00	\$ -	\$ 70,000.00
Front Office Security/Reception Upgrades	\$ 57,001.25	\$ -	\$ -	\$ 57,001.25	\$ -	\$ 57,001.25
	\$ 151,501.25	\$ 100,000.00	\$ -	\$ 251,501.25	\$ -	\$ 251,501.25
<u>POLICE DEPARTMENT</u>						
Squad Replacement (Year 3 of 3)	\$ 44,785.63	\$ 22,000.00	\$ -	\$ 66,785.63	\$ -	\$ 66,785.63
Office Furniture (Lt. Desktop Computer and Software)	\$ -	\$ 1,350.00	\$ -	\$ 1,350.00	\$ -	\$ 1,350.00
Computer Server for Digital Media	\$ -	\$ 6,500.00	\$ -	\$ 6,500.00	\$ -	\$ 6,500.00
(4) Tasers, Batteries, & Cartridges (Year 4 of 5)	\$ -	\$ 3,360.00	\$ -	\$ 3,360.00	\$ -	\$ 3,360.00
(3) Squad and (7) Body Cameras (Year 3 of 5)	\$ 17,386.15	\$ 12,344.00	\$ -	\$ 29,730.15	\$ -	\$ 29,730.15
Metal and Cloth Badges	\$ 1,535.00	\$ -	\$ -	\$ 1,535.00	\$ -	\$ 1,535.00
P25 Radio	\$ 19,989.33	\$ -	\$ -	\$ 19,989.33	\$ -	\$ 19,989.33
	\$ 83,696.11	\$ 45,554.00	\$ -	\$ 129,250.11	\$ -	\$ 129,250.11
<u>FIRE DEPARTMENT</u>						
Fire Equipment Replacement	\$ 110,866.15	\$ -	\$ -	\$ 110,866.15	\$ -	\$ 110,866.15
Residual Fire Department Capital Reserves	\$ 54,905.53	\$ -	\$ -	\$ 54,905.53	\$ -	\$ 54,905.53
	\$ 165,771.68	\$ -	\$ -	\$ 165,771.68	\$ -	\$ 165,771.68
<u>PUBLIC WORKS DEPARTMENT</u>						
Vehicle Replacement Fund	\$ 147,460.11	\$ 20,000.00	\$ -	\$ 167,460.11	\$ -	\$ 167,460.11
Garbage Truck & Cushman Replace Reserve	\$ 170,302.00	\$ -	\$ -	\$ 170,302.00	\$ -	\$ 170,302.00
Garbage Cans (compatible with new truck)	\$ 24,452.39	\$ -	\$ -	\$ 24,452.39	\$ -	\$ 24,452.39
Emerald Ash Borer Program	\$ -	\$ 20,000.00	\$ -	\$ 20,000.00	\$ -	\$ 20,000.00
Sidewalk Maintenance Program	\$ 12,000.00	\$ 12,000.00	\$ -	\$ 24,000.00	\$ -	\$ 24,000.00
Public Works Building Reserve	\$ 25,000.00	\$ -	\$ -	\$ 25,000.00	\$ -	\$ 25,000.00
Public Works Bldg Improvement-Architectural	\$ 81,863.00	\$ -	\$ -	\$ 81,863.00	\$ -	\$ 81,863.00
	\$ 461,077.50	\$ 52,000.00	\$ -	\$ 513,077.50	\$ -	\$ 513,077.50
<u>DPW PARK DEPARTMENT</u>						
Tennis Court Light Replacement	\$ 19,500.00	\$ -	\$ -	\$ 19,500.00	\$ -	\$ 19,500.00
Tennis Court Resurface (Year 1 of 2)	\$ 56,577.00	\$ -	\$ -	\$ 56,577.00	\$ -	\$ 56,577.00
Parade and Special Event Barricades	\$ 5,000.00	\$ -	\$ -	\$ 5,000.00	\$ -	\$ 5,000.00
Music Park	\$ 3,296.00	\$ -	\$ -	\$ 3,296.00	\$ -	\$ 3,296.00
	\$ 84,373.00	\$ -	\$ -	\$ 84,373.00	\$ -	\$ 84,373.00
<u>UNCLASSIFIED IMPROVEMENT FUND</u>						
Old Village Hall Upper Floor Study	\$ 26,644.44	\$ -	\$ -	\$ 26,644.44	\$ -	\$ 26,644.44
Remediation Village Hall	\$ -	\$ 10,000.00	\$ -	\$ 10,000.00	\$ -	\$ 10,000.00
Assessment Revaluation	\$ 7,560.00	\$ -	\$ -	\$ 7,560.00	\$ -	\$ 7,560.00
Village Park Improvement Plan (Water Feature)	\$ 40,234.50	\$ -	\$ -	\$ 40,234.50	\$ -	\$ 40,234.50
Alta Loma/Riverview Storm Water	\$ (7,049.59)	\$ -	\$ -	\$ (7,049.59)	\$ -	\$ (7,049.59)
North Main Street Bike Trail Spur	\$ 50,000.00	\$ -	\$ -	\$ 50,000.00	\$ -	\$ 50,000.00
Road Program Reserve	\$ 372,579.22	\$ 100,000.00	\$ -	\$ 472,579.22	\$ -	\$ 472,579.22
Village Park Boat Launch	\$ 28,143.46	\$ -	\$ -	\$ 28,143.46	\$ -	\$ 28,143.46
Orchard Street Development Incentive	\$ (445,000.00)	\$ -	\$ -	\$ (445,000.00)	\$ -	\$ (445,000.00)
Two Hundred Green Development Incentive	\$ (204,277.31)	\$ -	\$ -	\$ (204,277.31)	\$ -	\$ (204,277.31)
Public Parking Reserve	\$ 96,451.75	\$ 100,000.00	\$ -	\$ 196,451.75	\$ -	\$ 196,451.75
Molyneux Veterans Memorial	\$ 5,100.00	\$ -	\$ -	\$ 5,100.00	\$ -	\$ 5,100.00
PWSB Short-term note	\$ -	\$ 530,000.00	\$ -	\$ 530,000.00	\$ -	\$ 530,000.00
CONTINGENCY	\$ 106,551.47	\$ 48,957.00	\$ -	\$ 155,508.47	\$ -	\$ 155,508.47
	\$ 76,937.94	\$ 788,957.00	\$ -	\$ 865,894.94	\$ -	\$ 865,894.94
TOTALS	\$ 1,023,357.48	\$ 986,511.00	\$ -	\$ 2,009,868.48	\$ -	\$ 2,009,868.48

VILLAGE OF THIENSVILLE
2022 CAPITAL EXPENDITURE REQUESTS
JANUARY 23, 2023

<u>DEPARTMENT</u>	<u>AMOUNT IN RESERVES</u>	<u>AMOUNT BUDGETED</u>	<u>AMOUNT REQUESTED</u>	<u>ITEM DESCRIPTION</u>
REP	\$ -	\$ 70,000.00	\$ 70,000.00	VILLAGE HALL FIRE ALARM & SECURITY SYSTEM
ADM	\$ -	\$ 30,000.00	\$ 30,000.00	BS&A FINANCIAL SOFTWARE
TPD	\$ 44,785.63	\$ 22,000.00	\$ 57,007.00	2023 FORD EXPLORER SQUAD & EQUIPMENT
PARK	\$ 5,000.00	\$ -	\$ 5,000.00	PARADE & SPECIAL EVENT BARRICADES
TOTAL	\$ 49,785.63	\$ 122,000.00	\$ 162,007.00	



Image source: Mequon-Thiensville Chamber of Commerce

VILLAGE OF THIENSVILLE

PARK AND OPEN SPACE PLAN

2023 - 2028





ACKNOWLEDGEMENTS

2022 VILLAGE BOARD

Van A. Mobley, President
Jennifer Abraham, Trustee
Angelina Apostolos, Trustee
Kristina Eckert, Trustee
Rob Holyoke, Trustee
Kenneth C. Kucharski, Trustee
David A Lange, Trustee

2022 VILLAGE STAFF

Colleen Landisch-Hansen, Village Administrator
Andy LaFond, Director of Community Services/Public Works

PLANNING AND DESIGN ASSISTANCE

Parkitecture + Planning
Blake Theisen, Principal
901 Deming Way
Madison, WI 53717
608.664.3910

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APPENDIX





CHAPTER 1: INTRODUCTION

This chapter provides an overview of the mission and goals for the overall community park and open space system as well as the Park and Open Space Plan (POSP) development process. The Village of Thiensville open space system is comprised of park facilities within the Village but provides service to a much larger geographical area.

EXECUTIVE SUMMARY

The Village of Thiensville contains within its boundaries many natural land features, such as woodlands, wetlands, and the Milwaukee River basin, offering numerous opportunities for recreation, relaxation, exercise, and enjoyment. Through implementation of the City's Park and Open Space Plan (POSP), the community has worked to best utilize these features through its vibrant and eclectic parks and open space system.

The Park and Open Space Plan for the Village of Thiensville is an expression of the community's goals and objectives, current and future needs, and projected demands for recreational facilities. The intent of this document is to plan for the improvement and maintenance of Thiensville's recreational and open space resources by outlining a strategy to manage existing resources wisely, and to develop added resources to meet future needs and demands.

Parks can serve a limited neighborhood area, a portion of the Village, or the entire community or region and provide area and facilities for outdoor recreation for residents and visitors. Open space can take the form of parks, greenbelts, wetlands, and floodplains. Open space can also serve many functions for a community other than recreation, such as the following:

- Preservation of scenic, cultural, and natural resources
- Flood management
- Protecting the area's water resources
- Buffering incompatible land uses

A well-designed parks and facilities plan should incorporate private as well as public open space areas in the community. The development and continual updating of a Parks Plan, such as this, becomes an asset to a community and contributes to its present day and future stability and attractiveness.

STATEMENT OF NEED

A POSP provides an outline for park development and ongoing maintenance of the community-wide open space system. This tool should be used by both municipalities for budget planning purposes and assigning priorities for project implementation. This document should be updated on a five-year basis to keep current with recreational demand, changes in facility needs, and to maintain eligibility for Wisconsin Department of Natural Resources (WDNR) and other agency grant programs. Adoption and integration into the Village of Thiensville Comprehensive Plan is also an important step to ensuring that the recommendations and policies can be effectively carried out.

GOALS AND OBJECTIVES

The following section identifies goals and objectives to guide the future development or expansion of parks and recreation facilities in The Village of Thiensville. These baseline goals were established by the Department staff and Parks & Recreation Board.

GOAL NO. 1

ESTABLISH AND MAINTAIN HIGH QUALITY PARKS AND RECREATIONAL SERVICES

Objectives:

- a. Ensure the number of parks and recreational facilities is reflective of community population needs.
- b. Upgrade and improve existing parks and facilities.
 - i. Develop bi-annual inspections and inventory of existing parks facilities to maintain an active log of facilities improvements.
 - ii. Continue funding the replacement of old and deteriorating equipment in all Village parks to ensure health, safety and welfare of visitors including playground equipment and safety surfacing.
- c. Pursue funding for park and recreation development and land acquisition.
- d. Pursue the development of revenue generating recreational facilities and activities, which can aid in the development of new facilities and/or the maintenance of existing facilities.
- e. Investigate private funding sources and partnerships with other groups with overlapping interests, such as the local businesses.

GOAL NO. 2

OFFER RECREATIONAL SERVICES IN AN EFFICIENT, EFFECTIVE AND ECONOMICAL MANNER

Objectives:

- a. Cooperatively work with surrounding municipalities, the Mequon-Thiensville school district, and other partners.
- b. Conduct periodic reviews of programs and services and their benefit to the community.
- c. Research alternative organizational structure and potential for a Parks and Recreation organization that shares ownership and management of public parks.
- d. Participate in regional planning of parks and recreational needs, including City of Mequon and Ozaukee County Parks Departments, and the Wisconsin Department of Natural Resources.

GOAL NO. 3

EVALUATE AND ANALYZE PARK, OPEN SPACE AND RECREATIONAL SERVICES BASED ON THE NEEDS OF THE COMMUNITY

Objectives:

- a. Encourage citizen involvement with the development of the plan.
- b. Survey community to determine changing needs.
- c. Provide regular updates to members of the public via emails and website postings.

GOAL NO. 4

PROMOTE BICYCLE AND PEDESTRIAN FACILITIES THROUGHOUT THE VILLAGE OF THIENSVILLE

Objectives:

- a. Improve local trail connectivity throughout The Village of Thiensville area to parks, conservancy areas, schools, local businesses and all regional trails.
- b. Maintain wayfinding signage to allow new residents or visitors to effectively travel throughout The Village on foot, bicycle or other means (skateboard, rollerblades, etc.)
- c. Increase the availability and accessibility of bicycle parking, both on public and private sites (e.g., commercial developments).

GOAL NO. 5

PROMOTE WATER RECREATION THROUGHOUT THE COMMUNITY

Objectives:

- a. Enhance and maintain access to the Milwaukee River through development of portals.
- b. Improve visibility and awareness of the natural amenity and asset the river provides to the community.
- c. Promote and maintain boat and paddlecraft launches.
- d. Continue to support community events, and business and housing development that supports river activity.

GOAL NO. 6

ENSURE THE COMMUNITY'S EXISTING OPEN SPACE, RECREATIONAL FACILITIES AND PROGRAMS ARE DESIGNED TO MEET THE SPECIAL NEEDS OF ALL RESIDENTS REGARDLESS OF AGE, GENDER OR ABILITY

Objectives:

- a. Prepare a site Master Plan prior to improvement and/or development of any public park to assure the highest and best use of existing resources.
- b. Provide for barrier-free access in all new park facility construction and play areas.
- c. Pursue compliance with accessibility requirements in existing facilities by 2025, except where unavoidable barriers exist, such as steep topography.
- d. Encourage participation and accommodation of all interested participants at park and recreational meetings and in recreational programs.
- e. Comply with the Americans with Disabilities Act as it applies to communication with the public. This is in reference to the standard language that government agencies should use on their agendas and other public meeting documents stating accommodation of those with disabilities who wish to attend the meeting.

GOAL NO. 7

PROVIDE RESIDENTS WITH SAFE AND RELIABLE RECREATION EQUIPMENT THROUGHOUT THE COMMUNITY PARK SYSTEM

Objectives:

- a. Accurately inventory existing parks facilities and maintain an active log of facilities improvement.
- b. Continue funding the replacement of old and deteriorating recreation equipment in all area parks.
- c. Continually monitor and maintain existing park equipment to ensure its longevity and safety.

GOAL
NO. 8

RECOGNIZE THE IMPORTANCE OF AN ADEQUATE PARK BUDGET, AND USE ALL AVAILABLE RESOURCES TO FURTHER ENHANCE THE QUALITY OF THE CITY PARK SYSTEM**Objectives:**

- a. Use the Comprehensive Outdoor Recreation Plan as a guide to establish yearly park budgets and funding for the Village of Thiensville Parks & system.
- b. Invest funds for the development of facilities that will maximize existing park and recreation areas and provide exciting recreational programs, with the intention of increasing park prominence, community visibility, and use.
- c. Continually pursue state and federal funding programs, which can aid in the purchase and/or development of desired park system improvements.
- d. Update the Comprehensive Outdoor Recreation Plan every five years to maintain grant eligibility.
- e. Pursue the development of revenue generating recreational facilities and activities, which can aid in the development of new facilities and/or the maintenance of existing facilities.



SUMMARY OF PAST PLANNING DOCUMENTS

A MULTI-JURISDICTIONAL COMPREHENSIVE PLAN FOR OZAUKEE COUNTY: 2035 (2009)

This comprehensive plan is a broad, policy-driven document that looks at key elements which impact residents, visitors, the environment and natural resources within 14 local governments of Ozaukee County. The plan identifies a vision for the future with realistic goals, objectives, policies, and programs that provide direction and rational basis for local decisions over the next 25 years.

Key findings from plan:

- Ozaukee County continues to see steady growth, with further growth expected through 2035.
- Environmental corridors along the Milwaukee River and isolated natural resource areas include the best remaining woodlands, wetlands, plant and wildlife habitat areas.
- Preserving the rural character of Ozaukee County is a priority.
- Strong support exists for expanding the Ozaukee Interurban Trail.

CITY OF MEQUON PARK & OPEN SPACE PLAN (2019)

In addition to directing the City of Mequon with planning and maintenance of recreation spaces and facilities through the year 2024, the Park and Open Space Plan also works to aid in obtaining grant opportunities through the Department of Natural Resources and other agencies.

The plan identifies three purposes of the Park and Open Space System:



Promote and provide active and passive recreational activities



Promote and provide environmental education for the City's residence



Promote and provide land and water preservation and restoration

THRIVE IN THIENSVILLE (2021)

Thrive in Thiensville outlines the background, objectives, and financing strategy of a new 15-acre redevelopment district in Thiensville called Thiensville Crossing. The redevelopment will include retail, residential, and mixed-use space within the heart of the historic downtown district.

Components of the plan include:

- Tax Incremental Financing (TIF) & Tax Incremental District (TID) to fund the development
- Creation of new open space and aesthetic feel of the district
- Infrastructure improvements to create enhanced pedestrian and bicycle experience

JOINT MEQUON-THIENSVILLE BIKE & PEDESTRIAN WAY COMMISSION 2010 TO 2030 RECOMMENDATIONS (2015)

The joint communities of Mequon and Thiensville established a Bike and Pedestrian Ways Commission to advise the Mequon Common Council and Thiensville Village Board regarding creation, revisions to and implementation of a city and village-wide master plan for bike and pedestrian ways and trails accessible to bicyclists, pedestrians, and participants in other silent sports.

Goals and objectives cover:

1. Providing safe travel on roadways
2. Connecting cultural and recreational amenities
3. Including bike and pedestrian facilities in new developments
4. Establishing clear wayfinding of routes
5. Improving overall safety
6. Updating maps and routes
7. Working with adjacent communities

WISCONSIN STATE OUTDOOR RECREATION PLAN (2019-2023)

The Wisconsin Statewide Comprehensive Outdoor Plan provides information on the status of outdoor recreation in the state and serves as a guide for distributing money by the Department of Natural Resources to communities that support outdoor recreation projects.

Goals for recreation include:



1. Boost participation in outdoor recreation



2. Grow partnerships



3. Provide high-quality experiences



4. Improve data to enhance visitor experiences and benefits



5. Enhance funding and financial stability

The process for updated a POSP typically takes several months and up to a year for development and completion of the necessary steps. The 2023 Thiensville POSP began in 2022 and was concluded in December. A field review and assessment of all Village owned public lands took place in July and August and was conducted by staff from Parkitecture + Planning. Several review meetings were held with Village staff to review progress and draft plans. A draft plan was presented to the Village in December, and the final draft plan was completed in January 2023 for adoption. The final plan was submitted to the Wisconsin Department of Natural Resources to maintain eligibility for certain grant programs and funding assistance.



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CHAPTER 2: PHYSICAL & SOCIAL CHARACTERISTICS

Understanding the demographics and physical characteristics of a community is an important baseline for the analysis and development of recommendations for the system-wide open spaces. This chapter provides data related to existing and projected growth patterns with the POSP study area.

VILLAGE OF THIENSVILLE POPULATION TRENDS

There is a direct relationship between population and the need for parks and recreational space. Predicting how the population might grow in the future provides important information about the amount of new parkland and recreational facilities that will be needed to serve the new population.

ESTIMATED 2020 POPULATION

**Village of
Thiensville**

3,290

**Thiensville
Population per
square mile**

3,055

**City of Mequon
Population**

25,015

**Ozaukee County
Population**

92,497

Source: 2020 United States Census Bureau

POPULATION TRENDS & PROJECTIONS

Estimated Growth Since 2010

-4.57%

Projected 2040 Population

3,080

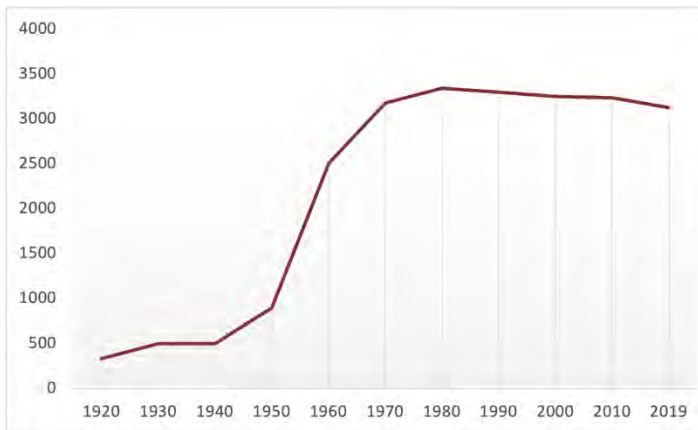


Figure 2 - Village of Thiensville Population Trends
Source: US Census Bureau

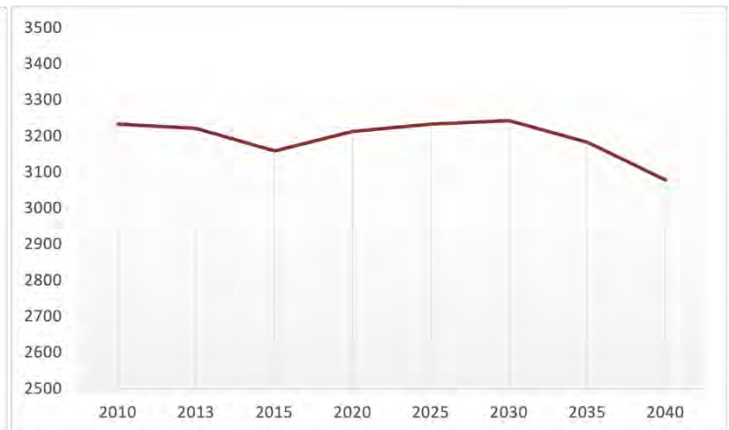


Figure 1 – Village of Thiensville Projected 2010 – 2040 Population Trend
Source: WIDOA

FAMILIES & LIVING ARRANGEMENTS

1,541

Number of households

Source: US Census Bureau

2.1

Persons per household

58%

**Married couples'
ownership rate**

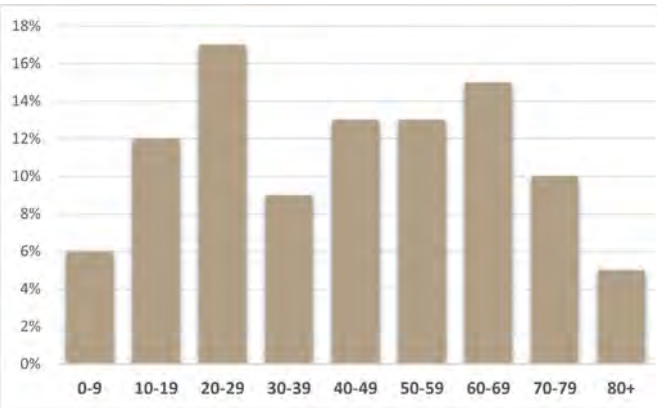
66.5%

**Owner-occupied housing
unit rate**

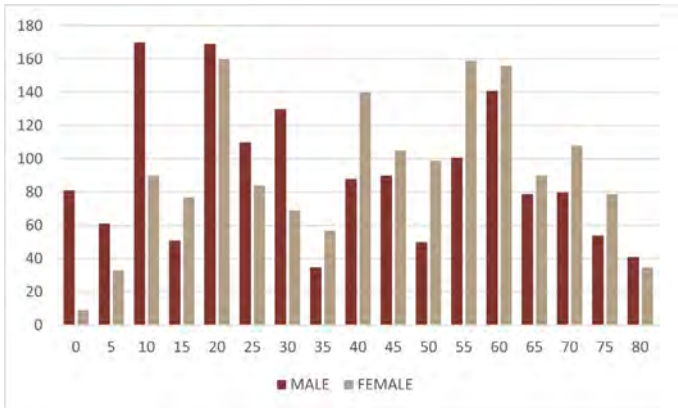
VILLAGE OF THIENSVILLE DEMOGRAPHICS

Data on demographic trends such as age, sex, ethnicity, employment, and household income for a community factor into future demand for services and facilities. These snapshots from sources such as the US Census Bureau also aid in decision making for present and near-future allocation of local, state, and federal resources.

AGE & GENDER DISTRIBUTION

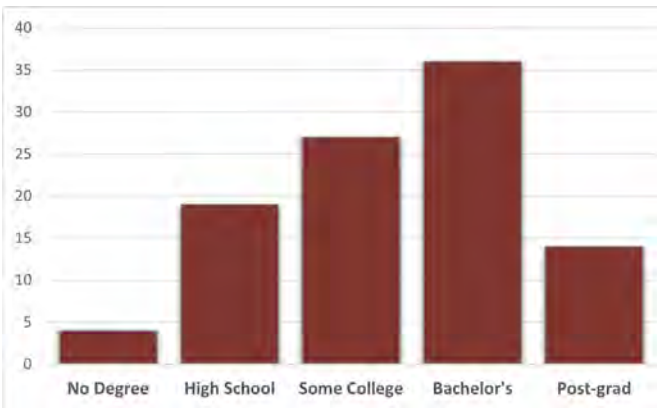


Source: 2020 US Census Bureau

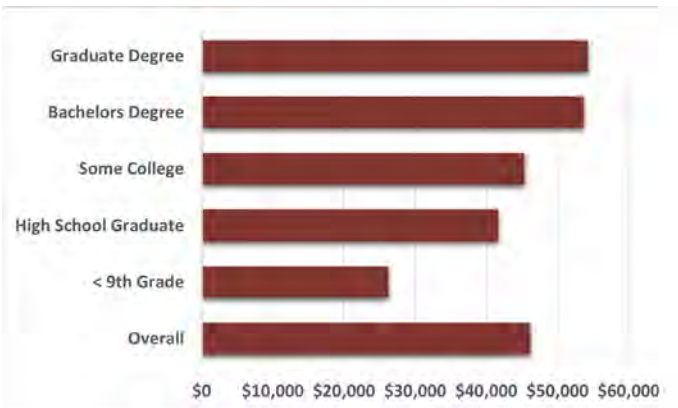


Source: 2020 US Census Bureau

EDUCATION LEVELS & EARNINGS BY EDUCATION LEVEL

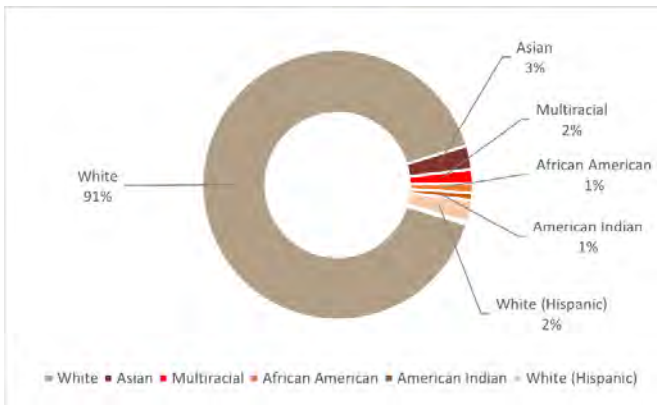


Source: 2020 US Census Bureau



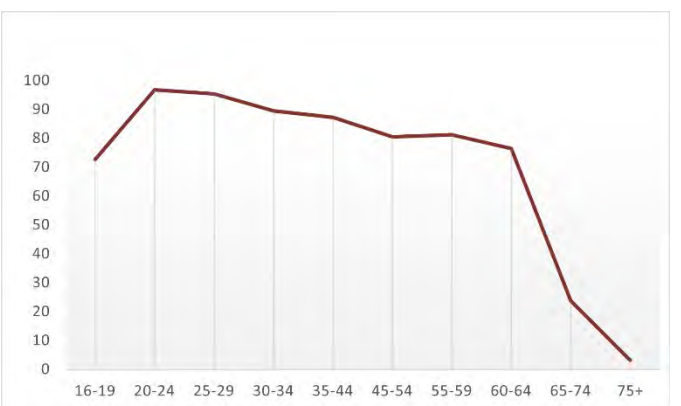
Source: 2020 US Census Bureau

ETHNIC BACKGROUND



Source: 2020 US Census Bureau

EMPLOYMENT RATE BY AGE



Source: 2020 US Census Bureau

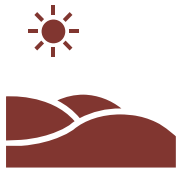
PHYSICAL CHARACTERISTICS

This section presents physical factors in the community and region that are important to understanding The Village of Thiensville's recreational potential. The landforms and physical features of the Thiensville area are also important determinants of growth and development. The physical geography of an area must be considered in land use, transportation, and utility and community facility planning and development, and for its contribution to the natural beauty and overall quality of life in an area.



LANDFORMS AND TOPOGRAPHY

Glaciation has largely determined the topography and soils of The Village of Thiensville and the Ozaukee County area. In general, the topography of the area is relatively level to gently rolling in some areas, with low lying areas associated with streams and wetlands.



GEOLOGY

Knowledge of bedrock and the surface deposits overlaying the bedrock is important to land use, transportation, and other utility and community facility planning. Bedrock conditions and the overlaying surface deposits directly affect the construction costs of urban development such as streets, highways, and utilities, particularly those that involve extensive trenching or tunneling, and affect the location of onsite waste treatment systems

The bedrock formations underlying the Thiensville area and the Ozaukee County area consist of the Milwaukee Formation and Niagara Dolomite. The Milwaukee Formation includes shale and shale limestone and dolomite in the bottom third. It is approximately 130 feet thick and is found in the eastern portion of Ozaukee County along Lake Michigan. Niagara Dolomite is approximately 100 feet thick and is found in the central and western portions of Ozaukee County.

In the Village of Thiensville, depth to bedrock ranges from 100-150 feet on the eastern portions of the Village and 50-100 feet on the western portion. This deeper portion is comprised mostly of glacial till consisting of poorly sorted clayey, silty to sandy materials with boulders and cobbles. The shallow areas are made mostly from glacial outwash deposits of gravel and coarse to medium sand.



SOILS

The U.S. Department of Agricultural Soil Conservation Service, now the Natural Resources Conservation Service (NRCS), issued a soil survey for Ozaukee County in 1970. The soil survey plays an important role in land use decisions and is used to determine which areas of the County are suitable for agricultural use, which areas vulnerable to erosion, and which areas are appropriate for development.

The survey shows the Village of Thiensville to contain two soil associations: Casco-Fabius association along the river corridors, and the Kewaunee-Manawa association elsewhere.

The Casco-Fabius association contains well drained and somewhat poorly drained soils that have a subsoil of clay loam and sandy clay loam, shallow over gravel and sand and on-stream terraces. Most of the soils in this association are cultivated. The soils are easy to cultivate, and erosion is generally not a serious hazard. These soils are a good source of sand and gravel.

The Kewaunee-Manawa association contains well-drained to somewhat poorly drained soils that have a subsoil of clay to silty clay loam formed in thin loess and silty clay loam glacial till on uplands. Most of this association is cultivated. Erosion control and drainage of low, wet areas are the main concerns in managing these soils.

Thiensville also contains 147 acres of saturated soils, also known as hydric soils, which are soils that are saturated with water or that have a water table at or near the surface. These soils pose significant limitations for most types of development.



GROUNDWATER

An adequate supply of high-quality groundwater is essential if used for domestic consumption. Like surface water, groundwater is susceptible to depletion and deterioration. The quality of groundwater can be reduced by the loss of recharge areas, excessive or overly concentrated pumping, and changes in ground cover. In addition, groundwater quality is subject to degradation from onsite waste treatment systems, surface water pollution, improper agricultural practices, and other soil and water pollutants.

Ozaukee County has seen an increase in overall water consumption and groundwater consumption in recent decades. SEWRPC indicates that there is an adequate supply of ground water in both a shallow aquifer for Ozaukee

County and the Region as a whole. The shallow aquifer is the source of water for most wells in the County.

Village resident's drinking water comes from three different sources. There are four water Co-Op's served by privately owned wells. Other residents are served by the Mequon Water Utility. The remaining properties get their water from private groundwater wells.

Portions of Ozaukee County, including areas of Thiensville, are susceptible to higher risks of groundwater contamination due to a variety of factors including soil characteristics, unsaturated zone thickness, permeability of vertical sequences in the unsaturated zone, recharge to groundwater, represented by soil percolation, and aquifer characteristics. Groundwater contamination risk is greatest along the Pigeon Creek corridor and the Milwaukee River corridor, with less risk occurring on the northeastern portions of the Village.



DRAINAGE BASINS

The Village of Thiensville exists within the 882 square mile Milwaukee River watershed, which is within the Lake Michigan subbasin. Within the watershed, Thiensville sits in the 168 square mile South Branch Milwaukee River subwatershed. There are three small named lakes, several unnamed lakes and many park ponds within the Milwaukee River South Watershed. Land cover in the watershed is a mix of rural and urban uses. Overall, the watershed is about 33 percent urban, with agriculture (25%), grasslands (21%), forests (12%) and wetlands (6%) making up the rest of the major land cover types. Fourteen cities and villages are found in this watershed.



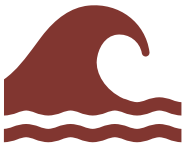
WETLANDS

Wetlands are defined as areas that are inundated or saturated by surface or groundwater at a frequency and duration that is sufficient to support a prevalence of vegetation typically adopted for life in saturated soil conditions.

Wetlands are generally unsuited or poorly suited for most agricultural or urban development purposes. Wetlands do have important recreational and ecological values. Wetlands contribute to flood control and water quality enhancement, since such areas naturally serve to store excess runoff temporarily, thereby tending to reduce peak flows and to trap sediments, undesirable nutrients, and other water pollutants. Wetlands may also serve as groundwater recharge and discharge areas. Wetlands also provide breeding, nesting, resting, and feeding grounds for many forms of wildlife.

Collectively, Small areas of mapped wetlands exist in the Village of Thiensville, particularly along Pigeon Creek and the Milwaukee River. Pigeon Creek just outside of the jurisdiction of The Village is home to an extensive area of established wetlands.

Other areas include patches between West Street and Spring Street, between North Main Street and Green Bay Road, Southwest of the intersection of East Freistadt and Vernon Avenue, areas surrounding Laurel Lake, and areas near the end of Crescent Lane.



FLOODPLAINS

The Village of Thiensville has historically experienced flooding from Pigeon Creek and the Milwaukee River, with several instances resulting in federal disaster declaration.¹

According to Flood Factor, a flood risk data analysis resource, there are 121 properties in Thiensville, or 11% of all properties in the Village, which have greater than a 26% chance of being severely affected by flooding over the next 30 years. At greatest risk are commercial buildings in the Village, with 43 of the 71 businesses being at some level of flood risk.² SEWRPC states that 101 acres of floodplain exist in Thiensville.³

A three-phase flood mitigation project began in 2003 and worked to reduce the intensity of the flooding, however the creek is still prone to overflows.



WOODLANDS

Since 2015, Thiensville has been recognized as an Arbor Day Foundation Tree City USA Community. The Tree City USA program provides communities with a four-step framework to maintain and grow their tree cover. It also gives them an avenue to celebrate their work, showing residents, visitors, and the entire country that they are committed to the mission of environmental change.

The four-step framework includes

1. Maintaining a tree board or department
2. Having a community tree ordinance
3. Spending at least \$2 per capita on urban forestry
4. Celebrating Arbor Day

¹ FEMA

² Flood Factor

³ SEWRPC



RARE SPECIES OCCURRENCE AND PROTECTED AREAS

Natural area and critical species habitat losses in Southeastern Wisconsin have been profound. About 83 percent of the pre-European-settlement vegetation had been lost by 1990 and the region has experienced a substantial loss of wetlands and woodlands.⁴

Natural areas and critical species habitats benefit humans in a number of ways including supporting of scientific research, maintaining biodiversity, protecting drinking water supplies, supporting cultural and educational value, and providing economic value through tourism and recreation.

The Village of Thiensville has no designated areas of natural significance, however SEWRPC identifies the 82-acre Pigeon Creek Low, Mesic and Maple Wood areas just outside of the Village boundary as NA-2 “site of local significance”

A combination of lowland hardwoods, wet-mesic woods, and upland mesic woods, much of which borders the cold, clear, fast waters of Pigeon Creek. On the grounds of a former fox farm. Known to support four critical plant species: the State-designated endangered heart-leaved plantain (*Plantago cordata*); the State designated threatened snow trillium (*Trillium nivale*) and forked aster (*Aster furcatus*); and the State designated special concern chinkapin oak (*Quercus muehlenbergii*).⁵

SEWRPC also delineates aquatic areas of significance and cites Pigeon Creek as being an aquatic river or stream of countywide or regional significance (AQ-2), describing it as having “good overall fish population and diversity, including critical fish species; critical plant species adjacent to and within the channel.” The Milwaukee River is characterized as locally significant (AQ-3).

The US Fish & Wildlife Service lists five threatened or endangered species to reside or exist in Ozaukee County:

1. Northern long-eared bat – threatened
2. Rufa red knot shorebird – threatened
3. Hine’s emerald dragonfly – endangered
4. Eastern prairie fringed orchid – threatened

⁴ SEWRPC

⁵ SEWRPC



CHAPTER 3: ANALYSIS

The health of a community is often exhibited in the park and open space system. This chapter provides an overview of the existing conditions and a comparison to national standards in terms of acreage, service area, and standard of care. It inventories and classifies the park system based on national standards established by the National Recreation and Park Association (NRPA). In addition, this chapter documents the nearby county and state outdoor recreation supply available to area residents.

VILLAGE OF THIENSVILLE PARKS AND OPEN SPACE FACILITIES

MINI PARKS

Mini Parks include specialized facilities that serve a concentrated population or specific group such as tots or senior citizens. Typical size is **1 acre or less** but may be categorized as Mini Parks simply based on the type and quantity of facilities they offer. Service areas are **less than a ¼ mile radius**.

- **MOLYNEUX PARK**
- **ORCHARD SPRING PARK**
- **PIGEON CREEK PARK**

COMMUNITY PARKS

Community parks are areas of diverse recreational activity and may include amenities such as athletic complexes, trails, and large swimming pools. Community parks are typically **10 acres or larger** and serve **populations in a 1–2-mile radius** but may vary depending on facilities offered.

- **VILLAGE PARK**

SPECIAL USE PARKS

Special use parks are areas for specialized or single purpose recreational activities such as golf courses, campgrounds, nature centers and skate parks. They may also be used to designate areas that are primarily used as event space, general gathering areas, expanded trail corridors or plaza space.

- **ROTARY RIVERWALK**
- **CRESCENT STORMWATER BASIN GREEN SPACE**

TRAIL AND ENVIRONMENTAL CORRIDORS

A linear park, trail corridor, or public environmental corridor is an area often available for one or more modes of recreational travel such as hiking and biking. While the Village contains other shorter paths, the main existing trail corridors are described below.

OZAUKEE INTERURBAN TRAIL

The Ozaukee Interurban is a 30-mile paved trail that spans the entire length of Ozaukee County. Much of the Trail is off-road and perfect for family enjoyment. The Trail is located between Milwaukee County's Oak Leaf Trail and Sheboygan's Plank Road Trail, and east of the Eisenbahn State Trail in Washington County.

The Trail connects the Ozaukee communities of Mequon, Thiensville, Cedarburg, Grafton, Port Washington, and Belgium. It runs along woodlands, wetlands, farmlands, and waterways, including the Milwaukee River, Lake Michigan, and the Lake Michigan National Marine Sanctuary, and provides easy access to Ozaukee County's walkable downtowns. While primarily used for outdoor recreation, the Trail is also used as a commuter route for employment, businesses, industry, and commerce.



Unlike many recreational trails in the state of Wisconsin, use of the Ozaukee Interurban Trail is free for everyone. The Village is required to maintain the segment within the municipal boundary.

The Trail is intended for year-round uses such as biking, in-line skating, walking, running, and cross-country skiing, and is designated as a "Great Wisconsin Birding and Nature Trail." Use of motorized vehicles (including snowmobiles) and horses is prohibited.

MILWAUKEE URBAN WATER TRAIL

Water trails are liquid "pathways" that are being developed in communities across the country. They enable non-motorized boaters to find legal and safe access points, resting sites and nearby attractions. Water trails connect people with places, both natural and human-made, connect past to present and give boaters a unique perspective on rivers, lakes, and the surrounding land. These connections provide "a sense of place" within our watersheds and bring us together as a community.



**MILWAUKEE URBAN
WATER TRAIL**

The Milwaukee Urban Water Trail is a trail and map for canoes, kayaks, and other small non-motorized boats on the “urban” portions of our three rivers. The Milwaukee Urban Water Trail map includes access points, portages, hazards, and resting sites (e.g., sites accessed only from the water), and includes information on historic, cultural, ecological, or scenic points of interest along the way.

The Village of Thiensville allows access to the Water Trail on the Milwaukee River via an above and below dam boat launch and portage at Village Park, as well as a paddler friendly launch at Molyneux Park.

Milwaukee Urban Water Trail is a project of Milwaukee Riverkeeper. The project is funded by the Wisconsin Coastal Management Program and the National Oceanic and Atmospheric Administration, Office for Coastal Management.

OTHER PARK AND RECREATIONAL FACILITIES IN THE AREA

HIGHLAND WOODS

This 85-acre parcel was purchased by the Ozaukee Land Trust through generous private donations, City of Mequon funds from the land acquisition account, and a grant from the DNR. The Ozaukee Land Trust turned the property over to the City in 1996 as a passive use nature and educational study area. An agreement between the OLT, City of Mequon, and the DNR governs the site.

Amenities include a parking area and trail system. Possible improvements include educational signage and brochures, a vegetation management plan for the woods and the adjacent Pigeon Creek site, improvements to the trail system, and the creation of a meadow area in the northeast section of the site.

ROTARY PARK

This site was purchased by the City of Mequon in 1989 with generous donations from the Rotary Club for the specific purpose of creating a multiple use community park. An approved landscaping and phased development plan governs the site.

On the North end of the Rotary Park is Pukaite Woods Nature Preserve which features Loyal Wells Nature Trail (Handicapped Accessible), observation deck, meadow area, oak savannah area.

VILLAGE GROVE PARK

This 5-acre community park is in Mequon South of Freistadt Rd. on Villa Grove Rd. The park is bordered on the South side by the Milwaukee River and has a small parking lot with a canoe/boat launch. Great views of the river can be seen with lots of wildlife around.

Land for the park was acquired by the City of Mequon in 1969 with the assistance of Federal funds that were dedicated to acquiring land that was in the floodplain. Homes and properties were acquired as they became available. Land was then used for park purposes.

Possible improvements include restoration of the riverbank, and installation of a Riverwalk and fishing platforms.

RIVERVIEW PARK

This site was donated to the City of Mequon in pieces beginning in 1969, with a four-acre donation occurring in 1983, and another 10.2-acre donation in 2001.

This park has features such as play equipment, parking lot, walking trail, baseball diamond, memorial garden, river walk, and bike path.

SETTLERS PARK

Also known as the Vacheron Site, this 1.4-acre site on the Milwaukee River just south of the Village of Thiensville on North Cedarburg Road, was acquired by the City of Mequon in 1990. It is the site of the Isham Day House, a structure with historical significance. Amenities include a short trail to the river and the historical building.

MEQUON CIVIC CENTER PARK

The Mequon Community Park is a vital resource for the community, as it links the Mequon-Thiensville library, public pool, Ozaukee Interurban Trail, and a fantastic park for families.

SHORELAND NATURE PRESERVE

Shoreland Nature Preserve is located in Mequon along the Milwaukee River and owned by the City of Mequon. This 19-acre conservancy features walking trails along a private lake and through wooded trails to the river. Mostly made up of wetlands due to the low-lying area along the river.

This site was dedicated to the city in 1984 by the developer of the Ville Du Parc subdivision in exchange for a nearby publicly owned gravel pit which the developer now utilizes as a lake amenity in his subdivision. While much of the site does not directly abut the Milwaukee River, a part of the land transfer agreement specifically affords public access upon the strip of land, still owned by Ville Du Parc, which separates this site from the river.

Potential park improvements include upgrading the trail system, improving parking, installing a canoe launch, and surveying the property to determine exact ownership and access points.

PARK SERVICE AREA REQUIREMENTS

Evaluating the open space system service area within a community is an important tool in establishing equitable access and distribution for residents. A service area is defined as the distance around a park or open space that patrons could be expected to travel to for regular use. As a park size increases, so does the expectation of a larger service area. In a practical sense, this measurement is intended to ensure that an entire community's population has easy access to some sort of recreation space.

This is especially important to consider when a community is faced with new developments both residential and commercial in nature. Just because a potential residential neighborhood is within the service area of a Community Park, there may be a need for a Mini Park or small Neighborhood Park within the development to satisfy age-appropriate recreational demands and provided park space within walking distance. In an ideal scenario, all residents would fall within the service areas for each type of park and have overlapping opportunity and access.

The NRPA provides a guideline for this distribution in the form of radial service areas around each park within the three "active use" classifications. Mini Parks being the smallest provide a service area of $\frac{1}{4}$ mile. Neighborhood Parks have an increased service area of $\frac{1}{2}$ mile. Community Parks as expected have the largest service area of 1 mile. While schoolyards, athletic fields, and playgrounds provide community members with recreational facility access, these facilities are not traditionally included in a service area calculation. The map insets below depict the community service areas by classification. Map 2 depicts the entire community service area coverage.

PARKLAND DEDICATION AND FEES

The Village of Thiensville has developer exactions for parkland acquisition, maintenance, and development. These exactions are designed to finance the capital costs of acquiring, establishing, upgrading, expanding, and constructing public park facilities necessary to accommodate new developments in the Village. As residents move into a new subdivision, apartment building, or condominium development, they place additional stress on and are often distant from existing park facilities. Developer exactions, often established during the subdivision review and approval period, provide land, cash, or a combination of both to be used for the provision and improvement of park facilities that serve the new residential development. As of 2022, the per residential dwelling unit fee is \$500. The Village should strongly consider reevaluation of this fee amount to be more in line with neighboring communities.

ANALYSIS OF VILLAGE-OWNED AND OPERATED PARK AND RECREATIONAL SYSTEM

One tool to measure the allocation of parkland within a community is in terms of acres to population. The National Recreation and Park Association (NRPA) generally recommends 10.5 acres of public park space for every 1,000 persons. With an estimated 2020 population of Thiensville being 3,125, by this standard, the Village should have at least 32.8 acres of overall park acreage. As of 2022, the Village has approximately 25.93 acres of public park space including special use spaces. With the anticipated additions of Freistadt & Interurban Trail Park (.47 acres) and the Pigeon Creek Spur Park (.52 acres), total Village park acreage will increase to 26.92 acres. Compared to standards set forth by the NRPA, the Village of Thiensville does not contain sufficient park and recreational space acreage to serve its current population (26.92 existing and future acres vs 32.8 recommended acres).

The NRPA further recommends that this 10.5 acres/1000 be distributed as follows:

- Mini Parks: 0.5 acres/1,000 population
- Neighborhood Parks: 2 acres/1,000 population
- Community Parks: 8 acres/1,000 population

Including anticipated parks, The Village of Thiensville has 2.15 acres of Mini Parks, which will exceed the 1.56 acres advised by NPRA for a community of its population.

The Village has no parks classified as neighborhood parks.

There is a total of 16.6 acres of community parks, all at Village Park, which is 8.4 acres below the 25 acres recommended by the NPRA.

It should be noted that the 6.4-acre stormwater basin area is included in the total park acreage analysis and primarily functions as a stormwater detention facility instead of recreational open space. Additionally, the .68-acre Spring Orchard Park does not yet have any recreational programming.

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CHAPTER 4: RECOMMENDATIONS

This chapter analyses the parks and open space system in The City of Thiensville and provides basic recommendations for improvements. The information for this section was gathered from site visits conducted by Parkitecture & Planning, discussion with both Villages staff and review of past planning documents.

GENERAL RECOMMENDATIONS

A Park and Open Space Plan should serve as a planning tool for both general and specific improvements. While individual park recommendations are important to consider fulfilling immediate and or/near term safety needs or deficiencies, general recommendations provide broad sweeping improvement concepts that should be implemented over longer periods of time.

These are often framed around best management practices, policies, solving commonly occurring issues, or altering regular/historical maintenance and development procedures. When establishing priorities for these recommendations, safety considerations should always take precedence over functional, aesthetic, and general replacement of outdated facility improvements.

COVID-19 IMPLICATIONS AND RELATIONSHIP TO PARK USE

Park systems across the state, region, country, and world have been impacted by the COVID-19 pandemic in many ways. People turned their attention to local open spaces during the first months of the infection escalation in record numbers.

In Wisconsin, many communities instituted workplace and school closures, retail outlets shuttered their businesses, local eateries and bars ceased to provide service, playgrounds were indefinitely closed, and even basic government functions slowed to a halt.

An initial reaction of fear and confusion eventually gave way to a re-emergence of people from indoors as the weather conditions improved in the spring and summer months of 2020. Parks, trails, and sidewalks became platforms for social interaction, stress relief, and a coping mechanism. The Wisconsin State Park system experienced record numbers of visitors despite offering limited or no support facilities or amenities. Online sales of recreational equipment skyrocketed, and local bicycle retailers could not keep up with demand.



While the COVID-19 pandemic will hopefully be controlled with herd immunity and increased vaccination numbers, the lessons learned from this extraordinary event will prevail. The ripple effect of social distancing and increased sanitation of public spaces will likely have an impact on how designers look at park and other public gathering spaces.

POLICY AND PRACTICE

BARRIER FREE ACCESS



Continue efforts to retrofit parks and other facilities for barrier free access. This should include restrooms, playgrounds, trails, and other gathering spaces.

BICYCLE & PEDESTRIAN ROUTE SYSTEM



Work towards completion of the community-wide multi-modal off-road trails and on road bicycle route system.

ALLOCATION OF FUNDS



Allocate sufficient funds for planning, development, programming, and maintenance of park and open space facilities.

COMMUNITY FUNDING



Continue to foster a positive approach towards community funding assistance, donations, and planned giving. This has been used to great success in the Thiensville community.

PLANNING PROCESS



Prior to facility development, complete a conceptual site plan or park master plan process to establish the highest and best use of the proposed space.

COMMUNITY GROWTH



Follow adopted guidelines for land acquisition and park development as it relates to new infill developments within the community.

AGE SPECIFIC NEEDS



Evaluate solutions to fill age specific deficiencies and recreational demand across the community.

COMMUNITY CONNECTIONS



Continue to provide public outreach and input opportunities via websites, email blasts, social media outlets, and other methods.

FEE ADJUSTMENTS



Increase the current impact fee structure for new development and redevelopment projects. Monitor and adjust as required to remain consistent with surrounding communities such as Mequon.



INFRASTRUCTURE AND FACILITY

- PLAYGROUND SAFETY** ➔ Ensure all playgrounds are checked on a regular basis for safety issues, consistent depth resilient surfacing, and conformance with the National Playground Safety Institute. Refer to the current edition of the NPSI Handbook for recommended materials and depths.
- BICYCLE RACKS** ➔ Install sufficient bicycle and other wheeled device parking racks at all parks, other public institutional facilities, and commercial service and retail developments. These racks should be installed on concrete or asphalt surfacing to aid in the longevity of the structure and for ease of maintenance.
- ADEQUATE LIGHTING** ➔ Install adequate lighting to aid in security, facility ambiance, and proper lighting of flagpoles, and other landscape features. All lighting should be LED technology and utilize auto dimmers, occupant or motion sensors, and other energy saving measures.
- MAINTENANCE INSPECTIONS** ➔ Conduct regular maintenance inspections in each park for broken equipment.
- WAYFINDING AND SIGNAGE** ➔ Continue to enhance wayfinding and park monument signage by installing consistent and standardized signs. This may include colors, logos, font styles, and other community specific elements.
- RESTROOM SECURITY** ➔ Continue installing auto-locking door handles in all restroom facilities. This technology allows for enhanced facility security and reduces daily staffing efforts.



FUTURE PARK AND OPEN SPACES

The Village is currently undertaking a redevelopment TID adjacent to the downtown area. Opportunities for several new open spaces have been created as part of the proposed plan and should be included in future park planning and budget efforts.

The connections from the Interurban Trail and additional pocket parks within/adjacent to the private development lots are a benefit for both public and private entities. Graphical renderings of some of these areas are depicted below.



Two additional path/trail connections should be established to provide further connectivity between the Interurban Trail, Downtown District, and the Village Park area. These include formalizing the desire line pathway in the 600 block of Main Street (Main Street to Interurban), and a new pathway along the south edge of the Hawthorne Glen Development.



BICYCLE AND PEDESTRIAN SYSTEM

The Village of Thiensville works with the City of Mequon via the Mequon-Thiensville Bikeway Commission to advise the Mequon Common Council and Thiensville Village Board regarding creation, revisions to, and implementation of a city and Village-wide master plan for bike and pedestrian ways and trails accessible to bicyclists, pedestrians, and participants in other silent sports. The Commission meets every fourth Thursday of the month and has authored recommendations for both municipalities for the years 2010-2030. The overall goal of the recommendations is to encourage mobility of all residents by creating a bike-pedestrian network throughout the communities.

INDIVIDUAL PARK RECOMMENDATIONS

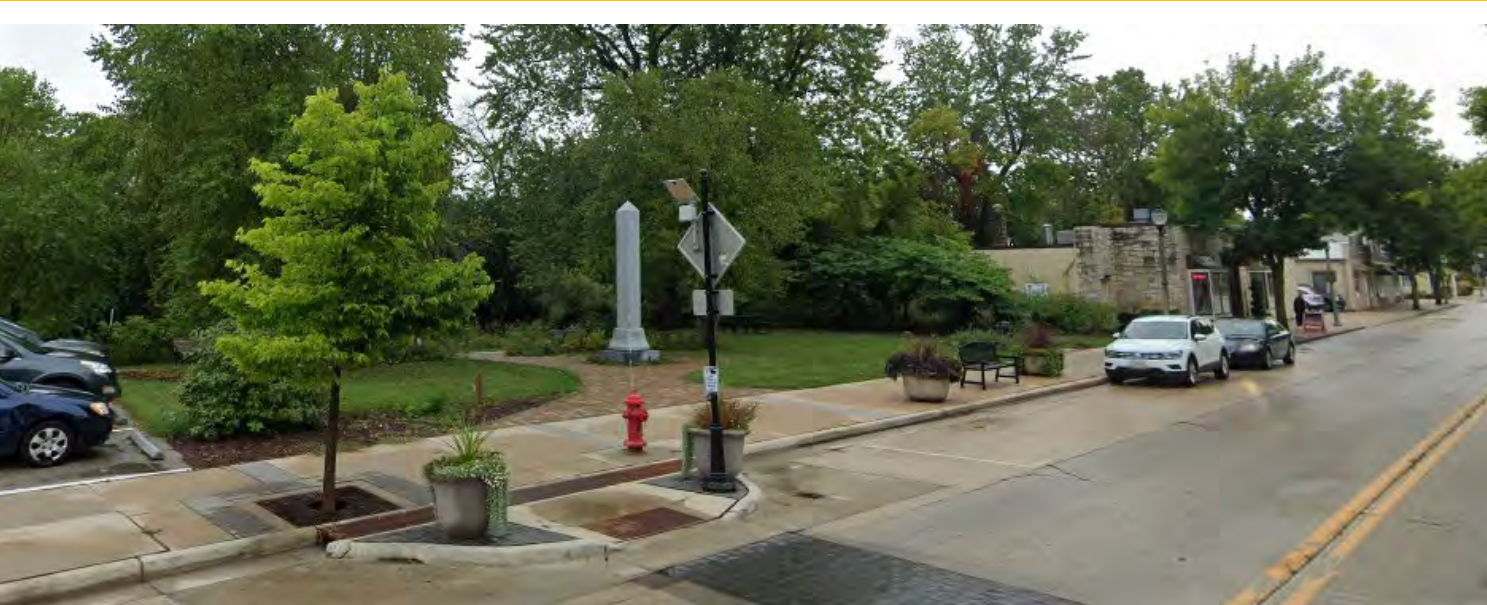
To maintain a safe and enjoyable park system, inspections and recommendations are made with each iteration of the POSP for every park in the area. The conclusions for each park are based on site visits, communications with residents and meetings with Village officials.

These conclusions are communicated in the following inventory sheets and include contextual information about each park. Conditions of concern are highlighted in a varied degree of severity ranging from “GOOD” to “POOR,” with corresponding cost estimates related to each park.

This sample inventory sheet is intended to aid in understanding how the inventory is communicated. Park uses and size are arranged in the following colors:



MOLYNEUX PARK



EXISTING FACILITIES	CONDITION	ISSUES TO NOTE
• Picnic table	GOOD	Launch is rarely used
• Dedication bench	GOOD	
• Dedication monument	GOOD	
• Paddlecraft launch	AVERAGE	
• Public parking	GOOD	

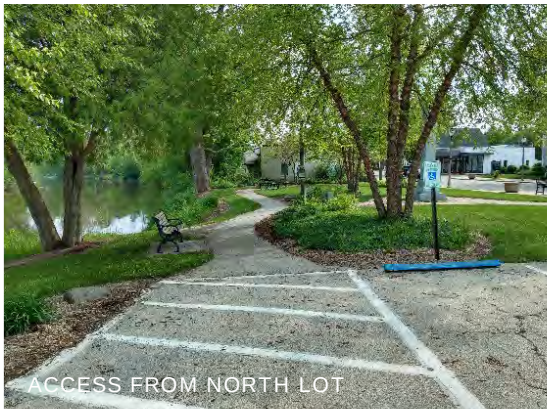
IMPROVEMENT OPTIONS, SUGGESTIONS & ESTIMATES		
• Convert launch site into fishing access		\$ 2,500
• Upgrade site lighting		\$ 5,000
• Install Veterans memorial plaque and flagpole		\$ 5,000
TOTAL		\$ 12,500

Molyneux Park is located in the business district between Main Street and the Milwaukee River, south of Green Bay Road. This Park offers picnic tables, benches, a canoe launch area, fishing access, public parking, and views of the river.

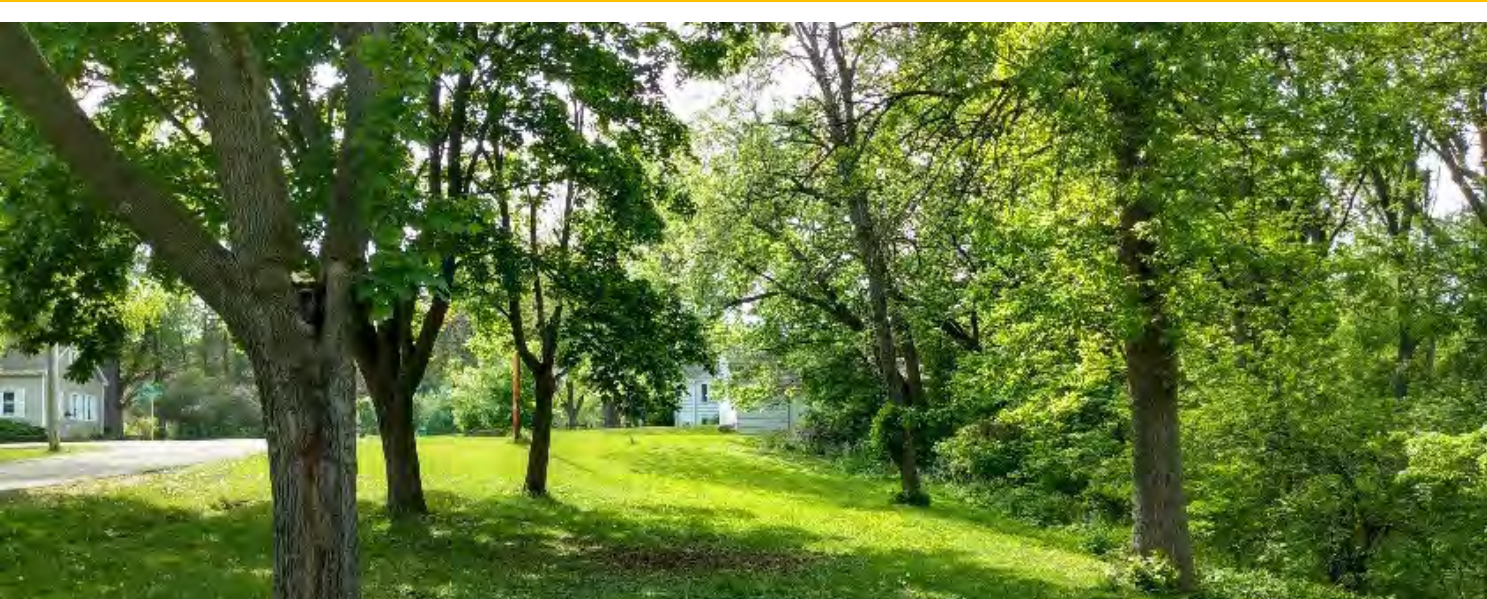
MINI PARK

164 Main Street

.3
ACRES



ORCHARD SPRING PARK



EXISTING FACILITIES	CONDITION	ISSUES TO NOTE
None		

IMPROVEMENT OPTIONS, SUGGESTIONS & ESTIMATES		
Install natural playground		\$ 50,000
Install pedestrian path		\$ 6,000
Install benches and picnic tables		\$ 8,000
Install park sign		\$ 2,500
TOTAL		\$ 66,500



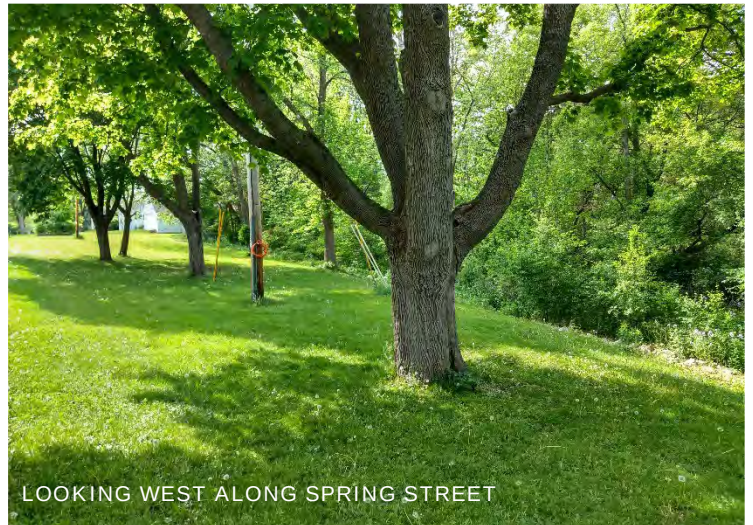
NATURE PLAYGROUND EXAMPLE BY PARKITECTURE + PLANNING, COMPLETED 2022

This area currently exists as a city owned parcel with no amenities or park designation. Potential exists to increase the use of the parcel as a mini park for the surrounding neighborhood, which is underserved for park access.

MINI PARK

200 Spring Street

.68
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PIGEON CREEK PARK



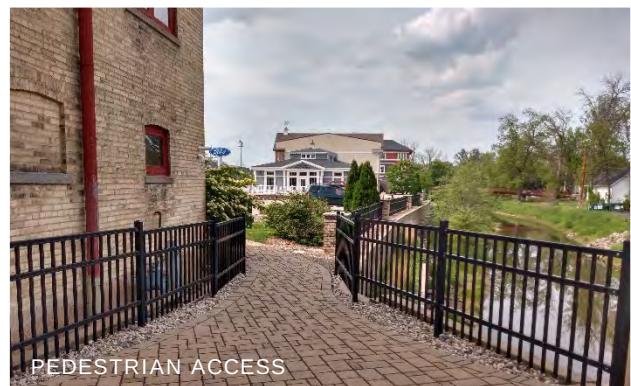
EXISTING FACILITIES	CONDITION	ISSUES TO NOTE
• Permanent bench	GOOD	
• Plaque	GOOD	
• Bollard lighting	AVERAGE	

IMPROVEMENT OPTIONS, SUGGESTIONS & ESTIMATES		
• Install wall plaque / mural on fire station façade celebrating the Village		\$ 2,500
	TOTAL	\$ 2,500

Pigeon Creek Park is a newly installed public space overlooking Pigeon Creek – a tributary to the Milwaukee River. The space serves as a connection behind the Village fire station and the parking lot on Main Street. A plaque exists highlighting recent capital improvement projects.

*108 N. Main Street /
101 Green Bay Road*

.18
ACRES



VILLAGE PARK



EXISTING FACILITIES	CONDITION	ISSUES TO NOTE
• Bandshell	GOOD	
• Concession buildings (3)	GOOD	
• Pavilion building	AVERAGE	
• Permanent benches	GOOD	Not installed on concrete
• Restroom building	GOOD	
• Fishing pier	GOOD	
• Boat launch	GOOD	
• ADA paddlecraft launch	GOOD	
• Memorial fireplace	GOOD	
• Temporary restrooms	AVERAGE	Unsightly appearance
• Tennis courts	POOR	In poor condition - surfacing has failed
• Playground	GOOD	
• Baseball field (3)	AVERAGE	Far eastern diamonds in average/poor condition, seldom used
• Picnic benches	GOOD	
• Walking path	GOOD	

IMPROVEMENT OPTIONS, SUGGESTIONS & ESTIMATES

• Install splashpad/water feature	\$ 400,000
• Replace open air shelter (Ice rink underneath)	\$ 450,000
• Expand parking lot, include EV charging stations, and air pump	\$ 200,000
• Install screening fence for porta-potty area	\$ 5,000
• Install shade structures over dugouts and concrete pads beneath bleachers	\$ 2,000
• Replace tennis courts with combination tennis / pickleball courts	\$ 350,000
• Consolidate rear ball diamonds into one new field	\$ 250,000
• Install music instrument garden	\$ 10,000
• Replace concession building	\$ 200,000
TOTAL	\$ 1,867,000

The Village Park and its riverside setting is considered one of Thiensville's crown jewels. The Park is 16.3 acres with two large parking lots and a boat launch. Tennis courts and three softball/baseball fields are heavily used throughout the summer. A walking trail, the Rotary River Walk and the fish passage natural area provide walking opportunities and views of wildlife. A playground, covered pavilion, kitchen building, bar building, picnic tables, grills, and public restrooms are also available. The Park, athletic fields and building are available for rent for private events.

250 Elm Street

16.6
ACRES



VILLAGE PARK



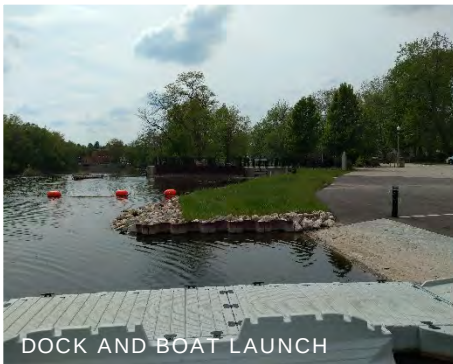
RESTROOM BUILDING



RESTROOM BUILDING



SEATING AREA



DOCK AND BOAT LAUNCH



ADA PADDLECRAFT LAUNCH



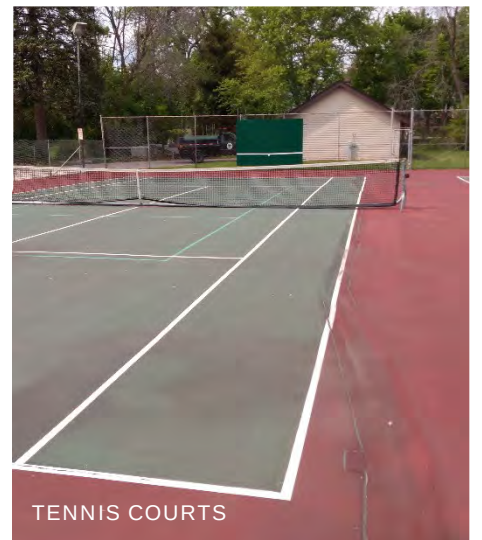
MEMORIAL FIREPLACE



CONCESSION BUILDING



TEMPORARY RESTROOMS



TENNIS COURTS



VILLAGE PARK

Several large project needs have emerged throughout this planning process for Village Park. A splashpad/civic water feature has been the top priority of discussion for more than four years and a location has now been established in the central greenspace of the park (see plan below). This proximity to the playground will provide park users with a contiguous playscape during warm weather months while also activating the node during winter months with integrated in-ground color changing lights. The existing open-air pavilion is aged and in need of replacement within the next 5 to 10 years. The potential exists and is depicted in the concept plan to shift the position of the new pavilion further east and south into the park allowing for greater flexibility and use of the great lawn for special events, providing a vertical backdrop for the lawn, and making a more efficient use of current dead space.



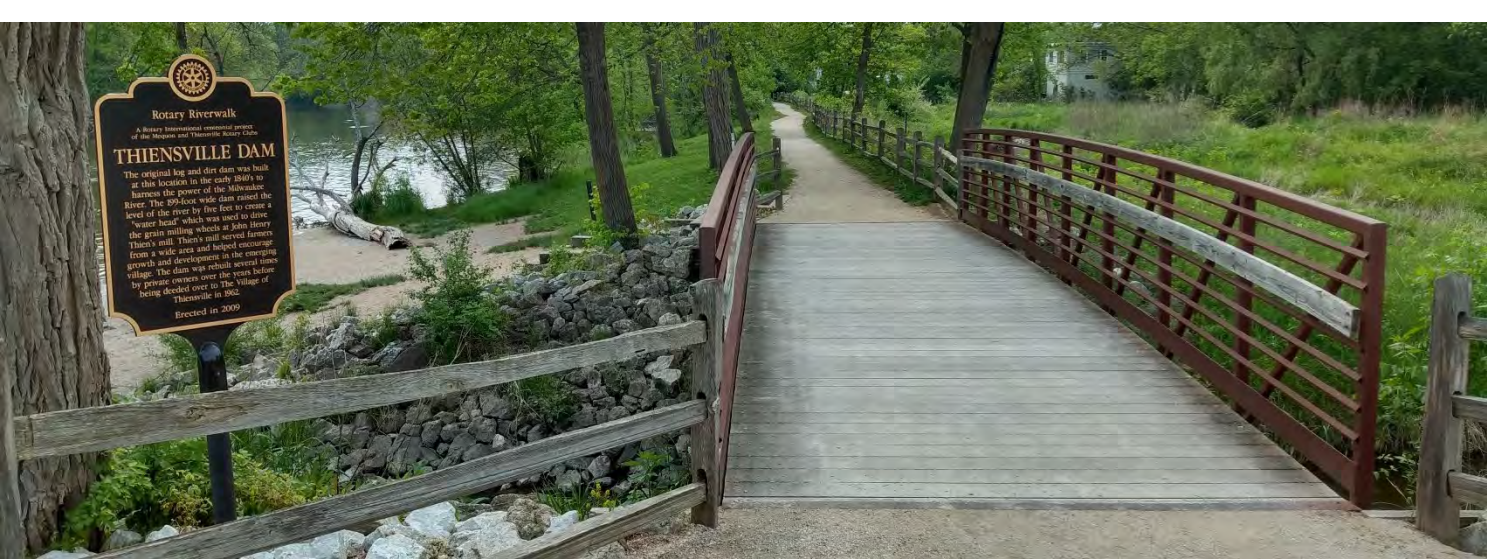
LEGEND	
1	Music Instrument Garden
2	Splashpad Water Feature
3	Great Lawn
4	Festival Tree/Monument
5	New Pavilion/Ice Rink (100x80)
6	Pathway Connection
7	Grand Stairs



The third major project studied is the replacement of the existing tennis courts. A demand for pickleball has emerged as the hottest national recreational trend while tennis is experiencing a decline in participation. Several conceptual alternatives were developed depicting various combinations of tennis and pickleball court overlays of the existing tennis court footprint. Each concept has impact on the adjacent paths and walkways as well as the parking lot. As part of this redevelopment effort, the southern pathway system could be realigned, and a new social area node created including yard games, shaded seating, and other day use amenities.



ROTARY RIVER WALK



EXISTING FACILITIES	CONDITION	ISSUES TO NOTE
• Paddlecraft launch	GOOD	Washouts occur in gravel surfacing area
• Portage area	AVERAGE	
• Fish passage	GOOD	
• Parking area	GOOD	
• Interpretive signs	GOOD	
• Permanent benches	GOOD	
• Overlook (2)	POOR	
• Walking path	GOOD	
• Sign	GOOD	

IMPROVEMENT OPTIONS, SUGGESTIONS & ESTIMATES		
• Install permanent hard surfacing on upper lookout area (concrete, pavers, etc.)		\$ 30,000
• Check paddlecraft launch area for washouts and debris on regular basis		\$ 1,500
	TOTAL	\$ 31,500

The Rotary Riverwalk is a collaborative community project of the Mequon-Thiensville Sunrise Rotary Club, the Thiensville-Mequon Rotary Club, the City of Mequon, and the Village of Thiensville. Rotary Riverwalk will eventually stretch along the Milwaukee River from Village Park in Thiensville to new park space in Mequon at the intersection of Cedarburg and Mequon roads.

250 Elm Street

1.77
ACRES



CRESCENT STORM WATER BASIN OPEN SPACE

SPECIAL USE
PARK

The stormwater retention area exists in an area along Laurel Drive known for flooding. A crushed gravel pathway extends around half of the detention area beginning at Crescent Lane.

230 Crescent Lane

6.4
ACRES



EXISTING FACILITIES	CONDITION	ISSUES TO NOTE
None		

IMPROVEMENT OPTIONS, SUGGESTIONS & ESTIMATES		
None		



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CHAPTER 5: IMPLEMENTATION

Implementation of a plan takes time and perseverance. This chapter outlines the steps required to adopt, amend, and enact the recommendations in Chapter 4. Various funding strategies need to be explored to supplement annual municipal budgets for large capital projects while many of the smaller upkeep and regular maintenance projects can be completed by in-house crews, volunteer groups, or service club labor efforts.

PLAN ADOPTION AND NEED

A successful plan serves as a tool for daily, weekly, monthly, and annual review and use in application. Significant time and energy go into the development of a 5-year plan and continued effort is needed to implement the recommendations. Upon completion of the planning process, a thorough review by municipal bodies, programming staff, maintenance staff, and the Recreation Commission should vet the proposed recommendations and associated budget projections.

Adoption of a POSP serves as confirmation and commitment to move methodically forward towards completion and fulfillment of the plan. Many communities adopt a POSP as part of the Comprehensive Plan which helps to give teeth to the recommendations, specifically when needed for negotiations regarding development project efforts. A current adopted POSP also provides eligibility for certain grant programs.

Planning should be re-visited every five years to keep current with trends, demographic changes, climactic changes, and in response to unforeseen events such as the COVID-19 global pandemic which began in 2020. Should events require a dramatic shift in funding, staffing, or management of the community open space system, a POSP may be amended prior to the sunset of the five-year window.

FUNDING

This planning tool provides a forecast of capital and maintenance requirements as well as long range goal setting. Accomplishing the list of recommendations can be a daunting task, and the projected funding required is often far more a typical municipal budget may allocate. Development of a Capital Improvement Plan (CIP) is a standard process conducted annually by most municipalities to establish budget priorities for the following year. A POSP can be a useful tool in determining the allocations for the park and open space system line items. Chapter 3 of this document outlines the proposed recommendations and the associated opinions of probable construction costs.

There are several mechanisms that can and should be explored to supplement an annual CIP budget for park development.

- A 501(3)(c), or non-profit group allows for donations and planned giving to be handled for both development costs and ongoing maintenance endowments.
- Grants are an excellent source of supplemental capital for park development projects. There are a host of potential programs ranging from local service clubs, to private industry (Pepsi, Nike, etc.), to State infrastructure programs (WisDOT and WiDNR), to federal aid programs (LWCF, etc.). Each of these categories have different cycles and requirements for eligibility. A few of the most commonly used grant sources for Wisconsin park development and acquisition are included in the following table.

Agency	Name	Type	Contact
Wisconsin DNR	Acquisition & Development (ADLP)	Nature Based Recreation Projects	Aid Wisconsin DNR (http://dnr.wisconsin.gov/aid)
Wisconsin DNR	Urban Rivers (UR)	Stream & River Restoration	Aid Wisconsin DNR (http://dnr.wisconsin.gov/aid)
Wisconsin DNR	Urban Green Space (UGS)	Preservation of Ecologically Sensitive Lands and Urban Gardens	Aid Wisconsin DNR (http://dnr.wisconsin.gov/aid)
Wisconsin DNR	Acquisition of Development Rights	Land Purchase and Protection	Aid Wisconsin DNR (http://dnr.wisconsin.gov/aid)
Federal Govt./ Wisconsin DNR	Land and Water Conservation Fund (LWCF)	Acquisition and Development of Active Use Park Projects	Aid Wisconsin DNR (http://dnr.wisconsin.gov/aid)
Federal Govt./ Wisconsin DNR	Recreational Trails Act	Off-road Trail & Pathway Development Projects	Aid Wisconsin DNR (http://dnr.wisconsin.gov/aid)
Wisconsin DOT	Transportation Alternatives Program (TAP)	Multi-modal Transportation Development Projects	Wisconsin Department of Transportation Transportation Alternatives Program (TAP) (wisconsin.gov)
Wisconsin Dept. of Administration	Community Development Block Grant (CDBG)	Acquisition and Development of Public Infrastructure and Park Projects	DOA Community Development Programs (wi.gov)
NRPA	Various	Various Grant Programs for Development and Programming of Parks	Grant Opportunities, Fundraising Resources, Funding National Recreation and Park Association (nrpa.org)
Wisconsin Department of Revenue	Tax Incremental Finance (TIF) / Tax Incremental District (TID)	Municipal	Tax Incremental Financing – Wisconsin Department of Revenue

The Village has pursued several grant funding sources for recent projects including the 2021 Urban Forestry Grant which will help to fund an update of the urban tree inventory, and condition analysis.

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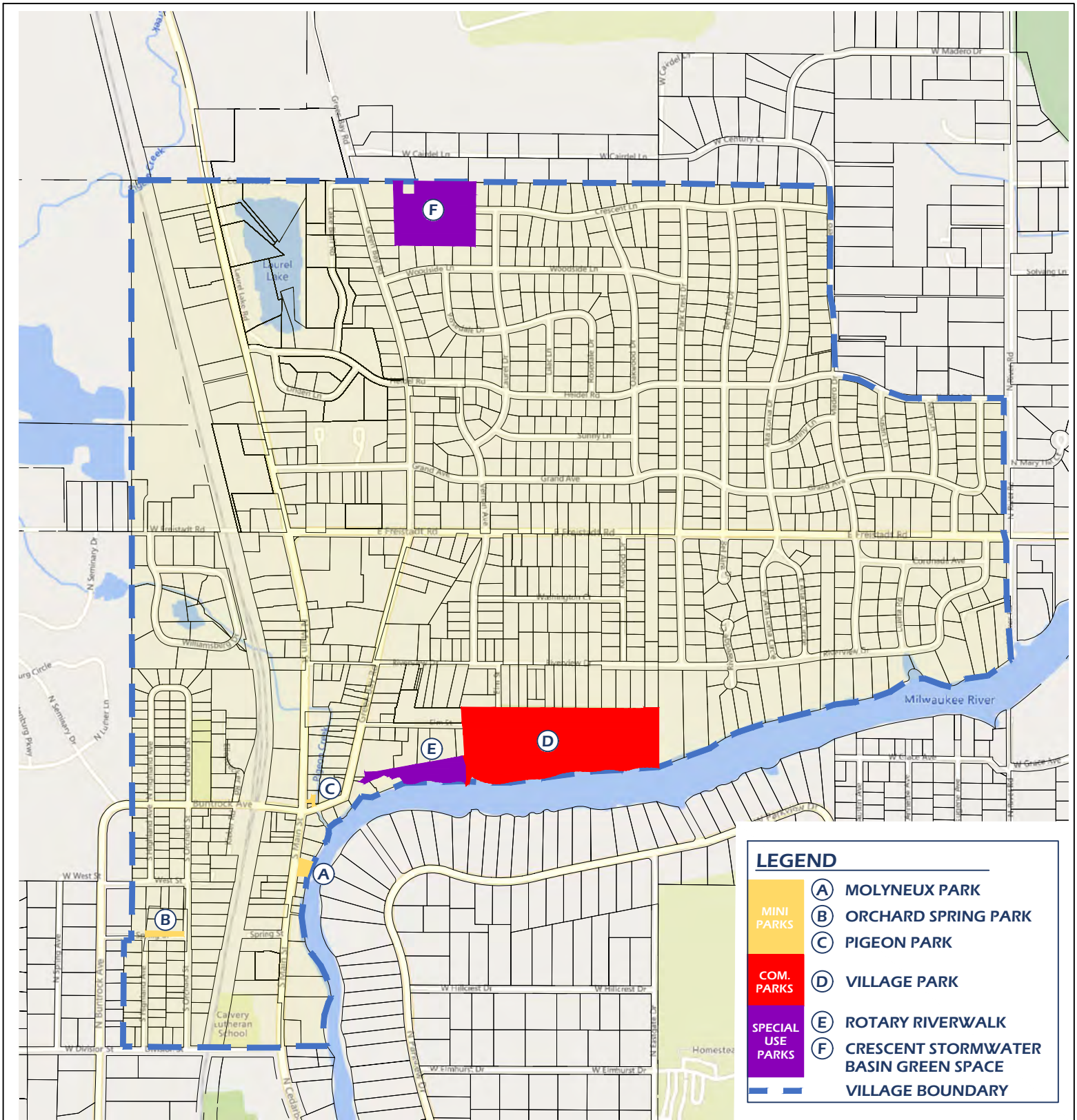




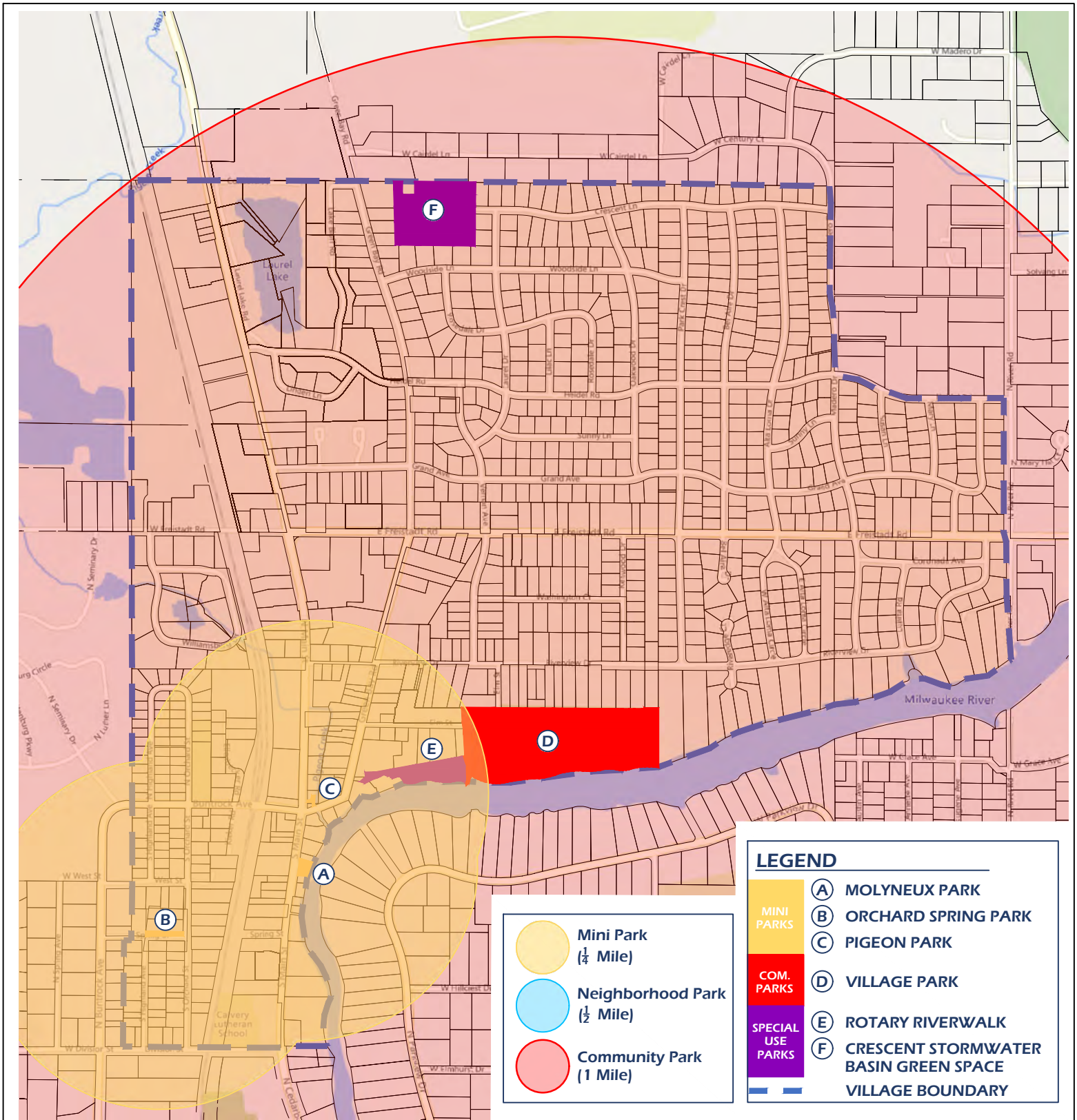
APPENDIX

MAP A - EXISTING PARKS

MAP B - EXISTING PARKS SERVICE AREA



			Project Name: VILLAGE OF THIENSVILLE PARK AND OPEN SPACE PLAN VILLAGE OF THIENSVILLE	 901 Deming Way, Suite 102 Madison, WI 53717 608.664.3910
Sheet Title: MAP A	Project #: 21.018 Date: 22_1206 Rev:	Sheet Title: EXISTING PARKS		



			Project Name: VILLAGE OF THIENSVILLE PARK AND OPEN SPACE PLAN VILLAGE OF THIENSVILLE		 901 Deming Way, Suite 102 Madison, WI 53717 608.664.3910
Sheet Title: MAP B	Project #: 21.018 Date: 22_1206 Rev:	Sheet Title: PARK SERVICE AREA			

VILLAGE OF THIENSVILLE

RESOLUTION NUMBER 2023-01

A RESOLUTION APPROVING THE 2023-2028
VILLAGE OF THIENSVILLE
PARK AND OPEN SPACE PLAN
PREPARED BY PARKITECTURE + PLANNING

It is hereby ordained by the Village Board of the Village of Thiensville, Ozaukee County as follows:

WHEREAS, the Village of Thiensville wishes to establish and maintain high quality parks and recreational services; and

WHEREAS, a Park and Open Space Plan (POSP) would provide an outline for park development and ongoing maintenance of the community-wide open space system as a tool for budget planning purposes and assigning priorities for project implementation; and

WHEREAS, these goals are set forth in the attached 2023-2028 Park and Open Space Plan prepared by Parkitecture + Planning.

THEREFORE, the Village Board approves Resolution 2023-01 a resolution approving the 2023-2028 Village of Thiensville Park and Open Space Plan prepared by Parkitecture + Planning (see attached).

PASSED AND ADOPTED by the Village Board of the Village of Thiensville this 23rd day of January, 2023.

APPROVED

VILLAGE OF THIENSVILLE

Van A. Mobley, Village Board President

ATTEST

Amy Langlois, Village Clerk

OPINION OF PROBABLE CONSTRUCTION COSTS



Project: Thiensville Village Park Courts
Date: January 6, 2023
Exterior Elements

GENERAL

Item	Qty.	Unit	Unit cost	Item Total	Comments
MOBILIZATION	1	LS	\$5,000.00	\$5,000.00	
EROSION CONTROL	1	LS	\$3,000.00	\$3,000.00	
DEMOLITION	1	LS	\$4,000.00	\$4,000.00	
EARTHWORK	1	LS	\$4,000.00	\$4,000.00	
			SUBTOTAL	\$16,000.00	

PAVEMENT

DENSE GRADED BASECOURSE	335	TN	\$22.00	\$7,364.07	
PARKING PATCH AND PATHWAY CONCRETE	317	TN			8"
	18	TN			6"
ASPHALT PAVEMENT	142	TN	\$120.00	\$17,090.15	
PARKING PATCH AND PATHWAY	142	TN			3.5"
CONCRETE - 4"	474	SF	\$11.00	\$5,214.00	
CURB HEAD	212	LS	\$32.00	\$6,784.00	
PAVEMENT STRIPING	1	LS	\$2,000.00	\$2,000.00	
			SUBTOTAL	\$38,452.22	

UTILITIES

STORM MH CONNECTION	1	LS	\$1,000.00	\$1,000.00	
			SUBTOTAL	\$1,000.00	

SITE AMENITIES

PICNIC TABLES	2	EA	\$1,200.00	\$2,400.00	
BENCHES	2	EA	\$1,200.00	\$2,400.00	
SHADE STRUCTURES	1	EA	\$35,000.00	\$35,000.00	
			SUBTOTAL	\$39,800.00	

LANDSCAPING

TREES	7	EA	\$425.00	\$2,975.00	
LANDSCAPE BED	1	LS	\$3,500.00	\$3,500.00	
LAWN RESTORATION	1	LS	\$4,500.00	\$4,500.00	
			SUBTOTAL	\$10,975.00	

Total	\$106,227.22
10% Contingency	\$10,622.72
BASE BID COST	\$116,849.95

OPINION OF PROBABLE CONSTRUCTION COSTS



Project: Thiensville Village Park Courts
Date: January 6, 2023
Interior Elements

GENERAL						
Item		Qty.	Unit	Unit cost	Item Total	Comments
MOBILIZATION		1	LS	\$10,000.00	\$10,000.00	
DEMOLITION		1	LS	\$8,500.00	\$8,500.00	
EARTHWORK		1	LS	\$4,000.00	\$4,000.00	
				SUBTOTAL	\$22,500.00	
PAVEMENT						
DENSE GRADED BASECOURSE		309	TN	\$22.00	\$6,800.64	
	COURTS	309	TN			4"
ASPHALT PAVEMENT		238	TN	\$120.00	\$28,566.00	
	COURTS	238	TN			3"
COURT SURFACING		12420	SF	\$1.50	\$18,630.00	
				SUBTOTAL	\$53,996.64	
UTILITIES						
UNDERDRAIN - 4"		220	LF	\$20.00	\$4,400.00	
				SUBTOTAL	\$4,400.00	
SITE AMENITIES						
COURT FENCING EXTERIOR		432	LF	\$72.00	\$31,104.00	10' HEIGHT BLACK
COURT FENCING INTERIOR		135	LF	\$65.00	\$8,775.00	5' HEIGHT BLACK
COURT GATES		2	EA	\$1,700.00	\$3,400.00	
COURT EQUIPMENT		3	EA	\$2,000.00	\$6,000.00	PER COURT
COURT WINDSCREENS		300	LF	\$10.00	\$3,000.00	3 SIDES
COURT LIGHTS		1	LS	\$96,000.00	\$96,000.00	VILLAGE WILL INSTALL
				SUBTOTAL	\$148,279.00	
Total					\$229,175.64	
10% Contingency					\$22,917.56	
BASE BID COST					\$252,093.20	

File: P:\22.048 Thiensville Courts\CAD\LW.dwg Layout: Courts B User: Blake Thiesen Plotted: Jan 05, 2023 -- 9:19am



LEGEND

- 1 Pickleball Courts
- 2 Tennis/Pickleball Combo Courts
- 3 Parking Expansion (8 Stalls)
- 4 Pathway Re-alignment
- 5 Shaded Sitting Area
- 6 Yard Game Area

Dimensions shown approx.



**PARKITECTURE
+ PLANNING**
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608.886.6808

Project Name:
VILLAGE PARK REDEVELOPMENT

Thiensville, WI 53092

Sheet Title:
COURT REDEVELOPMENT CONCEPT PLAN

Revisions:

No.	Description	Date

Project #: 22.048
Issued For: Review
Date: 1/03/2023

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C100

PUBLIC TREE INVENTORY REPORT AND MANAGEMENT PLAN

FOR THE
VILLAGE OF THIENSVILLE, WI



PREPARED BY:
WACHTEL TREE SCIENCE, INC.
October 2022

Public Tree Inventory Report & Management Plan
For the Village of Thiensville, WI
By Wachtel Tree Science (262)538-1900
October 2022

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ACKNOWLEDGMENTS

Wachtel Tree Science would like to acknowledge the cooperation and efforts of the Village of Thiensville officials and their staff who have made this project possible. Village officials provided Wachtel Tree Science with necessary information and assistance in a timely and professional manner.

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This project was funded with an urban forestry grant from the Wisconsin Department of Natural Resources as authorized under Wis. Stat. 23.097 and with matching funds from the Village of Thiensville.

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EXECUTIVE SUMMARY

The Village of Thiensville recognizes a properly maintained urban forest provides numerous benefits and an increased quality of life to its citizens. These benefits range from air pollution reduction, energy conservation, increased property values, aesthetics and more. The Village contracted with Wachtel Tree Science to do a tree inventory analysis and develop an urban forest management plan designed to increase these benefits for the community.

This document reports the findings of the street and parks tree inventory update that was conducted during the spring of 2022 by Wachtel staff. The results include:

ALL PUBLIC TREES

- 1,699 records were collected, consisting of 1,355 tree records, 169 vacant planting sites, 153 No Replant Sites*, and 22 stumps. No Replant Sites are inventory records that were kept where a tree once was present, but site limitations did not warrant a replacement tree.
- Excluding stumps/vacant/no replant records, this population contains 40 genera and 74 different species of trees. Within the arboricultural industry, a general tree diversity recommendation is the “10-20-30 rule”. This recommends that community forestry managers strive to have no more than 10% of their forest as one species, no more than 20% as one genus, and no more than 30% as one family. The WI DNR supports a more restrictive recommendation of “5-10-20” to avoid the catastrophic losses that have been inflicted from Dutch Elm Disease and the Emerald Ash Borer historically. In practical application, we acknowledge there are hurdles every community must face such as restricted planting budgets and limited nursery stock. In the end, these are recommendations, and each community should do their best to promote the greatest tree species diversity possible.
- Thiensville’s urban forest is close to meeting the more restrictive guidelines for species diversity but should strive to achieve greater diversity. The maple genus (*Acer*, 406 trees, 29.96%) exposes the Village’s urban forest to the greatest risk in the event a pest is introduced that impacts maples. It is positive to note the *Acer* genus is down from 448 trees in 2010, or 30.4% of the total population. The ash and cedar genus (*Fraxinus*, 140, 10.33%; *Thuja*, 144, 10.63%) both meet or exceed the recommend 10% genus diversity. It is expected that the *Fraxinus* genus will be reduced as ash trees are removed due to Emerald Ash Borer. Species that come close to 5% of the total population are Green ash (*Fraxinus pennsylvanica*), and Northern White Cedar (*Thuja occidentalis*). Some species and genera that should be stopped or limited in their planting are maple and cedar trees. Any ash tree species should not be planted due to the presence of the emerald ash borer.

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- The Village of Thiensville’s public tree inventory shows an ideal bell-shaped curve size distribution of trees. Most trees (45.98%) are in the established tree diameter classes of 6-18 inches in trunk diameter. These trees are considered established in the landscape and will grow exponentially, adding value to the landscape. The size class distribution tapers off in the larger size classes, as these larger/older trees decline and are removed. There is a decent population of newly planted trees (203, 29.96%) from 1”-6” trunk diameter. More trees should continue to be planted to replace trees that are naturally lost to old age, or prematurely removed due to invasive, damaging pests (the relationship between ash trees and emerald ash borer).
- A minority of the trees (23.7%) are in good condition classes of 75% or greater, which is not ideal. (68.3%) of all trees are within the fair condition classes of 60 to 70%. The Village has adequate equipment, training, and budget to address these issues. More staff time will need to be directed to forestry operations to manage trees in fair condition. These trees would benefit from routine and safety pruning to increase their condition and overall value.
- Co-dominant branching was noted in approximately 47.5% (643) of all trees. This is a concern to the Village’s urban forest. Many trees have been planted and have only been managed to raise limbs over streets and sidewalks. The result is that a large number of publicly owned trees have poor structure that could have been corrected when the trees were young. Structural pruning should be utilized to improve young tree structure which can reduce future maintenance costs and improve overall tree health. Trees that are 12 inches trunk diameter and larger are beyond the point of corrective pruning. These trees are more susceptible to failure in storm events and have a greater risk of being prematurely removed. Future maintenance should focus on structural pruning in the years following new tree planting. The Village has already taken a step towards better management by hosting forestry training events in the fall of 2022. A great manual available for field instruction on pruning practices is “The International Society of Arboriculture Best Management Practices, Pruning. *Third Edition.*”
- With a tree population facing immediate needs (structural pruning, more young trees), the Village should plan to allocate greater forestry budgets. The Village should look to increase staff hours dedicated to forestry to stay on top of these tree care needs to avoid costly large tree failures in the future, and establish a healthy, diverse tree population for years to come.

STREET TREES

- 1,329 street records were collected made up of 1,046 trees, 123 vacant planting sites, 143 no replant sites and 17 stumps. *No Replant Sites are inventory records that were kept where a tree once was present, but site limitations did not warrant a replacement tree.
- The stocking level is 89.5%, 1,046 of the 1,169 street records are trees (stumps/no replant not included).

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- 85 Ash trees are still in the street tree population. The Village is currently administering an Ash tree preservation program through proactive trunk injected treatments on 75 trees in good condition. 10 Trees will need be removed due to failing health. A minority of treatment trees (5) in fair condition should be monitored annually to determine if preservation is still viable. Further details and budgets are identified in a separate Village Emerald Ash Borer Response Management Plan.
- This population includes 70 different species of trees. 4 tree species, Norway maple (*Acer platanoides*), Northern White Cedar (*Thuja occidentalis*), Green ash (*Fraxinus pennsylvanica*), and Colorado Spruce (*Picea pungens*) exceed the general recommendation of no more than 5% of any individual tree species should make up an urban forest population. 2 tree species, Honeylocust (*Gleditsia triacanthos*) and Crabapple (*Malus spp.*) come very close to meeting the 5% threshold.

PARK TREES

- 370 park and municipal property records were collected consisting of 309 trees, 46 vacant planting sites, 10 no plant sites, and 5 stumps. *Park vacant planting sites are inventory records where a tree was once present, and site conditions favor a new planting. No Replant Sites are inventory records that were kept where a tree once was present, but site limitations did not warrant a replacement tree.
- 55 Ash trees are still in the parks. The Village is currently administering an Ash tree preservation program through proactive trunk injected treatments on 41 trees in good condition. 14 trees will need to be removed due to failing health. Further details and budgets are identified in a separate Village Emerald Ash Borer Response Management Plan.
- This population includes 39 different species of trees. 5 tree species, Green Ash (*Fraxinus pennsylvanica*), Eastern Redbud (*Cercis canadensis*), Northern White Cedar (*Thuja occidentalis*), River Birch (*Betula nigra*), and Norway Maple (*Acer platanoides*), exceed the general recommendation of no more than 5% of any individual tree species should make up an urban forest population.

GENERAL OBSERVATIONS

- The Village has very good species diversity, with some improvements being needed. In future planting, the Village should prohibit the planting of the genus *Acer* (maples) and *Fraxinus* (ash). The Village should limit planting Northern White Cedar, Honeylocust, Spruce, and Crabapple.
- The poor structural condition of ~47.5% of Village streets reflects the lack of regular

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maintenance that promotes better structure. These trees are more susceptible to failure in severe storm events, requiring additional clean up and adding further stress to limited staff time. Trees should not be planted with a mind set of “set it, and forget it”. Young trees require regular maintenance every 2-3 years following planting to promote good structure. Investing budgets in simple forestry tasks early on will reduce unforeseen budgets down the road to complete technical storm response work.

- Total public tree value for the inventory of the Village of Thiensville is **\$1,933,702**. This equates to an average value of **\$1,427** for each inventoried tree along the Village ’s streets and in parks. Given five to ten more years of growth to boost diameter and height, it becomes obvious that the value of the Village of Thiensville’ urban forest would be even higher.
- The Village should be commended on taking proactive action through the 2022 WIDNR urban forestry grant to get on track with effective forestry management.

Policy recommendations, maintenance schedules and budget requirements are outlined in the included management plan to assist the Village of Thiensville in both short- and long-term municipal tree maintenance planning.

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INVENTORY REPORT

I. INTRODUCTION

Trees give some of the first impressions of the Village of Thiensville to visitors and provide intangible benefits to the everyday lives of its citizens. Trees add beauty to the Village of Thiensville by softening and complementing of building architecture and creating a pleasant environment. Trees improve the quality of life now and will continue to do so in the future, provided they are managed to their fullest potential.

The energy savings trees produce are well documented. Trees planted around a home can reduce cooling costs by up to 30%, up to \$250 in savings per home per year. Windbreaks aid in reducing winter heating bills. Proper tree placement can reduce solar radiation (creating shaded areas), focus air movement, and lessen air temperature (offsetting the urban "heat island" effect).

Trees improve the quality of the air around us. One acre of full-grown medium-sized trees removes up to 2.6 tons of carbon dioxide each year and produces enough oxygen for 18 people for a year. Trees trap dust particles and absorb a large variety of harmful gases. The proper placement of trees can reduce noise and pollution to more tolerable levels.

Trees play an important role in stormwater management reducing soil erosion, runoff and providing storm water treatment. Trees intercept falling raindrops, resulting in less runoff, while green spaces encourage infiltration, lowering runoff volumes. Trees, taking up water through their roots, take up nutrients that can harm water quality.

Trees benefit the health and well-being of people in a variety of ways. Trees reduce air pollutants and urban heating effects, reducing health concerns associated with these environmental conditions. Neighborhoods with more trees are shown to have less crime. Interestingly, certain areas have noted increased crime in the years following ash tree loss due to the emerald ash borer. Forested areas provide a calming environment that benefits our mental health. Individuals that have immersed themselves in forested environments have noted improvements in conditions such as stress, depression, and anxiety. These are just a few of the ways in which trees benefit the lives of people.

The trees in our communities improve recreation opportunities by providing comfortable, inviting parks for a variety of activities. They create wildlife diversity in the Village of Thiensville by providing habitat for birds and small animals that otherwise would not be present.

The urban forest increases economic stability by helping to attract and keep businesses. The National Arbor Day Foundation has reported that people will linger longer in shaded shopping areas. Properties rent faster and have fewer turnovers in areas that are well stocked with trees.

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Studies by the United State Department of Agriculture – Forest Service, show that trees can add 10% or more to property values. It is a fact that people will pay more for a property with trees.

The Village of Thiensville’s urban forest can add great value to the community, but it can also be a liability or hazard if not taken care of. Trees that are not managed can fall apart in storms, damaging property and interrupting electric and telephone service. These same trees can pose a risk to people. The Village of Thiensville needs to plan so the best suited trees are planted. No management is an option that always costs more in the long run.

The public trees in the Village of Thiensville are owned by every citizen. Most other public investments a community makes depreciate in value. By investing wisely in trees, values increase for both present and future generations.

II. INVENTORY METHODOLOGY

A. Inventory System

A street and park property tree inventory update was conducted along Village streets and within Village parks in the spring of 2022.

Field data was collected on tablet computers using ESRI Field Maps, a web-based GIS (geographic information systems) tree inventory collector application. All trees and potential planting sites in the public ROW of the Village were inventoried per community mapping supplied by the Village.

B. Public Tree Record Information

- Object Identification - tree or vacant growth space unique identification number
- Inspection Date - date the site record was collected or updated
- Species or Site Status - tree species, vacant plantable or stump
- Address - the house number
- Street Name - the street that corresponds to the address
- Location - the general site type or characteristic (street, park, natural area, etc.)
- Growth Space Type - a more detailed description of the growth space, usually the distance between impermeable surfaces
- Diameter at Breast Height (DBH) - tree diameter measured at 4.5 feet above ground, rounded to nearest inch, for multi-stemmed trees the largest stem was used as the basis for

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measurement and additional stem diameters were recorded in the inventory notes section

- Height Class - the approximate height range of the tree
- Deadwood Percent - an estimate of the percentage of deadwood in the crown of the tree
- Condition Rating - an overall assessment of the health of the tree
- Planting Depth - the location of the root flare with regards to planting depth
- Primary Maintenance Need - the highest priority maintenance need, usually removals or safety pruning
- Secondary Maintenance need - the next most important maintenance need, usually structural pruning or plant health care treatment
- Work Priority - the date by which the primary maintenance need should be completed
- Clearance - hazardous branches, usually low hanging branches that impede vehicle or pedestrian traffic or visually block sight lines
- Utility - a record within a close proximity to overhead or underground utilities
- Notes - a general section to capture other useful information about the site or tree

III. INVENTORY RESULTS AND DISCUSSION

For analysis, the Village of Thiensville's tree population was divided into two categories, street trees and park/municipal property trees. The two categories were defined based on the location information collected. Trees inventoried with the locations termed Street, Natural Area, Building Site, and Other were analyzed as street trees. Park and parking lot trees were labeled Park.

A. Street Tree Inventory

The Village of Thiensville's street tree population consists of 1,329 street records were collected made up of 1,046 trees, 123 vacant planting sites, 143 no replant sites and 17 stumps. *No Replant Sites are inventory records that were kept where a tree once was present, but site limitations did not warrant a replacement tree.

i. Planting Site Summary

There are 123 potential planting sites within the street tree inventory area that meet the criteria for being a suitable planting site. Suitable planting site records were collected along the major

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roadways and within neighborhoods. Medians were also inventoried for tree records, but no potential planting sites were inventoried.

During the inventory, data on buried utilities and overhead wires was collected. No buried utilities were noted for any of the suitable planting sites, but some of these sites may still be impacted by underground utility conflicts which may prohibit planting.

One of the criteria for being a suitable planting site is absence of overhead wires. This means all the vacant planting sites inventoried have no limitations in term of growth and overall height, but sites with overhead utilities can be planting sites when the appropriate tree species is selected for those locations. Small growing trees such as Serviceberry, American Hornbeam, Hawthorn and Ironwood could be utilized at these locations to limit future maintenance. Vacant planting sites made up 9.3% of the records collected within the street inventory records, but there are potentially more sites within the Village, along medians, within neighborhoods and subdivisions and under or near overhead wire that could be suitable planting locations.

The Village does not actively plant trees in residential neighborhoods where a sidewalk does not exist. This project was an inventory update, records were preserved where a tree was once present, and the site is suitable for replanting. We suggest the Village consider plantings in these spaces to enhance the benefits urban trees provide a community that is described in multiple sections throughout this document.

Trees prefer large planting spaces because they have more space for root growth. Identifying a suitable planting site with a large width (greater than five feet) creates many options when selecting species to plant and is a feature that many municipalities do not have. Distinguishing between different suitable growth spaces allows managers to prioritize planting sites with larger areas. The larger planting areas in these sites allow a wider variety of trees to be planted and will help the Village of Thiensville have healthier trees.

All in all, (89.5%) 1,046 of the 1,169 street records (stumps/no replant not included) have trees (stocking level). This is a higher stocking level than for most of the communities. The normal stocking level is in the 65 to 75% range.

Emphasis should continue to focus on new tree plantings and promoting greater species diversity during the planting process. Since stocking is at an above average level, planting trees is not urgent, but it is an important component of urban forest management. This scenario presents an opportunity to select superior quality tree species when planting budgets are established. If superior tree species replace undesirable species that are removed from the street tree population, the overall value of the urban forest has a greater potential to increase over time.

ii. Species Frequency

Providing for species and age diversity in the urban forest are the two most significant ways to reduce the impact of a destructive pest or disease. Dutch Elm Disease (DED) should have taught us this lesson, but we weren't listening. Municipalities should strive for more strict recommendations of greater species diversity, "no more than 20% in one family, no more than 10% in one genus and no more than 5% of any single species, including cultivars and varieties."

Shown below is an example of how this works:

Plant no more than 20% of a family: i.e. Sapindaceae (Soapberry Family)

Plant no more than 10% of a genus: i.e.

1. *Acer × freemanii* (Autumn Blaze Maple)
2. *Acer rubrum* (Red Maple)
3. *Acer platanoides* (Norway Maple)
4. *Acer miyabei* (Rugged Maple)
5. *Acer saccharum* (Sugar Maple), etc.

Plant no more than 5% of a species: i.e. *Acer platanoides*

Optimally, try to have the greatest diversity of species that can be managed. Start planning now for a more diverse urban forest. Finding a wider variety of species will be harder and more expensive, but it is worth it. Work with local nurseries to come up with innovative solutions. Educate policy makers on the necessity to do it right, not fast and cheap. In the long run this will save money, time and effort and increase the benefits a healthy, sustainable urban forest provides.

The 1,046 street trees include 70 different species. The top ten species break down as follows:

Table 1. Top Ten Street Tree Species.

Common Name	Count	Percent
Norway Maple	276	26.39%
Northern White Cedar	113	10.80%
Green Ash	72	6.88%
Colorado Spruce	55	5.26%
Honey locust	50	4.78%
Crabapple	45	4.30%
Sugar Maple	34	3.25%
Littleleaf Linden	33	3.15%
Northern Hackberry	32	3.06%

The species that do not fit the recommendation for 5% species frequency are Norway Maples, Northern White Cedar, Green Ash, and Colorado Spruce. The *Acer* (Maples) and *Thuja* (White Cedar) fail to meet the recommendations of 10% diversity and should not be planted. *Picea* (Spruce) is approaching the threshold. The rest of the species, genera and families meet these criteria.

Thankfully the inventory update identified only 2 Callery Pear. This species has exhibited growth habits of an invasive tree species and is currently being considered for inclusion to the NR40 invasive species list. The Village is in a very good position to address this statewide problem. I recommend proactively banning any future plantings of Callery Pear on public property to avoid future problems.

4 of the 70 different street tree species are outside the common recommendation of no more than 5% in one species. The Village is actively working on increasing tree species diversity, though focus will always be needed on this management item. This is not an impossible task. Ash will be removed in the coming years due to emerald ash borer, reducing ash tree frequency in the population. Focusing on planting more diverse, healthy trees will improve the Village's urban forest needs over time. It is promising to note there are roughly only 85 Ash trees left on Village streets. This is a testament to the foresight of Village leaders to stay ahead of this nuisance pest and the damage it has inflicted on the surrounding area. It will be imperative that more species on the recommended street tree species list (see **Appendix B – Tree Species Recommendations**) be planted as Ash trees are removed.

Within the street tree population, the genus *Acer* 34.80%/364 trees (Maple), significantly exceeds the recommendation of no more than 10% in one genus. The Village has been busy dealing with the ramifications of EAB on the Village's ash population. Any problems with Maple will create a larger problem for the Village's urban forest and budgets.

All future planting projects should continue to focus on adding more diversity and quantities to the species mix. Species that could be increased in numbers planted annually include: Yellow Buckeye, Ironwood, Ginkgo, Kentucky Coffeetree, and Swamp White x Bur Oak hybrid.

Norway Maples are the most common tree (26.39%, 276 trees) in the street tree population. A concern is their tendency to develop girdling roots which is a major maintenance issue. Girdling roots are a combination of a nursery problem, a characteristic of the species, and deep planting. The girdling roots tend to kill the trees about thirty to thirty-five years after planting, just as the trees are getting nice sized. This species, because of its opposite branching habit, has the propensity to develop co-dominant stems and included bark. If left unchecked, serious structural issues can develop. This can be prevented by performing training pruning when trees are young. Weak branch unions lead to this species being more susceptible to large branch failure in storms. They also can become invasive through seed dispersal and germination in unwanted areas. For these reasons, Norway maples are not highly desirable street trees.

Ash species (Green, White), have a combined total of 85 trees or 8.13% of the street tree

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population. Trees within this genus host a number of disease and insect problems other than EAB. Although most of these will not cause the tree's demise, they can be a nuisance. Native ash borers, flower gall mites and plant bugs are the most common insect pests of Ash, while anthracnose and ash yellows lead the list of diseases.

The biggest threat to the native ash population is EAB. This is an exotic wood borer that was found attacking and killing ash trees in Michigan during 2002. Since its detection, EAB has killed millions of ash trees and is now found from the east coast of the United States west to Colorado, and from Texas north into Manitoba. EAB is easily spread through the movement of firewood, logs and nursery stock.

It is recommended that an indefinite moratorium continue on all future Ash plantings. Thiensville's EAB management strategy is outlined in their 5-Year EAB Implementation Plan.

Crab Apples comprise 4.3% (45 trees) of the street tree population. These are mostly trees that have been planted in the R-O-W by adjacent homeowners. Species within this genus are very prone to disease, such as apple scab. Apple scab is a disease that has increasingly impacted local crabapple populations. Under normal circumstances, apple scab only causes minor defoliation and reduction in overall tree health. Over the past several years, apple scab has been causing more extreme defoliation. This has largely impacted older crabapples, whereas younger trees tend to be more disease resistant. Even though these trees are ideal for planting under overhead wires and at smaller planting sites. Given the current population, the number of crabapples planted should be very limited, but if planting, disease resistant varieties should be utilized.

Honeylocusts are 4.78% (50 trees) of the street tree population. Some common pests and diseases that impact Honeylocusts include plant bugs, leafhoppers and cankers. Plant bugs and leaf hoppers feed on the leaves of the tree causing distorted and damaged leaves. Severe infestations can cause tip dieback. Neither insect is a major health concern or management problem. Honeylocusts can also get cankers that will eventually girdle and kill the tree. The spread of these cankers can be reduced by ensuring young trees are being watered during droughts, and trees are being pruned properly. Oftentimes, Honeylocusts don't suffer from pests and make good street trees that are very urban tolerant.

Spruce account for ~9.66% (101 trees) of the street tree population. This is a statistic that could require additional attention. There are several common diseases which negatively impact these trees. Both Rhizosphaera needle cast and Cytospora canker cause needle loss and kill branches in the lower portion of the tree. These diseases destroy a tree's form and aesthetics, damage overall health and creates a lot of pruning work. Conifer trees should not be used as street trees because of their pest problem, and they cause view and clearance obstructions in many street settings. They may not initially be a problem on street, but as they grow, increasing in size, they can become problems. All conifers, including Spruce, should be watched to determine when they become a hazard so appropriate action can be taken to mitigate their risk.

Silver Maples make up 2.87% (30 trees) of the street tree population. They are large fast-growing

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trees. This may seem appealing when planting new trees, but this same growth rate causes them to form weak wood and develop poor structure. These characteristics make Silver Maples prone to storm, wind and ice damage. They don't have any major pest problems that affect the overall health of the tree, but given the prevalence of Maple trees within the community if a pest were to damage or kill of Maples trees it would have the same effect as EAB or DED.

It is important to continue the planting of trees with mature heights of 30 feet or less. Some smaller scale trees include: Japanese Tree Lilac, Ironwood, Serviceberry and American Hornbeam. These are important to use in areas with power lines where shorter trees are preferred or in smaller growth spaces (less than five feet between the back of curb and sidewalk).

iii. Street Tree Planting

Though the number of potential planting sites (123) within the Village is minimal compared to other communities, planting is an important component in the overall urban forest plan. Proper species selection is a key to reducing future problems and costs. **Appendix B – Tree Species Recommendations** contains a list of recommended trees and ones to avoid. Planting sites should be greater than 5 feet in width between sidewalk and curb within the ROW to allow for more choices in species and healthier plants due to larger root zones.

When planting, it is best to plant trees of the same species in groupings or using mixed species with similar mature size and growth habit. Alternating species every other tree can create a checkerboard effect that is not very attractive as the trees mature. By planting in groups of three to five, the desired effect of the plants will be achieved. Also, when possible, plant in the back half of the ROW to protect from vehicular and road salt damage. This is particularly important with unrestricted locations when those areas are chosen for planting in the future.

The following modifications are recommended to be incorporated into the “Thiensville Arboricultural Specifications Manual”.

- Place an indefinite moratorium on the planting of Ash and Maple species, due to insect threat and the high frequency of Maple trees throughout the Village.
- Under power lines, plant only trees that are small at maturity (less than 30 feet in height).
- Whenever possible add groups of new species that are currently not being used to any great extent.
- Discourage planting of conifers such as Spruce and Pine species in the ROW by abutting property owners.

Early care is important. Trees will need watering for a two to five-year period depending on how bad the dry periods are. The longer the drought, the more the trees will need to be watered. Water is probably the single most important limiting factor to establishment and good growth in our harsh urban environment.

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Pruning after the trees are established (Training Pruning) is also very important. Try to visit and prune newly planted trees, on average, at least every three years up until they are 6 inches in diameter. The frequency of training pruning will vary depending on the tree species. Some species of young trees, such as hybrid Elms, will require more frequent training pruning (one to two years) than other species, such as Oaks (three years or more). Yearly inspections of new tree species should occur for the first five to eight years to determine the frequency of appropriate training pruning. This will ensure that proper structural pruning is taking place. What can be taken off a tree with a hand pruner or handsaw in year three will need a chain saw in year fifteen. It is not only more expensive but is also more stressful on the tree to wait. Early training pruning will go a long way to reduce costs and provide a safer urban forest by directing future growth.

B. Park/Municipal Property Tree Inventory

Village parks/public properties that were inventoried include: Village Park, Village Hall, Molyneux Park, Spring Street Greenspace, Pigeon Creek Greenspace, assorted Village facilities.

A total of 370 park and municipal property records were collected consisting of 309 trees, 46 vacant planting sites, 10 no plant sites, and 5 stumps. Vacant and no plant sites are records where a tree once existed. New park tree vacant planting sites were not inventoried as part of this project.

I. Species Frequency

The 309 existing park trees are made up of 39 different species. The top ten break down as follows:

Table 2. Top Ten Park and Municipal Tree Species.

Common Name	Count	Percent
Green Ash	50	16.18%
Eastern Redbud	45	14.56%
Northern White Cedar	31	10.03%
River Birch	23	7.44%
Norway Maple	19	6.15%
Black Walnut	12	3.88%
Silver Maple	12	3.88%
Honeylocust	11	3.56%
Norway Spruce	11	3.56%
Northern Hackberry	10	3.24%

Green Ash, Eastern Redbud, Northern White Cedar, River Birch, and Norway Maple are species that exceed the recommended 5% rule. More of other genera, species and varieties on the recommended street and park tree species list need to be planted (see **Appendix B – Tree Species**

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Recommendations).

Tree species to consider suitable replacement park trees are Kentucky Coffeetree, Serviceberry, Ginkgo, White Fir, Baldcypress, Yellow and Ohio Buckeye, Catalpa, and Ironwood.

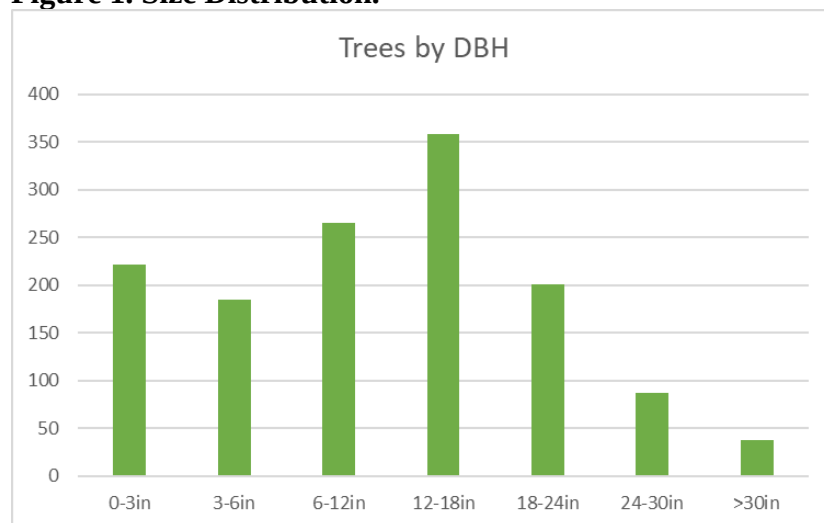
C. Public Tree Size, Condition and Value Discussion

i. Size Class Distribution

The Village of Thiensville's public tree inventory shows an ideal bell-shaped curve size distribution of trees (**Figure 1. Size Distribution**). Most trees (45.98%) are in the established tree diameter classes of 6-18 inches in trunk diameter. These trees are considered established in the landscape and will grow exponentially, adding value to the landscape. The size class distribution tapers off in the larger size classes, as these larger/older trees decline and are removed. There is a decent population of newly planted trees (203, 29.96%) from 1"-6" trunk diameter. More trees should continue to be planted to replace trees that are naturally lost to old age, or prematurely removed due to invasive, damaging pests (the relationship between ash trees and emerald ash borer).

Focus on planting is critical to maintain the populations of younger trees. Future maintenance should address structural issues in younger trees. As trees becomes larger, trying to correct these issues becomes costlier and less effective. Many of the problems with form and structure can be corrected with regular maintenance while the trees are young or moderately young. This also extends tree life and reduces future maintenance costs. The overall condition of younger trees can be improved for less expense than with larger trees where poor structure and form have gotten to the point that they are no longer correctable.

Figure 1. Size Distribution.



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ii. Condition Rating

The overall condition of the Village Street trees is an opportunity for improvement concerning widespread co-dominant stem structural issues (47.5 % of all trees). There are 3.5%, 47 trees within the 0 to 45% condition classes. Trees in this range are very poor quality and warrant removal. The rest of the trees are distributed between the 50 to 55% range (4.5%, 61 trees), the 60 to 65% range (36.8%, 499 trees), the 70 to 75% range (51.6%, 699 trees) and trees rated 80% and greater (3.6%, 49 trees). Trees in the 50 to 55% range are usually in poor health and condition and could be considered for removal in the future. The 60 to 70% range has trees that are less than average condition. The 75% range encompasses trees that are good and average in terms of overall health for a street tree of that species. Trees rated 80% and greater are in great health and have excellent structure. The majority of the Village's trees are in condition classes of 70% and lower which will require improvement.

Co-dominant branching was noted on 47.5% (643 trees) of all trees. Co-dominant stems are an undesirable tree structure that are more likely to fail as stems rip apart in severe storm events. Trees that have been properly pruned throughout their life have better structure and have a better chance of weathering severe storm events. Not all storm damage can be prevented, but a routine pruning program used to promote better tree structure can minimize the amount of storm damage in severe weather.

Younger trees (1 to 6 inches diameter) made up 29.96% (406 trees) of the tree population. 26.4% (107 trees) of those young trees have co-dominant branching. Maintenance should be focused on some of the larger diameter trees in this group before structural problems become worse. Younger trees that are having difficulty becoming established may need to be removed and replaced.

There is opportunity to improve these condition ratings because younger trees tend to be more vigorous. They require more frequent pruning visits, once every two to three years versus every five to seven years for routine prune (trees greater than 6 inches in diameter). Supplemental watering for at least two years after transplanting is also a critical component of early tree maintenance. It is imperative to keep on top of the pruning and moisture requirements of younger trees, so their condition rating improves as they grow in size, and they don't become liabilities later in life. The key is to strive to maintain a high condition as the trees become older.

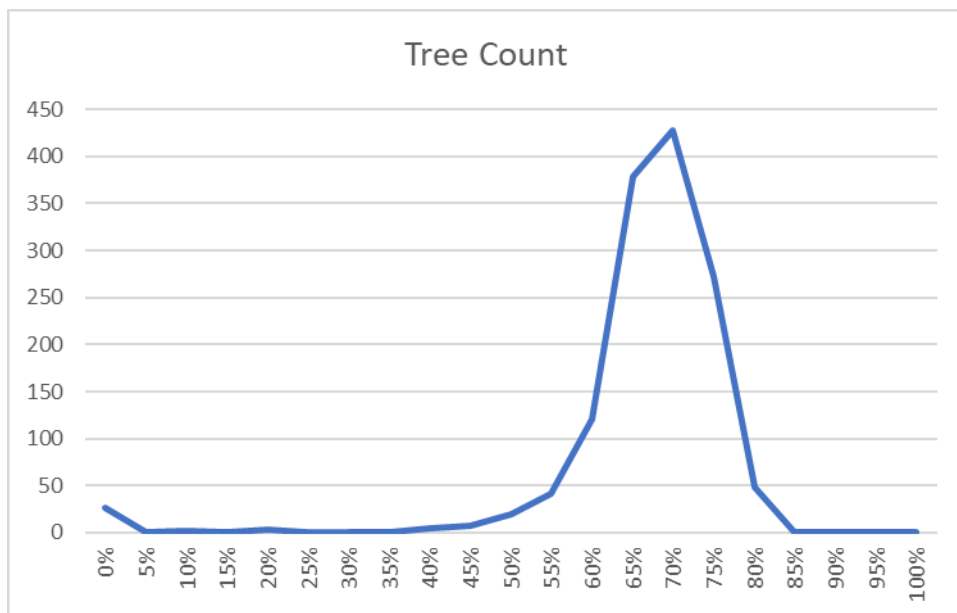
In the larger trees ranges (greater than 6 inches in diameter), 96.4% (886 trees) are in the condition classes greater than 45%. The rest of these trees (3.6% or 33 trees) were rated 45% or less. The focus of routine pruning in these larger diameter size classes should be with trees that are currently in the 60 to 70% condition classes. There is a good chance for a number of these trees to move into higher condition classes, if a five to seven-year routine pruning schedule can be sustained.

The condition of the urban forest needs improvement with most of the trees in condition classes 70% and lower. There is the potential to improve the condition of some of the trees in the lower condition classes. Focus should be given to younger trees that can be training pruned to improve

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structure. Structural issues are easier to address when the trees are smaller. Larger trees can also benefit from Safety and Routine Pruning. Targeted pruning of large trees in the 60 to 70% condition classes, specifically Norway Maples, Freeman Maples and Sugar Maples.

Figure 2. Condition Rating Distribution.



iii. Maintenance

Overall, the Village of Thiensville' urban forest is vibrant and healthy but will always need improvement. A renewed focus on maintenance; primarily training/structural pruning, planting and young tree aftercare, will improve condition ratings and help guarantee the presence of healthy trees that add value to the community for many generations to come.

Table 3. Maintenance Needs.

	Diameter Range					Total
	1"-6"	7"-12"	13"-24"	25"-35"	36"+	
Remove	14	12	26	5	0	57
Remove Stakes	12	0	0	0	0	12
Routine Prune	0	202	385	61	12	660
Safety Prune	2	5	28	11	3	49
Training Prune	253	16	0	0	0	269
Remove Stump	0	5	13	1	3	22
Tree Heaving Walk/Curb	0	0	2	0	0	2
Girdling Root	2	6	28	1	1	38
Watch	176	86	89	13	0	364

Stumps (22) should be removed. Stump removals are minimal and should be accomplished in the near future. Opening up these sites for new planting will help increase the age and species diversity across the urban forest.

Trees in the 0 to 45% condition classes, with notable cracks or decay and severe pest problems such as DED were classified as a removal. These trees are a high risk and pose a hazard and threat to the community. They should be removed within the next year.

The Village should focus on planting a diverse selection of trees ensuring their streets, parks and public properties are populated with a primarily young and varied urban forest. Proper planting techniques should be utilized to prevent girdling roots that increase maintenance costs and damage the tree's overall health and value. Watering is essential for new plantings, especially during periods of drought or low rainfall. If stakes are utilized, they should be removed as trees become established and establish their own root flare. Currently, there are 2 trees with stakes. They should be removed within the year. Taking the time to properly maintain trees within their first several years of life can increase the overall health and value of these new trees for years to come.

Training Pruning is another important component of tree maintenance and care. Pruning trees when they are young, to improve structure, can reduce future maintenance costs and increase tree health and condition. Trees should undergo training pruning when they are less than 7 inches in diameter. Trees that are closer to the end of this range should be a priority for training pruning before they get too large and structural issues become harder or impossible to resolve. Training Pruning should take place at two- to three-year intervals to spread out pruning sessions so any structural issues don't have to be solved with major pruning cuts.

The focus of Routine pruning in trees greater than 6 inches in diameter should be with trees that are currently in the fair to excellent condition classes. There is a good chance for a number of these trees to move into higher condition classes, if a five- to seven-year routine pruning schedule can be sustained.

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Conifers, such as Spruce and Pines, are not suitable street trees. These trees should be watched and reassessed every five years to ensure they don't become clearance and sightline issues for sidewalks and streets. When they become hazardous, these trees should be removed. Overall, abutting property owners should be discouraged from planting trees within the ROW, especially conifers.

Safety pruning is pruning to reduce a tree's risk and hazard to the community. It is needed when a tree's canopy is made of 15% or more deadwood 2 inches or larger, or there is a clearance issue. Clearance issues can include height of branches over sidewalks and streets, conflicts with lights and signs and visually block views, especially near intersections. There are 49 trees that require safety pruning to eliminate the hazard. The young trees should be raised as they become established to prevent these problems (part of training pruning). Be sure not to elevate the existing canopy too much at one time, or the tree's health can be severely affected.

Focused tree maintenance is essential for maintaining and potentially increasing the value of the Village's urban forest.

iv. Public Tree Value

Total public tree value for the inventory of the Village of Thiensville is **\$1,933,702**. This equates to an average value of **\$1,427** for each inventoried tree along the Village's streets and in parks. A table of value by species can be found in (**Appendix G – Public Tree Value**). Given five to ten more years of growth to boost diameter and height, it becomes obvious that the value of the Village of Thiensville's urban forest would be even higher.

IV. REVIEW AND CONCLUSION

The Village of Thiensville has a healthy urban forest with achievable improvements needed in species diversity, size class distributions and tree conditions. Species diversity almost meets old guidelines, but a goal of reaching newer recommendations with greater diversity should be made. The size class distribution of the forest can be improved by increasing planting efforts. Tree conditions are the area of greatest need. These ratings will be improved by increasing focus on training and structural pruning and increasing regular maintenance cycles.

A tree inventory is a dynamic, powerful management tool. The inventory should be updated to reflect work performed such as new planting and when trees are removed. The entire urban tree inventory should be re-inventoried and updated in 2027.

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URBAN FOREST MANAGEMENT PLAN

I. INTRODUCTION

The purpose of this management plan is to review the data collected in the street, park and municipal property tree inventories and through analysis, develop management scenarios for both tree populations. These management strategies will build upon current practices and provide cost effective suggestions that will improve the health, safety and diversity of the Village's urban forest.

This management plan will focus on the inventoried public tree population excluding the public ash population. A "5-Year Emerald Ash Borer Implementation Plan" has been prepared for the Village as a separate document. That document contains pertinent ash tree data as well as costing over a five-year period for implementation of the plan. The previous section of this document includes discussions on all public trees and gives an overview of diameters, condition and species mix for the entire population.

The Village of Thiensville' urban forest (combined street and park trees) is healthy but requires improvement. Focus on structural pruning and regular maintenance of trees will improve the overall health over time. Focused maintenance (i.e. training pruning, proper mulching and young tree watering) early in a tree's life will be easier than trying to correct a lot of problems later. As it is, there will be continued work in the future due to changing maintenance needs as the trees grow older. This maintenance is imperative for the quality of life, property values and especially the safety of Thiensville's citizens.

The priorities in the Management plan are:

1. Removals, including stump removal.
2. Safety and Clearance pruning.
3. Training pruning (10% of the inventoried trees need this service.)
4. Yearly inspections of lower condition class trees.
5. Identify any additional training needs for Village crews to acquire proper tree skills (planting, pruning, hazard tree recognition, insect and disease identification, etc.)
6. Expand the recommended species list.
 - a. Proper species selection and diversity are key to reduced future costs and a healthy urban forest.
7. Regular maintenance pruning is needed to keep trees healthy.

Removals and safety pruning must be given priority to eliminate hazards. Training pruning, performed early in a tree's growth cycle, establishes proper branching structure and reduces long term maintenance costs. Focus must be maintained, so that low priority items that are easy to do, are not moved up. It is imperative to deal with the most important problems first. As these are dealt with, maintenance costs will decrease, safety will be greatly improved and the value of the Village of Thiensville's urban forest will increase.

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II. STATEMENT OF PURPOSE AND SCOPE

A. Purpose

Build upon the foundation of the comprehensive urban forestry street and park/municipal property tree inventory updated in the summer of 2022 by re-prioritizing field operations along with policies and procedures as needed to enhance the management of the urban forest resource.

B. Scope

This plan provides an outline of the community's urban forestry goals. It gives citizens, community decision makers and the staff of the Village of Thiensville a clear set of strategies to achieve these goals. These goals and strategies, together with the accompanying management plan, propose a timetable of implementation and where possible, provide estimated costs to achieve the goals set forth.

III. MISSION STATEMENT

Where appropriate planting sites are present, create an aesthetic atmosphere in the Village through maintaining a diversity of high quality healthy young, intermediate and mature trees. By providing quality tree care on a low cost and regular basis, public trees will continue to be a significant asset to the Village. Quality care of public trees will also inspire and educate residents to properly care for trees on private property.

IV. GOALS & STRATEGIES

A. GOAL 1: Maintain the Village of Thiensville' urban forest in a cost effective, healthy and safe condition through proper care and maintenance of trees.

Strategies:

- Use the 2022 street and park tree inventories results to establish a maintenance action plan (part of the management plan).
 - Perform comprehensive updated inventory in 2027.
- Implement maintenance goals from the management plan.
- Review yearly work plan with the Village Board in the summer of each year prior to budget submission to the Board.
- Ensure safety with regular inspections of street, park, and municipal property trees.
- Promote homeowners to assume a sense of ownership in public trees by encouraging them to perform seasonal maintenance (i.e. mulching and watering).
 - Village crews and contractors set an example by doing proper tree care.
 - Collect information from (Arbor Day Foundation, DNR, etc.) to be shared with

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- citizens. Set up public events to distribute information.
 - Create tree related articles for the Village website.
- Establish a “best management practices” manual that contains standards and specifications for performing tree work.
 - Continue Village employee training in proper tree care.
 - Hold at least one membership in International Society of Arboriculture (ISA) and Wisconsin Arborist Association (WAA) and have multiple employees attend WAA trainings.
 - Strive to get at least one person on staff to become an ISA Certified Arborist.
 - Consider hiring only private contractors that agree to adhere to proper American National Standards Institute (ANSI) standards and who employ Certified Arborists.
 - Enforce tree protection standards to be part of Public Works contract specifications.
 - Educate others of the importance of trees, along with the current condition and goals for Village of Thiensville’s urban forest.
 - Make sure the importance of the role other Village departments in maintenance and development of the Village ’s Urban Forest is made clear.
- On a regular basis, update 2022 inventory to ensure maintenance records are kept current.
- Maintain “Tree City USA” status.

B. GOAL 2: Establish and maintain maximum tree cover, age and species diversity, with proper site and species selection to minimize hazards and maintenance costs.

Strategies:

- Implement planting goals from the management plan.
 - Review and update recommended species list.
 - Increase budget dollars for street and park tree planting.
 - Increase plantings in areas that were identified in the GIS inventory as currently lacking street trees.
- Seek out additional ways to provide funding for planting.
 - State grants (DOT and DNR.)
 - Community groups.
 - Businesses (homeowner discounts from nurseries where the Village is purchasing planting stock.)
 - Strengthen Developers agreements to reflect the Village’s management plan where they are utilized.

C. GOAL 3: To have an educated public that knows what proper tree care is.

Strategies:

- Promote public awareness through publications and appearances at civic groups and schools.
- Discuss the importance of tree care with Village departments, contractors, and residents.

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V. CURRENT SITUATION

A. Ordinances

Current ordinance language with respect to care and protection of public trees is minimal and spread throughout multiple chapters. See below:

Chapter 62. Sec. 62-106. Street Trees

- Identifies the responsibilities of Village personnel in public tree management, and rights of homeowners in regards to tree care on public property.

Chapter 30. Sec. 30-3. Hazardous or infected trees.

- Defines the parameters of how hazardous or infected trees will be managed within the Village.

Ordinance Recommendations

- It is recommended that a public tree ordinance be drafted that pulls all the existing provisions into one chapter. It needs to be comprehensive and should primarily cover the planting and removal of trees within public rights-of-way. It should also contain provisions governing maintenance or removal of private trees which pose a hazard to the traveling public. Once a tree ordinance is enacted, many of the existing sections can be repealed. Below is a sample table of contents.

CHAPTER XX – URBAN FORESTRY

XX.20 Purpose and Intent

XX.21 Definitions

XX.22 Tree Advisory Board

XX.23 Nuisance Trees Prohibited

XX.24 Standards and Specifications

XX.25 Public Nuisances, Declaration and Abatement

XX.26 Planting, Maintenance and Removal of Public Trees and Shrubs

XX.27 Tree Protection During Construction

XX.28 Private Tree Maintenance

XX.29 Penalty

XX.30 Appeals

This chapter would be the overarching section in the Thiensville Municipal Code that establishes policies, regulations and standards necessary to ensure that the community will continue to realize the benefits provided by its urban forest.

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- Include in the nuisance section, provisions for any potential pest/disease that could threaten the health of the Village's urban forest. Keeping this definition broad, and avoiding identifying specific threats, will allow the Village to be flexible in responding to new pests and diseases that establish in the area over time.
- Creation of a Public Tree Care Manual. A good example for the Village of Howard (Arboricultural Specifications Manual) can be found at the following website: <https://www.Cityofhoward.com/DocumentCenter/View/362>. Also consider, *Best Management Practices for Tree Care Operations* published by the International Society of Arboriculture and various *ANSI Standards for Tree Care Operations* published by the American National Standards Institute. These are excellent supplements to include in a procedure's manual.
- **Appendix H** is intended to provide resource information regarding sample Tree Protection Provisions.

SPECIAL NOTE:

Inserting large amounts of detailed arboricultural information in an ordinance makes it cumbersome and difficult to change. One of the advantages of having management standards and specifications separate from the ordinance is the ease of making changes. A change made by the City Forester or a board is done more quickly and doesn't involve the politics of changing the City Code. Another advantage to separate standards and specifications is that exceptions can be authorized by the City Forester whereas ordinances tend to be absolute. Greater detail can be written into standards and specifications when they are separate, without fear of not being able to change it in the future.

Through these processes, the Village of Thiensville's trees will receive the protection and consideration they warrant.

B. Tree Administration

The responsibility for all street and park trees is overseen by the Public Works Director. This management plan should help establish priorities and commitment in the Village system for nurturing the public tree population. A few problems need to be dealt with now, but in the long term, training and maintenance pruning along with new tree planting are the main priorities for future safety, health and benefits of the urban forest. Time needs to be set aside and taken for maintenance of street and park trees.

The Village currently employs an adequate number of public works staff to manage forestry in-house (minus contracted treatments). These staff members are comfortable in forestry operations using existing forestry equipment and have gone through various formalized forestry training events. Forestry field duties are delegated to public works staff as time allows. This system is adequate when responding to resident forestry requests or tree removal needs. To keep up with

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long term care of the Village's urban forest, a half-time forestry position should be created.

It is critical that this position be implemented as it is important to have a "go to" person for forestry issues. The public, elected officials, other Village staff and state staff need to know who the primary contact is. Also, this person would be the focus of training and support and reduce having multiple people answer questions differently and leading to conflict (i.e. one person asks a parks staffer about pruning along a drive, then asks a public works employee - you can get opposing answers). It can also help in pulling workload from staff (for calls, emergencies, staff questions, etc.) that are not trained or equipped to deal with tree issues.

It is discouraging to only see that roughly 5.5% of the Public Works/Parks budget is utilized for forestry related activities. The public tree inventory report within this document identified ~47.5% of public trees that have poor structure. This is a direct result of deferred, regular maintenance. Establishing a budget now to adequately maintain the Village's tree population will begin the correct process and start the Village's forestry operations on the right track. The financial and administrative support of the Village Administrator and elected officials is crucial to help in moving the urban forestry program forward with an overall focus on the goals and objectives. The Village will need to make changes to meet this challenge.

An internal assessment of Public Works Department highlighted a need for an ISA Certified Arborist. The Village does have staff comfortable in urban tree care. A Certified Arborist with technical experience will provide the needed skill set to spread the workload and focus on other tree care activities. Employees should be kept current with the latest techniques and procedures with staff training days. Appropriate training modules include tree planting, training pruning, chain saw safety, and felling techniques. Continued training will promote safe and efficient work practices.

Currently the Department is adequately stocked with forestry equipment such as chainsaws, various assorted small equipment, and various large loading, lifts, and chipping equipment.

By utilizing the evolving GIS tree inventory, the Department should attempt to establish a rotational pruning cycle within the Village. The goal would be to set up a tree pruning cycle based on a 5- to 8-year rotation. The opportunity the Village is currently presented with is the chance to develop a dashboard within their inventory app that is designed specifically for their forestry needs.

It is important that the work strategies are well thought-out so that they can fit correctly into the existing system of overall departmental responsibilities. A critical factor is to stay current with arboricultural practices. Opportunities for appropriate training for the staff are a priority of management. It is easier to train someone to run a lawn mower than it is to train a person to perform proper pruning. Improper pruning can have long term negative impacts on tree health and Village budgets.

An area that is not seen as a problem is wood residue utilization. Currently wood residues generated by Village forestry operations are utilized by residents or traded for valuable landscape materials (processed topsoil).

C. Inventory Summary – All Public Trees

The Village of Thiensville has a healthy forest, but needs improvement within species diversity, size distribution and condition ratings. All of these components can be improved with focused management over the years.

The distribution of size classes is ideal showing an uneven aged forest with many young trees (30%) within the 1 to 6-inch diameter classes. 46% of trees are in the established and fast growing 6 to 18-inch diameter classes. An uneven aged forest is ideal because as the older age tree classes succumb to mortality and removal, there are numerous young healthy trees that will continue to grow and preserve benefits provided by the overall urban forest.

Approximately 76% of public trees have condition ratings 70% or lower. This is concerning. Improvements can be made using training, routine and safety pruning. Focus should be placed on safety pruning which can eliminate hazards and training pruning which can correct structural issues improving the health of the tree and reducing future maintenance costs.

Overall, the Village has okay species diversity that comes close to meeting the current tree diversity recommendations. There should be no future planting of *Acer* (Maples) and *Fraxinus* (Ash).

Maple trees make up a large portion (30%) of the overall forest. Norway Maple is the main maple species in the Village. Norway maples tend to have co-dominant stems, a poor structural condition. Norway maples are also prone to girdling roots and also tend to have poor structure.

Plant species that are not currently represented in the inventory or have very low numbers but have unique attributes and necessary hardiness include: Swamp White x Bur Oak hybrid, Bitternut Hickory, Ohio Buckeye, Baldcypress, and Ironwood.

VI. REVIEW OF RESOURCE & DISCUSSION

A. Introduction

Priorities in the Goals section for the public trees were set with safety being the most important criteria. Therefore, the first items dealt with were removals (incl. stumps) and safety pruning. A routine pruning program should be implemented on a limited basis, while focusing on taking care of newly installed trees. Ongoing street tree planting is a high priority. The Village should strive to meet a minimum of 25 trees planted annually, and emphasis should be placed on facilitating other funding means to increase this number. Based on vacant planting sites (123 sites), by planting 25 trees per year the Village will reach full stocking within 5 years. This number does not factor in replanting sites where trees were removed. Training pruning needs to be ramped up in 2024 as an important means of directing future growth and reducing costs for the Village's urban forest. After these programs are up and running, the focus can be spread out to include more routine pruning.

It is important to stay focused on the priorities. **Table 4 – Estimated Costs for a Five-Year Implementation Schedule Public Trees – In House** summarizes the expenses by area and function per year. This table was compiled using the priorities from the Goals section and data from all the trees included in the inventory. As problems are corrected, there may be a reduction in cost over time. The yearly budgets are only suggestions and depend on overall funding levels available.

B. Estimated Costs

All projected costs in **Table 4** are made with the assumptions that work will be performed by Village crews with an average cost of \$50.00 per hour for full-time staff. Costs have been calculated managing street and park trees together as an urban forest. Actual costs could vary and no factor for inflation has been included.

Table 4. Estimated Costs for a Five Year Urban Forest Implementation Schedule Public Trees – In House.

Estimated costs for each activity			2023		2024		2025		2026		2027		Five Year Cost
Activity	Diameter Class	Cost/Tree (\$)	# of trees	Total Cost	# of trees	Total Cost	# of trees	Total Cost	# of trees	Total Cost	# of trees	Total Cost	
TREE REMOVALS	1-6"	50.00	14	700.00									
	7-12"	200.00	12	2400.00									
	13-24"	600.00	26	15600.00									
	25"+	875.00	5	4375.00									
Activity Totals			57	23075.00	(M)	12000.00	(M)	12000.00	(M)	12000.00	(M)	12000.00	71075.00
PRIORITY PRUNING (SAFETY, CLEARANCE, DEADWOOD)	1-6"	25.00	2	50.00									
	7-12"	50.00	5	250.00									
	13-24"	100.00	28	2800.00									
	25"+	200.00	14	2800.00									
Activity Totals			49	5900.00	(M)	3750.00	(M)	3750.00	(M)	3750.00	(M)	3750.00	20900.00
TRAINING PRUNING	1-6"	37.50	0	0.00	253	9487.50	0	0.00	0	0.00	0	0.00	
	7-12"	75.00	0	0.00	16	1200.00							
Activity Totals			0	0.00	269	10687.50	(M)	2500.00	(M)	2500.00	(M)	2500.00	18187.50
ROUTINE PRUNING (MAINTENANCE)	7-12"	75.00	0	0.00	0	0.00	0	0.00	75	5625.00	127	9525.00	
	13-24"	150.00	0	0.00	0	0.00	160	24000.00	125	18750.00	100	15000.00	
	25"+	300.00	18	5400.00	55	16500.00	0	0.00	0	0.00	0	0.00	
Activity Totals			18	5400.00	55	16500.00	160	24000.00	200	24375.00	227	24525.00	94800.00
TREE PLANTING	Site Prep	50.00	25	1250.00	25	1250.00	25	1250.00	25	1250.00	25	1250.00	
	Tree Cost	200.00	25	5000.00	25	5000.00	25	5000.00	25	5000.00	25	5000.00	
	Planting	75.00	25	1875.00	25	1875.00	25	1875.00	25	1875.00	25	1875.00	
Activity Totals			50	8125.00	50	8125.00	50	8125.00	50	8125.00	50	8125.00	40625.00
OTHER MAINTENANCE	Stake Removal	12.50	12	150.00	25	312.50	25	312.50	25	312.50	25	312.50	
	Watering (3x)	75.00	50	3750.00	25	1875.00	25	1875.00	25	1875.00	25	1875.00	
	Mulching	15.00	50	750.00	25	375.00	25	375.00	25	375.00	25	375.00	
	Watch	12.50	75	937.50	75	937.50	75	937.50	75	937.50	75	937.50	
	Stump Removal	8.00	392	3136.00	(M)	2000.00	(M)	2000.00	(M)	2000.00	(M)	2000.00	
	Girdling Root	125	38	4750.00	0	0.00	0	0.00	0	0.00	0	0.00	
				13473.50		5500.00		5500.00		5500.00		5500.00	35473.50
Totals per Year				55973.50		56562.50		55875.00		56250.00		56400.00	281061.00

(M) = REGULAR MAINTENANCE ITEM REOCCURRING YEARLY OR ON A CYCLE

In House cost based on \$50.00 per hour
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C. Summary

The data projected in **Table 4** was extrapolated directly from the database created from the public tree inventory update that was conducted during the spring of 2022. The budget provides a starting point for Village staff to see what the current needs are with respect to the public tree population. Staff will have to make some priority choices to keep cost within each annual budget allocation.

Overall cost (excluding emerald ash borer response identified in separate plan) projections for the first five-year period of the Implementation Schedule for all public trees averages about \$56,212 per year over the projected five years. According to discussions with Village Staff, the estimated 2023 starting budget of \$55,973 is an ~28% increase over the actual forestry labor costs spent by the Village in 2022. The current forestry budget averages roughly 5.5% of annual public works/parks expenses. This level of financing will not be enough to support the Village's public trees as they grow into the future. This plan is asking to increase forestry operations to ~7% of public works/parks expenses.

Supplementary funding might be secured through additional Urban Forestry Assistance Grants for implementation of this management plan. There are also other possible funding sources such as American Transmission Company's Pollinator Planting and Community Planting Programs. Additional funding sources include fundraising events in conjunction with the business community or possibly homeowners paying for the wholesale cost of the trees selected for street plantings and the Village paying for the planting labor.

Realize that the costs in the Implementation Schedule are only projections. As stated before, removals and safety issues are of priority. Years two, three, four, and five are when most routine pruning would expand in activity level.

D. Implementation Detail

i. Tree and Stump Removal (see Table 4)

Tree removals (57 total) are taken care of during the first year of the budget. Larger trees within the 13 to 24-inch, and greater than 25-inch diameter classes are likely the most hazardous. After 2023 this activity becomes a regular maintenance item with \$12,000.00 budgeted annually for this expense. All stump removals are completed in the first year. This becomes another regular maintenance expense with an annual budget of \$2,000.00. Since some time has passed from when the inventory was concluded to when this management plan is completed, several of the trees in this category may have already been removed.

ii. Safety and Clearance Pruning (see Table 4)

Safety pruning (deadwood, broken limbs hanging in trees and clearance issues) involves 49 trees in total to be completed in 2023. After work on these trees is completed, \$3,750.00 is budgeted

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every year as a regular maintenance item. Having the trees on a routine pruning cycle of every five to seven years will prevent most of the problems that are now being corrected in the safety category.

There are 18 trees with noted clearance issues. Clearance Pruning is needed to eliminate these hazards that interfere with foot and vehicle traffic and view obstructions. When raising trees, they do not have to be raised evenly. The street side can be raised to allow for truck clearance and the walk side can be left lower to keep more crown surface. View obstructions at intersections and clearance for lights and signage need to be resolved and maintained.

iii. Training Pruning (see Table 4)

The corrective training pruning is spread out over the first 2 years of the five-year rotational pruning schedule. Some trees, because of diameter increase, will move into the routine prune category. Others, because of their species or habit of growth, may be able to be skipped for a rotation. This category involves 269 trees, all in the 1-to-6-inch diameter categories. After 2023, \$2,500 is budgeted annually to prune newly planted trees.

Young trees, depending on the growth habit of the species, should be pruned every two to three years for the first ten years of the establishment period. This is very critical for maintaining street and sidewalk clearances. At the same time, a young tree cannot be raised up (removing lower limbs) too fast or it will not have enough crown area (leaf surface) and will become susceptible to other stresses.

Even more important than clearance pruning, training pruning creates proper structure in the trees. This not only makes the trees safer but will also greatly reduce future pruning expenses. The amount of time and money it takes to remove a one-inch branch with a hand pruner in year five as opposed to using a chainsaw at age 30 is obvious. This can greatly reduce future pruning expense and reduce tree decay along with stress.

iv. Routine Tree Pruning (see Table 4)

This is regular maintenance pruning for all trees (including mature tree pruning). It is crown cleaning pruning that includes training and clearance pruning as needed. As the trees grow older, this category will become even more important.

All trees should be on a five to seven-year pruning cycle to keep the trees at maximum health and to prevent most problems from developing. The number of trees requiring routine pruning increases over the course of the budget as resources previously allocated towards removals and safety pruning become available for regular maintenance such as routine pruning. In fifteen years, the number of trees requiring routine pruning could double and will increase even more over time as the trees mature.

Once the problems are corrected, not budgeting to this area may save money for a year or two. However, problems will reappear needing more money to correct and compromising the safety of citizens. The most cost effective and safe way to manage trees is with routine maintenance pruning. You don't wait for trucks to breakdown before changing the oil because usually it is too late by then! Tree maintenance prevents problems, extends the life of the tree and reduces costs.

v. Tree Planting (see Table 5)

The Village currently plants approximately 25-30 trees per year. This number is sufficient based on the number of potential vacant planting sites (123) being available. These sites have been identified in the street tree inventory. Using the visual mapping information in GIS, management can readily discern where the greatest need for future plantings should take place. It is important to continue introducing new tree species into the street tree population to keep and improve the diversity of the population.

If the Village uses outside contractors for planting, a primary focus should be to establish planting and aftercare specifications (see **Appendix F – Planting Specifications**) that will be adhered to by all private contractors planting in the public ROW. Inspection and enforcement of the specifications is critical at planting time.

According to Village staff, priority is not placed on planting trees in front of residential yards where sidewalk does not exist. This is an opportunity for improvement throughout the Village as these large open growing spaces are ideal for planting street trees. When possible, where the terrace is particularly wide, trees should be planted in the back portion of the right-of-way away from the street. Unless they are small scale trees, they should be at an approximate 45' to 50' spacing. This gives enough room for the mature crown to grow (reducing pruning) and can lessen the potential spread of a future pathogen through root grafts. Also, in many areas a larger vision corner should be left by staying farther away from the corner with plantings.

It is recommended that a community wide planting plan be developed after most of the existing tree problems are corrected (2023 or 2024). Do not use conifers for street side planting, eliminate planting *Acer* (Maples) and *Fraxinus* (Ash) and continue to add more variety in species planted. There are many options to help fund planting; from involving community groups, grants for planting, partnerships with businesses, projects tied to highway work, etc.

The planting that does take place should only be trees from the list of Recommended Tree Planting List (**Appendix B: Tree Species Recommendations**). This is set up to ensure that the proper size tree is used under utility wires or in a narrower tree terrace situation.

Better quality (single leader) planting stock should be specified and required when ordering nursery stock. The Village should expect to receive quality nursery stock from its suppliers that do not exhibit poor structural problems. By using quality nursery stock, the Village will be able to reduce the amount of training pruning time spent correcting problems created in the nursery. This

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is best accomplished by purchasing plant material from nursery firms that are members of the Wisconsin Nursery and Landscape Association (WNLA).

vi. Tree Stake Removal (see Table 4)

There are 12 sites where tree stakes were still in place supporting younger trees. Stake removal is important to prevent potential damage to the trunks of these trees. If the stakes are left on too long and are extremely taut, there is a risk of girdling taking place and causing restriction of water and nutrient flow between the roots and crown, potentially leading to dieback in the crown.

Tree stakes should not be left on for more than two growing seasons. Beginning in 2024, hours are budgeted to remove stakes systematically from trees that were planted one year previously.

vii. Young Tree Watering (see Table 4)

A most critical phase of new tree establishment is young tree watering. Through public awareness and education most newly planted street trees can be watered by the adjoining property owner. This saves the Village substantial employee-hours that can be redirected towards other tree maintenance activities including new park/municipal property tree watering. Supplemental watering of newly planted trees during the first two to three years after planting is crucial to their survival, becoming established and beginning vigorous growth. This initial care sets the course for getting trees started on the right path and reduces their chances of succumbing to insects, diseases or environmental stresses in the future. Minimal dollars have been budgeted to provide two visits to newly established trees during the course of a summer.

It is important to realize that more plants are lost to over-watering than to under watering. Roots need air just as much as they need water. Always check the moisture level under the mulch before watering.

viii. Mulching (see Table 4)

Creating mulched beds around street trees is important to reduce damage to the base of the trees from mowing and string trimmer equipment. It also creates a superior rooting area for improved tree vigor and better aesthetics. When trees are being mulched, care should be taken to avoid piling mulch against the trunk (see **Appendix F – Planting Specifications**). This work needs to be ongoing project of the department. Maintenance funds need to be budgeted every year beginning in 2023 to maintain the mulch at a two to three-inch thickness. This mulch can be wood chips from Village tree care operations (free) or shredded hardwood mulch (will stay in place better, last longer and look nicer, but must be purchased).

Educating homeowners on the importance of installing mulch rings is vital. Numerous instances were observed when conducting the street tree portion of the inventory field work where basal damage had occurred as the result of mower or string trimmer damage.

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ix. Watch (see Table 4)

There is also a projected budget amount that includes watch trees as identified in the inventory. The inspection of these 364 trees are distributed relatively evenly throughout each budgeted year, they are all conifers. They rarely require any maintenance; however, they need to be checked periodically for sight clearance issues where they are planted in the street terrace and general overall health and vigor.

x. Girdling Roots (see Table 4)

Girdling roots is a situation where a root(s) grows around the base of the tree cutting off the flow of materials through the cambium up into the tree. This will slowly kill the tree over several years. It is a very common problem with Norway Maples and the reason why planting Norway Maples is discouraged. Given that there are 295 Norway Maples (21.77% of population) this may become a problem over time. Instead of the trees living eighty plus years, they may only live thirty to forty years. Girdling roots are discovered and correct during a root collar exam utilizes an air spade. This procedure exposes roots in the root crown area and the problem roots can be cut away to correct the problem. However, it is not possible to see all problem roots because they are below the surface. These types of maintenance could reduce the removal and planting costs of leaving a tree with girdling roots. Better species selection for new plantings is the long-term answer.

E. Disease & Insect Problems

i. Dutch Elm Disease

There are 27 Elm Spp. (1.99%) in the entire inventory for the Village. This includes a variety of hybrid species that are less susceptible to DED. Regular inspections are still necessary, and removal of infected elm trees should be programmed into the maintenance schedule to help break the disease cycle and to keep dead or dying trees from endangering the public.

The Village has planted several varieties of disease resistant hybrid elms. This is a great way to keep the *Ulmus* genus part of the species diversity mix. The low planting rate of these trees provides an opportunity for greater tree diversity in the Village's urban forest. A note of caution, these young hybrid trees grow fast. Without regular structural pruning (every 2-3 years for a period of 15 years), these tree can develop poor form and become a hazard. Remember, there is no "set it and forget it" solution with newly planted trees!

ii. Oak Wilt

There was no active oak wilt detected in either the street or park inventoried areas. Oak wilt is a fungal disease that invades the water conducting vessels of the sapwood and causes blockage of these vessels. This disrupts sap flow, causing leaves to wilt and eventual death of the tree. The Red Oak group is more susceptible to the disease than White, Swamp White or Bur Oak. The breakdown of oak species inventoried includes: 1 Northern Red Oak, 8 Swamp White Oak, 1 Bur Oak, and 4 English Oak trees. The Oak family accounts for ~1% (14 trees) of all the public trees that were inventoried in the Village. Planting more *Quercus* tree species is another opportunity for increasing tree diversity in the Village.

Understanding of oak wilt management is critical to properly managing this disease. An excellent publication giving an overview of this disease and its management has been produced by the University of Wisconsin-Extension titled “*Oak Wilt Management – What are the Options*” (publication #G3590).

iii. Spongy Moth

There has been no organized aerial spraying in the Village of Thiensville for the spongy moth suppression program in recent years. It should be noted that increasing spongy moth populations were noted in 2022 across southern Wisconsin. Additional monitoring efforts are recommended in 2023.

iv. Emerald Ash Borer

The EAB is an exotic wood borer that was found attacking and killing ash trees in Michigan during 2002. Since its detection, EAB has killed millions of ash trees and is now found across the eastern United States, west to Colorado, south to Texas, and north into Canada. EAB is easily spread through the movement of firewood, logs and nursery stock and is why people have been the greatest cause for the rapid spread of EAB over the past decade.

EAB is a very destructive pest. This insect attacks and kills white, green, blue, black and all horticultural varieties of ash. This insect attacks not only stressed ash trees but healthy and vigorous ash trees as well. The larvae of this insect feed under the bark undetected, disrupting the flow of nutrients and water between the roots and crown of ash trees. The first visible signs are usually crown dieback. By this time, it is usually too late to save trees.

This pest has been confirmed and is well established across southern and eastern Wisconsin, and is spreading into northern Wisconsin. Using the ash population data from the recent inventory a “5-Year EAB Implementation Plan,” was created to address how the Village will handle the ash tree population. Adherence to this plan will help the Village proactively deal with EAB without drastically impacting the urban forest.

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Additionally, listed below are three websites with current information on EAB:

1. <http://emeraldashborer.wi.gov/>
 - a. EAB internet portal for Wisconsin sponsored by Wisconsin Department of Agriculture, Trade and Consumer Protection, the Wisconsin Department of Natural Resources and the University of Wisconsin – Madison
 - b. Contains information from a Wisconsin perspective on EAB biology, management, survey activities, publications and provides related links
2. <http://www.emeraldashborer.info/>
 - a. Official emerald ash borer web page administered by Michigan State University
 - b. Contains information on EAB biology, distribution, control measures, current research and links to various EAB infested state's web sites
3. <http://dnr.wi.gov/topic/UrbanForests/EABToolBox.html>
 - a. Wisconsin DNR EAB Toolbox for Wisconsin Communities
 - b. Designed for the planning and response needs of municipal governments, including such topics as: "Is Your Community Ready for EAB (video)", "EAB: The Opportunity of a Lifetime", "Readiness Checklist", "What Will Happen if EAB is Found in Your Community?" and "EAB University"

v. Asian Long Horned beetle

The Asian Longhorned Beetle (*Anoplophora glabripennis*, ALB) is a destructive pest that threatens to cause more damage than gypsy moth, the emerald ash borer, and Dutch Elm Disease combined. This is due to the indiscriminate nature of ALB when choosing host trees to feed and lay eggs on. The ALB is known to affect multiple favorable tree species including maple, elm, birch, horse chestnuts, poplar, and willows. These species are in addition to some of the tree species that are becoming popular as municipal tree plantings such as London planetree and Katsura. ALB has currently established in New York, Massachusetts, and Ohio.

Approximately 1/3 of the Village's public tree population is comprised of maples. The Village has a lot to lose if ALB becomes established and should actively monitor for trees displaying signs/symptoms of ALB infestation. Images of the beetle and signs left behind, as well as additional information can be found online at:

<https://www.aphis.usda.gov/aphis/resources/pests-diseases/asian-longhorned-beetle>

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vi. Other Pest Problems (by tree species):

Honeylocust

Leafhoppers and plant bugs (leaf sucking insects that defoliates the tree)

- Relatively easy to control, but the public is often not comfortable with spraying. Can be controlled with a soil injected material for individual high value trees (like park trees or business district area).

Nectria canker

- A fungus that causes a dead area in the bark, usually at a branch crotch area. Important to keep the tree growing vigorously and out of drought stress. Proper pruning cuts and dormant pruning during dry, lower humidity conditions are important.

Linden

Boring insects

- Can be very serious on individual trees. Usually attack branch crotch areas. Buying good planting stock and good training pruning can do a lot to limit this problem. Keeping existing plants healthy and out of stress is very important. Can trunk inject specimen trees but is expensive.

Spruce

Spruce needle casts (Rhizosphaera)

- Rows of black dots (fruiting bodies) on needles. Loss of innermost needles. Shade and irrigation compound the problem.

Cytospora canker

- Dieback and eventual death of lower branches. Disease progresses upward in tree over time. Prune out infected branches during dry conditions. Mulching, supplemental watering and fertilization reduce disease incidence.

Crabapple

Apple scab

- A fungus causing leaf spots, which causes premature leaf drop, and disfigured fruits. Can be treated with two to three foliar sprays annually. Plant disease-resistant varieties.

F. Crew Training

Some general fund money should continue to be included each year for continued forestry training. Serious consideration should be given to have one ISA Certified Arborist on staff and to hold at least one membership with the Wisconsin Arborist Association. Attending the various meetings produced by the WAA and/or the DNR's Urban Forestry working group can provide additional avenues to secure technical training. A goal should be to have at least one International Society of Arboriculture *Certified Arborist* on staff.

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KEY NEEDS OF THE URBAN FOREST

The main needs of the Village of Thiensville' urban forest, as brought out in the inventory and discussions, fall into three categories:

Administrative Needs:

- implementation of the Management Plan
- recommendations for additions and reorganization to the Municipal Tree Ordinance
- supplemental training of crews
- all Village departments understand importance of trees
- revenue generating opportunities

Resource Needs:

- street tree removals
- safety and clearance pruning
- training pruning
- proper species selection to improve diversity
- improve tree condition/health through timely watering and mulching practices
- proper regular maintenance

Community Needs:

- public awareness on policies of trees in the ROW and other public property
- education, especially major disease and insect threats
- involvement of civic groups in funding projects, particularly tree planting

VII. REVIEW OF PLAN

It is vital to the success of the urban forestry program that this Plan be evaluated to see that desired results are being attained. It must be remembered that a Management Plan is a dynamic document. There will certainly be a need to change or add goals, strategies and priorities as time goes on. It will be the responsibility of the appropriate Village departments to review all of the goals, strategies, actions, tasks, and priorities in the Plan in the summer of every year, prior to budget submission, to see that they are achieving the overall Mission and Purpose. Any additions and/or adjustments to the Plan will be made at the time of the review. The Village Board should be informed of these accomplishments. A major review and update should take place in **2027** by an outside urban forestry consulting firm.

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VIII. CONCLUSION

It has been the pleasure of Wachtel Tree Science to assess the data and policies that comprise Thiensville's Urban Forest. The Village's Urban Forest has exceptionally planted with trees. This is a testament to the commitment to Thiensville's Urban Forest on behalf the Village 's residents, administration, and motivated individuals within the Village's staff. The Village should be commended on a job well done in keeping vacant planting spaces filled! With some additional focused management strategies, the Village will be able to improve the overall health and structure of the urban forest, laying the foundation of beautiful trees for years to come.

The Village of Thiensville has a wonderful living, growing resource. The urban forest needs to be managed to avoid serious problems and to achieve its full potential. When managed properly, it will increase in value, giving many benefits to the citizens from cleaner air, cooler homes, increased property values and making the Village of Thiensville a more beautiful community to visit, work and live in.

APPENDICES

Appendix A: Inventory Criteria

Thiensville Tree Inventory – ESRI Field Maps

GENERAL NOTES:

Inventory all trees in the Right-Of-Way (R.O.W.), selected parks and public properties that are 1.0” diameter at breast height (DBH, 4.5 feet above ground) or greater.

- Data fields not applicable to the site being inventoried do not have to be edited

Page 1

Inspection Date - use check box to automatically select the current date or drop down menu to select required date from a calendar

Species - select the species group (common, uncommon or rare) that contains the site description or tree species to being inventoried > select the site description or species from the second drop down menu

- DO NOT use varieties designated for Green Ash, White Ash, Norway Maple or Honeylocust
- Oddball Linden (Boulevard, Sentry, etc.) are Basswood Spp.
- For Norway Maple and other species with purple leaves, write ‘purple leaved’ in NOTES, these trees have slightly different growth characteristics
- For species with variegated leaves, write ‘variegated’ in NOTES, these trees have slightly different growth characteristics
- See sections on VACANT PLANTING SITES or STUMPS for more information how to fill out those site types

COMMON	UNCOMMON	RARE
Vacant	Ailanthus	American Hornbeam
Stump	American Mountain-Ash	Amur Corktree
Alder Spp.	Amur Chokecherry	Balsam Poplar
American Basswood	Amur Maple	Bigtooth Aspen
American Elm	Apple Spp.	Bitternut Hickory
Ash Spp.	Baldcypress	Black Ash
Austrian Pine	Balsam Fir	Black Maple
Birch Spp.	Basswood Spp.	Black Oak
Black Cherry	Black Hills Spruce	Black Spruce
Black Locust	Cockspur Hawthorn	Black Willow
Black Walnut	Cornelian Cherry Dogwood	Blackgum
Boxelder	Dogwood Spp.	Blue Ash
Bur Oak	Douglas-Fir	Bristlecone Pine
Callery Pear Spp.	Eastern Cottonwood	Butternut

Cherry and Plum	Eastern Hemlock	Canada Plum
Colorado Spruce	Eastern Redcedar	Catalpa Spp.
Crab Apple Spp.	Eastern White Pine	Chestnut Oak
Crab Apple Var.	European Alder	Chestnut Spp.
Elm Spp. (Hybrid)	European Hornbeam	Chinese Elm
Freeman Maple	European Larch	Chinkapin Oak
Green Ash	European Mountain-Ash	Common Hoptree
Green Ash Var.	Fir Spp.	Common Persimmon
Hackberry	Ginkgo	Crack Willow
Hawthorn Spp.	Glossy Buckthorn	Cucumbertree
Honeylocust (Thornless)	Honeylocust (Native)	Dawn Redwood
Honeylocust Var.	Hornbeam Spp.	Downy Hawthorn
Horsechestnut	Jack Pine	Eastern Redbud
Ironwood	Juniper Spp.	European Ash
Japanese Tree Lilac	Kentucky Coffeetree	European Beech
Littleleaf Linden	Larch (Introduced)	False Cypress Spp.
Mountain-Ash Spp.	Lilac Spp.	Fraser Fir
Northern Red Oak	Lombardy Poplar	Golden Raintree
Norway Maple	Magnolia Spp.	Japanese Larch
Norway Maple Var.	Maple Spp.	Katsura Tree
Oak Spp.	Northern Catalpa	Korean Mountain-Ash
Other, Unknown	Northern Pin Oak	Mockernut Hickory
Paper Birch	Northern White-Cedar	Ohio Buckeye
Pine Spp.	Norway Spruce	Pagoda Dogwood
Poplar Spp.	Osage-Orange	Pear Spp.
Red Maple	Pin Oak	Pecan
Redmond Linden	Red Elm	Pignut Hickory
Russian-Olive	River Birch	Pin Cherry
Scotch Pine	Rock Elm	Ponderosa Pine
Siberian Elm	Sargent Cherry	Port-Orford-Cedar
Silver Maple	Serviceberry	Quaking Aspen
Spruce Spp.	Shagbark Hickory	Red Mulberry
Sugar Maple	Shubert Cherry	Red Pine
White Ash	Silver Linden	Sassafras
White Ash Var.	Swamp White Oak	Saucer Magnolia
Willow	Sweetgum	Scarlet Oak
	Sycamore	Shingle Oak
	Tamarack (Native)	Silverbell
	Turkish Filbert	Smoketree

	Walnut Spp.	Sourwood
	Washington Hawthorn	Southern Catalpa
	Weeping Willow	Tartian Maple
	White Fir	White Mulberry
	White Oak	White Poplar
	White Spruce	White Willow
	Yew Spp.	Wild Plum
		Yellow Birch
		Yellow BUCKeye
		Yellow-Poplar
		Yellowwood

Address - N/A (automatically filled post process by Ruekert-Mielke)

Street - N/A (automatically filled post process by Ruekert-Mielke)

Side Street - N/A

- Only collect data for communities when requested
- For corner properties with trees located on the adjacent side street, fill Side Street with the name of the adjacent side street.
- Also fill in Side information

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Side

- N/A
- Front
- Right
- Left
- Back
- Median

Location

- Street
- Park
- Parking Lot
- Building Site
- Natural Area
 - Under Special Conditions check wooded area - WA
 - Only inventory trees that are 8 inches DBH or greater
- Other

Year Planted - N/A.

Growth Space

- Open
- 0 - 3 ft - distance between street and sidewalk
- 3 - 5 ft - distance between street and sidewalk
- 5 ft + - distance between street and sidewalk
- Ditch - drainage ditch
- Median - strip of land between lanes of opposing traffic

- Island - strip of land between traffic lanes used for control of traffic movement
- Boxout - space located within downtown sidewalks designated for tree
- Grate - boxout with grate surrounding tree
- Behind Walk - site located behind sidewalk, rather than between the street/curb and sidewalk (usually the R.O.W. ends at the sidewalk, occasionally it can extend beyond the sidewalk and trees may be planted there)
- Other
-

Diameter -

- Measure DBH in inches
 - Round up for trees over the 0.5 inch mark and round down for trees below the 0.5 inch mark
 - For ash trees round up for trees over the 0.3 inch mark
- For multi-stemmed trees measure the largest stem DBH
 - Under NOTES designate the number of stems, ex. '2-stemmed', '3-stemmed', 'clump' (stems less than 2 inches DBH), etc. and the DBH of all the individual stems above 2 inches in diameter
 - For multiple stem trees where stems originate from ground level, under Special Conditions check multi-stemmed - MS and possibly codominant trunks/stems - CT or included bark - IB (stems might have fused together)
 - For single stem tree with codominant stems below 6', measure/record DBH of single stem, under Special Conditions check low crotched - LC and possibly codominant trunks/stems - CT, included bark - IB or poor structure - PS

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Height Class

- N/A
- 0-15'
- 15-30'
- 30-60'
- 60'+

Deadwood Present (%) - estimated the percent of deadwood in the crown, range of 0-100% with 5% increments

- For trees with 15% and greater deadwood normally 2 inches in diameter and greater check deadwood - DW under Special Conditions and 'safety prune' under Needs Priority

Condition Rating (%) - range of 0-100% with 5% increments

- No tree should have a 100% rating for liability purposes

Planting Depth

- N/A
- OK
- Deep, Vigor Good
- Deep, Declining
- For both 'Deep' planting depths, under Special Conditions mark deep planting - DP

Primary Maintenance Needs - list most pressing maintenance need

- Hierarchy: removal, safety, structure, health
- Plant - vacant site suitable for planting
 - Work Priority should be OK by default
- Remove - tree requires removal
 - Tree usually has Condition Rating between 0 and 45%, may be adjusted based on pest problems, etc.
 - Work Priority should occur 'Within One Year' and 'Within Three Years', depends on severity
- Safety Prune - tree require immediate pruning to remove potential hazards,
 - Trees usually has Condition Rating between 50 and 65%, might not apply to clearance pruning
 - For trees with 15% and greater deadwood normally 2 inches in diameter and greater, under Special Conditions check deadwood - DW
 - Trees with hangers - HG require a 'safety prune'
 - Trees that require clearance should be marked low branched - LB in Special Conditions and require a safety prune
 - Work Priority should occur 'Within One Year'
- Routine Prune - normal maintenance for trees with no immediate hazards
 - Trees usually has Condition Rating 65% and above
 - For trees 7 inches and greater DBH
 - Work Priority should occur 'Within Five Years'
- Training Prune - pruning for small trees to encourage good structure
 - Trees usually has Condition Rating 65% and above
 - For trees 6 inches and less DBH
 - Work Priority should occur 'Within Three Years'
- Watch - regularly inspect trees that are not actively managed (pruning, etc.), but still fall within the R.O.W. and inventoried properties
 - All evergreen species are NOT actively managed, Work Priority should occur 'Within Five Years'
 - Trees that 6 inches or less that are establishing poorly
 - We don't want to continue to stress the tree with training pruning
 - Primary Maintenance Needs should be 'Watch' with Work Priority should occur 'Within Three Years'
- Cable & Prune - not applicable to all communities
 - Work Priority should occur 'Within Three Years'
- Girdling Root -
 - Pay attention to Norway Maples
 - Usually Secondary Maintenance Need
 - Under Special Conditions mark deep planting - DP
 - Work Priority should occur 'Within Five Years'
- Remove Stump
 - Work Priority should occur 'Within One Year'
- Remove Stakes - new planting occasionally require stakes to stabilize the tree as it gets established

- Trees should not be staked for more than one year after planting, otherwise the tree might become dependent on the stakes
 - Work Priority should occur 'Within One Year'
- Tree Heaving walk/curb - sidewalk or curb next to tree heaving creating uneven separation that affects the safe use of the sidewalk or uplifting 2 inches and greater
 - Where sidewalk is purposely altered to go around a root flare, list 'sidewalk radius' under NOTES
 - Work Priority should occur 'Within One Year'
 - If the tree is marked for 'Removal' heaving sidewalks don't have to be noted
- Treat

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Secondary Maintenance Needs - list second most pressing maintenance need for tree

- N/A
- Routine Prune
- Training Prune
- Watch
- Cable & Prune
- Girdling Root
- Remove Stakes
- Tree Heaving walk/curb
- For trees that require treatment and a safety prune mark 'Treat' in Primary Maintenance Needs and 'safety prune' in Notes

Work Priority

- OK
- Within One Year
- Within Two Years
- Within Three Years
- Within Four Years
- Within Five Years

Clearance

- Trees that require clearance should be marked low branched - LB in Special Conditions and require a safety prune
- OK
- Traffic - tree branches hang below 14 feet over street
 - These branches typically have damage from passing trucks
- Signs/Lights - where trees are in direct conflict (touching or obstructing the view)
 - Under NOTES list 'street light' or 'stop sign', these types of signs have priority for safety pruning
- Walk - tree branches hang below 8 feet over sidewalk
- Potential View Obstruction

Utility

- For trees that have been utility pruning in the past, mark utility pruned - UP in Special Conditions
 - Condition ratings will normally be 70% or less
- None

- Electric - 10 ft clearance
- Telephone/Cable - 10 ft clearance
- Both
- Underground - 5 ft clearance
- DO NOT include service drops

Notes

- Make note of 'old storm damage', 'upright/columnar' forms, 'multi-stemmed' trees, 'purple' or 'variegated' varieties, 'street lights', 'stop signs' or pest problems

Special Conditions - ways to note atypical/abnormal growth patterns/problems based on a street tree species

Abbreviation	Special Condition	Description
BS	Basal Suckers	suckers growing around base of trunk, any number
BW	Basal Wound	visible/open wound at ground level, actively sealing
CC	Concreted Cavity	concrete in tree
C/D	Cavity/Decay	visible/open cavity
CD	Crown Dieback	deadwood present at the tips of the canopy, crown retreating
CR	Consider Removal	condition rating between 50 and 55%
CT	Codominant Trunks/Stems	no central leader
DFP	Decay Fungi Present	fruiting bodies of decay
DL	Dead Leader	dead codominant stem still present in the tree
DP	Deep Planting	deep planting
DW	Deadwood (15%, 2"+)	trees with 15% and greater deadwood normally 2 inches in diameter
HG	Hanger	hanger
IA	Invasives Around	unintended sprouts (buckthorn, ect.) conflicting with growth space, found in WA and or around conifers
IB	Included Bark	included bark
IM	Improperly Mulched	excessive mulch against trunk of tree
IP	Improperly Pruned	stubs, flush cuts, tears, etc.
LB	Low Branched	branches that impede safe use of area around tree (streets, sidewalks, mower clearance etc.)
LC	Low Crotched	single stem tree with codominant stems below 6', measure/record DBH of single stem
LLD	Large Leader Decay	significant dieback on one significant limb/leader
LML	Lost Main Limb/Leader	stump/wound from damaged large main limb/leader ripped/broken out of tree, usually during a storm event

LN	Leaning	significant abnormal growth pattern, tree may potentially fail
LS	Lightning Struck	lightning struck
MD	Mechanical Damage	trunk wound from mechanical damage (mower damage, struck by cars, construction damage, etc.), BW and/or TW
MS	Multi-stemmed	stems originate from ground level
ND	Nutrient Deficiency	mostly chlorosis
OG	Overgrowing Growthspace	usually large tree in narrow terrace, roots over growing sidewalk/curb
OS	Overshadowed	street trees where private tree dominates public tree's canopy
PL	Poor Location	poor location
PP	Pest Problem	list pest problem under NOTES (apple scab, target canker, etc.)
PS	Poor Structure	IB, LC, significant CT
RD	Root Damage	visible root damage and assumed damage from new construction
RP	Raised Planter	raised planter
RR	Root Rot	visible root decay or fruiting bodies
SP	Sucker Present	canopy water sprouts/suckers, note when vigorous for species
TP	Topped	topped
TS	Trunk Split	unsealed wound/split in trunk, usually remove Within One Year, call client contact to notify
TW	Trunk Wound	visible/open wound on trunk, actively sealing, don't have to include typical frost cracks (for species such as Norway Maples)
UP	Utility Pruned	tree was pruned for utility clearance
WA	Wooded Area	should already be noted in tree location
WG	Weak Growth	recent growth is less than expected for species profile

VACANT PLANTING SITES

Locate vacant planting sites within the following parameters:

terrace width of 5 feet (1.5 meters) or greater that have curb, sidewalk and grass.

- Street tree Growth Spaces with terrace widths that are open, greater than 5 feet, boxout/grate or behind walk that have a curb, sidewalk and grass
- In medians and Growth Spaces not listed above only inventory existing trees, no vacant planting sites will be located
- Vacant planting sites must be spaced 40 feet (12.2 meters) on center
- No overhead restrictions
- Minimum of 5 feet (1.5 meters) from water/gas laterals
- Minimum of 10 feet (3.0 meters) from driveways
- Minimum of 10 feet (3.0 meters) from utility poles
- Minimum of 10 feet (3.0 meters) from hydrants

- Minimum of 10 feet (3.0 meters) from other miscellaneous obstacles (signage, flag poles, fencing etc.)
- Minimum of 50 feet (15.2 meters) from intersections (watch vision triangles!!)
- In the event of an inventory update, if an existing yard or private tree conflicts with a potential planting site, show as a “no plant site” and list reason in Notes
- For vacant planting sites, include the following information:
 - Inspection Date
 - Species - Common, Vacant
 - Location - Street
 - Growth Space - Open, 5 ft +, Boxout, Grate, Behind Walk
 - Primary Maintenance Needs - Plant
 - Work Priority - OK
 - Work Priority managed separately/differently from other maintenance needs

STUMPS

Inventory all stumps in the Right-Of-Way (R.O.W.), selected parks and public properties.

- For stumps, include the following information:
 - Inspection Date
 - Species - Common, Stump
 - Location -
 - Growth Space - Open, 5 ft +, Boxout, Grate, Behind Walk
 - Diameter - diameter of the stump
 - Primary Maintenance Needs - Remove Stump
 - Work Priority - Within One Year
 - Include other information as needed to identify whether or not it would make a suitable planting site

Appendix B: Tree Species Recommendations

RECOMMENDED TREE PLANTING LIST

This list is provided as a guide to some of the most appropriate trees for urban settings in USDA Hardiness Zone 5b for the Village of Thiensville. There is no single perfect tree. These species have been selected for use in our demanding street tree situations. There is a larger group of plants that would grow very well in the Village of Thiensville and should be considered for other landscape uses (parks, etc.). Before selecting any particular species or variety, each site should be evaluated as to: rooting space, soil texture, soil pH, drainage, exposure, overhead wires, and surrounding buildings (crown space). The most important thing to remember is to plant the right tree in the right place.

SMALL TREES (Below 30' Maximum Height) – Acceptable trees for terraces with overhead power lines and/or if terrace is 3-5 feet wide. May be planted in wider terraces.

Scientific Name	Common Name	Cultivars
<i>Amelanchier arborea</i>	Downy Serviceberry	
<i>Amelanchier x grandiflora</i>	Apple Serviceberry	Autumn Brilliance', 'Robin Hill'
<i>Amelanchier laevis</i>	Allegheny Serviceberry	'Cumulus', 'Lustre'
<i>Carpinus caroliniana</i>	American Hornbeam	'Firespire'
<i>Crataegus crusgalli inermis</i>	Thornless Cockspur Hawthorn	
<i>Crataegus phaenopyrum</i>	Washington Hawthorn	
<i>Crataegus viridis</i>	Winter King Hawthorn	'Winter King'
<i>Maackia amurensis</i>	Amur Maackia	'Starburst'
<i>Malus spp.</i>	Flowering Crabapple	'Adirondack', 'Bob White', 'Harvest Gold', 'Jackii', 'Prairiefire', 'Professor Sprenger', 'Red Bud', 'Royal Raindrops', 'Sugar Tyme'
<i>Ostrya virginiana</i>	Ironwood	
<i>Syringa pekinensis</i>	Peking Lilac	China Snow'
<i>Syringa reticulata</i>	Japanese Tree Lilac	Ivory Silk', 'Summer Snow'

MEDIUM TREES (30’-45’ Maximum Height) – Acceptable trees for terraces that are 5-8 feet wide. May be planted in wider terraces.

Scientific Name	Common Name	Cultivars
<i>Aesculus carnea</i>	Red Horsechestnut	‘Ft. McNair’
<i>Aesculus glabra</i>	Ohio Buckeye	‘Sunset’
<i>Cladrastis kentuckea</i>	American Yellowwood	
<i>Sorbus alnifolia</i>	Korean Mountain Ash	

LARGE TREES (Above 45’ Maximum Height) – Acceptable trees for terraces 8 foot and wider.

Scientific Name	Common Name	Cultivars
<i>Aesculus octandra</i>	Yellow Buckeye	
<i>Carya cordiformis</i>	Bitternut Hickory	
<i>Celtis occidentalis</i>	Hackberry	Prairie Pride', 'Chicagoland'
<i>Cercidiphyllum japonicum</i>	Katsuratree	
<i>Corylus colurna</i>	Turkish Filbert	Autumn Gold'
<i>Eucommia ulmoides</i>	Hardy Rubber Tree	
<i>Ginkgo biloba</i>	Ginkgo (male only)	Autumn Gold', 'Magyar', 'Princeton Sentry'
<i>Gleditsia triacanthos inermis</i>	Thornless Honeylocust	Imperial', 'Shademaster', 'Skyline/Skycole', 'Sunburst', 'Street Keeper/Draves'
<i>Gymnocladus dioica</i>	Kentucky Coffeetree	Espresso', 'Prairie Titan'
<i>Liriodendron tulipifera</i>	Tuliptree	
<i>Platanus x acerifolia</i>	London Planetree	‘Exclamation’
<i>Quercus bicolor</i>	Swamp White Oak	
<i>Quercus macrocarpa</i>	Bur Oak	
<i>Quercus robur</i>	English Oak	Skymaster', 'Regal Prince'
<i>Quercus rubra</i>	Red Oak	
<i>Quercus muehlenbergii</i>	Chinkapin Oak	
<i>Quercus x schuettei</i>	Swamp x Bur Oak	
<i>Taxodium distichum</i>	Baldcypress	‘Shawnee Brave’
<i>Ulmus x</i>	Hybrid Elm	Accolade', 'New Horizon', 'Regal', 'Triumph’
<i>Ulmus parvifolia</i>	Lacebark Elm	

EVERGREENS TREES – Do not plant on streets, evergreens obstruct visibility making them hazardous on street locations. Acceptable trees for parks and non-street tree locations.

Scientific Name	Common Name	Cultivars
<i>Abies concolor</i>	White Fir	
<i>Xanthocyparis nootkatensis</i>	Nootka Cypress	
<i>Juniperus chinensis</i>	Chinese Juniper	Iowa', 'Mounntbatten'
<i>Juniperus x</i>	Star Power Juniper	JN Select Blue'
<i>Picea glauca var. densata</i>	Black Hills Spruce	
<i>Picea omorika</i>	Serbian Spruce	
<i>Pinus bungeana</i>	Lacebark Pine	
<i>Pinus flexilis</i>	Limber Pine	Vanderwolf's Pyramid'
<i>Pinus strobus</i>	Eastern White Pine	Fastigiata'
<i>Pinus sylvestris</i>	Scotch Pine	
<i>Pseudotsuga menziesii</i>	Douglasfir	
<i>Thuja occidentalis</i>	Arborvitae	Smaragd', 'Hetz Wintergreen', 'Sunkist', 'Techny'
<i>Thuja plicata</i>	Western White Cedar	
<i>Tsuga canadensis</i>	Canadian Hemlock	

UNACCEPTABLE TREE PLANTING LIST

The following is a list of trees that are considered unacceptable for planting in the road right-of-way. Species on this list may be planted in park or open space settings in the right location and situation. This list should be evaluated periodically, and species may be added or removed as seen fit.

Scientific Name	Common Name	Reason
<i>Acer negundo</i>	Boxelder	Weak wooded, attracts boxelder bug
<i>Acer platanoides</i>	Norway Maple	Over-planted, invasive, girdling roots
<i>Acer rubrum</i>	Red Maple	Intolerant of alkaline soils
<i>Acer saccharinum</i>	Silver Maple	Weak wooded, aggressive roots, heavy seed crop
<i>Ailanthus altissima</i>	Tree-of-Heaven	Weak wooded
<i>Betula spp.</i>	Birch	Susceptible to insects and disease, intolerant of disturbed sites
<i>Catalpa spp.</i>	Catalpa	Littering fruit
<i>Elaeagnus angustifolia</i>	Russian Olive	Disease problems, weak wood

<i>Fraxinus spp.</i>	Ash	Emerald Ash Borer
<i>Ginkgo biloba</i> (female)	Ginkgo (female)	Messy and smelly fruit
<i>Juglans spp.</i>	Walnut	Littering fruit
<i>Malus sylvestris</i>	Common Apple	Fruit tree
<i>Morus spp.</i>	Mulberry	Littering fruit
<i>Populus spp.</i>	Poplar, Cottonwood	Weak wooded, aggressive roots, heavy seed crop
<i>Prunus serotina</i>	Black Cherry	Fruit tree
<i>Prunus domestica</i>	Garden Plum	Fruit tree
<i>Pyrus calleryana</i>	Callery Pear	Exhibits invasive traits
<i>Pyrus communis</i>	Common Pear	Fruit tree
<i>Quercus palustris</i>	Pin Oak	Intolerant of alkaline soils
<i>Robinia</i> <i>pseudoacacia</i>	Black Locust	Weak wooded, thorns, invasive
<i>Salix spp.</i>	Willow	Weak wooded, aggressive roots
<i>Sorbus americana</i>	American Mountainash	Susceptible to insects and disease
<i>Sorbus aucuparia</i>	European Mountainash	Susceptible to insects and disease
<i>Ulmus pumila</i>	Siberian Elm	Weak wooded, aggressive roots

Appendix C: Definitions

American National Standards Institute (ANSI)	Non-profit organization that develops national consensus standards for various industries.
ANSI A3100 Standards	Industry-developed, national consensus standards of practice for tree care.
ANSI Z133.1 Standards	Industry-developed, national consensus safety standards of practice for tree care.
Arborist	Professional who possesses the technical competence gained through experience and related training to provide for or supervise the management of trees and other woody plants in residential, commercial, and public landscapes.
Best Management Practices (BMP)	Best-available, industry-recognized courses of action, in consideration of the benefits and limitations, based on scientific research and current knowledge.
Canopy	Collective branches and foliage of a tree or group of trees.
Superintendent Public Works	Individual in charge of enforcing the provisions of these specifications
Chlorosis	A whitish or yellowish leaf discoloration caused by a lack of chlorophyll, often caused by nutrient deficiency.
Co-dominant Branches or Co-dominant Stems	Forked branches nearly the same size in diameter, arising from a common junction and lacking normal branch union.
Construction Damage	Damage to a tree (branches, trunk or roots) usually from excavating, filling, grade changes, compaction, etc. It can take up to five years for visible signs of this damage to show up in a tree and ten years for a tree to die.
Crown	Upper part of a tree, measured from the lowest branch, including all the branches and foliage.
Crown Cleaning	Removing dead, dying, diseased, and/or broken branches from the tree crown.
Crown Rot	Disease or other decay at the base of a tree or root crown.
Cultivar	Cultivated variety of a plant; cannot be reproduced without human assistance; usually propagated asexually (cloned); compare to variety.
Deadwooding	Removing dead and dying branches from a tree.
Diameter-at-Breast-Height (DBH)	A standard measure of tree trunk size measured at 4.5' above ground level, on the uphill side.
Dieback	Condition in which the branches in the tree crown die from the tips toward the center.

Directional Pruning	A pruning technique that is used to "train" trees to grow in a certain direction (usually away from utility lines or buildings). The most important aspect involves always pruning back to a lateral branch to try and reestablish a leader in that area of the tree.
Flagging	Symptom in which leaves on a branch wilt and may ultimately turn brown without falling from the shoot.
Genus	Taxonomic group of species having similar fundamental traits: botanical classification under the family level and above the species level.
Girdling Roots	Roots located above or below ground whose circular growth around the base of the trunk or over individual roots applies pressure to the bark area, ultimately restricting sap flow and trunk/root growth, frequently resulting in reduced vitality and/or death of the plant.
Hanger	Broken or cut branch that is hanging in a tree.
Hardiness	Genetically determined ability of a plant to survive low temperatures.
Hazard Tree	Any tree or tree part that has a major structural fault that could lead to catastrophic loss and it has an identifiable target (people or property).
Included Bark	Bark that becomes embedded in a crotch (union) between branch and trunk or between codominant stems; causes a weak union.
ISA Certified Arborist	An individual who is trained in the art and science of planting, caring for and maintaining individual trees. And one who has passed the certification examination sponsored by the International Society of Arboriculture and who maintains a current certification.
Leader	Primary terminal shoot or trunk of a tree; large, usually upright stem; a stem that dominates a portion of the crown by suppressing lateral branches.
Live Crown Ratio	Ratio of the height of the crown containing live foliage to the overall height of the tree.
Mature Height	Maximum height that a plant is likely to reach if the conditions of the planting site are favorable.
Pruning Cycle	In municipal arboriculture, the length of time between each maintenance (routine) pruning for a given geographic area.
Qualified Arborist	A worker who, through related training and on-the-job experience, is familiar with the hazards of pruning, trimming, repairing, maintaining, or removing trees, and with the equipment used in such operations, and has demonstrated his/her ability in the performance of the special techniques involved.
Raising or Lifting	Selective removal of lower limbs from a tree to provide clearance.
Root Crown or Collar	Area where the main roots join the plant stem, usually flared at the tree trunk base.
Routine Pruning	Pruning done on a regular basis (usually every five to seven years) that is done mostly for sanitation, therapeutic or maintenance reasons to keep

	trees healthy. Usually involves a combination of crown cleaning, raising and training pruning.
Safety Pruning	Pruning to remove a potential hazard such as large deadwood, broken branches, or branches impeding traffic or pedestrian travel. This type of pruning also includes branches obstructing street signs and light or obstructing vision at intersections and drive approaches.
Significant Trees	Trees that provide significant aesthetic and environmental benefits such as reduction of storm water runoff, preservation of wildlife habitat, enhancement of air quality, and contributes to overall forest health by providing species and size class diversity.
Species	Taxonomic group of organisms composed of individuals of the same genus that can reproduce among themselves and have similar offspring.
Speciman Tree(s) or Stand	Any tree or group of trees which has been determined to be of high value because of its species, size, age, historic significance or other criteria as designated by the Village of Thiensville.
Structural Defects	Any naturally occurring or secondary conditions such as cavities, poor branch attachments, cracks, or decayed wood in the trunk, crown, or roots of a tree that may contribute to structural failure.
Training Pruning	Pruning done to young trees (or sometimes neglected older trees) to establish proper branching structure, critical for long term health and safety of trees. Best if performed on a two to four year cycle.
Tree Protection Zone (TPZ)	A fenced area around a tree or group of trees that will not be disturbed by construction activities.
Trunk Formula Method	Method to appraise the monetary value of trees considered too large to be replaced with nursery or field-grown stock, or a method to produce a fairly accurate monetary value of a large grouping of public trees.
Watch Tree	These are trees that need to be checked yearly due to problems such as poor structure or decay. These are marginal trees that are not bad enough to make the safety prune or removal list, but due to their condition, they may need work in the next few years. They have a higher potential for problems and should be checked regularly due to this.
Utility Prune	Pruning around or near utility facilities with the objective of maintaining safe and reliable utility service.
Variety	Naturally occurring subdivision of a species having a distinct difference and breeding true to that difference; compare to cultivar.

Appendix D: References and Resources

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Shigo, A. L., 1989. "A New Tree Biology (2nd ed.)", Shigo and Trees, Durham, NH, 727 pp.

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Matheny, Nelda, Clark, James R., 1998. "Trees and Development, A Technical Guide to Preservation of Trees During Land Development", Inter. Soc. of Arboriculture, Champaign, IL, 184 pp.

WEBSITES FOR INFORMATION ON TREES

Wisconsin's Emerald Ash Borer Resource <http://emeraldashborer.wi.gov/>

Wisconsin's Gypsy Moth Resource <http://www.gypsymoth.wi.gov/>

Insect Diagnostic Lab, UW-Madison <http://labs.russell.wisc.edu/insectlab/>

Plant Disease Diagnostic Clinic, UW-Madison <https://pddc.wisc.edu/>

UW-Extension Wisconsin Horticulture <https://hort.uwex.edu/>

Tree Care Information <http://www.treesaregood.org/>

Wisconsin Arborist Association <http://www.waa-isa.org/>

Appendix E: Standards and Guidelines

These provisions are intended to provide standards and guidelines for the preservation of trees as part of the land development and/or building construction process. The Village of Thiensville finds that such preservation is necessary to promote the general health and welfare of the community by making the Village a more attractive place to live, protect watercourses and ecology, provide a healthy living environment, and to better maintain control of flooding, noise, glare, and soil erosion. The Village further finds that trees provide beneficial oxygen while reducing the levels of harmful carbon dioxide and reduce air pollution, purify water, and stabilize soil. Trees also provide wildlife habitat and shade, cool the land, reduce noise, and provide an aesthetic value to the land.

Table 5. Sample Specimen Tree List

SPECIES	Min. DBH	SPECIES	Min. DBH
American Basswood	20"	Common Hackberry	16"
Sugar Maple	12"	American Beech	12"
All Serviceberries	6"	All Oaks	12"
Musclewood	6"	White Pine	12"
All Hickories	12"	Butternut	12"
Black Walnut	12"	Black Cherry	12"
Eastern Red Cedar	8"	Ironwood	6"
Tamarack or Larch	12"	White Cedar	12"
Kentucky Coffeetree	12"		

Table 6. Size and Tolerance of Tree Species to Construction Impacts.

This table represents information from three publications: Tree Characteristics, Protecting Trees from Construction Damage, Minnesota Extension Service, University of Minnesota; The Response of Ohio's Native and Naturalized Trees to Construction Activity, T. Davis Sydnor, School of Natural Resources, The Ohio State University; and Relative Tolerance of Tree Species to Construction Damage, Kim D. Coder, The University of Georgia Cooperative Extension Service, Forest Resources Unit.

Tolerance to construction impact can vary greatly according to site characteristics such as soil depth, individual tree characteristics such as rooting habit, prevailing weather conditions such as drought, and the degree of construction impact.

		SOIL	MATURE	HAZARD	
	ROOT	COMPACTION AND	CROWN SPREAD	POTENTIAL	
SPECIES	SEVERANCE	FLOODING	(FEET)	RATING*	COMMENTS
Norway Spruce	tolerant	tolerant	20-30	medium	vulnerable to windthrow
Colorado Spruce	intermediate	tolerant	20-30	medium	vulnerable to windthrow
White Pine	tolerant	sensitive	40-60	medium	sensitive to drainage changes
Austrian Pine	tolerant	sensitive	30-50	medium	sensitive to poor drainage
Scotch Pine	tolerant	sensitive	30-50	medium	sensitive to poor drainage
Tamarack or Larch	tolerant	tolerant	15-25	medium	
Red Cedar	tolerant	sensitive	10-20	low	
White Cedar	tolerant	tolerant	10-20	low	
All Firs	tolerant	sensitive	10-20	medium	
Horsechestnut	sensitive	sensitive	30-40	medium	
Kentucky Coffeetree	intermediate	intermediate	40-50	medium	
Butternut	sensitive	sensitive	50-60	medium	
Redbud	intermediate	intermediate	25-35	low	sensitive to increased light and heat
All Mulberries	tolerant	tolerant	35-50	high	
Sycamore	tolerant	tolerant	60-80	low	
Pagoda Dogwood	intermediate	intermediate	15-20	low	sensitive to increased light and heat
Ironwood	sensitive	sensitive	20-30	low	
Musclewood	sensitive	sensitive	20-30	low	
All Hickories	intermediate	sensitive	30-40	medium	
Amur Corktree	intermediate	intermediate	30-40	medium	
Hackberry	tolerant	intermediate	40-50	low	
Ohio Buckeye	sensitive	sensitive	30-40	medium	
Catalpa	intermediate	tolerant	30-50	medium	
Bur Oak	tolerant	tolerant	40-80	low	
Red Oak	tolerant	sensitive	40-50	low	
White Oaks	sensitive	sensitive	50-90	low	
Sugar Maple	tolerant	sensitive	60-80	medium	sensitive to fill
Red Maple	tolerant	tolerant	40-60	medium	sensitive to wounding
Norway Maple	tolerant	tolerant	60-80	medium	
Black Cherry	intermediate	sensitive	40-50	low	
White Ash	tolerant	intermediate	40-70	medium	
All Serviceberries	intermediate	intermediate	15-20	low	
American Beech	sensitive	sensitive	30-50	medium	sensitive to fill
European Beech	sensitive	sensitive	40-60	medium	sensitive to fill
Honeylocust	tolerant	tolerant	50-75	medium	
Black Walnut	sensitive	intermediate	50-70	medium	

TABLE 7. Guidelines for Tree Protection Zones

SPECIES TOLERANCE TO IMPACTS	TREE AGE	DISTANCE FROM TRUNK* (feet per inch of DBH)
tolerant	young	0.5'
	<1/4 life expectancy	
	middle aged	0.75'
	1/4 - 3/4 life expectancy	
	mature	1.0'
	>3/4 life expectancy	
intermediate	young	0.75'
	middle aged	1.0'
	mature	1.25'
sensitive	young	1.0'
	middle aged	1.25'
	mature	1.5'

Calculating the Optimal Tree Protection Zone

1. Evaluate the species tolerance of impact: tolerant, intermediate, sensitive (see Table 6).
2. Identify specimen tree age: young, mature, or overmature.
3. Using **Table 7**, find the distance (in feet) from the trunk that should be protected per inch of trunk diameter.
4. Multiply the distance by the trunk diameter to calculate the optimum radius (in feet) for the tree protection zone.

Examples:

A healthy 50-year-old, 15" diameter Northern Red Oak (*Quercus rubra*) (good tolerance, mature age):

$$0.75' \times 15'' = 11.25' \text{ radius for Tree protection zone}$$

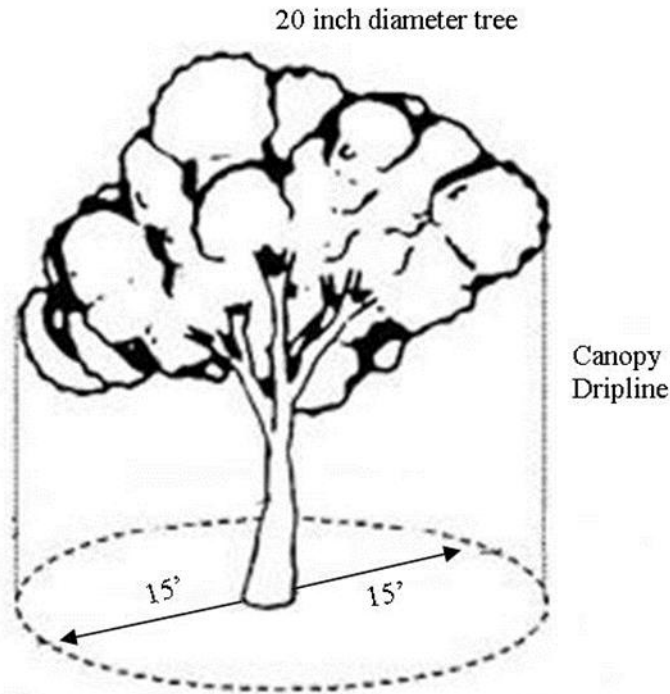
A declining 90-year-old, 26" diameter Shagbark hickory (*Carya ovata*) (intermediate tolerance, overmature age):

$$1.25' \times 26'' = 32.5' \text{ radius for Tree protection zone}$$

The tables and formulas are strictly guidelines, not an absolute rule, and may need to be adjusted in the field to meet local conditions and design criteria. It is best and least expensive to protect trees in groupings during construction. Groupings offer the best protection for soil, root systems and associated plants.

Site Clearing Specifications

Figure 3. Extent of Tree Protection Zone.



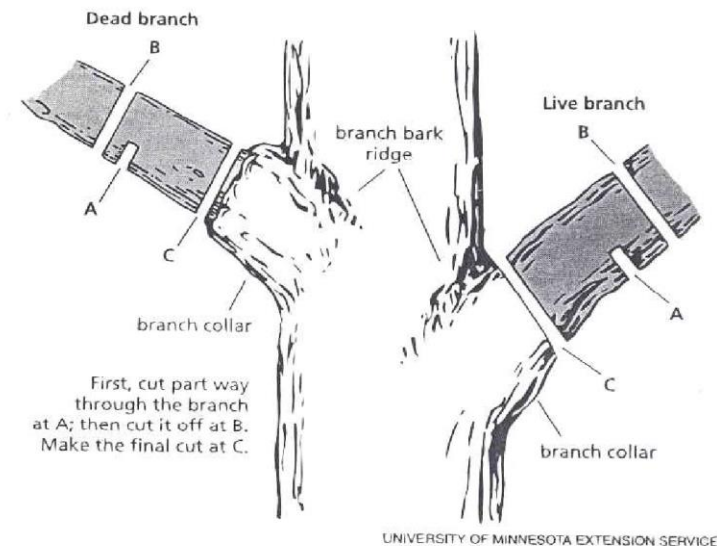
The following work must be accomplished before any demolition or site clearing activity occurs within 50 feet of specimen trees:

1. The site clearance/demolition contractor is required to meet with the Village Forester at the site prior to beginning work to review all work procedures, access and haul routes, and tree protection measures.
2. Limits of all TPZ(s) shall be staked by the contractor in the field. A 4-foot plastic, wood or chain link fence with posts sunk in the ground at no more than 10' on center shall be erected to enclose each TPZ. Weather resistant signs with the wording: KEEP OUT – TREE PROTECTION ZONE shall be erected by the contractor at each TPZ. Signs shall be placed a minimum of 30' on center on the TPZ fencing. Each TPZ shall have a minimum of one sign.
3. Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain must be removed by a qualified arborist and not by demolition or construction contractors. The qualified arborist shall remove the tree in a manner that causes no damage to the tree(s) and understory to remain.
4. Any brush clearing required within the TPZ shall be accomplished by a qualified arborist using hand-operated equipment.

5. Trees to be removed shall be felled so as to fall away from TBZ(s) and to avoid pulling and breaking of roots to remain.
6. Trees to be removed within the tree protection zone shall be removed by a qualified arborist. The trees shall be cut near ground level and the stump ground out.
7. All downed brush and trees shall be removed from the TPZ either by hand or with equipment sitting outside the TPZ. Extraction shall occur by lifting the material out, not by skidding it across the ground.
8. Brush shall be chipped and hauled offsite or stored to be used as a buffer over root zones.
9. Structures and underground features to be removed within the TPZ shall use the smallest equipment possible and operate from outside the TPZ. The Village Forester shall be on site during all operations within the TPZ to monitor demolition activities.
10. All trees to be pruned in accordance with the provided Pruning Specifications.
11. Any damage to trees due to clearing or demolition activities shall be reported to the Village Forester within 6 hours so remedial action can be taken. Timeliness is critical to tree health.
12. If temporary haul or access roads must pass over the root areas of trees to be retained, a roadbed shall be constructed by laying appropriate geo-textile fabric on the surface and covering with 8 inches of mulch or gravel to protect the soil from compaction. The road bed material shall be replenished as necessary to maintain an 8-inch depth.

Pruning Specifications

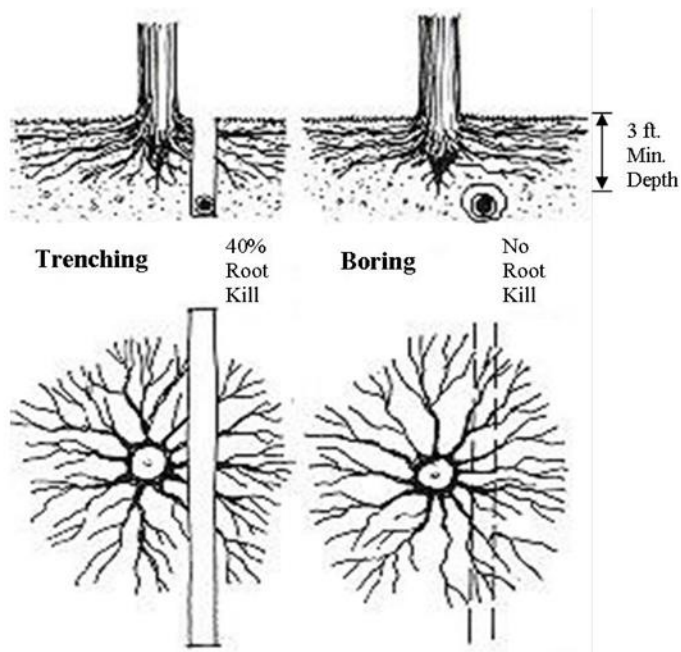
Figure 4. Proper Pruning Techniques.



1. All pruning shall be performed by a qualified arborist under the direct, on-site supervision of a Certified Arborist.
2. All pruning shall be in accordance with the ANSI A300 Pruning Standard (American National Standard for Tree Care Operations) and adhere to the most recent edition of ANSI Z133.1 Safety Requirements for Tree Care Operations.
3. Where temporary clearance is needed for access, branches shall be tied back to hold them out of the clearance zone.
4. Pruning shall not be performed on Oaks or Elms during the time period of April 15th thru September 1st due to the potential spread of Oak Wilt and Dutch Elm disease.
5. Interior branches shall not be stripped out.
6. Pruning cuts larger than 4 inches in diameter, except for deadwood, shall be avoided.
7. No more than 20 percent of live foliage shall be removed within the trees.
8. Brush shall be chipped and chips shall be spread underneath trees within the TPZ to a maximum depth of 6 inches, leaving the trunk clear of mulch.

Construction Specifications

Figure 5. How Boring Saves Trees.



1. Before beginning work, the contractor is required to meet with the Village Forester at the site to review all work procedures, access routes, utility corridors, storage areas, and tree protection measures.
2. Fences have been erected and sign have been posted to protect trees to be preserved. Fences define a specific protection zone for each tree or group of trees. Fences and signs are to remain until all site work has been completed. Fences or signs may not be relocated or removed without the permission of the Village Forester.
3. Construction trailers and traffic and storage areas must remain outside fenced areas at all times.
4. All underground utilities and drain or irrigation lines shall be routed outside the TPZ. If lines must traverse the protection area, they shall be tunneled or bored under the tree. (See Table 3) Utilities shall be placed in a common trench where practical. Soil removed from trenches shall be placed on the side away from trees and replaced as soon as possible. Trench walls shall be shored rather than sloped to reduce trench width.

Table 8. Trench Augering Distances

The distance from tree face for augering in each direction if trench is located within a particular radius of a TPZ (Morell 1984).

Tree Diameter (DBH)	Auger distance from face of tree
0-2"	1'
3-4"	2'
5-9"	5'
10-14"	10'
15-19"	12'
over 19"	15'

5. No materials, equipment, spoil, or waste or washout water may be deposited, stored, or parked within the TPZ.
6. Additional tree pruning required for clearance during construction must be performed by a qualified arborist and not by construction personnel.
7. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use. Any pesticides used on site must be tree-safe and not easily transported by water.
8. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Village Forester so that appropriate treatments can be applied.
9. Any grading, construction, demolition, or other work that is expected to encounter tree roots must be monitored by the Village Forester. Specific locations or tree tag numbers shall be identified prior to work commencing.
10. Erosion control devices such as silt fencing, debris basins, and water diversion structures shall be installed to prevent siltation and/or erosion within the TPZ.

11. Before grading, pad preparation, or excavation for foundations, footings, walls, or trenching, specimen tag # trees, shall be root pruned 1 foot outside the TPZ by cutting all roots cleanly to a depth of 36 inches, normal depth of root penetration. Roots shall be cut manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, a narrow trencher with sharp blades, or other approved root-pruning equipment.
12. Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw or other appropriate sharp cutting instrument.
13. If temporary haul or access roads must pass over the root areas of trees to be retained, a roadbed shall be constructed by laying appropriate geo-textile fabric on the surface and covering with 8 inches of mulch or gravel to protect the soil from compaction. The road bed material shall be replenished as necessary to maintain an 8-inch depth.
14. Spoil from trenches, basements, or other excavations shall not be placed within the TPZ, either temporarily or permanently.
15. No burn piles or debris pits shall be placed within the TPZ. No ashes, debris, or garbage may be dumped or buried within the TPZ.
16. Maintain fire-safe areas around fenced areas. Also, no heat sources, flames, ignition sources, or smoking is allowed near mulch or trees.

Grading

1. Maintain the root flare at the bottom of trees. Do not bury the trunk flare.
2. For small grade changes (1 to 2 feet) slope to natural grade rather than construct a retaining wall. For larger grade changes, retaining walls can increase the distance of natural grade and therefore should be considered.
3. Within or in close proximity to a TPZ, adjust surrounding grades to match base trunk elevation as closely as possible.
4. Where grade must be raised, determine the location of the proposed structure on the fill area, plus required overbuild. If within a TPZ, a retaining wall may be required at that location.
5. If TPZ is in a low area that will collect water, a drain shall be installed as far from the tree as possible, near the retaining wall. Fine grade the area by hand to create flow to the drain.
6. Where required grade changes prohibit the establishment of an adequate TPZ, the tree/trees shall be removed and replanting of appropriate trees (per mitigation requirements). Planting for that location shall be performed after final grades are installed.

Mitigation Requirements for Specimen Trees

1. Report any damage or injury to specimen trees within 6 hours to the Village Forester so that mitigation can take place.
2. If inadvertent compaction occurs in the upper 12" of soil within the TPZ, the soil shall be loosened by a method approved by the Village Forester, such as vertical mulching or soil fracturing.
3. Irrigate to wet the soil within the TPZ during periods of drought as specified by the Village Forester.
4. Where roots 2" and larger are encountered in trenches, they must be cleanly cut back to a sound lateral root. All exposed root areas within the TPZ shall be backfilled or covered within one hour. If this cannot be accomplished, then the roots shall be covered with layered wet burlap until backfilling can occur to reduce evaporation from trench walls.
5. If bark or trunk wounding should occur, current bark tracing and treatment methods shall be performed by a qualified arborist within two days.
6. Where injury occurs to branches, within 5 days, the broken or torn branch shall be cut back to an appropriate branch capable of resuming terminal growth. Work shall be performed by a qualified arborist. If foliage is heat scorched from equipment exhaust pipes, the Village Forester shall be informed within 6 hours.
7. Where a specimen tree is removed by design or error, replacement shall be at a ratio of 1" of DBH of replacement for every 1" of DBH of removal. Replacement trees shall be of a size and species as determined by the Village of Thiensville.
8. If a specimen tree incurs significant damage to its roots, bole or crown, the Village Forester will determine the Tree Appraisal value. This will be determined by adjusting the tree's basic value by its species, location and condition using the most recent edition of the *Guide for Plant Appraisal*, published by the Council of Tree and Landscape Appraisers. The formula and appraisal methods used shall be noted.

Alternative Construction Techniques

1. Where grades are to be raised, excavation towards trees is minimized with L-type footings, with the L of the footing extending towards the fill and away from the tree. In cuts, the footing shall extend towards the cut and away from the tree.
2. For grade changes over 5 feet, two or more smaller retaining walls shall be considered and stepped down the slope to reduce the mass of a larger single wall.
3. Where structures must be placed close to a TPZ, alternative footing designs shall be considered. These include: the use of custom footings in the vicinity of trees that bridge over tree roots; cantilevering the structure, so the building extends outward from the footing; and installing a raised foundation with discontinuous footings (piers).

Aftercare

1. Avoid putting trees in stress for several years after construction. Water during periods of drought and treat for insect and disease infestations when they arise.
2. Contact a Certified Arborist about whether fertilizing trees is appropriate. Be sure not to overdo it. Trees with damaged roots can't take up and utilize excessive amounts of fertilizer. Also consider mycorrhizae applications to assist with root regeneration and Cambistat (a plant growth regulator) to redirect the root to shoot ratio to producing more root growth.
3. Aerate compacted soils if there are large trees on the site where roots are growing in compacted areas of the site. Aeration can be done to shallow depth with standard core aerators or to deeper depths by vertical mulching with air spades or gas powered augers.
3. If root damage or loss should occur, estimate the percentage of damage or loss and thin out the top in direct proportion to root loss.
4. Protect root zones of both existing and newly planted trees with 3 to 4 inches of organic mulch. Keep mulch several inches away from the trunk base and mulch all the way to the dripline where feasible.
5. Keep competing vegetation especially grass away from trees. Consider alternative landscaping in the areas beneath trees. Use native plants and groundcovers that can provide a variety of sizes, colors and forms beneath preserved trees. These plantings preserve tree root systems, conserve water and reduce the reliance on fertilizers and pesticides.

Standards and Guidelines References

American National Standards Institute. 2000. ANSI Z133.1 Safety Requirements. *American National Standards for Arboricultural Operations – Pruning, Repairing, Maintaining, and Removing Trees, and Cutting Brush – Safety Requirements*. New York, NY: American National Standards Institute. 32 pp.

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Council of Tree and Landscape Appraisers (CTLA). 2000. *Guide for Plant Appraisal* (9th ed.). Champaign, IL: International Society of Arboriculture. 143 pp.

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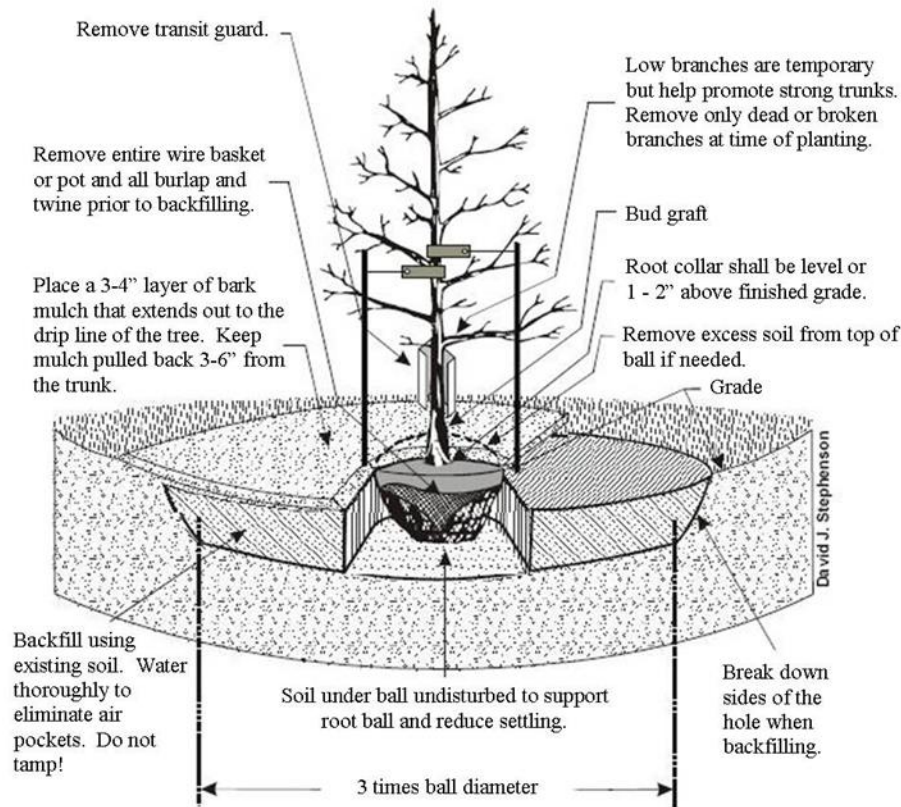
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Appendix F: Planting Specifications

Figure 7. Tree Planting Detail.



a) All plant material shall be true to name and type, and first-class representatives of their species or variety. They shall have normal, well-developed branches, be healthy, vigorous plants free from defects, plant disease, and all forms of infestation or objectionable disfigurements. Either bare root or balled and burlaped trees are acceptable. All plant material shall conform to American Standard for Nursery Stock (ANZI Z60.1-2004 or later).

b) Diggers Hotline will be contacted to mark all planting areas before any work is carried out.

c) Site Disturbances: Take precautions to insure that equipment and vehicles do not disturb or damage existing site grading, walks, drives utilities, plants, etc. Replace and/or return to original condition any damage caused by Contractor's negligence at no cost to Owner.

d) The trees shall be planted according to the planting plan. Unless otherwise approved, the trees shall also be located five (5) feet from all sewer and water laterals, and ten (10) feet from driveways, light poles and fire hydrants. No trees shall be planted within 25 feet of any street corner.

e) All trees planted shall be of minimum size of 1.5" to 2.5" in caliper. Said caliper reading shall be taken 6" above the ground surface.

f) Plants stored on site must be mulched and watered. The root balls can not dry out.

g) The size for the tree installation hole shall preferably be two to three times the root ball in diameter where feasible. Trees shall be planted with the root collar (root flare) exposed and at or slightly above the surface level. For balled trees, the hole shall be at least 18" larger than the largest diameter of the ball and no deeper than the ball. Place no soil on top of the root ball.

h) Care should be taken to remove as much planting material from the root ball as possible without compromising the structure of the root ball. At a minimum, all planting material must be removed from the top half of the root ball. Planting twine must be removed, especially twine that comes into contact with the tree trunk, to prevent any future trunk girdling issues. It is recommended that burlap and wire be removed during the plant installation process.

i) Soil for backfilling around roots and/or root balls shall be the existing soil from the excavation. Where existing soil is rocky and poor quality, the local brown topsoil may be used. Soil shall be pulverized and screened. All material dug from the plant holes and not used shall be removed from the site and disposed of. Immediately after planting, soil around roots and balls shall be thoroughly watered.

j) At the time of planting, trees shall be pruned to remove dead, broken, or diseased branches or cross branches that rub. As much of the leaf surface as possible shall be maintained to create food for the tree. Trees shall appear symmetrical in shape and appearance. Trees shall have a single, straight leader.

k) Persons installing street trees shall take all necessary precautions to minimize the damage to existing lawns. Any damage to existing lawns shall be repaired by placing topsoil and seed in the damaged area.

l) Plants shall be lifted and handled from the bottom of the ball only. Not dragged, lifted or pulled by the trunk or foliage parts in a manner that will loosen the roots in the ball.

m) All plants shall be mulched over the root system with a 3 - 4 inch layer of wood chips or bark immediately after planting. Mulching material shall be pulled back no less than 2 - 3" and no more than 6" from the trunk. Mulch between the plants may be deeper depending upon the individual plan.

n) Only those plants designated by the Purchaser shall be wrapped, staked and/or guyed. Staking shall consist of a minimum of two posts or stakes. The minimum length of the posts shall be the depth of the bore plus one-half the height of the tree. The posts shall be installed at least one foot outside the diameter of the tree planting hole. The tree shall be connected to the posts with a 2"x 1/16" strap of such design so as not to damage the tree. The tree shall be planted as plumb as possible and the contractor shall maintain tree plumb ness throughout the guarantee period. All stakes shall be removed within one year of planting.

o) Trees planted between June 1 and September 15, shall be balled and burlaped.

p) All installation must be inspected by the Village Forester, or a representative. If, in the sole opinion of the Village Forester, additional remedies are needed to assure the stocking and maintenance of healthy tree specimens, additional remedies may be required.

Appendix G: Public Tree Value

Tree Inventory Report by Average Value					
Common Name	QTY	Genus	Total Value	Average Value	% of Total QTY
Balsam Fir	1	Abies	\$76	\$76	0.06%
Amur Maple	2	Acer	\$531	\$265	0.12%
Boxelder	11	Acer	\$4,171	\$379	0.65%
Freeman Maple	13	Acer	\$2,961	\$227	0.77%
Norway Maple	295	Acer	\$499,241	\$1,692	17.36%
Red Maple	8	Acer	\$1,599	\$199	0.47%
Silver Maple	42	Acer	\$111,388	\$2,652	2.47%
Sugar Maple	35	Acer	\$82,874	\$2,367	2.06%
Ohio Buckeye	2	Aesculus	\$89	\$44	0.12%
Horsechestnut	5	Aesculus	\$7,299	\$1,459	0.29%
Serviceberry	4	Amelanchier	\$146	\$36	0.24%
River Birch	25	Betula	\$7,831	\$313	1.47%
Paper Birch	8	Betula	\$5,464	\$683	0.47%
Birch Spp.	1	Betula	\$124	\$124	0.06%
American Hornbeam	10	Carpinus	\$536	\$53	0.59%
Shagbark Hickory	1	Carya	\$1,832	\$1,832	0.06%
Northern Catalpa	3	Catalpa	\$185	\$61	0.18%
Catalpa Spp.	1	Catalpa	\$111	\$111	0.06%
Hackberry	42	Celtis	\$78,132	\$1,860	2.47%
Eastern Redbud	48	Cercis	\$7,315	\$152	2.83%
Dogwood Spp.	1	Cornus	\$9	\$9	0.06%
Pagoda Dogwood	1	Cornus	\$36	\$36	0.06%
Hawthorn Spp.	1	Crataegus	\$359	\$359	0.06%
Cockspur Hawthorn	1	Crataegus	\$249	\$249	0.06%
Washington Hawthorn	1	Crataegus	\$40	\$40	0.06%
Burning Bush	1	Eunonymus	\$5	\$5	0.06%
American Beech	20	Fagus	\$48,798	\$2,439	1.18%
Green Ash	122	Fraxinus	\$262,483	\$2,151	7.18%
White Ash	18	Fraxinus	\$31,273	\$1,737	1.06%
Ginkgo	2	Ginkgo	\$2,351	\$1,175	0.12%
Honeylocust (Thornless)	60	Gleditsia	\$155,277	\$2,587	3.53%
Honeylocust Var.	1	Gleditsia	\$46	\$46	0.06%
Kentucky Coffeetree	18	Gymnocladus	\$3,837	\$213	1.06%
Butternut	1	Juglans	\$1,526	\$1,526	0.06%
Black Walnut	15	Juglans	\$35,055	\$2,337	0.88%
Eastern Redcedar	8	Juniperus	\$8,837	\$1,104	0.47%
Juniper Spp.	4	Juniperus	\$598	\$149	0.24%
Tamarack (Native)	2	Larix	\$1,281	\$640	0.12%
Crab Apple Spp.	45	Malus	\$35,508	\$789	2.65%
Crab Apple Var.	2	Malus	\$111	\$55	0.12%
Apple Spp.	5	Malus	\$1,633	\$326	0.29%
Mulberry Spp.	8	Morus	\$6,717	\$839	0.47%
No Plant Site	153	No Plant Site	\$0	\$0	9.01%
Ironwood	5	Ostrya	\$229	\$45	0.29%
Amur Corktree	2	Phellodendron	\$1,480	\$740	0.12%
Colorado Spruce	58	Picea	\$95,077	\$1,639	3.41%
Norway Spruce	31	Picea	\$81,957	\$2,643	1.82%
Spruce Spp.	1	Picea	\$36	\$36	0.06%
White Spruce	27	Picea	\$29,330	\$1,086	1.59%
Scotch Pine	8	Pinus	\$9,952	\$1,244	0.47%
Pine Spp.	3	Pinus	\$2,052	\$684	0.18%
Eastern White Pine	10	Pinus	\$18,280	\$1,828	0.59%
Austrian Pine	9	Pinus	\$27,363	\$3,040	0.53%

Appendix G: Public Tree Value (continued)

<i>Common Name</i>	<i>QTY</i>	<i>Genus</i>	<i>Total Value</i>	<i>Average Value</i>	<i>% of Total QTY</i>
Eastern Cottonwood	7	Populus	\$31,879	\$4,554	0.41%
Poplar Spp.	3	Populus	\$7,142	\$2,380	0.18%
White Poplar	6	Populus	\$4,367	\$727	0.35%
Black Cherry	3	Prunus	\$2,513	\$837	0.18%
Callery Pear Spp.	6	Pyrus	\$3,061	\$510	0.35%
Pear Spp.	3	Pyrus	\$100	\$33	0.18%
Swamp White Oak	8	Quercus	\$1,852	\$231	0.47%
Northern Red Oak	1	Quercus	\$10	\$10	0.06%
English Oak	4	Quercus	\$538	\$134	0.24%
Bur Oak	1	Quercus	\$196	\$196	0.06%
Black Locust	10	Robinia	\$11,287	\$1,128	0.59%
Willow	2	Salix	\$21,415	\$10,707	0.12%
Weeping Willow	1	Salix	\$9,784	\$9,784	0.06%
Stump	22	Stump			1.29%
Japanese Tree Lilac	4	Syringa	\$768	\$192	0.24%
Lilac Spp.	6	Syringa	\$189	\$31	0.35%
Yew Spp.	10	Taxus	\$774	\$77	0.59%
Northern White-Cedar	140	Thuja	\$27,869	\$199	8.24%
Linden Spp.	4	Tilia	\$44	\$11	0.24%
Littleleaf Linden	34	Tilia	\$67,635	\$1,989	2.00%
Redmond Linden	5	Tilia	\$3,558	\$711	0.29%
American Basswood	13	Tilia	\$50,042	\$3,849	0.77%
American Elm	4	Ulmus	\$4,784	\$1,196	0.24%
Elm Spp. (Hybrid)	17	Ulmus	\$4,226	\$248	1.00%
Red Elm	3	Ulmus	\$1,505	\$501	0.18%
Siberian Elm	3	Ulmus	\$4,145	\$1,381	0.18%
Other, Unknown	5	UNKNOWN	\$329	\$65	0.29%
Vacant	169	Vacant	\$0	\$0	9.95%
Totals:	1695		\$1,933,702		

** Blank or missing values above may indicate incomplete tree data (e.g., diameter, condition rating).*

5 –YEAR EMERALD ASH BORER IMPLEMENTATION PLAN

FOR THE

Village of Thiensville, WI



Emerald Ash Borer Adult



D-shaped Exit Hole



S-shaped Tunnels



Treatments Do Work

**PREPARED BY:
WACHTEL TREE SCIENCE, INC.
October 2022**

This project was funded with an urban forestry grant from the Wisconsin Department of Natural Resources as authorized under Wis. Stat. 23.097 and with matching funds from the Village of Thiensville.

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INTRODUCTION

Ozaukee County confirmed the presence of Emerald Ash Borer (EAB) in 2008. The Emerald Ash Borer has firmly established itself across the State of Wisconsin, and the damaging effects can be witnessed across Southeast Wisconsin. At this time, the Village should continue to focus on hazard mitigation by pre-emptively removing ash trees and selectively treating the best condition ash trees on publicly owned property.

SUMMARY

The Village of Thiensville is responsible for the management of all trees on its property. The Thiensville Public Works Department is responsible for all trees in the public right-of-way (ROW), public parks, and municipal properties. These trees include the following breakdown of the ash component:

- 140 total ash trees were identified and placed on the Village GIS database.
- Of the 140 Ash, there are 122 Green Ash and 18 White Ash.
- 85 ash are located in the street ROW and 55 ash are located in parks.
- The ash trees make up 10.33% of the public tree species mix; 8.13% of street trees and 17.8% of park trees.

BACKGROUND

The emerald ash borer is an exotic wood borer that was found attacking and killing ash trees in Michigan during 2002. Since its detection, EAB has killed millions of ash trees and is now found in across the eastern United States west to Oregon (2022), south to Texas, and north into Manitoba, Canada. EAB is easily spread through the movement of firewood, logs and nursery stock. People have been the greatest cause for the rapid spread of EAB over the past decade.

EAB was first found in Southeast Wisconsin in July of 2008. It has been detected in numerous counties throughout Wisconsin. As of March 2018, the entire state is under quarantine.

Figure 1. EAB Detection in North America as of October 25th, 2022.

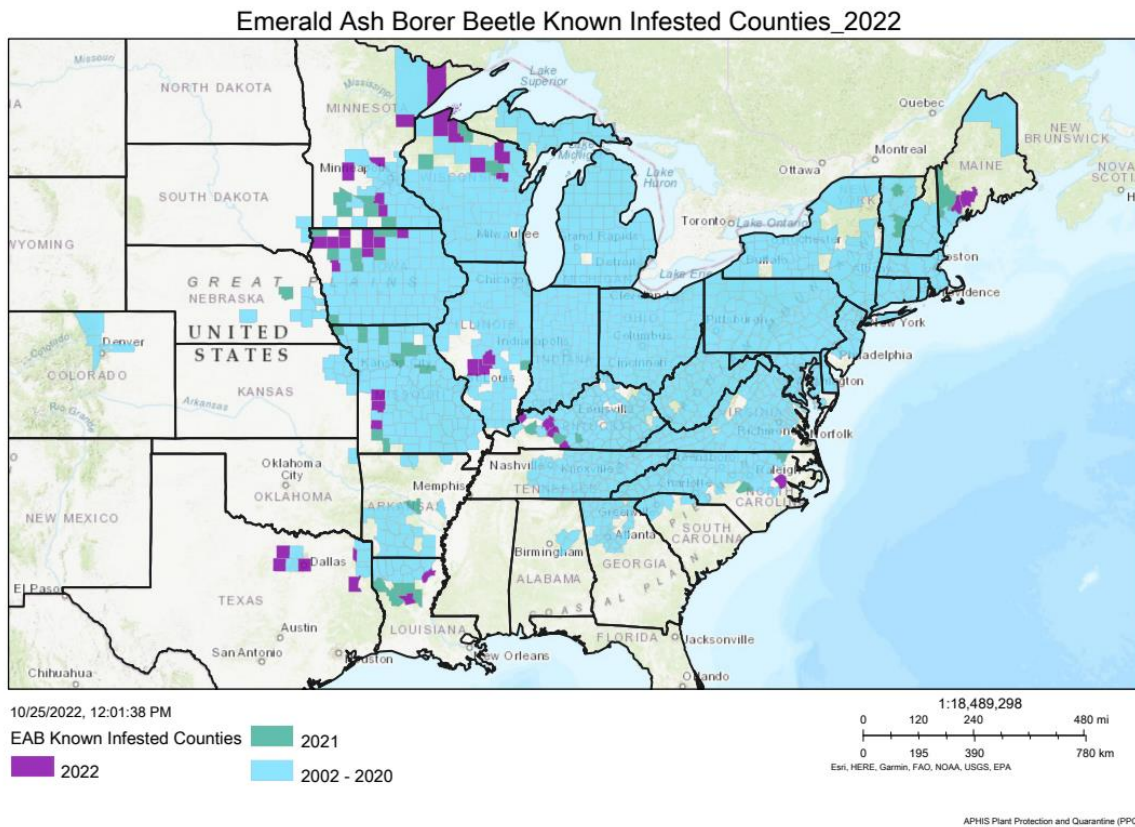
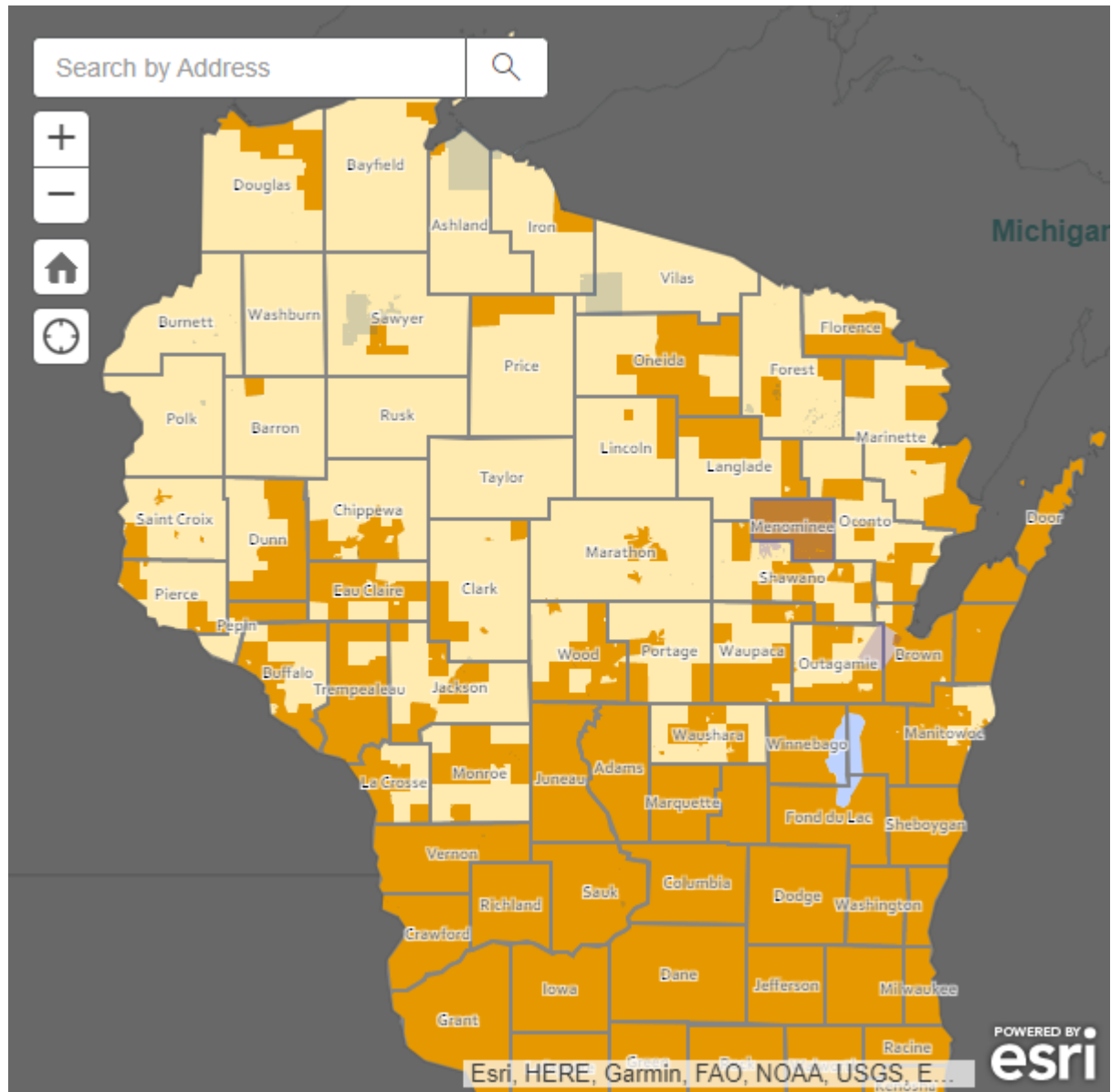


Figure 2. EAB Detection in Wisconsin as of October, 2022. (Dark orange)



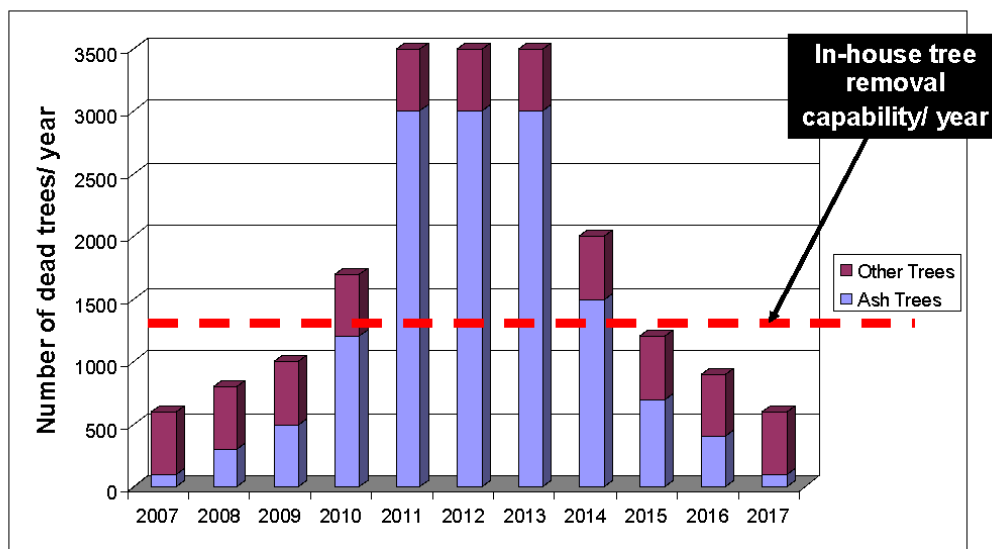
EAB is a very destructive pest. This insect attacks and kills white, green, blue, black and all horticultural varieties of ash. This insect attacks not only stressed ash trees, but healthy and vigorous ash trees as well. The larvae of this insect feed under the bark undetected, disrupting the flow of nutrients and water between the roots and crown of ash trees. The first visible signs are usually crown dieback. By this time, it is usually too late to save trees. Once infected, it can take between two and five years for trees to die. Once infected, these trees are structurally compromised and become extremely hazardous. This requires an immediate and costly removal.

In urban areas, ash trees often can make up approximately 20% of the urban forest. This is a large portion of the urban forest. This amounts to more money and resources needed to remove or manage the ash tree population.

The below graph shows that 3 to 4 years after EAB was discovered in the City of Fort Wayne. There is an exponential cost increase to the City as more contractors had to be hired above and beyond what the City could remove. This example depicts the extreme cost and resources required to remove ash trees.

Ash Tree Death Projection (2010)

Fort Wayne, IN



Courtesy Chad Tinkel - City Forester Fort Wayne, IN

Below is another perspective from a City Forester in eastern Michigan, approximately 30 miles from the original discovery of EAB in Detroit.

“We had to use staff from other departments because we didn’t have the money upfront to contract out tree removals or to hire extra staff.” Tom Wilson, from Westland, Michigan, stressed how important and challenging it was to assign enough personnel to the task of facing EAB. He reassigned 4 people from his 18-person streets department and sent them over to work on tree removals full-time. It was only when these additionally-staffed City crews fell behind that contracting was used to keep up with the work. A word of warning from his experience: “When contracting, keep in mind sudden, urgent, high-volume demand for service can make contracted removals more expensive and less available. Disreputable firms commonly appear.” Other municipalities shared an experience similar to Westland’s. These and other communities affected by EAB were left with many tasks and services undone and major purchases deferred.

Like all trees, ash are valuable resources for communities. They provide numerous ecosystem services and benefits such as energy savings, increased air quality, stormwater management, aesthetic value, recreational opportunities and more. Being such a large portion of urban forests, the potential removal and loss of trees will have a serious impact to the overall value and benefits gained from a community’s urban forest.

Additionally, listed below are three websites with current information on EAB:

- <http://emeraldashborer.wi.gov/>
 - EAB internet portal for Wisconsin sponsored by Wisconsin Department of Agriculture, Trade and Consumer Protection, the Wisconsin Department of Natural Resources and the University of Wisconsin – Madison
 - Contains information from a Wisconsin perspective on EAB biology, management, survey activities, publications and provides related links
- <http://www.emeraldashborer.info/>
 - Official emerald ash borer web page administered by Michigan State University
 - Contains information on EAB biology, distribution, control measures, current research and links to various EAB infested state’s web sites
 - management, survey activities, publications and provides related links
- <http://dnr.wi.gov/topic/UrbanForests/EABToolBox.html>
 - Wisconsin DNR EAB Toolbox for Wisconsin Communities
 - Designed for the planning and response needs of municipal governments, including such topics as: “Is Your Community Ready for EAB (video)”, “EAB: The Opportunity of a Lifetime”, “Readiness Checklist”, “What Will Happen if EAB is Found in Your Community?” and “EAB University”

MANAGEMENT OPTIONS

Given EAB's impact on ash trees, no management is not an option. Left unmanaged, ash trees will die and become extreme hazards to the community which is not an option. The use of different management plans depends on the number or size of the ash tree population, location of relevant ash trees and the health or condition of the trees.

Different management strategies usually always involve the removal of ash trees, some incorporate treatment of viable trees and the replacement of removed trees.

Treatment plans can reduce long term removal costs and or maintain a portion of the ash tree population for species diversity and urban forest benefits. Some communities that have incorporated treatment into their EAB management plans include Oak Creek, Franklin, Milwaukee, West Allis, Wauwatosa, Shorewood, Whitefish Bay, Glendale, Fox Point, Racine, Kenosha, Janesville, Madison, Green Bay, Port Washington, Slinger, Brown Deer, Baraboo and Butler.

Until recently, the treatment of ash trees has been an essential tool for communities addressing EAB and managing ash tree populations, but the success of treatment is based on the overall health of the tree being treated.

Considerations such as tree location, size and overall health should be taken into account before treating a tree. Ash trees in poor locations, such as trees next to or under power lines are not worth treating. Larger trees provide significant value to the community, but they can pose a larger risk and can cost more to maintain especially ash trees. It may not be cost effective to treat trees above a certain diameter class. Trees in poor health, especially those showing signs or symptoms of EAB are not ideal treatment candidates. Research suggests that trees with over 30% canopy decline do not recover even with the most effective treatment options.

EAB is widely distributed throughout Southern and Eastern Wisconsin. It has approached a high enough population that it has begun to severely impact the health of many ash trees in the region. We have been seeing large populations of untreated ash in forested areas that have died.

The replacement of removed trees is an essential component of EAB management. With the removal of ash trees, a large amount of ecosystem services and benefits will be lost. Planting new trees and increasing species diversity will ensure a healthy urban forest for generations to come.

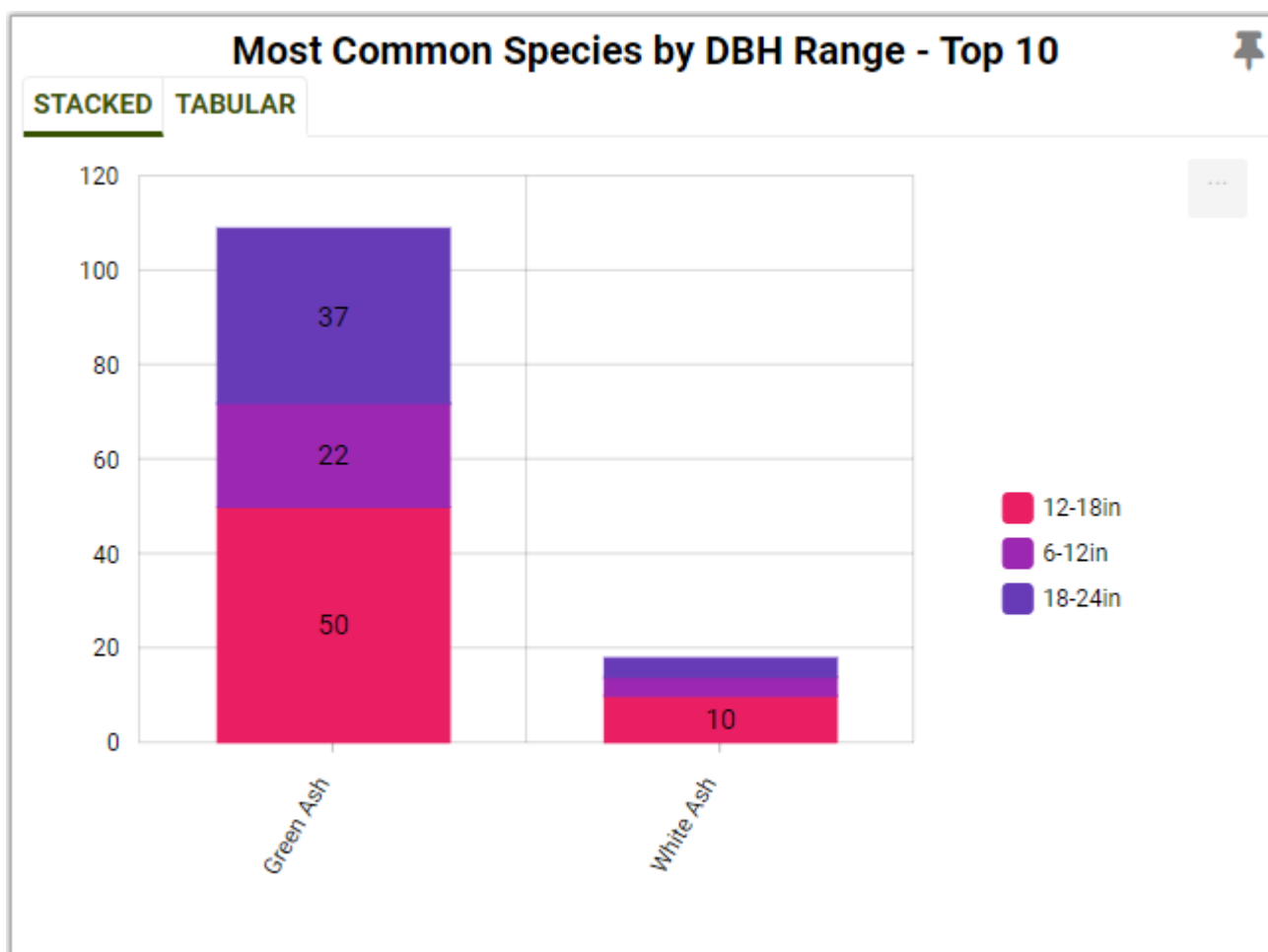
INVENTORY METHODOLOGY

A street and park tree inventory update was conducted along Village streets and within Village parks in the spring of 2022.

INVENTORY RESULTS AND DISCUSSION

140 total ash trees were identified and placed on the City GIS database. Of the 140 Ash, there are 122 Green Ash and 18 White Ash. 85 ash trees are located in the street ROW and 55 ash trees are located in parks. The Ash trees make up 10.33% of the public tree species mix, 8.13% of street trees and 17.8% of park trees.

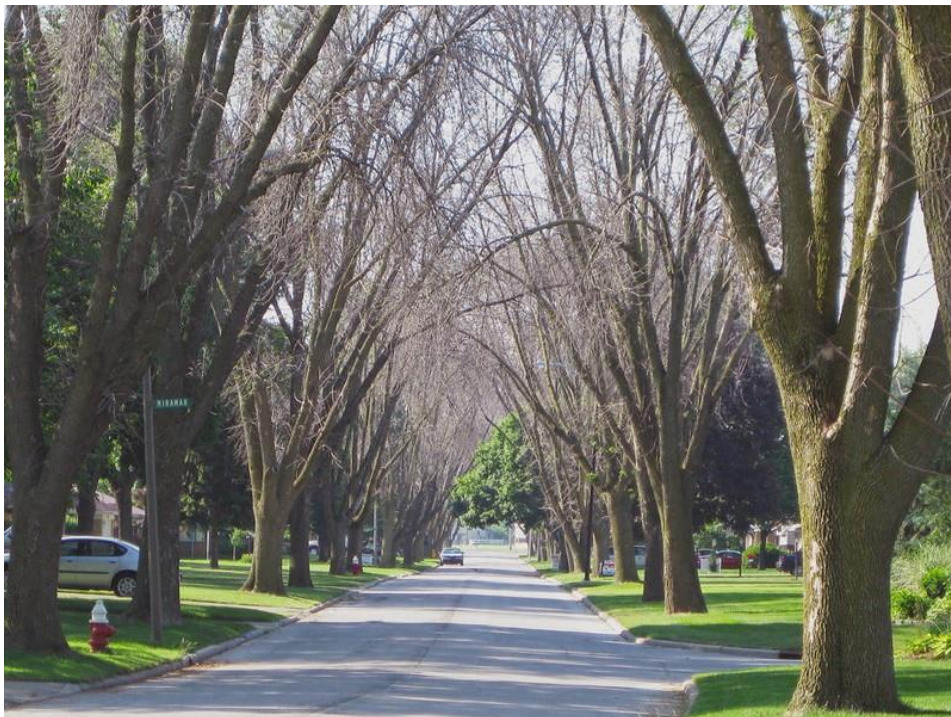
Figure 3. Size Distribution, Ash Trees.



Most ash trees in the Village are being treated (115). Only 25 untreated trees remain to be removed. This is ideal and a testament to the Village's proactive Ash tree management program since the first county detection over 10 years ago.



Ash trees before Emerald Ash Borer devastation – Belvedere Dr. – Toledo, Ohio – June 2006



Untreated Ash trees after Emerald Ash Borer Peak – Belvedere Dr. – Toledo, Ohio – June 2009



Dead Ash trees at the first detection area near Newburg, WI

Detection Date July 2008

Photo taken July 31, 2012



Aerial view of the same area one year later - August 2013

This is the outcome in heavy ash population forested areas where treatment options are not feasible.

Benefits of Emamectin Benzoate Trunk Injection

- 2-year control for Emerald Ash Borer
- Affects only insects that are targeted and will not harm beneficial insects
- Can be applied in a wide variety of weather conditions
- No drift or runoff
- Can be used on larger trees that maybe difficult to spray
- Safe to use, mix and apply
- A wide time frame in which to make effective applications (late-May to mid-August in most seasons)

It is recommended that the Village empower residents to continue treating private ash trees and disseminate information about the benefits of treatment. It is not too late to implement a treatment program for the public tree population to preserve a component of this beneficial tree species. Retaining some ash trees will preserve the benefits these trees provide the Village and help to maintain diversity of trees across the Village's urban forest.

Outdated Messages About EAB

Courtesy of J. Bradford Bonham, Certified Arborist from SW Ohio. Dr. Bonham has been a major public education spokesperson about EAB throughout the Midwest.

The following is a run-down of the most entrenched and problematic of the outdated messages that are still out there. If one or more of these points of conventional wisdom form the foundation of your management strategy, it's time for an update.

"Treatment doesn't work," or "Treatment is not 100%."

Leaving aside federal management of isolated infestations (like Maryland), federal funds for attempting eradication of this pest were pulled early in 2006. Prior to that, if you wanted to treat a tree to spare it from the eradication chainsaws, you would have had to prove that treatment consistently resulted in 100% larval kill in the treated tree (i. e., zero potential for adult emergence from the treated tree). The chance of re-infestation could not be tolerated.

"Treatment will lead to an insecticide-resistant population."

The population dynamics of EAB will not support resistance development. The vast numbers of insecticide-naïve beetles emerging from natural areas and breeding with any insecticide-exposed-but-not-dead beetles will override any trend toward resistance.

"Treatment isn't guaranteed!"

Neither are the antibiotics prescribed to treat pneumonia. University testing of products currently available has established that street-side ash up to 25" diameter at breast height (dbh) can be reliably brought through peak infestation. Testing is underway and is showing positive results on ash up to 55 inches dbh.

"Treatment is not environmentally sound."

Usually sourced to the internet, this claim sometimes alleges specific danger, while other times it is a moving target of vague, amorphous allegations. This recently released document should inject some well-tempered wisdom and reason into these discussions to dispel persistent myths.

[http://www.emeraldashborer.info/files/Potential Side Effects of EAB Insecticides FAQ.pdf](http://www.emeraldashborer.info/files/Potential_Side_Effects_of_EAB_Insecticides_FAQ.pdf)

"You will have to treat forever!"

Frankly in a municipal setting, you're simply talking service life. Pre-EAB, the average service life for ash in the Midwest was 25 - 40 years. Reliability of currently-available treatments suggests this service life can be preserved with confidence.

"Treatment is not cost-effective"

Early in the history of EAB, with what little was known about short or long-term reliability of treatment, this was true. Annual cost to treat in the commercial arena was in the range of \$12 - \$15 per inch dbh, and confidence in success was reserved for smaller trees. Even on a municipal scale, treatment could not be justified at the time.

However, research has progressed, and market forces have caused annual treatment cost per inch dbh to drop drastically. Some communities are beginning to say, "Wait a minute, the budget consideration for this is not just the cost to remove ash trees, you have to add in stump grinding + cost of replacement trees + cost of installations, over a 6- to 10-year time frame. Not only will we be creating an even-aged stand of replacement trees with the attendant burden of first-decade care, we will lose property value, infrastructure value, ecosystem value, and in many neighborhoods, a sense of place."

Depending on the local removal and nursery market, the total cost for a remove/replace program (without considering the burden of creating an even-aged stand) may be somewhat more or less than the total cost of removing the decrepit stock and treating the remaining healthy inventory until they age out naturally. You must run your own numbers to assess this, but the prospect of spreading what would otherwise be short-term catastrophic costs out over several decades (and shifting removals back under normal management costs) has great appeal to finance committees, even if they don't understand the "conservation of services" which treatment ensures.

Resetting the Message

Conservation of healthy ash canopy is not only achievable, but also cost-effective. As such, it should be part of integrated forestry management plans. If your plan is outdated, give it an overhaul, and when you do, send out a press release to help reset the message. Many homeowners with ash trees will follow your lead for sensible decision-making.

"Reset" the information posted at your City website. Anything related to treatment options which is more than 2 years old should be pulled because it's freshness-dating has expired. Convey to your readers that anything they see touted on the internet as a "best" or effective

treatment, but relying on old Extension fact sheets, should be considered suspect. Currently, "old" is pre-2022.

Research on the reliability of treatment continues to improve. New products are under investigation and the work on bio-controls is very active. Take a moment every 6 - 12 months to seek out research updates, and "reset" your own professional knowledge base.

Quick Facts about Thiensville' Public Ash Population

The Village of Thiensville is responsible for the management of all trees on its property. The Thiensville Public Works Department is responsible for all trees in the public right-of-way (ROW), public park and municipal properties. These trees include the following breakdown of the ash component:

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Thiensville ACTION PLAN (Three Year Projection)

Plan Components

1. Over the three-year period, systematically remove and replace remaining untreated Ash trees (25 trees), with a diversity of healthy new tree species. These trees should be able to be removed by in-house staff. This work should be completed by 2024.
2. Replanting is an important component of the plan. Increasing species diversity is the desired goal. All 25 planned removals may not produce appropriate replanting sites. Some sites may be under overhead utilities, too close to driveway approaches or intersections or conflict with a mature yard tree. Based on available funding, the planting of replacement trees may have to be spread out over multiple years beyond the three-year plan. It will need to be determined if replanting can be accomplished with City forces, or because of time constraints, contract planting will be required.

Results, Costs and Discussion Points

- Following this 3-year plan will reduce the public ash tree component to 8.5% of the Village's publicly owned urban forest.
- Removed ash trees should be replaced with diverse, healthy, vigorously growing tree species that will help rebuild the lost tree canopy.
- Cost of implementation of the 3-year Action Plan - **\$53,778 or approximately \$17,926 per year**; The cost will vary from year to year due to the number and size of trees removed and the number of replacement trees.
- The Department of Public Works shop is an ideal location to establish a yarding area for ash logs and mulch.

There are opportunities available that could provide a creative way for ash tree lumber utilization. Urban Evolutions in Appleton, WI has proven to be a reliable resource in utilizing urban wood from Wisconsin communities.

There will be viable wood available from Ash removals that can be processed into lumber. The challenge is identifying acceptable logs and determining how to keep costs of transportation to a minimum. Solutions are viable for the city to source urban evolutions with ash tree logs, using creative planning.

There is a movement in Wisconsin and nationwide to reclaim urban wood that is a result of urban tree removal activities. The Urban Wood network strives to provide connections between all partners involved in urban forestry operations. They can provide a link between two partners that otherwise would not have happened. The goal is to develop mutually beneficial partnerships that can utilize lumber from tree removals that would otherwise be a waste product. It is recommended that open communications begin between the Village and this organization to brainstorm creative solutions that will handle the remaining ash logs.

Contacts:

Urban Evolutions
Scott Boncher
(920)205-8999
scottboncher@urbanevolutions.com

Urban Wood Network
(908)875-3720
info@urbanwoodnetwork.org

TREE REPLACEMENT

Village staff hours are utilized in for this budget. Purchasing trees at wholesale prices combined with staff labor accounts for \$400/tree.

TREE TREATMENT

This plan identifies the ongoing treatment of 115 trees currently within preservation treatments. Treatment trees were previously identified as the healthiest ash trees with the best structure throughout the Village. These trees currently contribute ~\$279,512 in value to the Village's urban forest, or ~\$2,430.54 per tree. Total treatment costs over the 3-year management plan are less than 8% of the overall treated ash tree value. It is critical to preserve the value these trees provide the Village for years to come.

PROJECT ADMINISTRATION

Administration costs average ~\$1,829 annually. A considerable amount of time is needed to plan and administer yearly EAB management operations. Pursuing in-house administration would be another justification to hire the part time Certified Arborist recommended in the Urban Forest Management Plan.

RECOMMENDED FUNDING NEEDS

Five Year Total = \$53,777.50

Average Yearly Allocation = \$17,925.33

Removals (In-House) –

25 trees = \$11,650 (Using estimated removal pricing from UF management plan)

Replacement Tree Planting (In-House) – 25 trees @ \$400/tree = \$10,000

Tree treatment (Contract) – 115 trees alternating years = \$22,250

Project Administration = \$5,488

Contingency = \$4,390 (In-house)

Table 1. Estimated Costs for a Three-Year Emerald Ash Borer Response Plan

Village of Thiensville - EAB INITIATIVE						
3-YEAR PROPOSED BUDGET - Hybrid Contract Services/In-house Staff						
	Maintenance Activity					
YEAR	REMOVALS	PLANTING	TREATMENT	ADMINISTRATION	CONTINGENCY	BUDGET/YEAR
2023	\$10,150.00	\$0.00	\$7,750.00	\$2,237.50	\$1,790.00	\$21,927.50
2024	\$1,500.00	\$5,000.00	\$6,750.00	\$1,656.25	\$1,325.00	\$16,231.25
2025	\$0.00	\$5,000.00	\$7,750.00	\$1,593.75	\$1,275.00	\$15,618.75
TOTALS	\$11,650.00	\$10,000.00	\$22,250.00	\$5,487.50	\$4,390.00	\$53,777.50
Assumptions:						
2023 (14) ash 13-24"; (2) ash 25"+ DBH removed by in-house staff						
2024 (2) ash 7-12"; (7) ash 13-24" removed by in-house staff						
2023,2024,2025: (115) ash, 75% condition and greater treated by contract						
Replacement planting (\$400/tree); will vary from year to year based on appropriate replanting sites; 25 trees total						
Administration and Contingency costs reduced due to greater reliance on the use of City forces						

RECOMMENDED REPLACEMENT SPECIES

Larger Maturing - No Overhead Utilities or Mature Overstory Trees Present			
COMMON NAME	SCIENTIFIC NAME	MATURE HEIGHT	PARKS
Ft. McNair Red Horsechestnut	<i>Aesculus x carnea 'Ft. McNair'</i>	35-40'	X
Yellow Buckeye	<i>Aesculus octandra</i>	60-75'	
Bitternut Hickory	<i>Carya cordiformis</i>	60'	X
Northern Catalpa	<i>Catalpa speciosa</i>	40-60'	X
Chicagoland Hackberry	<i>Celtis occidentalis 'Chicagoland'</i>	40-60'	
Katsuratree	<i>Cercidiphyllum japonicum</i>	40-60'	
Turkish Filbert	<i>Corylus colurna</i>	40-50'	
Ginkgo	<i>Ginkgo biloba cultivar (male only)</i>	50-80'	
Skyline Honeylocust	<i>Gleditsia triacanthos 'Skycole' PP 1619</i>	50-60'	
Kentucky Coffeetree	<i>Gymnocladus dioica</i>	50-60'	
London Planetree	<i>Platanus x acerifolia 'Ovation' or 'Morton Circle'</i>	70-100'	
Swamp White Oak	<i>Quercus bicolor</i>	75'	
Bur Oak	<i>Quercus macrocarpa</i>	60-80'	X
Hybrid Swamp x Bur Oak	<i>Quercus x schuettei</i>	75'	
Triumph Elm	<i>Ulmus 'Morton Glossy'</i>	55'	
Accolade Elm	<i>Ulmus japonica x wilsoniana 'Morton'</i>	70'	
Small Maturing - Overhead Utilities and/or Mature Overstory Trees Present			
COMMON NAME	SCIENTIFIC NAME	MATURE HEIGHT	PARKS
Ohio Buckeye	<i>Aesculus glabra</i>	35'	X
Robin Hill Serviceberry	<i>Amelanchier x grandiflora 'Robin Hill'</i>	20-25'	X
Cumulus Serviceberry	<i>Amelanchier x lamarckii 'Cumulus'</i>	20-25'	X
Musclewood	<i>Carpinus caroliniana</i>	25-30'	X
Amur Maackia	<i>Maackia amurensis</i>	20-30'	X
Adirondak Crabapple	<i>Malus 'Adirondak'</i>	20'	
Jackii Crabapple	<i>Malus baccata 'Jackii'</i>	25-30'	
Royal Raindrops Crab	<i>Malus 'JFS-KWS'</i>	20'	
Redbud Crabapple	<i>Malus x zumi calocarpa</i>	20'	
Ironwood	<i>Ostrya virginiana</i>	25'	
Ivory Silk Tree Lilac	<i>Syringa reticulata 'Ivory Silk'</i>	25'	

AGREEMENT BETWEEN THE VILLAGE OF THIENSVILLE
AND WACHTEL TREE SCIENCE & SERVICE

FOR PROFESSIONAL ARBICULTURAL CONSULTING SERVICES - 2023

This contract entered on the last date of execution shown below, between the Village of Thiensville (the "Village") a municipal corporation duly existing in the State of Wisconsin, and Wachtel Tree Science and Service, Inc. ("Wachtel"), a Wisconsin corporation.

In consideration of the mutual promises and covenants described herein, and for other good and valuable consideration which is duly acknowledged, Village and Wachtel agree that Wachtel shall provide the following services to the Village of Thiensville for the 2023 calendar year, subject to the following terms and conditions:

I. For Administration of EAB Activities

Wachtel will perform the following administrative duties for in-house or contracted ash tree removal, stump removal and site restoration; tree replacement plantings; and ash tree treatments within the funding limitations of the Village's budget for such activities.

1. Utilizing the Village's GIS (Geographic Information System) Street, park/ public property tree inventories, locate and field verify ash that meet the criteria as determined by the Village to be candidates for removal or treatment.
2. Prepare informational letters (if determined to be necessary) explaining the process of the removal, replacement, and treatment programs. The Village would send the letter, approved by Village staff, to residents that are impacted by this program.
3. Prepare bid documents (if required) for tree removal, stump removal, tree treatment, and new tree planting. Village staff will incorporate these specifications into complete bid documents. The Village will advertise and mail documents to prospective bidders from a bidders list provided by the consultant. Consultant to assist Village staff with selection of qualified contractors to perform the work.
4. Select diverse species of trees to be utilized in replanting efforts.
5. Mark trees that are identified for treatment or removal and locate sites where new trees will be planted.
6. Assist Village staff as requested with inspection of work by contractors.

II. Village Forester Related Duties (as directed by Village staff)

1. Respond to and resolve citizen requests on an as needed basis in accordance with Village Codes to include:
 - Site visit including resolution
 - Phone call/letter/email to resident with resolution
 - Create work orders for field crews as needed
 - Follow up to those issues requiring follow up
2. Perform village wide "scout" surveys as necessary to check for the presence of invasive forestry pests and diseases. (I.e.-Dutch Elm Disease, Spongy Moth, etc.)

3. Coordinate contracts/operations to ensure that village services regarding Forestry are not disrupted, including:
4. Design and implement a tree planting program to include:
 - Identify locations for replacement trees where feasible for removed trees
 - Review Village property for tree planting opportunities
 - Work within a defined budget
5. Review and coordinate with the Director of Community Services/Public Works to keep up to date, as feasible, the Village Street tree pruning cycle
6. In consultation with staff develop a yearly Forestry budget for Village approval
7. Assist the Village in any forestry-related grant writing and grant administration.

III. Miscellaneous Provisions

1. Term. The term of this agreement shall be for the calendar year 2023. Either party can terminate this agreement at any time upon thirty (30) days written notice.
2. Payment Terms. The above work shall be at an hourly rate of \$145.00 for Project Manager and \$135.00 for a Staff Certified Arborist, billed at the conclusion of each month of services provided.
3. Nature of Relationship. It is the mutual intent of the parties that this agreement shall create an independent contractor agreement as such is defined under all applicable laws of the State of Wisconsin and shall specifically not be construed as an employer/employee relationship. Wachtel shall retain full right and authority to control the methodology in the implementation of their contractual obligations and shall exercise independent discretion in all matters of their professional expertise. Wachtel shall report to the Director of Community Services/Public Works or their designee, periodically as reasonably necessary to apprise the Village of the progress of the projects, and as to any matters of concern.
4. Public Records Responsibilities. Village and Wachtel recognize that applying applicable Wisconsin public records laws to records requests can be difficult, considering copyright and other confidentiality protections. To ensure that applicable laws are followed, both regarding private rights, and regarding public records laws, Village and Wachtel agree as follows. When Village receives public records requests for matters that Village believes might be proprietary or confidential information, Village will notify Wachtel of the request. Within three (3) days of such notification (subject to extension of time upon mutual written agreement), Wachtel shall either provide Village with the record that is requested, for release to the requestor; or Wachtel shall advise Village that Wachtel objects to the release of the requested information, and the basis for the objection. If for any reason Village concludes that Village is obligated to provide a record to a requestor that is in Wachtel's possession, Wachtel shall provide such records to Village immediately upon Village's request. Wachtel shall not charge for work performed under this paragraph, except for the "actual, necessary and direct" charge of responding to the records request, as that is defined and interpreted in Wisconsin law.

In addition to, and not to the exclusion or prejudice of, any provisions of this agreement or documents incorporated herein by reference, Wachtel shall indemnify and save harmless and agrees to accept tender of defense and to defend and pay any and all legal, accounting, consulting, engineering and other expenses relating to the defense of any claim asserted or imposed upon the Village, its officers, agents, employees and independent contractors growing out of (i) Village's denial of a records request, based upon objections made by Wachtel, or (ii) Wachtel's failure to provide records to Village upon Village's request; or (iii) Village's charges made to a records requestor, based upon reimbursement of costs Wachtel charged to Village in responding to a records request; or (iv) Village's lack of timely response to a records request, following Wachtel's failure to timely respond to Village as required herein; or (v) Village's provision of records to a requestor that were provided to Village by Wachtel in response to a records request. Wachtel's claims of proprietary rights, or any other copyright or confidentiality claims, shall be waived such that Village may provide all requested documents, programs, data, and other records to the requestor, upon failure by Wachtel to defend, indemnify or hold harmless the Village as required herein, and/or upon judgment of a court having jurisdiction in the matter requiring release of such records.

5. Our work will be on a time and materials basis. Our hourly rate is \$145 for the Project Manager and \$135 for a Staff Certified Arborist. We anticipate being able to begin work soon after receiving approval from the Village to proceed.

Dated this ____ day of _____, 20__.

VILLAGE OF THIENSVILLE

Village President

ATTEST:

Village Clerk

Dated this ____ day of _____, 20__.

Wachtel Tree Science & Service, Inc.

By: Nathan Schuettpelez, Consulting Dept. Manager

STORM WATER MANAGEMENT PLAN



Village of Thiensville Storm Water Management Plan *December 2022*

PREPARED FOR:
Village of Thiensville
250 Elm Street
Thiensville, WI 53092

PREPARED BY:
Ruekert & Mielke, Inc.
W233 N2080 Ridgeview Parkway
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Waukesha, WI 53188



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EXECUTIVE SUMMARY

Introduction

The Wisconsin Department of Natural Resources (WDNR) regulates municipalities who meet specific thresholds of population density for discharges from municipal separate storm sewer systems (MS4s). These discharges generally consist of runoff from rain events or snow melt. The concern with the runoff is the concentration of pollutants collected within the municipality and discharged into local waterways. The pollutants of concern include organic materials, suspended solids, metals, nutrients, bacteria, pesticides, fertilizers, and other materials introduced by spills or illicit connections.

The State of Wisconsin has authority to regulate these discharges under the Federal Clean Water Act of 1972 (33 U.S.C Navigable Waters) and State of Wisconsin Statutes s. 283 Pollution Discharge Elimination and Wisconsin Administrative Code Chapter NR 216, Storm Water Discharge Permits.

The Village of Thiensville (Village) is part of the City of Mequon and Village of Thiensville Group Wisconsin Pollutant Discharge Elimination Systems (WPDES) Permit (WI-S061557). This permit considers activities under the Village's direction and requires effective management techniques to minimize pollutants in discharge.

As a comprehensive tool of watershed-level pollution abatement, the WDNR includes requirements, as appropriate, based on total maximum daily load (TMDL) reports that are approved by the Environmental Protection Agency (EPA). The Village is within the approved Milwaukee River TMDL watershed.

Municipalities within approved TMDL watersheds are required to meet total suspended solids (TSS) and total phosphorus (TP) load reduction goals.

Village of Thiensville Storm Water Management Plan

To meet required components of the MS4 permit, a Storm Water Management Plan has been developed for the Village to use and update as the Village grows and manages new or additional pollutants or unforeseen events. This plan has been compiled by performing wasteload allocation analysis on the existing conditions within the Village. Information from this analysis was used to determine the Village's TSS and TP wasteload as compared to the TMDL load reduction requirements.

To achieve the wasteload reduction goals, storm water alternatives are included in this plan for the Village. The alternatives include potential locations for traditional and non-traditional storm water treatment facilities that would directly improve the water quality in the Milwaukee River and address the impairments that triggered the development of the TMDL report.

The following information, plans, programs, and ordinance updates constitute the Storm Water Management Plan:

- Discussion of existing conditions, alternatives analysis and recommendations, and bacteria source elimination recommendations,
- Department of Public Works Storm Water Pollution Prevention Plan,
- Winter Road Management Program,
- Leaf Management Program,

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- Catch Basin and Street Cleaning Program,
- Storm Water Facility Inspection Program,
- Illicit Discharge Detection and Elimination Program,
- Construction Site and Storm Water Program,
- Sanitary and Storm Sewer Cross-Connection Program, and
- Ordinance recommendations for storm water and erosion control, illicit discharge detection and elimination, and bacteria.

Conclusion

The development of the Village's Storm Water Management Plan provides the Village up-to-date program documents with the relevant information to perform effective storm water management and minimize the discharge of pollutants. The Storm Water Management Plan institutes multiple program methods to assess the current conditions and provide municipal-specific methods to manage the pollutants of concern. Additionally, achievable affordable storm water facilities are presented for a focused approach to manage pollutants over the term of this permit and into the future. This program, taken as a whole, will provide the Village with a comprehensive planning and program tool to make progress toward WDNR MS4 permit requirements, and prepare for continuing storm water needs of the future.



1. INTRODUCTION

The Village of Thiensville (Village) has been issued a Municipal Separate Storm Sewer System (MS4) permit from the Wisconsin Department of Natural Resources (WDNR) since 2013. The current Mequon-Thiensville Group Permit (WI-S061557-3) was issued to the Village of Thiensville and the City of Mequon in 2022 and expires in 2027.

The focus of the MS4 permit program is to reduce pollutants that enter receiving wetlands and waterways through storm water runoff. The MS4 permit program focuses on reduction of suspended solids, metals, nutrients, pesticides, materials that may be introduced from spills, illicit discharges, or illicit connections. The permit program requires municipalities to address and reduce these potential contaminants through public and municipal education, storm water facility monitoring and maintenance, and the development of municipal programs focused on storm water infrastructure tracking and improvements.

The MS4 permit also addresses storm water quality requirements from the Milwaukee River Basin Total Maximum Daily Load (TMDL) Report, which was approved in March 2018. The Milwaukee River TMDL addresses total suspended solids (TSS), total phosphorus (TP), and bacteria. The TMDL Report has established water quality goals for all impaired waterways and will aid in the prioritization of storm water improvements over the next 5-year permit term and beyond.

1.1 Plan Objective

This storm water management plan is intended to guide the Village in cost-effective water quality and water resources management through a stepped approach for progressive advancement to current and future permit requirements. Through implementation, the plan aims to provide opportunities for individuals who live, work, and play in the Village to benefit from the nearby lakes and rivers. The goals of this management plan are to:

1. Describe the Village's existing storm water quality management system,
2. Describe existing municipal storm water permit requirements, anticipated future permit requirements and subsequent water quality improvement efforts,
3. Explore and present alternative water quality best management practices and opportunities associated with the information presented in items 1 and 2 above,
4. Provide alternative best management practices with comparative evaluation of technical, economic, and environmental features,
5. Review and develop, or update, the Village's pollution prevention plan(s), winter road management plan, catch basin cleaning program, construction site and storm water program, storm water facility inspection program, storm water and erosion control ordinance, illicit discharge detection and elimination ordinance, illicit discharge detection and elimination program, draft bacteria control ordinance, bacteria reduction approach, bacteria source identification map, and sanitary and storm sewer cross connection program; and
6. Recommend a cost-effective, comprehensive storm water quality master plan for the Village of Thiensville.



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1.2 Previous & Current Master Planning Efforts

The Village's previous planning efforts identified common practices and potential resource sharing opportunities for the Village to partner with the City of Mequon to improve water quality and make progress toward meeting the goals of the Milwaukee River Basin TMDL. The Village previously completed a municipal-wide storm water management planning effort in 1999.

The southern and eastern portions of the Village are situated within the Milwaukee Metropolitan Sewerage District (MMSD). MMSD is a significant source of research, information, and guidance for water resources throughout the southeast Wisconsin region. Through the planning efforts of MMSD, the following management plans have been compiled which include goals and resources for waterways in the Village:

- Cedar, Pigeon, Ulao, and Mole Creeks Watershed Restoration Plan, 2020.¹
- Water-Resources-Related Information for the Milwaukee Metropolitan Sewerage District Planning Area, Wisconsin, 1970-2002.²
- Ecological Status of Aquatic Communities in Selected Streams in the Milwaukee Metropolitan Sewerage District Planning Area of Wisconsin, 2004-13.³

1.3 Planning Area

The planning area consists of the area within the corporate limits of the Village of Thiensville, approximately one square mile (Exhibit 1). The land within the corporate limits of the Village primarily drains to Pigeon Creek and the Milwaukee River. Pigeon Creek flows into the Milwaukee River within the Village limits.

1.4 Milwaukee River TMDL

The Milwaukee River has been listed as a United States Environmental Protection Agency (US EPA) Section 303(d) Impaired Water for many years. The Village of Thiensville is located within the Milwaukee River basin and includes the following Total Maximum Daily Load (TMDL) Reachsheds: MI-25, MI-26, and MI-27.

Excess levels of TSS, TP, and bacteria may lead to nuisance algae growth, oxygen depletion, increased submerged aquatic vegetation, decreased water clarity, and degraded habitat. These impairments can lead to public health concerns, as well as adversely impact fish and other aquatic life, water quality, recreation, and navigation. The WDNR incorporates the TMDL requirements into the MS4 permit program.

¹ Cedar, Pigeon, Ulao, and Mole Creeks Watershed Restoration Plan, 2020, Southeastern Wisconsin Watersheds Trust. Web Address: <https://www.swwtwater.org/cpum-watershed-plan>.

² Water-Resources-Related Information for the Milwaukee Metropolitan Sewerage District Planning Area, Wisconsin, 1970-2002, Water-Resources Investigations Report 03-4240, by Morgan A. Schneider, Michelle A. Lutz, and Others. Web address: <https://pubs.er.usgs.gov/publication/wri034240>.

³ Ecological Status of Aquatic Communities in Selected Streams in the Milwaukee Metropolitan Sewerage District Planning Area of Wisconsin, 2004-13, Scientific Investigations Report 2020-5035, by Barbara C. Scudder Eikenberry, Michelle A. Nott, Jana S. Stewart, Daniel J. Sullivan, David A. Alvarez, Amanda H. Bell, and Faith A. Fitzpatrick. Web Address: <https://pubs.er.usgs.gov/publication/sir20205035>.



The goal of the TMDL is to provide information on how stakeholders can improve waterways to a point at which they may be removed, or “de-listed”, from the Section 303(d) Impaired Waters List. To achieve this goal, the TMDL includes pollutant reduction requirements for TSS, phosphorus, and bacteria within the Village. The waste load runoff from existing conditions within the Village has been calculated and is provided in Chapter 3. Methods and practices to further reduce pollutants causing the impairment of the Milwaukee River are included in Chapter 4, Alternatives Analysis and Recommendations. Additionally, to address bacteria allocations, Chapter 5 addresses potential bacteria sources and provides recommendations for elimination of bacteria.

Please refer to the Wisconsin Department of Natural Resources website for additional information on the Milwaukee River Basin TMDL study and associated materials.⁴

1.5 Storm Water Management Plan Components

The Village’s MS4 permit requires a comprehensive storm water management plan for the Village. The following components comprise the Village’s storm water management plan:

- Assessments:
 - o Water Quality Objectives and Standards
 - o Existing Conditions
 - o Alternatives Analysis
 - o Recommendations for MS4 & TMDL Compliance
 - o Bacteria Source Identification Map
 - o Bacteria Reduction Recommendations
- Programs:
 - o Department of Public Works Storm Water Pollution Prevention Plan
 - o Winter Road Management Plan
 - o Leaf Management Program
 - o Catch Basin and Street Cleaning Program
 - o Illicit Discharge Detection and Elimination Program
 - o Construction Site Erosion Control and Storm Water Program
 - o Storm Water Facility Inspection Program
 - o Sanitary and Storm Sewer Cross Connection Program

⁴ WDNR website on the Milwaukee River TMDL Study and Report: <http://dnr.wi.gov/topic/TMDLs/Milwaukee/>



- Ordinances:
 - o Storm Water and Erosion Control Ordinance
 - o Illicit Discharge Detection and Elimination Ordinance
 - o Draft Bacteria Ordinance

The MS4 permit requires an annual report to be submitted to the WDNR summarizing the progress of these programs and practices by March 31st of each year.

1.6 Summary

The Village has strived to minimize the pollutant loads in storm water since the introduction of the MS4 permit program. This update is another step in the Village's progression to meet the MS4 permit and TMDL goals. Through institution of updates to current programs and the addition of new programs, the Village aims to achieve or exceed the required pollutant reduction targets.



2. WATER QUALITY OBJECTIVES AND STANDARDS

2.1 Pollutants of Concern & Sources

There are two general types of water pollution: point source and nonpoint source. Point source pollution comes from identifiable, localized sources that discharge directly into a water body, usually through a distinct outfall. Industries and wastewater treatment facilities are two common point sources. Storm water runoff from certain urban areas is also considered a point source.

Nonpoint source pollution comes from land use activities such as agriculture and other non-localized sources. Most nonpoint source pollution results from the runoff of storm water and snow melt. When rain or melted snow moves over and through the ground, the water carries pollutants that it meets into wetlands and waterways.

Section 303(d) of the Federal Clean Water Act requires each state to identify those waters within its boundaries which are not meeting their designated uses due to exceedance of water quality standards for any applicable pollutant. Essentially, the Clean Water Act requires Wisconsin to identify which waterways are too polluted to function as intended. These functions are typically represented as fishable or swimmable designations. There are currently over 1,500 listings on Wisconsin's EPA-Approved 2020 Impaired Waters List⁵.

Monitoring efforts over many years in the Milwaukee River Basin have found the Milwaukee River, and many tributaries, to be impaired by high levels of total suspended solids (TSS), total phosphorus (TP), and bacteria. These impairments exceed water quality standards and do not support a fishable, swimmable river system. Efforts to reduce pollutants and restore the Milwaukee River system have made significant progress in recent years, but additional work is needed to balance the needs of our communities, businesses, and citizens with a return to a healthy, swimmable, fishable river system.

The primary pollutants of concern addressed through urban storm water and rural runoff controls are TSS, sediment, phosphorus, and bacteria (*E. coli* and fecal coliform). Sources of bacteria, phosphorus, and sediment loadings in the Milwaukee River Basin include point source discharge from regulated wastewater treatment facilities, regulated industrial sites, and non-point source discharge from agricultural land, urban land (regulated municipal storm sewer system areas and non-regulated areas), and natural areas (i.e., forests and wetlands).

2.1.1 Total Suspended Solids / Sediment

Many water bodies in Wisconsin are impaired due to excess sediment loading. Sediment that is suspended in the water scatters and absorbs sunlight, which reduces the amount of light that reaches submerged aquatic vegetation, causing a reduction in photosynthetic rate and growth. Aquatic plants produce oxygen, provide food and habitat for fish and other aquatic life, stabilize aquatic beds, protect shorelines from erosion and take up nutrients that would otherwise contribute to nuisance algae growth. As photosynthetic rates decrease, less oxygen is released into the water by the plants. If light is completely blocked from bottom dwelling plants, the plants will stop producing oxygen and will die. As the plants decompose, bacteria draw more oxygen from the water as they feed on the decomposing plant material.

Reduced water clarity can also have direct impacts on aquatic fauna, including fish, waterfowl, frogs, turtles, and insects. Suspended sediment interferes with the ability of fish and waterfowl to see and catch food and can clog the gills of fish and invertebrates, making it difficult for them

⁵ Wisconsin DNR Bureau of Water Quality 2020 Impaired Waters Fact Sheet. Web address: <https://dnr.wisconsin.gov/topic/SurfaceWater/ConditionLists.html>.



to breathe. When sediments settle to the bottom of a river, they can smother the eggs of fish and aquatic insects, as well as suffocate newly hatched insect larvae. Settling sediments can also fill in spaces between rocks, areas commonly used by aquatic organisms for homes. Additionally, excess sediments can cause an increase in surface water temperature. As the sediment particles absorb heat from sunlight, dissolved oxygen levels can fall even farther (warmer waters hold less dissolved oxygen), and further harm aquatic life.

In addition to its direct effects, sediment may also carry nutrients, heavy metals, and other pollutants into water bodies. A large proportion of the phosphorus that moves from land to water is attached to sediment particles. This phenomenon can be seen in both spatial and temporal patterns of phosphorus and sediment movement. In general, this means that managing sediment sources can help manage phosphorus sources.

A municipal separate storm sewer system (MS4) discharges storm water directly into local streams, lakes, and wetlands without being treated to remove pollutants. The sediment is deposited into the water resource, along with any attached pollutants. Urban runoff consists of a variety of pollutants including sediment, excess nutrients (including phosphorus), metals, chlorides, PAHs, grease, oil, and more. Many of these pollutants attach to small soil particles which wash off roads, parking lots, sidewalks, parks, and lawns and into the storm sewer system.

Construction sites have traditionally been a significant source of sediment reaching the local waterways in urban areas. The impact of past land uses can affect the quality of the soil on site, such as past contamination from industrial uses, spills, and leaking underground fuel tanks. Inorganic pollutants and metals attached to sediment are transported to streams, lakes, and wetlands during rain events and springtime snow melt. In the past ten to twenty years, significant strides have been made to control sediment and erosion on construction sites. New products and practices to keep sediment on site have become routine for many contractors, developers, engineers, inspectors, and reviewers. As the benefits of using these practices becomes more widely recognized, and more pollution reduction measures are adopted, construction sites will have less of an overall impact on these waterways.

Other pollutant sources found in urban runoff include excess nutrients and inorganic materials which accumulate on roads, parking lots, sidewalks, lawns, and other areas that drain to the storm sewer system. Tiny exhaust particles, bits of tire rubber, rust pieces, and dripping oil or grease are examples of residue from cars, trucks, and other vehicles that is deposited on the ground. Rain or snow melt transports these contaminants into the storm sewer system. Excess nutrients from lawn fertilizers, waste from urban wildlife such as geese, raccoons, sea gulls, and pets can accumulate in the waterways in concentrations that are unhealthy for fish, aquatic organisms, and humans. Excessive runoff events can send high velocity flows of water from storm sewers to creeks, causing stream bank erosion events that contribute additional sediment load to the waterway.

Many traditional sources of runoff pollution in urban areas are permitted through the local, state, or federal authorities. Industrial and manufacturing sites, construction sites, and community-wide municipal storm sewer systems are entities that are required to obtain permit coverage from the appropriate governing body in Wisconsin. In addition, and separate from permit conditions of regulated bodies, there are many practices that individuals, homeowners, and non-regulated groups can do to minimize the overall impact of pollutants to the local waterways. A few examples include washing cars at commercial car wash locations or in the grass to allow water to soak into the ground, picking up pet waste, and installing rain gardens and rain barrels for single family homes to minimize the amount of runoff that reaches the road and the storm sewer system.



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2.1.2. Phosphorus

Although phosphorus is an essential nutrient for plant growth, excess phosphorus is a concern for most aquatic ecosystems. Where human activities do not dominate the landscape, phosphorus is generally in short supply, limiting the growth of algae and aquatic plants. When a large amount of phosphorus enters a waterway, it essentially fertilizes the aquatic system. This results in the rapid growth of aquatic plants and algae, often referred to as an algal bloom. This condition of nutrient enrichment and high plant productivity is referred to as eutrophication.

2.1.2.1. Total Phosphorus

Phosphorus found in storm water runoff is a combination of particulate phosphorus (which is typically attached to other particles such as sediment) and dissolved phosphorus. Total Suspended Solids, or TSS, has been the standard pollutant targeted in storm water treatment facilities, since other pollutants such as phosphorus (in particulate form), heavy metals, nutrients and others have been found to be attached to the sediment particles. Storm water treatment facilities are effective in removing suspended particles containing phosphorus, however, they only have a limited impact on removing phosphorus that is in dissolved form. Cost effective methods for improved removal of phosphorus from storm water runoff are being developed and evaluated, and it is expected that this technology will evolve rapidly in the coming years.



Figure 2.1. Composition of Total Phosphorus

Eutrophication can be detrimental to aquatic life, reduce recreational opportunities, and affect the economic well-being of the surrounding community. Excessive growth of vegetation at the surface in a water body reduces the amount of sunlight that penetrates the water, which chokes beneficial submerged aquatic vegetation. Large areas of excessive vegetation growth, including Eurasian water-milfoil (*Myriophyllum spicatum*), water celery (*Vallisneria sp.*), duckweed (*Lemnoideae sp.*), and many different pond weeds (*Potamogeton sp.*) can inhibit or prevent access to a waterway, which restricts use of the water for fishing, boating, and swimming. Addition of excessive phosphorus to an aquatic system may also cause a bloom of blue-green algae or cyanobacteria, which can produce toxins that can be harmful to fish and pose health risks to humans, including symptoms of stomach aches, rashes, diarrhea, and vomiting in severe exposure conditions. Algal blooms, particularly those that form surface scums, are visually unappealing and can have unpleasant odors. This makes recreational use of the water body undesirable, impacting the everyday quality of life for people who live nearby. When the large masses of aquatic plants and/or algae die off, the decomposition of organic matter depletes the supply of dissolved oxygen in the water, suffocating fish and other aquatic life. Depending on the timing and severity of the low dissolved oxygen event, large fish kills can occur.



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2.1.3. Bacteria

Bacteria concentrations in storm water are highly variable and difficult to predict, but generally follow patterns. Bacteria concentrations are typically higher in warmer seasons than in cooler seasons. Typical urban bacteria sources include the following:

- Damaged sewer laterals or illicit sanitary sewer connections,
- Uncovered dumpsters,
- Pet waste,
- Naturally occurring or human attracted urban wildlife,
- Decaying plant matter, litter, and sediment in the storm drain system, and
- Soil erosion.

Managing bacteria concentrations in runoff can be challenging because bacteria is present in varying levels in the natural environment. The approaches to managing bacteria in storm water are either through the management of the source of the bacteria or by the removal of bacteria through treatment of storm water prior to it entering surface waters.

Identifying sources can be as simple as looking for evidence of obvious sources. For example, hot spots can be identified in areas with large roof tops or parking lots that attract large groups of birds, storm water ponds that attract waterfowl and other wildlife, uncovered dumpsters, businesses that sell or keep livestock/other animals, and aged infrastructure that is likely to have illicit connections or damaged sewer lines.

At this time, the WDNR does not provide specific guidance on identifying bacteria sources.

2.2 MS4 Storm Water Permit Requirements

The Village's MS4 permit requires the Village to complete a multitude of activities aimed at improving the quality of storm water runoff that enters the nearby rivers, lakes, and wetlands. One of these requirements is to make progress towards TMDL Wasteload Allocations.

2.3 Total Maximum Daily Loads in the Milwaukee River Basin

Section 303(d) of the Federal Clean Water Act requires the development of strategies to address waterways that are impaired or exceed pollutant levels established to meet water quality standard designations of fishable and swimmable. TMDL designations are one strategy that has been used across the country to recognize and address polluted water resources and create goals to improve and eventually "de-list" Impaired Waters.

Through the designation of a TMDL, the assimilative capacity is determined. The assimilative capacity is the maximum amount of a pollutant that a waterbody is capable of accommodating, while continuing to meet the existing water quality standard. For all pollutant sources, load allocations are established at levels necessary to meet the applicable water quality standard, with consideration given to seasonal variations and margins of safety. TMDL reports provide the framework that allows states to establish and implement pollution control and management plans with the ultimate goal, as defined by the Clean Water Act, of "water quality which provides for the protection and propagation of fish, shellfish and wildlife, and recreation in and on the water wherever attainable."

The Wisconsin Department of Natural Resources, working in conjunction with the EPA, is responsible to implement approved TMDLs through permits that apply to the TMDL area. Several major TMDLs have recently been completed, including reports for the Milwaukee River, Rock River, Upper Fox and Wolf Rivers, and the Wisconsin River. Several more are currently under development.



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As shown on Exhibit 1, the Village of Thiensville is located within the Milwaukee River Basin. The Milwaukee River Basin TMDL analysis was started in 2013, with final EPA approval received in 2018. The Milwaukee River, which flows through the Village, has been listed on the State of Wisconsin's Impaired Waters List for many years. Table 2.1 (below) lists the pollutants, impairment indicators, pollutant sources, and listing date. Within the Village, the Milwaukee River is separated into two segments, upstream of the dam (Stream Mile Segment 19.35 to 29.33) and downstream of the dam (Stream Mile Segment 2.90 to 19.35). Additionally, the Milwaukee River Basin TMDL is separated into reachsheds. Each reachshed has its own designated TMDL goal. The Village's drainage area falls within three TMDL reachsheds: MI-25, MI-26, and MI-27 (Exhibit 1).

Table 2.1 Pollutants of Concern & Impairments Within the Village of Thiensville

Waterbody	TMDL Reachshed	Pollutant	Impairment	Source	Date Listed
Milwaukee River Stream Miles 2.90 – 19.35	MI-27	Unknown Pollutant	Elevated Water Temperature	Point/Nonpoint Source	4/1/2016
		Total Phosphorus	Impairment Unknown	Nonpoint Source	4/1/2014
		PCBs	PCBs Contaminated Fish Tissue	Contaminated Sediment	4/1/1998
		<i>E. coli</i>	Recreational Restrictions – Pathogens	Point/Nonpoint Source	4/1/1998
Milwaukee River Stream Miles 19.35 – 29.33	MI-25	PCBs	PCBs Contaminated Fish Tissue	Contaminated Sediment	4/1/1998
		<i>E. coli</i>	Recreational Restrictions – Pathogens	Point/Nonpoint Source	4/1/1998

Note: The Milwaukee River Watershed TMDL was approved by the EPA on March 9, 2018 and covers waters in the basin which are impaired for Total Phosphorus, Sediment/Total Suspended Solids, and bacteria (*E. coli* and Fecal Coliform).

Sources: <https://dnr.wi.gov/water/impairedDetail.aspx?key=426381> and <https://dnr.wi.gov/water/impairedDetail.aspx?key=1854856>

The pollutants of concern for stream mile segment 19.35 to 29.33 are PCBs and *E. coli*, which cause the impairments of Specific Restricted Fish Consumption and Restricted Recreation. The pollutants of concern for stream mile segment 2.90 to 19.35 are total phosphorus and PCBs, which cause a Specific Restricted Fish Consumption impairment. Data from the 2020 Impaired Waters listing cycle indicates that this segment of the Milwaukee River exceeded the total phosphorus listing criteria, but no corresponding impairment was assigned.⁶

The MS4 permit requires that the Village reduce the pollutants that reach the Milwaukee River through storm water runoff. The MS4 permit refers to the TMDL for the required reductions of TSS, phosphorus, and bacteria. Through these reductions, the state hopes to reach the overall goal of the TMDL: to remove, or “de-list”, waterways from Wisconsin's Impaired Waters List. Methods and practices to address the impairments along the Milwaukee River where it flows through the Village, thus improving the quality of the river, are included in the list of alternatives that the Village will evaluate and implement to meet the TMDL requirements under the MS4 permit (Chapter 4).

⁶ WDNR 2020 Impaired Waters and Restoration Waters Lists, EPA-Approved in October 2020. Web address: <https://dnr.wisconsin.gov/topic/SurfaceWater/ConditionLists.html>.



2.3.1. Total Maximum Daily Load Pollutant Wasteload Allocations

The TMDL establishes goals for each reachshed. These goals are managed through allocations of permitted discharge by pollutant type. All allocations are broken down by TMDL reachshed (or sub-watershed). Reachsheds may have drastically different allocations depending on the existing pollutant loading, land use, and the ability of the waterway to remove pollutants. The TMDL report presents the loading capacity of a pollutant into a waterbody, defined in terms of mass of pollutant over a certain period. As part of the Milwaukee River Basin TMDL, each reachshed is assigned an allowable discharge allocation for TSS, phosphorous, and bacteria. These allocations are then expressed in percent reduction goals by watershed, and for bacteria, by flow regimen.

2.3.2. TMDL Wasteload Allocations for the Village of Thiensville

The Village of Thiensville is within three reachsheds of the Milwaukee River Basin: Milwaukee River Reachshed (MI-25), Milwaukee River Reachshed (MI-26), and Milwaukee River Reachshed (MI-27). The pollutant reduction goals specified by the Milwaukee River Basin TMDL for each of the three reachsheds are summarized in Table 2.2 for TSS and phosphorus. Bacterial TMDL allocations are summarized in Table 2.3.

Table 2.2: Milwaukee River TMDL Pollutant Reduction Goals, TSS and Phosphorus

TMDL Reachshed	Required TSS/Sediment Reduction Goal from No Controls (Includes Baseline*)	Required Phosphorus Reduction Goal from No Controls (Includes Baseline*)
Milwaukee River (MI-25)	82%	43%
Milwaukee River (MI-26)	90%	88%
Milwaukee River (MI-27)	72%	54%

* Note: Baseline calculations detailed in Ch. 3.6.

Source: Total Maximum Daily Loads for TP, TSS, and Fecal Coliform, Milwaukee River Basin, Wisconsin, Final Report

Pollutant reduction goals are also specified in terms of annual, monthly, and daily loadings. To ease implementation and address any potential bias associated with differing acreages within each reachshed, WDNR has recommended the average annual percent reductions, as presented in Table 2.2 above, to be the primary compliance measure for TSS and phosphorus.



Table 2.3: Milwaukee River TMDL Fecal Coliform Wasteload Allocation

TMDL Reachshed	Maximum Fecal Coliform Loading: MS4 Wasteload Allocation (Billions of Cells per Month)				
	Low Flow	Dry Conditions	Mid-Range Flow	Moist Conditions	Wet Conditions
Milwaukee River (MI-25)	999	2,338	4,170	7,432	17,316
Milwaukee River (MI-26)	404	1,051	2,013	3,851	9,915
Milwaukee River (MI-27)	1,032	2,263	2,862	6,592	14,432

Source: Total Maximum Daily Loads for TP, TSS, and Fecal Coliform, Milwaukee River Basin, Wisconsin, Final Report, Appendix A, Table A.15

Table 2.3 summarizes the total allowable fecal coliform loads per flow regime in each reachshed. The TMDL values are in billions of cells per month. As the flow increases, the TMDL value increases because the assimilative capacity is greater at higher flows. All reachsheds have modeled load values greater than the allowable load, suggesting that a reduction is needed to meet the TMDL.



3. EXISTING CONDITIONS

In any storm water system planning effort, definitive knowledge is required of the existing storm water management system. Inventories and analyses are required of such factors as the existing land use, existing storm water ordinances, topography, drainage patterns, geology, conditions of receiving waters, and existing storm water facilities within the Village of Thiensville. The following is a summary of findings for each of these parameters.

3.1 Land Use

The existing land use is an important consideration in the preparation of a storm water management systems plan and is the primary data input in the water quality modeling efforts completed as part of this analysis. The Village of Thiensville utilizes the Southeastern Wisconsin Regional Planning Commissions (SEWRPC) land use information, as shown on Exhibit 2 and in Table 3.1.

Table 3.1 Land Uses by Area per SEWRPC

Land Use	Acres	Percent of Planning Area (%)
Commercial - Downtown	46.28	8.36
Industrial - Light	4.13	0.75
Institutional	28.43	5.14
Open Space	18.00	3.25
Park	3.05	0.55
Residential - High Density	52.97	9.57
Residential - Low Density	18.57	3.35
Residential - Medium Density	386.13	69.75
Total	557.56	100.00

3.2 Existing Storm Water Ordinance

The Village's existing storm water management ordinance, Village of Thiensville Code of Ordinances, Chapter 30, Article IV - Construction Site Erosion Control Stormwater Management, updated March 2004, was modeled after Chapters NR 151 and NR 216 of the Wisconsin Administrative Code.

The Village's ordinance requires water quality controls on new and re-development projects, to prevent further degradation of the local waterways. The ordinance specifies control requirements for new construction to achieve a reduction of at least 80% TSS in designed post-construction storm water runoff. Redevelopment sites are required to achieve a reduction of at least 40% TSS in designed post-construction storm water runoff. The ordinance further specifies that in-fill development that occurs after 2014 must achieve a reduction of at least 80% TSS in designed post-construction storm water runoff.

Pollutants of concern for the Milwaukee River include PCBs, *E. coli*, and total phosphorus. These pollutants cause the impairments of Specific Restricted Fish Consumption, Restricted Recreation, and Low Dissolved Oxygen.



3.3 Topography and Surface Drainage Patterns

The Village is located within the Milwaukee River watershed, in three distinct drainage areas. These drainage areas are within the Milwaukee River Reachsheds: MI-25, MI-26, and MI-27. Most of the Village is split between reachsheds MI-25 and MI-26, as delineated in the Milwaukee River Basin Total Maximum Daily Load (TMDL) report. A small portion of the southwest limits of the Village drain toward MI-27. Drainage basins for the storm water planning effort have been developed to reflect private and public storm water facility treatment areas.

3.4 Geologic Conditions

The geologic conditions of an area, including soils, depth to bedrock, and depth to the groundwater table, are important considerations in any storm water management system planning effort. Soil type in the Village ranges from poorly drained to well drained, as shown in Table 3.2. The dominant soil is well drained silt loam. Well drained soils allow for infiltration of storm water.

Table 3.2 Soil Drainage Classes Within the Village of Thiensville

Soil Drainage Class	Percent of Village
Well drained	55%
Moderately well drained	18%
Poorly drained	14%
Somewhat poorly drained	4%
Water	3%
Gravel pit	3%
Somewhat excessively drained	3%

Source: USDA NRCS Web Soil Survey

3.5 Existing Storm Water Management System and Best Management Practices

The existing storm water management system within the Village consists of a network of pipes, inlets, catch basins, detention and infiltration ponds, culverts, drainage ditches, and associated overland flow paths. The system consists of seven water quality devices and 12 grass swale basins. The location and configuration of this storm water system is shown on Exhibit 1. In the evaluation of existing conditions, it is assumed that all storm water facilities are being regularly inspected and maintained.

The Village is aware of the need to protect the natural resources located throughout the planning area while also complying with their MS4 storm water discharge permit. To achieve this goal, the Village is actively involved in numerous best management practices designed to protect water quality. The current activities include, but are not limited to:

- Leaf Disposal: The Village Department of Public Works (DPW) maintains a leaf and yard waste drop-off site open 7 days per week, year-round. Grass clippings are also accepted.
- Street Sweeping: The Village utilizes a vacuum assisted street sweeper, performing bi-weekly sweeping in the spring and fall and monthly in the summer.
- Catch Basin Cleaning: The Village performs annual cleaning of all catch basins.



3.6 Existing Conditions: Water Quality Modeling

The MS4 permit requires modeling to reflect existing and proposed storm water pollutant reductions produced by the existing land use conditions within the Village. The modeling that was generated as part of this planning effort reflects recent developments and new storm water best management practices. It also incorporates Wisconsin Department of Natural Resources' (WDNR) TMDL modeling guidance "TMDL Guidance for MS4 Permits: Planning, Implementation, and Modeling Guidance" and related appendices, dated September 2016.

This updated water quality analysis was completed using WinSLAMM, Version 10.4.1. The existing level of pollutant control was compared to the pollutant reduction requirements of the MS4 permit and the wasteload allocations in the Milwaukee River TMDL report. The TMDL wasteload allocations are represented as the pollutant reductions necessary to meet water quality standards. The TMDL report assumes a 20% TSS reduction baseline, which correlates to an 11.3% phosphorus reduction. In order to compare existing levels of pollutant control to the "no controls" condition, the wasteload allocations in the TMDL report need to be adjusted to account for the baseline 20% TSS reduction. The revised TSS and phosphorus reductions including the baseline reductions are listed in Table 2.2, Chapter 2.

Parameter files used with WinSLAMM follow WDNR guidance, including use of the Milwaukee five-year rainfall data, which has been determined by WDNR to be representative of a typical period of rainfall within the Village. The resulting pollutant loading levels are then annualized for the presented results.

The land use was based on SEWRPC's 2015 land use data and was updated to reflect recent development. The multitude of land use codes from SEWRPC were synthesized to align with the more general standard land use categories found within WinSLAMM. To replicate the Village's existing development and build-out patterns, WinSLAMM standard land use files that are representative of the Village's land use categories were utilized to generate pollutant loadings for the existing conditions. The standard land use files used in the modeling process are as follows:

- Low Density Residential (LDR),
- Medium Density Residential No Alleys (MDRNA),
- High Density Residential No Alleys (HDRNA),
- Light Industrial,
- Commercial: Downtown,
- Institutional: Miscellaneous, and
- Other Urban (Open Space).

Areas within the municipal boundary that were excluded from the water quality model are the following:

- Lands zoned for agricultural use and currently being used as such,
- Riparian areas that directly drain to waters of the state without passing through the Village's MS4, and
- State and County highways that are not maintained by the Village and any lands that drain to these highways.

The land use conditions are reflected on Exhibit 2 (excluded land use areas do not have associated symbology).



12/15/22

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Storm water facilities modeled to determine the existing conditions include those owned by the Village and owned by private entities which have Long Term Maintenance Agreements (LTMA) with the Village. Additional privately owned storm water facilities without LTMA were modeled for efficiency, however the reductions achieved were not included in the Village's regulatory reduction totals (Table 3.3). The Village recognizes that it will need to enforce maintenance provisions on those facilities which it does not own.

In-field infiltration rate testing was completed at 11 locations throughout the Village, shown on Exhibit 3. All infiltration rate testing was performed in grass swale drainage basins. The resulting infiltration rates from the tests were grouped into three areas based on the parameters as outlined in the WDNR MS4 Modeling Guidance. The static infiltration rates in each area were averaged and divided by two to obtain the dynamic infiltration rate. The final infiltration rates were approved by WDNR on December 17, 2020. The detailed infiltration rate field test reports can be found in Appendix J.

The WinSLAMM model was used to calculate the probable pollutant loadings under existing land use conditions with no storm water controls. The resulting TSS and phosphorus loadings were then compared to the corresponding reductions calculated when accounting for all the existing water quality controls within the Village (street sweeping, storm water facilities, etc.).

When available, the pollutant loading reductions for storm water quality devices were taken from approved storm water management plans for each corresponding facility. This sediment reduction percentage was then used by the model to determine a phosphorus loading reduction for the same contributing land use area. For water quality devices that did not have the support of a storm water management plan, performance was calculated by entering the physical parameters of the water quality device and allowing the WinSLAMM model to calculate the reductions achieved by that device within the corresponding drainage basin.

The pollutant loadings are provided in pounds and are equal to the amount of each pollutant that may be expected to be generated in storm water runoff from the area concerned over a typical calendar year. Generally, pollutant loadings increase when the amount of critical land use (industrial, commercial, high density residential, governmental, institutional, and highways) increases; the length of curb increases; the length of grass swales decreases; frequency of catch basin cleaning decreases; and frequency of street cleaning decreases. With the construction of best management practices, downstream pollution is expected to decrease. The results of the modeling are summarized in Table 3.3 and a map of the existing water quality basins is shown in Exhibit 2. Detailed modeling results per reachshed are provided in Tables 3.4, 3.5, and 3.6.

Table 3.3 - Pollutant Loading Results (WinSLAMM)

Table 3.4 – Detailed Modeling Results for MI-25

Table 3.5 – Detailed Modeling Results for MI-26

Table 3.6 – Detailed Modeling Results for MI-27

3.7 Bacteria

WDNR requires MS4 permittees to incorporate plans to meet TMDL wasteload allocation targets in their storm water management plans. Due to the difficulty of generalized bacteria reduction goals, a qualitative approach to assess and address bacteria was proposed by the WDNR. Following the WDNR approach, a Bacteria Source Identification Map (Exhibit 4) has been developed. Chapter 5, Recommendations for Bacteria Source Elimination, expands on the bacteria assessment and provides recommendations.



Summary of TMDL Modeling Results													
TMDL Reachshed	Area (acres)	Total Suspended Solids (TSS)						Total Phosphorus (TP)					
		Discharge No Controls (pounds)	Regulatory Discharge With Controls (pounds)	Regulatory TSS Reduction (%)	Constructed Discharge With Controls (pounds)	Constructed TSS Reduction (%)	Required TSS Reduction Per TMDL (%)	Discharge No Controls (pounds)	Regulatory Discharge With Controls (pounds)	Regulatory TP Reduction (%)	Constructed Discharge With Controls (pounds)	Constructed TP Reduction (%)	Required TP Reduction per TMDL (%)
MI-25	176	35,878	13,113	63%	13,113	63%	82%	132	51	61%	51	61%	43%
MI-26	330	79,386	39,341	50%	39,341	50%	90%	285	143	50%	143	50%	88%
MI-27	54	15,170	10,419	31%	10,359	32%	72%	44	30	33%	30	33%	54%
Overall	560	130,434	62,873	52%	62,813	52%	—————	462	224	51%	224	51%	—————

Note: Regulatory practices are those which can be counted as progress towards the TMDL given the current status of their Maintenance Agreements and/or Maintenance Programs.
Constructed practices are existing storm water controls that need updated or formalized Maintenance Agreements and/or Maintenance Programs.

TSS REGULATORY -- Values in Pounds

TSS	reduction needed	reduction achieved	reduction still needed (lbs)
MI-25	29,419.75	22,764.27	6,655.48
MI-26	71,447.52	40,045.37	31,402.16
MI-27	10,922.24	4,751.26	6,170.98
sum	111,789.52	67,560.90	44,228.62

Regulatory

	Pounds Reduction of TSS Needed	Pounds Reduction of P Needed
MI-25	6,655.48	(24.19)
MI-26	31,402.16	109.26
MI-27	6,170.98	9.25
Sum	44,228.62	94.32

REGULATORY -- Values in Pounds

PHOSPHORUS	reduction needed	reduction achieved	reduction still needed (lbs)
MI-25	56.91	81.10	(24.19)
MI-26	250.78	141.52	109.26
MI-27	23.99	14.74	9.25
sum	331.68	237.36	94.32

CONSTRUCTED -- Values in Pounds

TSS	reduction needed	reduction achieved	reduction still needed (lbs)
MI-25	29,419.75	22,764.27	6,655.48
MI-26	71,447.52	40,045.37	31,402.16
MI-27	10,922.24	4,810.76	6,111.48
sum	111,789.52	67,620.40	44,169.12

Constructed

	Pounds Reduction of TSS Needed	Pounds Reduction of P Needed
MI-25	6,655.48	(24.19)
MI-26	31,402.16	109.26
MI-27	6,111.48	9.11
Sum	44,169.12	94.18

Constructed-- Values in Pounds

PHOSPHORUS	reduction needed	reduction achieved	reduction still needed (lbs)
MI-25	56.91	81.10	(24.19)
MI-26	250.78	141.52	109.26
MI-27	23.99	14.88	9.11
sum	331.68	237.50	94.18

Summary of MS4 Modeling Results for Reachshed MI-25										
Land Use Analyzed			Storm Water Treatment Practices		Total Suspended Solids			Total Phosphorus		
Identification (label)	Acreage (acres)	Conveyance Method (GS, CG, UR)	Main Treatment Type (WP, IB, etc.)	Other Treatment (SC, LM)	Discharge No Controls (pounds)	Discharge Controls (pounds)	TSS Control (%)	Discharge No Controls (pounds)	Discharge Controls (pounds)	P Control (%)
Land Use with No Constructed Facilities and No Roadside Conveyance Treatment										
Note: Phosphorus reduction is not given in model for individual land use in non-controlled areas.										
Commercial - Downtown	1.77	CG	N/A	SC	705.92	611.37	13.39%	-	-	-
Industrial - Light	0.00				-	-	-	-	-	-
Institutional	0.00				-	-	-	-	-	-
Open Space	0.00				-	-	-	-	-	-
Park	0.00				-	-	-	-	-	-
Residential - High Density	1.14				309.86	275.11	11.21%	-	-	-
Residential - Low Density	7.72				1170.07	1051.16	10.16%	-	-	-
Residential - Medium Density	53.95				11229.01	9991.19	11.02%	-	-	-
SUBTOTAL	64.58				13414.86	11928.83	11.08%	49.76	46.39	6.77%
Publicly Owned Storm Water Facilities and Roadside Conveyance Treatment with Maintenance Plans										
BF-01	11.19	CG	Biofilter	SC	1777.90	645.65	63.68%	5.11	2.36	53.74%
PP-03	0.85	UR	Permeable Pavement		101.45	7.23	92.87%	0.44	0.07	84.10%
GS-02	72.49	GS	Grass Swale	N/A	14972.20	196.14	98.69%	56.07	0.89	98.41%
GS-03	13.16	GS	Grass Swale		2739.06	151.13	94.48%	10.23	0.69	93.28%
GS-04	11.65	GS	Grass Swale		2424.75	159.86	93.41%	9.06	0.73	91.95%
GS-10	2.15	GS	Grass Swale		447.53	24.64	94.49%	1.67	0.11	93.25%
SUBTOTAL	111.48				22462.89	1184.65	94.73%	82.59	4.85	94.12%
Private Storm Water Facilities with Maintenance Agreement										
Not Applicable										
Private Storm Water Facilities Without Maintenance Agreement										
Not Applicable										

Abbreviations
WP: Wet Pond
SC: Street sweeping
VS: Vacuum clean streets
C: Catch basin
O: Other control
GS: Grass swale
LM: Leaf Management
CG: Curb and gutter
UR: Undeveloped roadside

Existing Conditions for All Regulated Facilities			TSS Discharge No Controls (lbs.)	TSS Discharge With Controls (lbs.)	TSS Control (%)	TP Discharge No Controls (lbs.)	TP Discharge With Controls (lbs.)	TP Control (%)
MI-25	176		35877.75	13113.48	63.45%	132.35	51.24	61.28%

Existing Conditions for All Constructed Facilities			TSS Discharge No Controls (lbs.)	TSS Discharge With Controls (lbs.)	TSS Control (%)	TP Discharge No Controls (lbs.)	TP Discharge With Controls (lbs.)	TP Control (%)
MI-25	176		35877.75	13113.48	63.45%	132.35	51.24	61.28%

Summary of MS4 Modeling Results for Reachshed MI-26										
Land Use Analyzed			Storm Water Treatment Practices		Total Suspended Solids			Total Phosphorus		
Identification (label)	Acreage (acres)	Conveyance Method (GS, CG, UR)	Main Treatment Type (WP, IB, etc.)	Other Treatment (SC, LM)	Discharge No Controls (pounds)	Discharge Controls (pounds)	TSS Control (%)	Discharge No Controls (pounds)	Discharge Controls (pounds)	P Control (%)
Land Use with No Constructed Facilities and No Roadside Conveyance Treatment										
Note: Phosphorus reduction is not given in model for individual land use in non-controlled areas.										
Commercial - Downtown	32.08	CG	N/A	SC	12794.85	11080.84	13.40%	-	-	-
Industrial - Light	0.10				62.08	57.57	7.26%	-	-	-
Institutional	19.52				7749.03	6910.05	10.83%	-	-	-
Open Space	6.98				335.93	277.73	17.32%	-	-	-
Park	0.00				-	-	-	-	-	-
Residential - High Density	35.18				9558.04	8653.97	9.46%	-	-	-
Residential - Low Density	0.86				130.35	117.10	10.17%	-	-	-
Residential - Medium Density	27.66				5757.14	5122.31	11.03%	-	-	-
SUBTOTAL	122.38				36387.42	32219.57	11.45%	108.84	101.14	7.07%
Publicly Owned Storm Water Facilities and Roadside Conveyance Treatment with Maintenance Plans										
DP-01	51.84	CG/GS	Dry Pond	N/A & SC	9606.86	5146.79	46.43%	36.62	21.33	41.74%
PP-02	0.20	GS	Permeable Pavement	N/A	79.77	13.40	83.20%	0.20	0.05	73.88%
GS-01	126.34	GS	Grass Swale		26273.22	498.21	98.10%	98.16	2.22	97.74%
GS-05	6.16	GS	Grass Swale		1653.90	66.39	95.99%	5.85	0.27	95.46%
GS-07	2.10	GS	Grass Swale		570.53	19.27	96.62%	2.02	0.08	96.17%
GS-08	6.33	GS	Grass Swale		1241.22	139.21	88.78%	4.45	0.58	86.92%
GS-09	9.20	GS	Grass Swale		2003.47	29.77	98.51%	7.39	0.13	98.23%
SUBTOTAL	202.18				41428.96	5913.03	85.73%	154.69	24.67	84.05%
Private Storm Water Facilities with Maintenance Agreement										
PD-01	5.51	CG	Proprietary Device	SC	1569.76	1208.17	23.03%	21.45	17.65	17.72%
SUBTOTAL	5.51				1569.76	1208.17	23.03%	21.45	17.65	17.72%
Private Storm Water Facilities Without Maintenance Agreement										
Not Applicable										

Abbreviations
WP: Wet Pond
SC: Street sweeping
VS: Vacuum clean streets
C: Catch basin
O: Other control
GS: Grass swale
LM: Leaf Management
CG: Curb and gutter
UR: Undeveloped roadside

Existing Conditions for All Regulated Facilities		TSS Discharge No Controls (lbs.)	TSS Discharge With Controls (lbs.)	TSS Control (%)	TP Discharge No Controls (lbs.)	TP Discharge With Controls (lbs.)	TP Control (%)
MI-26	330	79386.14	39340.77	50.44%	284.98	143.46	49.66%

Existing Conditions for All Constructed Facilities		TSS Discharge No Controls (lbs.)	TSS Discharge With Controls (lbs.)	TSS Control (%)	TP Discharge No Controls (lbs.)	TP Discharge With Controls (lbs.)	TP Control (%)
MI-26	330	79386.14	39340.77	50.44%	284.98	143.46	49.66%

Summary of MS4 Modeling Results for Reachshed MI-27											
Land Use Analyzed			Storm Water Treatment Practices		Total Suspended Solids			Total Phosphorus			
Identification (label)	Acreage (acres)	Conveyance Method (GS, CG, UR)	Main Treatment Type (WP, IB, etc.)	Other Treatment (SC, LM)	Discharge No Controls (pounds)	Discharge Controls (pounds)	TSS Control (%)	Discharge No Controls (pounds)	Discharge Controls (pounds)	P Control (%)	
Land Use with No Constructed Facilities and No Roadside Conveyance Treatment											
Note: Phosphorus reduction is not given in model for individual land use in non-controlled areas.											
Commercial - Downtown	8.35	CG	N/A	SC	3330.38	2884.15	13.40%	-	-	-	
Industrial - Light	3.65				1971.31	1836.32	6.85%	-	-	-	
Institutional	7.30				2897.69	2584.12	10.82%	-	-	-	
Open Space	0.33				15.88	13.13	17.33%	-	-	-	
Park	0.13				15.51	14.61	5.85%	-	-	-	
Residential - High Density	0.73				198.34	179.57	9.46%	-	-	-	
Residential - Low Density	0.28				42.44	38.12	10.16%	-	-	-	
Residential - Medium Density	13.14				2735.01	2433.42	11.03%	-	-	-	
SUBTOTAL	33.91				11206.56	9983.44	10.91%	30.04	27.96	6.94%	
Publicly Owned Storm Water Facilities and Roadside Conveyance Treatment with Maintenance Plans											
PP-01	0.09	CG	Permeable Pavement	N/A	10.74	0.13	98.78%	0.05	0.00	96.98%	
GS-06	8.95	GS	Grass Swale		1976.22	114.11	94.23%	6.98	0.49	92.94%	
GS-11	0.75	GS	Grass Swale		156.09	2.62	98.32%	0.58	0.01	97.95%	
GS-12	9.08	GS	Grass Swale		1581.78	79.83	94.95%	5.91	0.36	93.83%	
SUBTOTAL	18.87				3724.83	196.69	94.72%	13.52	0.87	93.56%	
Private Storm Water Facilities with Maintenance Agreement											
Not Applicable											
Private Storm Water Facilities Without Maintenance Agreement											
WP-01	1.42	CG	Wet Pond	N/A	238.39	178.89	24.96%	0.86	0.72	16.53%	
SUBTOTAL	1.42				238.39	178.89	24.96%	0.86	0.72	16.53%	

Abbreviations
WP: Wet Pond
SC: Street sweeping
VS: Vacuum clean streets
C: Catch basin
O: Other control
GS: Grass swale
LM: Leaf Management
CG: Curb and gutter
UR: Undeveloped roadside

Existing Conditions for All Regulated Facilities				TSS Discharge No Controls (lbs.)	TSS Discharge With Controls (lbs.)	TSS Control (%)	TP Discharge No Controls (lbs.)	TP Discharge With Controls (lbs.)	TP Control (%)
MI-27	54			15169.78	10418.52	31.32%	44.42	29.69	33.17%

Existing Conditions for All Constructed Facilities				TSS Discharge No Controls (lbs.)	TSS Discharge With Controls (lbs.)	TSS Control (%)	TP Discharge No Controls (lbs.)	TP Discharge With Controls (lbs.)	TP Control (%)
MI-27	54			15169.78	10359.02	31.71%	44.42	29.54	33.49%

4. ALTERNATIVES ANALYSIS AND RECOMMENDATIONS

Annual pollutant loading goals are set forth in the Milwaukee River Basin Total Maximum Daily Load (TMDL) Report (2018), as noted in Table 2.2 (Chapter 2 - Water Quality Objectives and Standards). Based on the goals set forth, the existing storm water controls in the Village of Thiensville (Village) are not sufficient to meet water quality targets defined in the TMDL Report. To achieve TMDL compliance, the Village must reduce the annual discharge of Total Suspended Solids (TSS) by 44,229 pounds and reduce Total Phosphorus (TP) by 94 pounds.

To achieve reductions in TSS and TP, the Village assessed alternative nonpoint source pollutant abatement measures. The alternatives were evaluated based on their abilities to comply with the Village's TMDL and MS4 permit requirements and the specific needs of the receiving waterways.

A selection of potential traditional storm water facilities that the Village has deemed feasible are provided in the Traditional Water Quality Alternatives section below. Subsequently, the section on Non-Traditional Water Quality Alternatives provides an assessment of the following: stream restoration, long term maintenance agreements for existing storm water management facilities, and water quality trading.

The following is a breakdown of all the alternatives by traditional and nontraditional. The traditional alternatives include ALT-01 through ALT-06, ALT-08 and ALT-10 and the non-traditional alternatives include ALT-07 and ALT-09.

4.1 Traditional Water Quality Alternatives

Traditional alternatives that can be established throughout the reachsheds include: wet ponds, artificial wetlands, infiltration basins, grass swale conveyance, and rain gardens. These facilities have proven highly effective in reducing pollutant loadings. Typically, the area contributing to these facilities may achieve 80% to 100% reductions in the annual loadings of TSS and 40% to 100% reductions of TP.

Regional storm water facilities are constructed and operated with significant efficiency advantages over individual site-specific facilities. Based on these benefits, the Village will pursue the implementation of regional facilities wherever practical. Construction costs for regional facilities are generally borne by the Village, although these costs may be charged back to developers and landowners that contribute to, or benefit from, the facility.

The location of each alternative discussed below is shown on Exhibit 5.

4.1.1 Milwaukee River Reachshed MI-25

Milwaukee River Reachshed MI-25 is located in the southeast area of the Village. This area is primarily residential development with a grass swale storm water conveyance system. A few institutional and commercial land use areas are located along the southern boundary of the reachshed.

The TMDL TSS reduction goal for MI-25 is 82%. Currently, the Village is achieving 63% TSS reduction. The Village must reduce TSS in MI-25 by an additional 6,655 pounds. The Village is currently achieving the TMDL goal for TP reduction within this reachshed.



The below alternatives are recommended for continued progress toward TMDL compliance within this reachshed.

- **Alternative-01: Village Park Permeable Pavement.** The first alternative (ALT-01) is redevelopment of the parking lot at Thiensville's Village Park, located at 259 Elm Street. The existing parking lot is approximately 0.5 acres. The Village currently plans to increase the parking lot size by 0.4 acres.

Storm water devices such as permeable pavement or permeable pavers are recommended for installation when the parking lot is expanded. The device would need to be located within the northern section of the parking lot, as the southern portion experiences flooding from the Milwaukee River during extreme rain events and would therefore require more frequent maintenance to ensure proper function. Storm water facilities placed on Village property also lend the opportunity for public education, an additional requirement of the MS4 permit.

Pollutant reduction modeling was completed for the installation of approximately 17,000 square feet of permeable pavement. Installation of permeable pavement in the Village Park parking lot has the potential to reduce TSS loading by 21 pounds and TP loading by 1 pound.

- **Alternative-02: Riveredge Court and Alta Loma Circle Permeable Pavement.** The second alternative (ALT-02) is in the Riveredge Court (ALT-02a) and Alta Loma Circle (ALT-02b) neighborhood cul-de-sacs. Installation of permeable asphalt or pavers is recommended for the cul-de-sac roadways.

If installed in both cul-de-sacs, this alternative has the potential to reduce TSS loading by 2,994 pounds and TP loading by 11 pounds.

4.1.2 Milwaukee River Reachshed MI-26

The northwestern section of the Village is within Milwaukee River Reachshed MI-26 and accounts for over half of the total modeled area.

Reachshed MI-26 has a TMDL goal of 90% reduction of TSS and 88% reduction of TP. Based on the existing storm water controls, the Village is currently achieving a reduction of 50% TSS and 50% TP. The Village's annual pollutant loading in this reachshed falls short of the TMDL goal by 31,402 pounds of TSS and 109 pounds of TP.

Due to the percentage of the Village that falls within Reachshed MI-26, and the significant need for pollutant reductions, several alternatives were explored for this area.

The following alternatives are recommended for the Village's continued progress toward meeting TMDL compliance within this reachshed:

- **Alternative-03: Laurel Lake Retrofit.** The third alternative (ALT-03) is the retrofit of Laurel Lake, located near 502 Laurel Lake Rd. The lake has an overflow structure with a pump that is turned on during high flow events. Even with pumping, high flow events can lead to water in the basements of the surrounding houses and overflow into the Village sanitary sewer. Alternative three includes an outfall structure modification. The outfall structure would include an orifice, broad crested weir, and a vertical standpipe in the northwest



corner of the lake with a discharge to the Pigeon Creek wetland located to the west (following all permitting requirements).

This alternative also includes initiating a long-term maintenance agreement between the Village and the existing landowners around the lake for inspection and maintenance purposes of the pond and outfall structure.

The proposed outfall modification could result in a reduction of 4,270 pounds of TSS and 12 pounds of TP.

- **Alternative-04: Department of Public Works Biofilter.** The fourth alternative (ALT-04) is located at the current DPW yard, 132 W. Freistadt Rd. There is an existing depression located on the property that currently stores water during small rain events. There is a high ground water level here. The alternative includes using the existing depression to install a biofilter. With the installation of a biofilter it will result in the approximate reduction of 1,030 pounds of TSS and 2 pounds of TP.
- **Alternative-05: Hawthorne Square Underground Storage.** The fifth alternative (ALT-05) is located behind 278 N Main St. This alternative includes a large underground storage tank. Preliminary drawings have been created for the development. From the preliminary drawings the stormwater facility is receiving an approximate reduction of 171 pounds of TSS and 1 pound of TP.

With the addition of a basin for Hawthorne Square, the drainage basin will be impacted for an existing storm water quality device. The Walgreens, located at 278 N Main St., currently has a proprietary device (PD-01). Therefore, with the addition of Hawthorne Square this will reduce the storm water draining to PD-01 and impact the TSS and TP pounds reductions for the device.

- **Alternative-06: Retrofit of Existing Storm Water Facility DP-01.** The sixth alternative (ALT-06) is located directly west of 615 Laurel Drive. This alternative involves retrofitting an existing stormwater facility. DP-01 is a well-maintained dry pond that is owned by the Village.

The retrofit would include planting native vegetation and widening the buffer around the central drainageway within DP-01. Mowing at a lower frequency would deter geese from gathering within this facility. These changes would result in an approximate reduction of 4,932 pounds of TSS and 17 pounds of TP.

- **Alternative-08: Cul-de-sac Permeable Pavement.** The eighth alternative (ALT-08) is located in various neighborhood cul-de-sacs throughout the Village. The neighborhood cul-de-sac in Reachshed MI-26 includes Ellenbecker Road. The alternative includes installing permeable asphalt or pavers in the cul-de-sac to be filtered before being discharged to the grass swale or storm sewer. These neighborhood cul-de-sacs are not highly trafficked so oil and grease would not be a major concern for clogging. The addition of permeable pavement would approximately reduce TSS by 448 pounds and 1 pound of TP.



4.1.3 Milwaukee River Reachshed MI-27

The southwest section of the Village is within Milwaukee River Reachshed MI-27. This area consists of residential development with a grass swale storm water conveyance system and an area of institutional and commercial land use adjacent to the Milwaukee River.

The TMDL goal for Reachshed MI-27 is 72% reduction of TSS and 54% reduction of TP. Current conditions provide 32% reduction of TSS and 34% reduction of TP. The Village's annual pollutant loading in this reachshed falls short of the TMDL goal by 6,171 pounds of TSS and 9 pounds of TP.

- **Alternative-10: Proprietary Device Installation in Downtown Area.** The tenth alternative (ALT-10) is located on Main Street in the downtown area of the Village. With limited space for storm water facilities to be installed, it is recommended to install a proprietary device to assist in pollutant reduction. Proprietary devices are recommended for placement directly upstream of an outfall to remove TSS and TP before leaving the storm sewer system. Proprietary devices can include a sump to allow particulates to settle or trash racks to capture large floatables. Modeling of the addition of one proprietary device would approximately result in the reduction of 756 pounds of TSS and 2 pounds of TP. As development plans for the Village move forward, it is recommended that other areas be examined for potential placement of proprietary devices.

4.2 Non-Traditional Water Quality Alternatives

An analysis of the Village's storm water system has determined that the TSS and TP reductions can be achieved with the addition of storm water treatment facilities at strategic locations within the Village. In addition to the traditional alternatives above, non-traditional water quality alternatives can be used to meet pollutant reduction goals. Consideration should be given to combining these alternative practices with other traditional storm water pollutant reduction measures as an overall strategy to meet the MS4 permit requirements and to meet the goals of the TMDL.

These alternatives include:

- Eroding streambank/flow impediment assessment,
- Develop maintenance agreements with private storm water facility owners,
- Pollutant trading with upstream property owners,
- Implementing an enhanced ordinance, and
- Continued ordinance enforcement for development and redevelopment projects.

Partnerships with MATC Mequon (ALT-07) and the railroad (ALT-09) could be used for water quality projects in reachshed MI-26. The Village may form a partnership with Mequon MATC to develop maintenance agreements for existing ponds that are to the north of Thiensville's municipal boundary. The ponds were created through a past joint effort, but no long-term agreement for maintenance or pollutant reduction credit was established at that time. The Village is bisected by a railway and ALT-09 involves a partnership between the Village and the railroad. The two parties may work together to improve the drainage channel along the railroad, which receives runoff from Village land.

Other non-traditional projects include stream restoration at Pigeon Creek (WBIC 20500). Pigeon Creek crosses through the central portion of the Village and outfalls to the Milwaukee River within Village limits. It is not currently listed as an impaired waterway. Two project areas (behind Harley Davidson and within Williamsburg Drive neighborhood) have been conceptualized. If the waterway is found to be eroded, streambank improvement projects may be eligible for pollutant reduction credit.



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It is recommended that partnerships with local businesses and organizations continue to be explored as development and redevelopment occur.

4.2.1 Stream Naturalization and Stabilization

While the TMDL requirements in the Village's MS4 permit are associated with pollutant reductions, specifically TSS and TP, the overall goal of the TMDL is to remove, or "de-list", waterways from the Impaired Waters List. The impairments for Milwaukee River in Reachshed MI-25 and MI-27 include Low DO, pathogens (recreational), PCB, and metals.

Projects to improve the biological, physical, and chemical aspects of creeks and adjacent tributaries that flow through the Village can be implemented under the MS4 permit to meet the goals of the TMDL. These alternatives may cost less than traditional storm water practices and may be completed in conjunction with other activities to reduce the amount of sediment, phosphorus, and bacteria that flow off the landscape and enter the river system.

Improved streambank management techniques and stabilization, such as native plantings, will create opportunities for infiltration of storm water runoff, as well as habitat and cover for birds and small animals, and an enhancement to the natural aesthetics in the surrounding urban setting.

4.2.2 Long-Term Maintenance Agreements for Private Facilities

Through the municipal-wide storm water management analysis, one privately owned storm water facility was identified which lacks a Long-Term Maintenance Agreement (LTMA) between the property owner and the municipality. Per the MS4 permit, the Village is unable to include pollutant reductions that are achieved by this facility in the reported wasteload reductions. It is recommended that the Village work with private landowners to obtain a LTMA and verify or develop a maintenance plan for the facility. The potential reduction credit is provided in Table 4.1.

Leveraging existing storm water facilities can move the Village closer to achieving TSS and TP reduction goals and require less time and expense than the construction of new facilities.

Table 4.1 Privately Owned Storm Water Facility Without LTMA (Reachshed MI-27)

Facility	Location	Acres	Facility Type	TSS Discharge No Controls (lbs.)	TSS Discharge Controls (lbs.)	TSS Control (%)	TP Discharge No Control (lbs.)	TP Discharge Controls (lbs.)	TP Control (%)
WP-01	Village Estates	1.42	Wet Pond	238.39	178.89	24.96	0.86	0.72	16.53

4.3 Pollutant Trading

A cost-effective way to reduce the amount of phosphorus that enters receiving waterways is to approach local property owners outside of the Village, but within the reachshed, to form pollutant-reduction partnerships. Storm water facilities may be constructed along municipal boundaries wherein both parties benefit from the pollutant reduction efforts. The Wisconsin Department of Natural Resources has released "Guidance for Implementing Water Quality Trading in WPDES Permits" to help MS4 permittees determine which pollutant trading opportunities may be most suitable for a community.



4.4 Conclusion

The storm water management alternatives presented in this report are intended to serve as a guide to the future design and construction of storm water management facilities to improve water quality in the local wetlands and waterways. Detailed engineering design should be examined in greater depth and detail potential variations in the technical, economic, and environmental features of the recommended solutions identified in this plan to determine the best means of carrying out the plan.

Table 4.2 provides the total additional reduction per reachshed if all modeled alternatives were to be implemented. Additional practices will be necessary for the Village to fully satisfy the TMDL reduction goals for each reachshed.

Table 4.2 Alternative Total Reduction Results

Reachshed	TSS Reduction (lbs)	TP Reduction (lbs)
MI-25	3,015	12
MI-26	10,848	33
MI-27	756	2
Total	14,619	47

Compliance with the Village's TMDL allocations requires creative thinking, innovation, patience, and collaboration with all stakeholders (neighboring governmental agencies, regulatory agencies, the development community, public officials, residents, staff, etc.). It will also require diligence from the Village of Thiensville staff to champion the new storm water program.



5. RECOMMENDATIONS FOR BACTERIA SOURCE ELIMINATION

The Milwaukee River TMDL Report (2018) notes the impact of bacteria loading on local waterways. According to the report, environmental and public health agencies have turned to *E. coli* monitoring as an indicator of fecal contamination in waterways. High levels of fecal contamination in a waterbody lead to an increased risk of human illness from water ingested during recreational activities. To mitigate the increased risk of pathogen ingestion, waterbodies may be assigned restrictions on recreational use.

With the goal of eliminating the bacteria impairment of the Milwaukee River, MS4-permitted municipalities, including the Village of Thiensville, continue to develop measures to identify and reduce bacteria sources within the Milwaukee River basin.

5.1 Potential Bacteria Sources

Identification of potential bacteria sources within the Village will enable a targeted approach to reduce bacteria loading. The Village may incorporate this information into their Illicit Discharge Detection and Elimination prioritization of storm water outfall testing.

The Village has analyzed urban sources of bacteria including areas with large rooftops or parking lots that attract birds, aged storm water ponds that attract waterfowl and other wildlife, uncovered dumpsters, dog parks, businesses that sell or keep livestock/other animals, dense industrial development, and aged infrastructure that is more likely to have illicit connections or damaged sewer lines.

The Village has identified six locations from which bacteria could potentially enter the Village's storm water conveyance system (Exhibit 4). The locations are summarized in Table 5.1.

Table 5.1 Potential Bacteria Sources

Map ID	Location	Land Use	Potential Bacteria Source
1	Dry Pond 1 – North boundary of Village; Crescent Lane and Laurel Drive	Park/Open Space	Pond/Wetland habitat surrounded by manicured lawn may attract nuisance geese
2	Thiensville Hardware & Frenz Garden Center	Commercial	Large flat rooftops may attract nuisance birds
3	Main Street Strip Mall	Commercial	Large flat rooftops and large parking lot may attract nuisance birds
4	Walgreens on Freistadt	Commercial	Large flat rooftop may attract nuisance birds
5	Suburban Motors Harley Davidson & Gordi Boucher Ford Dealership	Commercial	Large flat rooftops and large parking lots may attract nuisance birds
6	Village Park Riverfront	Park/Open Space	Manicured lawn along Milwaukee River may attract geese



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5.2 Bacteria Targets

Bacteria targets and data for modeling bacteria load and removal mechanisms are limited. In addition, the wasteload allocations for bacteria as shown in the TMDL Report have not been represented in a “percent reduction” approach. Rather, the wasteload allocations are represented as annual load allocations in billions of cells per season and per day. In lieu of the implementation of a modeling approach, municipalities may evaluate and identify potential bacteria sources and take steps to reduce and eliminate those sources. This allows MS4 permittees to commit to steps that are achievable and unique to the funding, planning, and priorities of the community.

5.3 Testing Protocol Development

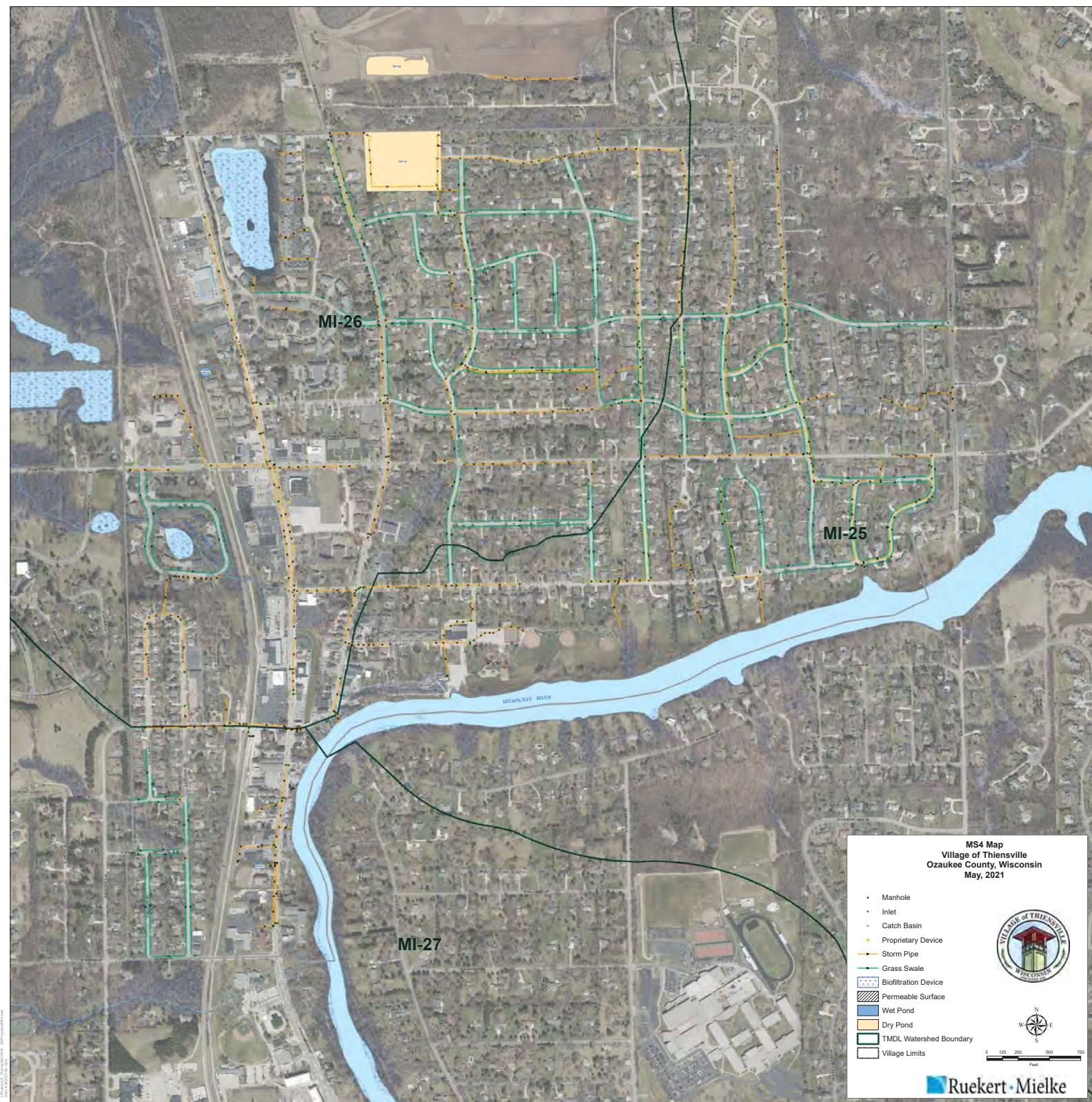
The Village currently performs bacteria tests on storm water outfalls, as detailed in the Illicit Discharge Detection and Elimination Program (Appendix E). Follow-up testing and investigation are performed on outfalls that test beyond the action limit parameters. As testing protocol and guidance are developed, the Village will continue to evaluate methods for bacteria source identification and elimination.

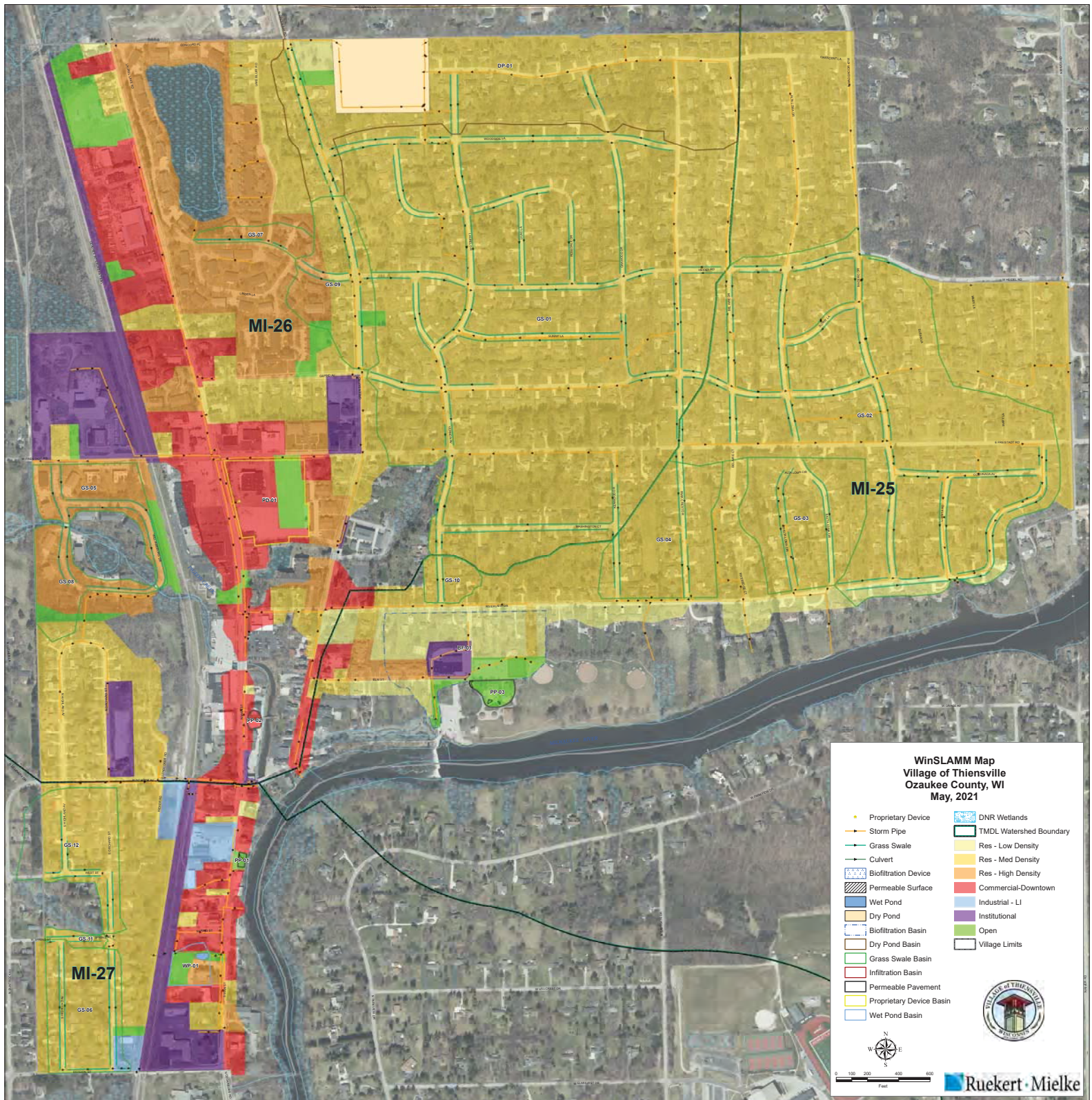


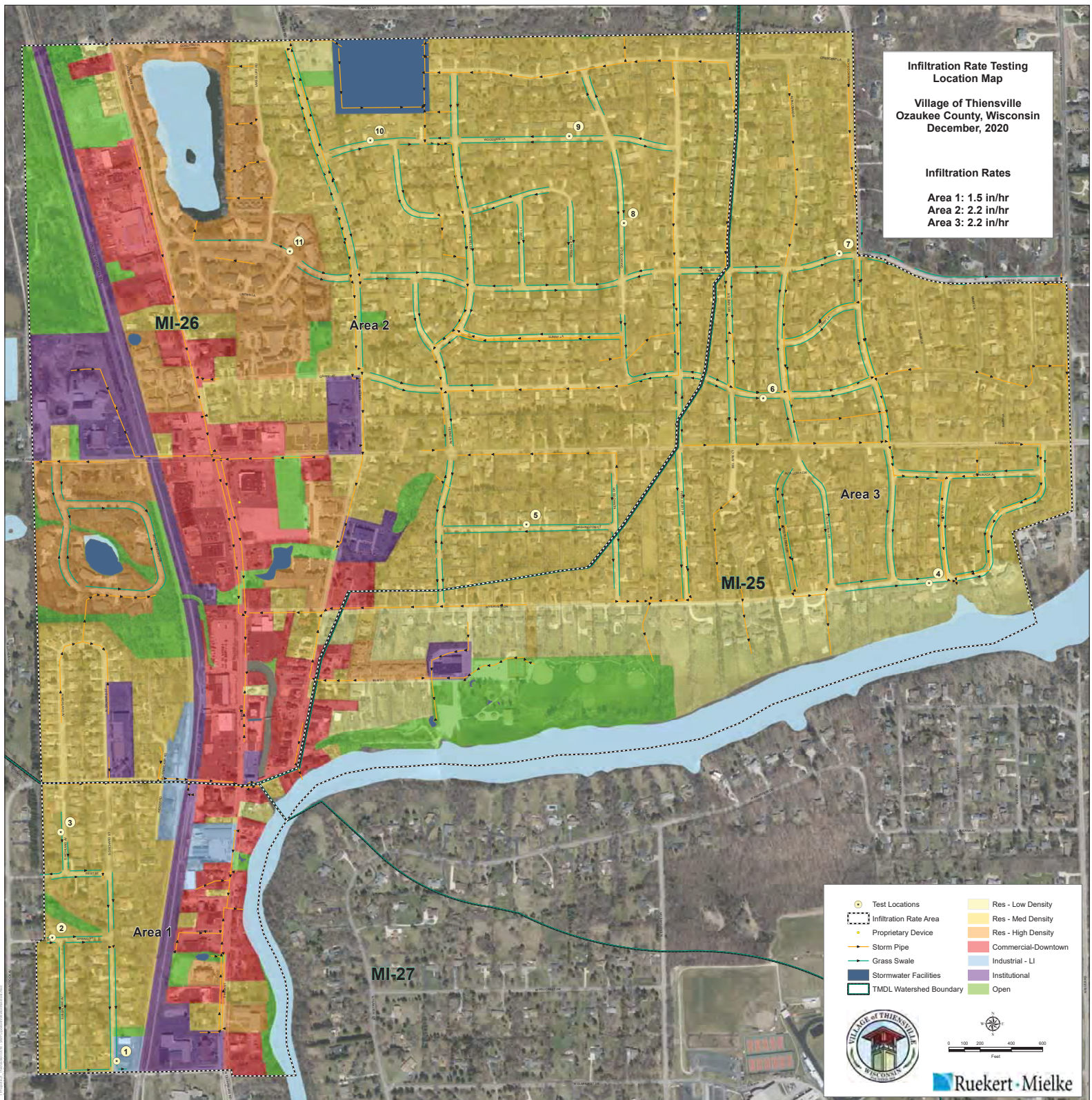
LIST OF EXHIBITS

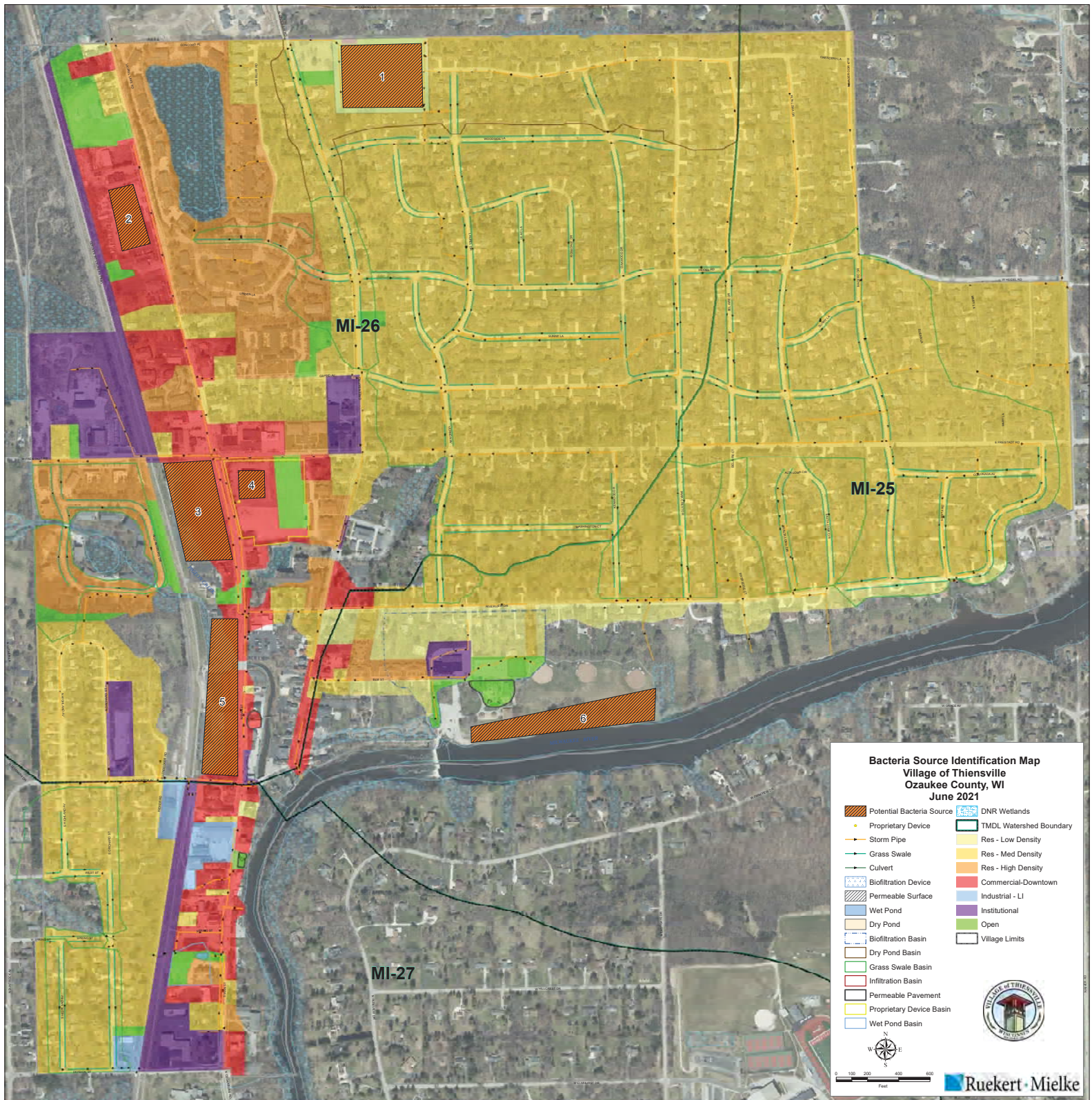
EXHIBIT 1	MS4 MAP
EXHIBIT 2	WinSLAMM MAP
EXHIBIT 3	INFILTRATION RATE TESTING LOCATION MAP
EXHIBIT 4	BACTERIA SOURCE IDENTIFICATION MAP











LIST OF APPENDICES

APPENDIX A	DEPT. OF PUBLIC WORKS STORM WATER POLLUTION PREVENTION PLAN
APPENDIX B	WINTER ROAD MANAGEMENT PROGRAM
APPENDIX C	LEAF MANAGEMENT PROGRAM
APPENDIX D	STREET SWEEPING & CATCH BASIN CLEANING PROGRAM
APPENDIX E	ILLICIT DISCHARGE DETECTION & ELIMINATION PROGRAM
APPENDIX F	CONSTRUCTION SITE STORM WATER PROGRAM
APPENDIX G	STORM WATER FACILITY INSPECTION & MAINTENANCE PROGRAM
APPENDIX H	STORM SEWER & SANITARY SEWER CROSS-CONNECTION PROGRAM
APPENDIX I	RECOMMENDATIONS FOR BACTERIA SOURCE ELIMINATION
APPENDIX J	CONSTRUCTION AND POST-CONSTRUCTION EROSION CONTROL ORDINANCE
APPENDIX K	ILLICIT DISCHARGE ORDINANCE
APPENDIX L	BACTERIA ORDINANCE RECOMMENDATIONS
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Appendix A: Department of Public Works Storm Water Pollution Prevention Program



**VILLAGE OF THIENSVILLE
DEPARTMENT OF PUBLIC WORKS
STORM WATER POLLUTION PREVENTION PLAN
2022**

Introduction

The Village of Thiensville Department of Public Works (DPW) Yard is located at 132 W. Freistadt Road, Thiensville, WI 53092. The yard is approximately 6.5 acres and is located in Section 15, Township 9N, Range 21E. The property is bordered on the east by the Ozaukee Interurban Trail and railway, to the north and west by privately-owned land, and to the south by residential, commercial, and US Postal Service properties. The Public Works Yard falls within the Milwaukee River watershed. The Village is committed to reducing the pollutant runoff entering the storm water conveyance system, wetlands, and waterways.

The site is currently used for the following:

- Storage of road salt and brine,
- Storage of vehicles and equipment,
- Stockpiles of gravel, mulch, and topsoil,
- Vehicle cleaning,
- Management of street sweepings,
- Unleaded and diesel fuel storage,
- Community drop-off of recycling, leaves, and yard waste; and
- Community drop-off of used motor oil.

The yard is accessed by the Village Department of Public Works staff, Village of Thiensville Fire Department, and private residents of the Village. The Thiensville Fire Department utilizes the northwest portion of the yard for training exercises.

There are four structures located within the yard (Appendix A, Figure 1). Structure 1 is for storage of landscaping equipment and pumps. Structure 2 is for public works vehicle and equipment storage. Structure 3 is used for equipment and vehicle storage, vehicle cleaning, and houses the public works office space. Structure 4 is used for storage of road salt.

Community residents are permitted to drop off used motor oil in a designated tank near the entrance of the yard. The Village contracts a company to pick up the oil from the tank. Community residents are also permitted to drop off un-bagged yard waste, including leaves, grass clippings, brush, and logs. A portion of the yard waste is hauled off-site by a landscaping company. The remaining yard waste is composted and mulched for use by the Village and community residents. The Village compost pile is inspected periodically by WDNR to maintain compliance.

There is a fuel pump located in the southeast portion of the yard for refueling of municipal vehicles and equipment.

The primary contact for the Public Works Yard is:

Andy LaFond
Director of Community Service/Public Works
262-242-3720
alafond@village.thiensville.wi.us





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The primary contact is responsible for carrying out the specific management actions identified in this SWPPP, including maintenance practices, monitoring activities, report preparation and submittal, and serving as the facility contact for the Village Department of Public Works.

Current Runoff Prevention Practices and Site Conditions

The site topography generally slopes from north to south (Appendix A, Figure 2). Storm water runoff in the northern portion of the yard generally flows from the east, north, and west boundaries toward the catch basin in the center of the yard. The catch basin is routinely cleaned. Runoff in the southern portion of the yard generally flows toward the storm water quantity basin in the southwest corner of the yard. There are four storm water inlets and two catch basins located within the yard. There are no storm water outfalls within the yard. The storm water pipes from the yard flow to an outfall at Pigeon Creek, tributary to the Milwaukee River. Floor drains within structures are connected to the sanitary sewer system.

The following practices are currently in place:

1. Un-mowed vegetative buffers around stockpiles in north portion of yard.
2. Vegetated berms on north, east, and west boundaries of yard.
3. Storm water retention pond in southwest portion of yard.
4. No Exposure storage of equipment in structures.
5. No Exposure storage of salt pile in salt shed.
6. Spill kit for community drop-off of used motor oil.
7. Spill kit for vehicle fueling station.
8. Stabilization vegetation on central stockpile.
9. Materials collected through street sweeping and catch basin cleaning are stored temporarily at the DPW yard (see Figure 1). There is a vegetated berm in place to reduce runoff. The materials are composted during leaf collection season. Outside of leaf collection season, the materials are picked up by a waste management company.
10. Loading of remnant salt into dispersal vehicles via broom and shovel located in salt shed after salt deliveries occur.
11. Designated area for community drop-off of yard waste. Instructions for community yard waste drop-off is posted on Village website¹ and on a sign at the facility entrance. Storm water best management practices in place include: residential access card required, frequent monitoring by Village staff, vegetated berm on west side.
12. Sanitary sewer inlet in Structure 3 for vehicle cleaning.
13. Annual training session for municipal staff on the importance of proper storm water management.

¹ Village Website instructions for residential drop-off: <https://village.thiensville.wi.us/203/Drop-Off-Location>





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Maintenance and inspection of these practices is required for proper functioning. Maintenance and inspections reduce the accumulation of debris such as sediment, metals, nutrients, etc. that can become a source of pollution if excess amounts are carried out with rain and snow melt in high concentrations from a treatment device. Inspections and maintenance of storm water facilities should be documented and recorded for comparison and evaluation of the performance of the practice.

Past Spill Locations

A historic spill is known to have occurred on the site. The spill was due to a leaking underground storage tank. At the time this report was finalized, the spill status was marked as *Closed*. The activity number reference is: 03-46-003305.

An additional spill is known to have occurred on the site. The spill is an ERP type, and at the time this report was finalized, the spill status was marked as *Open*. The activity number reference is: 02-46-000366. This spill has been open since 1991 and is still under active request by the WDNR. The owner of the spill is the Thiensville Highway Department.

Recommendations to Enhance Runoff Protection

Village staff currently take measures to implement best management practices and minimize runoff. Current recommendations to improve runoff control are listed below and will be implemented as resources become available.

1. Stabilize long-term stockpiles with perennial vegetation.
2. Cover small, temporary stockpiles with tarps to prevent runoff.
3. Redesign storm water retention pond in southwest portion of yard to serve as a water quality treatment facility (wet pond, infiltration basin, etc.).
4. Install inlet protection or a storm water proprietary device² for the catch basin in the central portion of the yard.
5. Install a roof/cover for community motor oil drop-off area.
6. Install a roof/cover for vehicle refueling station.
7. Update storm sewer with new pipes.

Inspections and Maintenance

Visual inspections are completed quarterly. An annual compliance inspection is conducted and documented at least once per year. Inspection forms (Appendix B) will be completed at least once per year. Items noted on the inspection reports are corrected as soon as possible. The yard is evaluated on a recurring basis to improve operations.

Spills Plan

² Proprietary devices are used to gather storm water and allow pollutants to settle before the water is released into the storm water system. Costs associated with purchasing and installing proprietary devices and other storm water quality facilities may be eligible for Urban Nonpoint Source and Storm Water Construction grants.





**VILLAGE OF THIENSVILLE
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Precautions are taken to avoid spills. Dry materials that spill are swept up and either disposed of or placed for future use, if possible. Liquids that spill on the ground are absorbed and the absorption materials are disposed of appropriately depending on the liquid.

New staff are educated on the spills plan at the start of employment. Any policy changes are communicated to the appropriate staff at the time of changes. As part of the Storm Water Pollution Prevention Plan, the spills plan will be evaluated annually, and any changes will be summarized in the Village's MS4 Annual Report. Staff will be educated on the contact procedure for notifying the Wisconsin Department of Natural Resources when spills occur (WDNR 24-hour Spills Hotline 800-943-0003).

Employee Training

Public Works Department training is an on-going activity for staff. Staff will be trained annually on spills procedures. Training practices will involve all departments that access the site. Changes in procedure are communicated with appropriate staff and new staff receive training on safety procedures and overall operations of the department. Any portions of the SWPPP, including the spills plan, that affect staff in other departments are shared with those departments. Employee training shall be documented with the date, names of attendees, and training material content.

Appendix A

Figure 1: Site Map

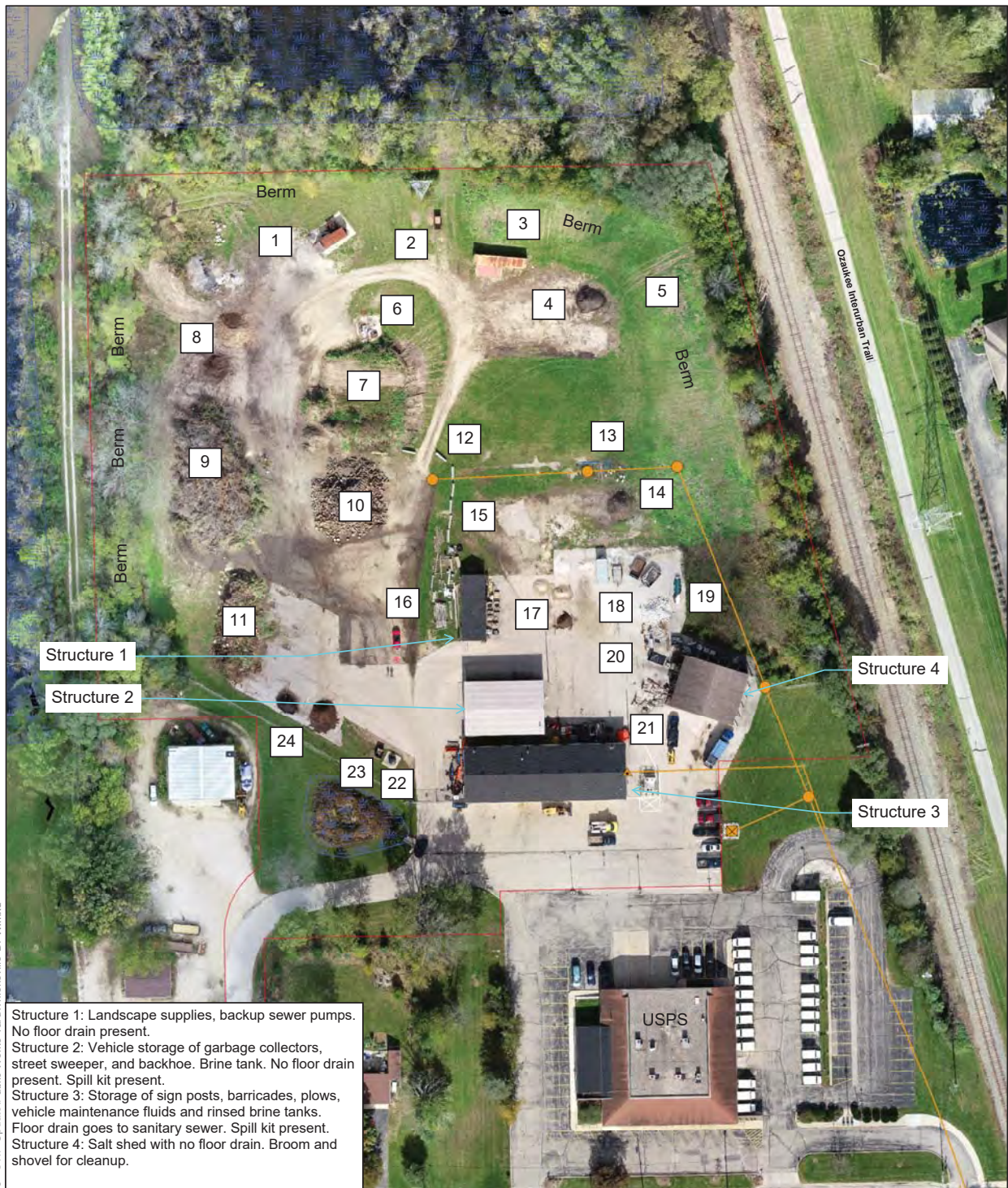
Figure 2: Topographical Map

Appendix B

Blank DPW SWPPP Inspection Form



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Structure 1: Landscape supplies, backup sewer pumps. No floor drain present.
Structure 2: Vehicle storage of garbage collectors, street sweeper, and backhoe. Brine tank. No floor drain present. Spill kit present.
Structure 3: Storage of sign posts, barricades, plows, vehicle maintenance fluids and rinsed brine tanks. Floor drain goes to sanitary sewer. Spill kit present.
Structure 4: Salt shed with no floor drain. Broom and shovel for cleanup.

- [1] Empty container used for fire department training area.*
- [2] Empty dumpster storage.
- [3] Holiday decoration storage container.
- [4] Finished compost stockpile, stored on gravel/permeable surface.
- [5] Berm surrounding storage area.
- [6] Scrap metal drop off via Village personnel only. Weekly pick via third party service. Stored on concrete slab with grass surrounding area.
- [7] Topsoil stockpile.
- [8] Mulch piles.
- [9] Village and residential tree cuttings drop off area.
- [10] Branches over 6" diameter storage area.
- [11] Yard waste, grass clippings, leaves from residential drop off.
- [12] Concrete barriers that separate area of permitted public access.
- *Fire department training may be moved off site in 2023

- [13] Temporary scrap storage.
- [14] Temporary stockpile of street sweeping collected outside leaf season. Hauled to off site waste facility when 24 Cu. Yds. of material is reached.
- [15 & 20] Temporary stone/rip rap storage.
- [16] Street light and pipe inventory.
- [17] Temporary screened topsoil and gravel.
- [18] Trailer storage.
- [19] Temporary storage of pavilion side curtains.
- [21] Paver storage around salt shed.
- [22] Residential oil recycling drop off area. Concrete pad with lid. Picked up as needed by private company.
- [23] Dumpster for leaf bags emptied by residents.
- [24] Resident pickup area for mulch and topsoil.



Source: Ozaukee County, Ruekert & Mielke, Inc.

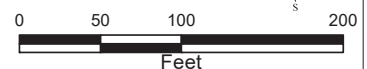
Date: April 2020

Legend

- | | |
|---------------------|------------------------------|
| WWI Wetland | Storm Water Structure |
| DPW Parcel Boundary | Catch Basin |
| | End of Pipe |
| | Manhole |
| | Storm Pipe |

Figure 1
Site Detail

Department of Public Works
Village of Thiensville
Ozaukee County, WI



Ruekert • Mielke

Document Path: I:\Projects\21_Thiensville\10018 - SWP Update\Public Works Yard\Thiensville-DPW-Topo.mxd



Source: Ozaukee County, WDNR, Ruekert & Mielke, Inc.

Date: April 2020

Legend

WWI Wetland

1-Foot Contour, Oct 2017

Storm Water Structure

StructureType

Catch Basin

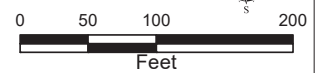
End of Pipe

Manhole

Storm Pipe

Figure 2
Topography

Department of Public Works
Village of Thiensville
Ozaukee County, WI



STORM WATER POLLUTION PREVENTION PLAN (SWPPP) INSPECTION FORM FOR MUNICIPAL FACILITIES

Site:	
Location:	
Inspector/Title:	
Date:	
Last Inspection (Date):	

Storm Water Pollution Prevention Plan

Has a storm water pollution prevention plan been developed for this site? Yes ☐ No ☐

Title of Plan: _____

Date of Plan: _____

Does the SWPP include a site map, list of pollutant sources, pollutant control practices to be inspected, and maintenance procedures? Yes ☐ No ☐

(Indicate any items that are *not* included):

Vehicle Maintenance, Washing and Fueling

	Activity/Practice	Inspected?	Activity/ Practice Adequate?	Corrective Action Needed & Notes
1	Vehicle maintenance area drains to sanitary sewer system	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
2	Vehicle maintenance area has oil-grease separator in floor drains	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
3	Floor drains are clean	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
4	Vehicle washing completed inside building	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
5	Vehicle washing drains to sanitary system	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
6	Vehicle fueling center has canopy/cover	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
7	Vehicle fueling center has clearly labeled spill kit nearby	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
8	Vehicle fueling center has oil-grease separators in nearby storm drains	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	

Hazardous Waste Management

	Activity/Practice	Inspected?	Activity/ Practice Adequate?	Corrective Action Needed & Notes
1	Hazardous materials and containers are stored indoors	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
2	Containers of hazardous materials are in good condition	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	

Waste Management

	Activity/Practice	Inspected?	Activity/ Practice Adequate?	Corrective Action Needed & Notes
1	Dumpsters are covered	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
2	Full dumpsters are hauled out on a regular basis	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
3	Piles of miscellaneous debris are sorted and disposed of on a regular basis	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
4	Street sweepings are covered	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
5	Street sweepings are stored in containers or have barriers or perimeter controls to minimize runoff impacts	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	

Material Storage

	Activity/Practice	Inspected?	Activity/ Practice Adequate?	Corrective Action Needed & Notes
1	Runoff from bulk storage is contained on low side by barriers, bays or other perimeter controls	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
2	Bulk storage piles are stabilized/vegetated	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
3	Materials stored under cover/inside buildings	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
4	Area near salt shed is clear of excess/spilled/tracked salt	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
5	Excess/spilled/tracked salt is swept up and added to bulk salt pile	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
6	Underground runoff containment is emptied on a regular basis	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	

Runoff Controls

	Activity/Practice	Inspected?	Activity/ Practice Adequate?	Corrective Action Needed & Notes
1	Grass filter strips have at least 70% uniform vegetation growth	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
2	Grass filter strips typically have 6 inches or more of vegetation	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
3	Storm water pond inlets/outlets are stable	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
4	Storm water berms are vegetated	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
5	Storm water pond berms are stable (no erosion, tree roots or animal borrows)	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
6	Infiltration basins/rain gardens have at least 70% plant growth	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
7	Infiltration basins/rain gardens are maintained regularly, and in the spring and fall	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
8	Infiltration basins/rain gardens drain down within 24 hours (<i>based on post-rain event observations</i>)	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	

Spills Program

	Activity/Practice	Inspected?	Activity/ Practice Adequate?	Corrective Action Needed & Notes
1	Written program is available for employees	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
2	Employees know where written program is located	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
3	Written program is evaluated annually	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	

Employee Training

	Activity/Practice	Inspected?	Activity/ Practice Adequate?	Corrective Action Needed & Notes
1	New employees are trained on SWPPP	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	
2	Annual or more frequent training provided to employees on SWPPP	Yes ☐ No ☐ N/A ☐	Yes ☐ No ☐	

	Recommendations/Correction	Completed On (Date)	Initials
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1			
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Appendix B: Winter Road Management Program



WINTER ROAD MANAGEMENT PROGRAM 2022

The Village of Thiensville implements a snow plowing and road salting program during the winter months. The Village monitors the amount of salt and brine applied to the roads to predict how much material remains in inventory for the remainder of the season. The Village strives to utilize cost effective ways to minimize salt usage to protect water quality and reduce winter road management costs through the MS4 permit program evaluation process.

Contact Information

Village of Thiensville Winter Road Management Program Contact:

Andy LaFond, Director of Community Services/Public Works
250 Elm Street
Thiensville, WI 53092
262-242-3720
Alafond@village.thiensville.wi.us

Salt and Deicing Equipment Storage Facility:

Village of Thiensville
Department of Public Works
132 W Freistadt Road
Thiensville, WI 53092

Products

Salt and brine (GeoMelt 55) are the anti-icing or deicing products used by the village at this time. Salt is stored in a 700-ton capacity salt shed at the Village of Thiensville Department of Public Works facility. The driveway outside of the shed is monitored for any salt spillage and cleaned up as needed. GeoMelt 55 is purchased pre-mixed and stored inside a heated shed.

Snow Removal Equipment

- Truck #1 Plow/Wing/Salt Pre-Wet 5 Yard
- Truck #3 Plow/Wing/Salt Pre-Wet 5 Yard
- Truck #4 Plow/Wing/Salt Pre-Wet 5 Yard
- Truck #12 Plow Salt 2 yard
- Loader #9 2 yard
- Skid Loader plow/bucket
- John Deer Snow Blower
- Truck #5 V-plow

Calibration

Calibration is an essential procedure to understand how much material will be discharged at a given setting. Each piece of salting equipment is calibrated at the beginning of the season in the fall. Equipment must be calibrated at each setting available to the operator. Calibration is completed using the methods outlined in the Minnesota Department of Transportation Snowplow Salt and Sander Controller Calibration Guide. Calibration records are maintained on a physical calibration tracking spreadsheet. A blank calibration spreadsheet is provided in Attachment G. The calibration tracking spreadsheet is stored in Structure 3 of the Public Works Yard. Calibration records are kept for a minimum of five years.

Process

Snowplow and road salting routes are maintained in the Village's GIS System. Each main route is covered at least once during a qualifying snow/precipitation event. All side routes are completed as needed. The routes and amount of vehicles used are based on snow coverage amounts, less than 4-inches of snowfall and above 4-inches of snowfall. The amount of salt or brine applied to Village roads is based on deicing application rate guidelines. Salt application events are tracked on the Winter Road Management Product Usage Tracking Sheet. Plow and salt crews are activated by the Director of Public Works Director, or designee, and by the police department. The decision of when and how to salt or plow is based on many factors including:

- Weather conditions (temperature, wind, ice vs. snow),
- Road surface temperature,
- Duration of the weather event,
- Day and time, and
- Special events.

Training

Village staff track winter road management training activities on an internal education tracking sheet. This information is included in the MS4 annual report. Specific training activities vary by year.

Attachments

Attachment A: Deicing Application Rate Guidelines

Attachment B: Plow Route Map for Snowfall Less Than 4 Inches

Attachment C: Plow Route Map for Snowfall Greater Than 4 Inches

Attachment D: Salt/Brine Route Map

Attachment E: Internal Training Log

Attachment F: Winter Road Management Product Usage Tracking Sheet

Attachment G: Calibration Tracking Spreadsheet

Deicing Application Rate Guidelines

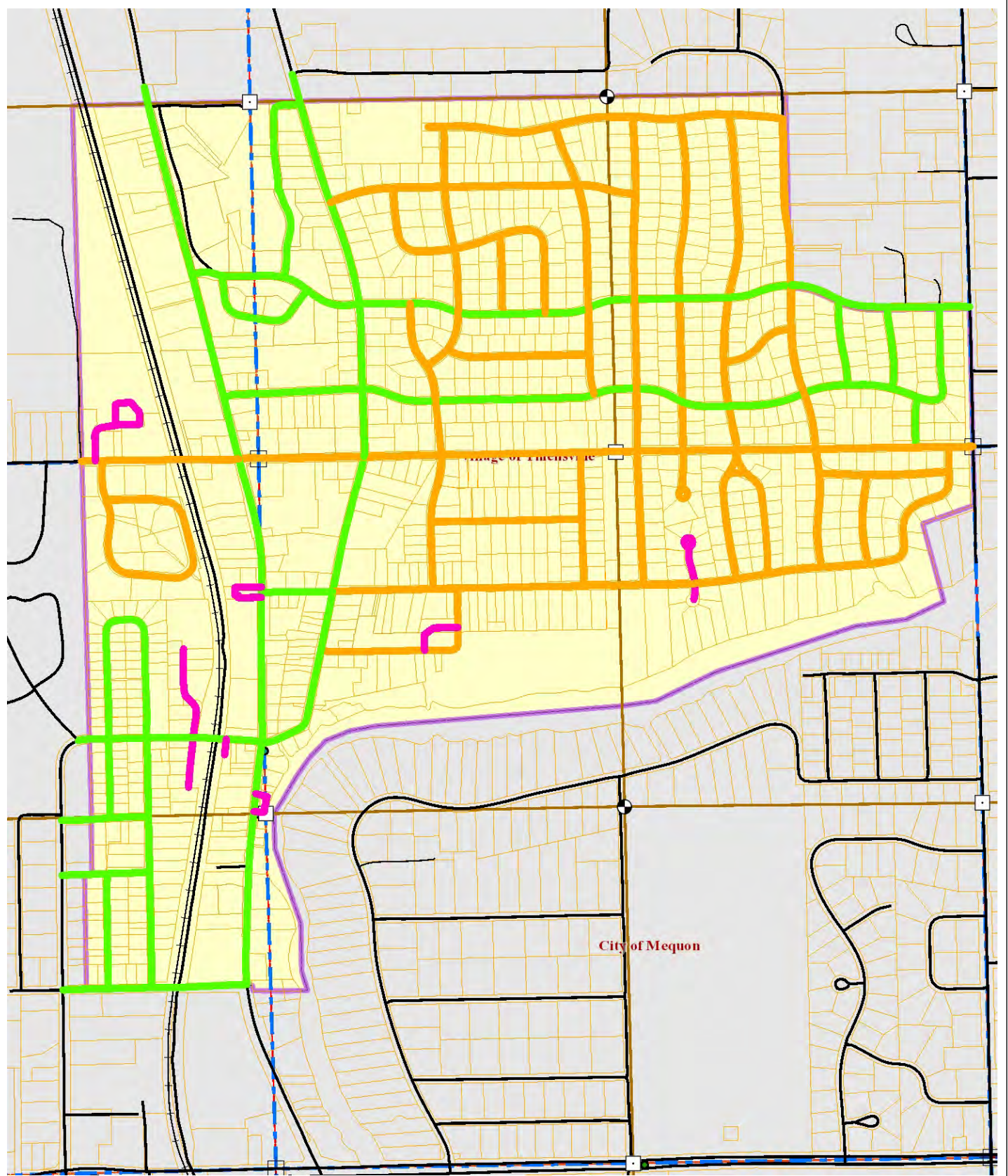
24' of pavement (typical two-lane road)

These rates are not fixed values, but rather the low end of a range to be selected and adjusted by an agency according to its local conditions and experience.

Pavement Temp. (°F) and Trend (↑↓)	Weather Condition	Maintenance Actions	Lbs/ two-lane mile			
			Salt Prewetted/ Pretreated With Salt Brine	Salt Prewetted/ Pretreated With Other Blends	Dry Salt*	Winter Sand (abrasives)
>30° ↑	Snow	Plow, treat intersections only	80 (40/lane mile)	70	100*	Not recommended
	Frz. rain	Apply chemical	80 – 160	70 – 140	100 – 200*	Not recommended
30° ↓	Snow	Plow & apply chemical	80 – 160	70 – 140	100 – 200*	Not recommended
	Frz. rain	Apply chemical	150 – 200	130 – 180	180 – 240*	Not recommended
25 - 30° ↑	Snow	Plow & apply chemical	120 – 160	100 – 140	150 – 200*	Not recommended
	Frz. rain	Apply chemical	150 – 200	130 – 180	180 – 240*	Not recommended
25 - 30° ↓	Snow	Plow & apply chemical	120 – 160	100 – 140	150 – 200*	Not recommended
	Frz. rain	Apply chemical	160 – 240	140 – 210	200 – 300*	400
20 - 25° ↑	Snow or frz. rain	Plow & apply chemical	160 – 240	140 – 210	200 – 300*	400
20 - 25° ↓	Snow	Plow & apply chemical	200 – 280	175 – 250	250 – 350*	Not recommended
	Frz. rain	Apply chemical	240 – 320	210 – 280	300 – 400*	400
15 - 20° ↑	Snow	Plow & apply chemical	200 – 280	175 – 250	250 – 350*	Not recommended
	Frz. rain	Apply chemical	240 – 320	210 – 280	300 – 400*	400
15 - 20° ↓	Snow or Frz. rain	Plow & apply chemical	240 – 320	210 – 280	300 – 400*	500 for frz. rain
0 to 15° ↑↓	Snow	Plow, treat with blends, sand hazardous areas	Not recommended	300 – 400	Not recommended	500 – 750 spot treat as needed
< 0°	Snow	Plow, treat with blends, sand hazardous areas	Not recommended	400 – 600**	Not recommended	500 – 750 spot treat as needed

*Dry salt is not recommended. It is likely to blow off the road before it melts ice.

**A blend of 6 – 8 gal/ton $MgCl_2$ or $CaCl_2$ added to NaCl can melt ice as low as -10°.



Village of Thiensville Plow Route Less than 4 Inches

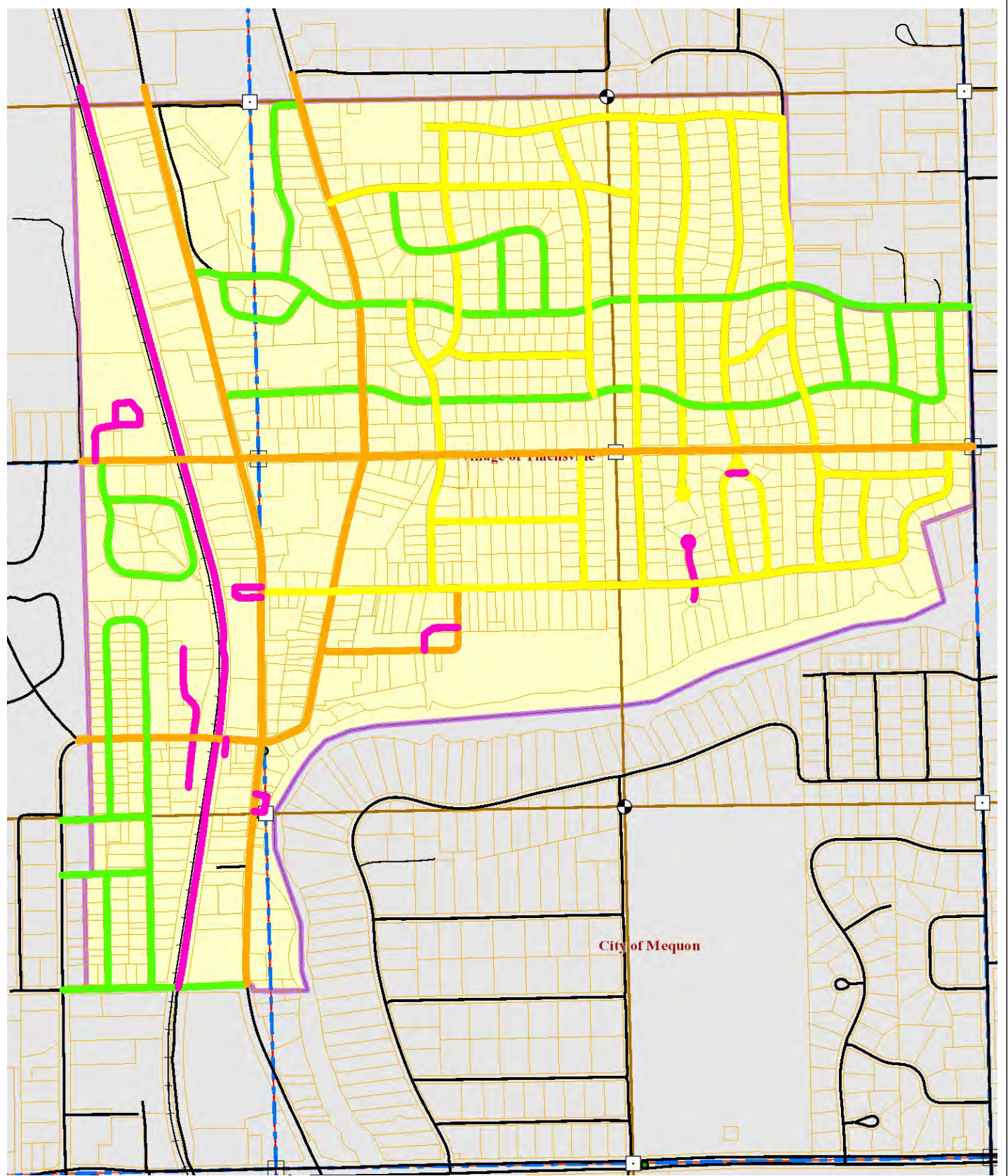
DISCLAIMER: The Village of Thiensville does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.

SCALE: 1 = 1000



Village of Thiensville
250 Elm Street
Thiensville, WI 53092
262-242-3720

Print Date: 3/17/2020



Village of Thiensville Plow Route Greater Than 4 Inches

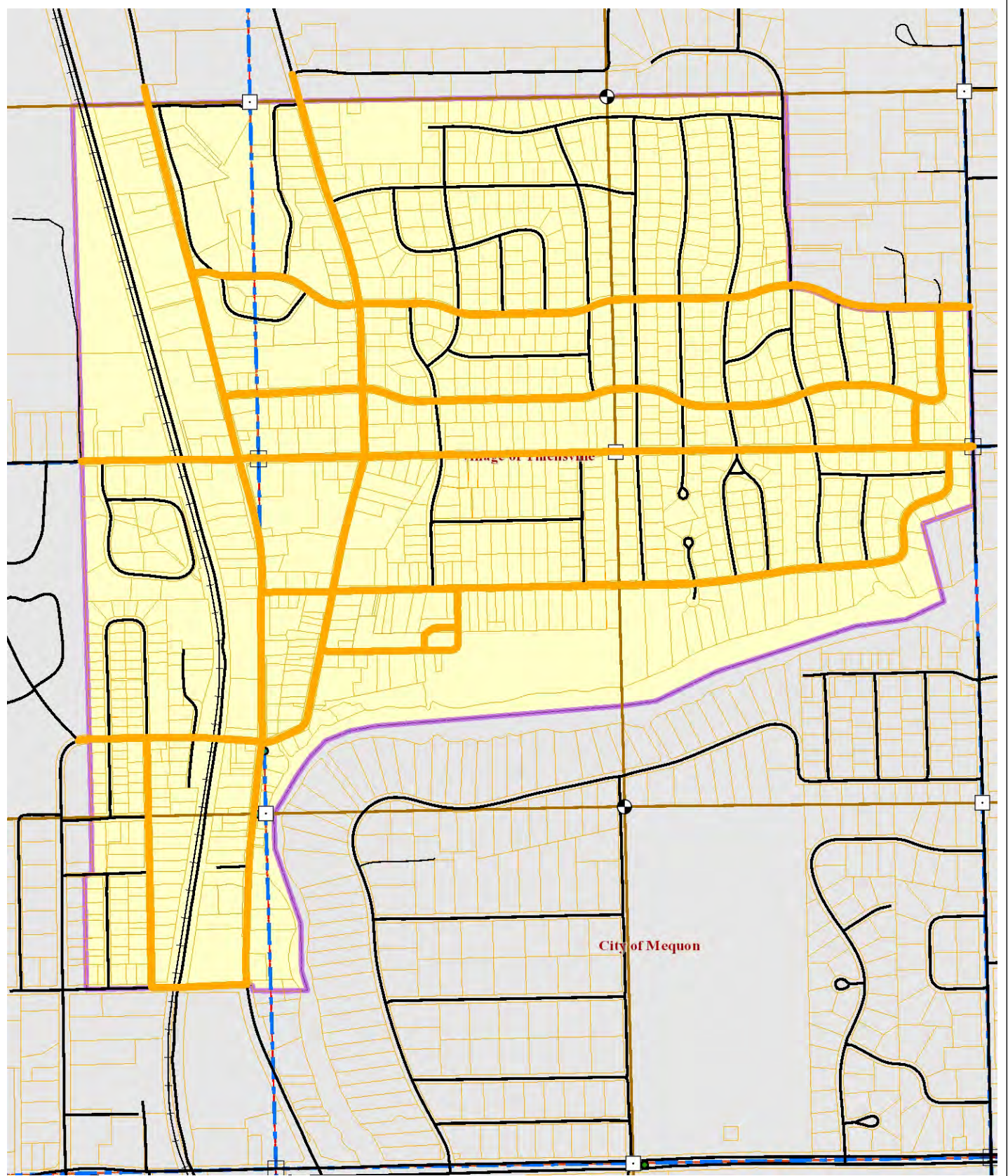
DISCLAIMER: The Village of Thiensville does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.

SCALE: 1 = 1000



Village of Thiensville
250 Elm Street
Thiensville, WI 53092
262-242-3720

Print Date: 3/17/2020



Village of Thiensville Salt Route Main Roads

DISCLAIMER: The Village of Thiensville does not guarantee the accuracy of the material contained here in and is not responsible for any misuse or misrepresentation of this information or its derivatives.

SCALE: 1 = 1000



Village of Thiensville
250 Elm Street
Thiensville, WI 53092
262-242-3720

Print Date: 3/17/2020

**Village of Thiensville
Winter Road Management Program
Internal Education Log**

Training Activity	Attendees	Date
Wisconsin Salt Wise		
Deicing Application Rate Guidelines for Parking Lots and Sidewalks (from the MN Snow & Ice Control Field Handbook, Manual 2005) (Review)		
Minnesota Snow and Ice Control – Field Handbook for Snowplow Operators (Review)		

COMMENTS:

**Village of Thiensville
Winter Road Management
Annual Salt Usage Tracking Form**

DATE	EQUIPMENT	SALT OR BRINE	AMOUNT OF PRODUCT	WEATHER CONDITIONS	COMMENTS



Calibration Tracking Spreadsheet

Village of Thiensville

Date	Equipment	Calibration Method	Calibration Date	Staff Initials

Appendix C: Leaf Management Program



LEAF MANAGEMENT PROGRAM 2022

The following leaf management program has been developed and implemented to minimize the discharge of excess nutrients and pollution into local waterways. The Village does not currently operate a curbside leaf collection program.

Leaf & Yard Waste Drop-Off

The Village provides a residential leaf and yard waste drop-off at the Department of Public Works Facility. The Village website contains instructions for residential leaf and yard waste drop-off¹. The Public Works Yard is open from sunrise to sunset every day of the year and is monitored by cameras. Residents gain access to the Yard with an access card.

Facility Location

Village of Thiensville Public Works Yard
132 W Freistadt Rd.
Thiensville, WI

Leaf Processing

A portion of the leaves are picked up from the Public Works Facility by a landscaping company. The remaining leaves are composted by the Village at the Public Works Yard, where the Public Works crew regularly monitors and turns over the compost piles. The compost piles are periodically inspected by the Wisconsin Department of Natural Resources.

Outreach to Property Owners

The Village has information about leaf collection and maintenance on the Village website. For more information, contact:

Director of Public Works
Village of Thiensville
250 Elm Street
Thiensville, WI 53092

Phone: (262) 242-3720

¹ <https://www.village.thiensville.wi.us/203/Drop-Off-Location>

Appendix D: Street Sweeping & Catch Basin Cleaning Program



STREET SWEEPING & CATCH BASIN CLEANING PROGRAM 2022

Introduction

In accordance with the Village of Thiensville's MS4 permit requirements, the following approach has been developed and implemented to ensure street sweeping and catch basin cleaning will occur to minimize the discharge of excess nutrients and pollution into local waterways via the municipal separate storm sewer system.

Street Sweeping

The Village utilizes a mechanical broom cleaner to maintain curb-and-gutter streets within the Village limits. Street sweeping is performed every 4 weeks on all roads with curb and gutter or draining to the storm sewer. The Village also performs street sweeping ahead of predicted heavy rain events. Quarterly street sweeping is performed on all roads, including those draining to swales.

Approximately 11 tons of material is collected each year. The material gathered by street sweeping is stored at the Department of Public Works (DPW) yard, and then collected every 1-2 months by a waste disposal company. When the majority of the waste is comprised of leaves, the Village will add the street sweepings to the compost pile maintained at the DPW yard.

Catch Basin Cleaning

The Village conducts routine cleaning of catch basins. This cleaning is performed annually in the spring. All catch basin cleaning debris is stored at the DPW yard and collected by a waste disposal company.

Appendix E: Illicit Discharge Detection and Elimination Program



ILLICIT DISCHARGE DETECTION & ELIMINATION PROGRAM 2022

Introduction

The Wisconsin Department of Natural Resources (WDNR) Municipal Separate Storm Sewer System (MS4) permit requires the Village of Thiensville (Village) to implement programs and practices to detect, remove, and eliminate illicit connections and discharges to the MS4. To reduce and prevent the release of pollutants into the Village MS4, this Illicit Discharge Detection and Elimination (IDDE) Program was developed. The IDDE Program includes procedures for spill and illicit discharge response, annual screening of storm water outfalls, and enforcement response.

Administration

This program shall be administered by the Village of Thiensville Director of Community Services/Public Works (Director). Program administration includes coordination of annual field screening activities and IDDE enforcement response. The IDDE program shall be distributed to all Village employees who may receive notice or respond to an illicit discharge or spill. The Village ordinance regarding illicit discharge and spills to the MS4 can be found in Chapter 1, Section 14-307 of the Village of Thiensville Code of Ordinances¹.

Contact Information

Village of Thiensville Director of Community Services/Public Works.....	Andy LaFond 262-242-3720
Emergency.....	911
Village of Thiensville Fire Department, Non-Emergency.....	262-242-3393
Village of Thiensville Police, Non-Emergency.....	262-242-2100
Wisconsin Department of Natural Resources Hazardous Spill Line.....	1-800-943-0003
Poison Control Center.....	1-800-222-1222

Investigation and Elimination Response Procedure

When Village staff is made aware of a spill or illicit discharge with the potential to contaminate the municipal separate storm sewer system, the individual receiving the call shall immediately notify the Director. The Director is responsible for coordinating a response to reports of illicit discharges and spills as well as coordinating the investigation of outfalls which have test results outside of the Action Limits (identified in Table 1).

- The Director shall be the primary contact for the spill and illicit discharge response procedure.
- All spills/illicit discharges, regardless of size, shall be reported as soon as possible to the Director.

¹ Village of Thiensville Code of Ordinances: https://library.municode.com/wi/thiensville/codes/code_of_ordinances
Accessed April 2022.

- Following the chain of command found within the Village's emergency government procedure, the emergency government director shall be notified if the spill/illicit discharge is suspected of reaching local waterways.
- The Village shall coordinate clean up with the appropriate trained emergency response personnel.
- All spills that reach or have the potential to reach local wetlands, lakes, and streams shall be reported to the Wisconsin Department of Natural Resources within 24 hours after being made aware of the spill. The Director or designated correspondent shall coordinate this notification immediately to the Department of Natural Resources if the spill/discharge is suspected of having reached local streams, lakes, or wetlands.
- **The Department of Natural Resources hotline for reporting spills is 1-800-943-0003.**
- If a spill/illicit discharge reaches a waterway and has the potential to contaminate downstream resources, the Director or emergency government director shall immediately notify the officials of the downstream communities that may be impacted by the spill, following the emergency government procedure.
- Persons in the vicinity of a spill should immediately evacuate the premises (except for employees with training in spill response). If the spill appears hazardous, immediately notify emergency response personnel listed above.
- Consult with the trained hazardous waste personnel for waste disposal procedures and never wash spills into a storm drain.
- Any illicit discharges that are discovered at an outfall shall be traced upstream through the storm sewer system to identify the source of the discharge. Any sample obtained from an outfall with results above the action limit listed in Table 1 shall be investigated to determine the source. If a source is identified, action shall be taken to stop the discharge. If the source cannot be corrected within thirty days, the Village shall notify WDNR and develop a plan for eliminating the source of the discharge.
- If the illicit discharge has been tracked upstream to an interconnection point or outfall from another municipality or originates from the permittee's permitted area that discharges directly to a MS4 or property under the jurisdiction of another municipality, the permittee shall notify the appropriate municipality within one working day.
- Any dye testing within an MS4 shall be reported to the Wisconsin Department of Natural Resources in advance.

Illicit Discharge Field Screening

- The Village has evaluated the outfalls to be inspected each year through a Priority outfall designation process.
- The IDDE Program is considered ongoing. Any changes will be determined based upon the results of the field screening. Any revisions to the Priority Outfall designation list will be submitted to WDNR.
- Field screenings of outfalls shall be conducted during dry weather conditions are within a period of at least 72 hours with no rainfall.

- Field screenings may be completed upon receipt of a complaint or based on professional judgement.
- Outfalls found to be submerged or otherwise inaccessible may have field screenings conducted at the nearest accessible upstream manhole.
- Any citizen complaint will be documented and investigated with an inspection of the discharge location in question.
- Inspections and field screenings shall be recorded on the Village of Thiensville Illicit Discharge Field Screening Sheet (Attachment C).

*Table 1. Action Levels for IDDE Outfall Screening^{2**}*

Parameters	Action Level	Illicit Sources	Non-Illicit Sources
Ammonia	0.1 mg/L	Sanitary sewage and industrial wastewater	Pets, wildlife and potentially WPDES permitted discharges
Detergents	0.5 mg/L	Industrial cleansers, commercial wash water and sanitary sewage	Residential car washing
pH	Less than 6 or greater than 9	Industrial wastewater and concrete truck wash-out	Groundwater and WPDES permitted discharges
Total Chlorine	Detection or positive test unless associated with a WPDES permitted discharge at background water supply levels	Industrial wastewater, swimming pools and sanitary sewage	WPDES permitted discharges
Total Copper	0.1 mg/L	Copper-based product use and manufacturing	WPDES permitted discharges
Phenol	Detection or positive test	Chemical, textile, paint, resin, tire, plastic, electronics, and pharmaceutical manufacturing	None
Fluoride	Detection above background groundwater or water supply levels	Commercial or industrial wastewaters with a water supply component	Groundwater and WPDES permitted discharges
Potassium	10 mg/L	Sanitary sewage and industrial wastewater	Groundwater and WPDES permitted discharges
<i>E. coli</i> *	10,000 MPN/100 mL	Sanitary sewage	Wildlife and pets
Human <i>Bacteroides</i> *	Detection or positive text	Sanitary sewage	None

*Total Coliform presence/absence testing may be performed to determine if further *E. coli* or Human *Bacteroides* testing is necessary.

**Parameters may be substituted. Substitutions will be submitted to DNR for approval prior to testing.

Enforcement Response Plan

In the event that Village staff identify a violation of the IDDE ordinance, the Village may order compliance by written notice of violation to the responsible party.

Action against the violation shall be taken as soon as possible. If it will take more than thirty days to remove the illicit connection or if the illicit discharge is from a facility with WPDES permit coverage, the Wisconsin Department of Natural Resources shall be contacted to discuss an appropriate action and/or timeframe for removal.

Such written notice of violation may require any of the following without limitation:

- The elimination of illicit connections or discharges.

² Wisconsin Department of Natural Resources Bureau of Watershed Management Program Guidance Document 3800-2012-01.

- Those violating discharges, practices, or operations shall cease and desist.
- The abatement or remediation of storm water pollution or contaminated hazards and the restoration of any affected property.
- Any responsible party that fails to comply with a notice of violation under this section shall be subject to further enforcement action under Village Ordinance Chapter 1 Section 1-15. The Director of Community Services/Public Works may refer to the Village of Thiensville Police Department for the issuance of citations.

Priority Outfalls

The Village has determined a targeted outfall prioritization based upon review of the Department of Natural Resources (WDNR) Program Guidance on Illicit Discharge Detection and Elimination programs (Document No. 3800-2012-01).

Outfalls within the Village have been categorized for inspection frequency as shown in Table 2. The designation of outfalls is based on the following recommended selection parameters per the guidance document:

- History of known or suspected illicit discharges reported within the last five years.
- Sections of storm and/or sanitary sewer infrastructure that have exceeded or are approaching their design/useful life.
- Contributing drainage areas with 80 or more percent imperviousness.
- Business or industrial parks with frequent changes in property ownership or operations.
- Schools or other institutional facilities.
- Commercial or industrial operations that generate wastewater or wash water including food processing, metal plating or machining shops, auto and scrap recyclers, commercial car washes, and chemical manufacturers or users.

Table 2. Outfall Classification and Inspection Frequency

Outfall Classification	Inspection Frequency
Priority Major Outfall	Once per year
Priority Minor Outfall	Once per year
Non-Priority Major Outfall	Once per 5 years (20% annually)
Non-Priority Minor Outfall	If a complaint is received or based on professional judgement of Village staff.

There are vegetated swale storm water conveyance systems within the Village limits. Swale systems can be inspected by visual observations for dead vegetation due to excessive standing water or pollutants in discharges; staining on pipes and structures that drain to the swales; staining or water marks on culverts in swales, etc. Visual observations of the swale systems shall be done on a complaint basis or as staff determine necessary.

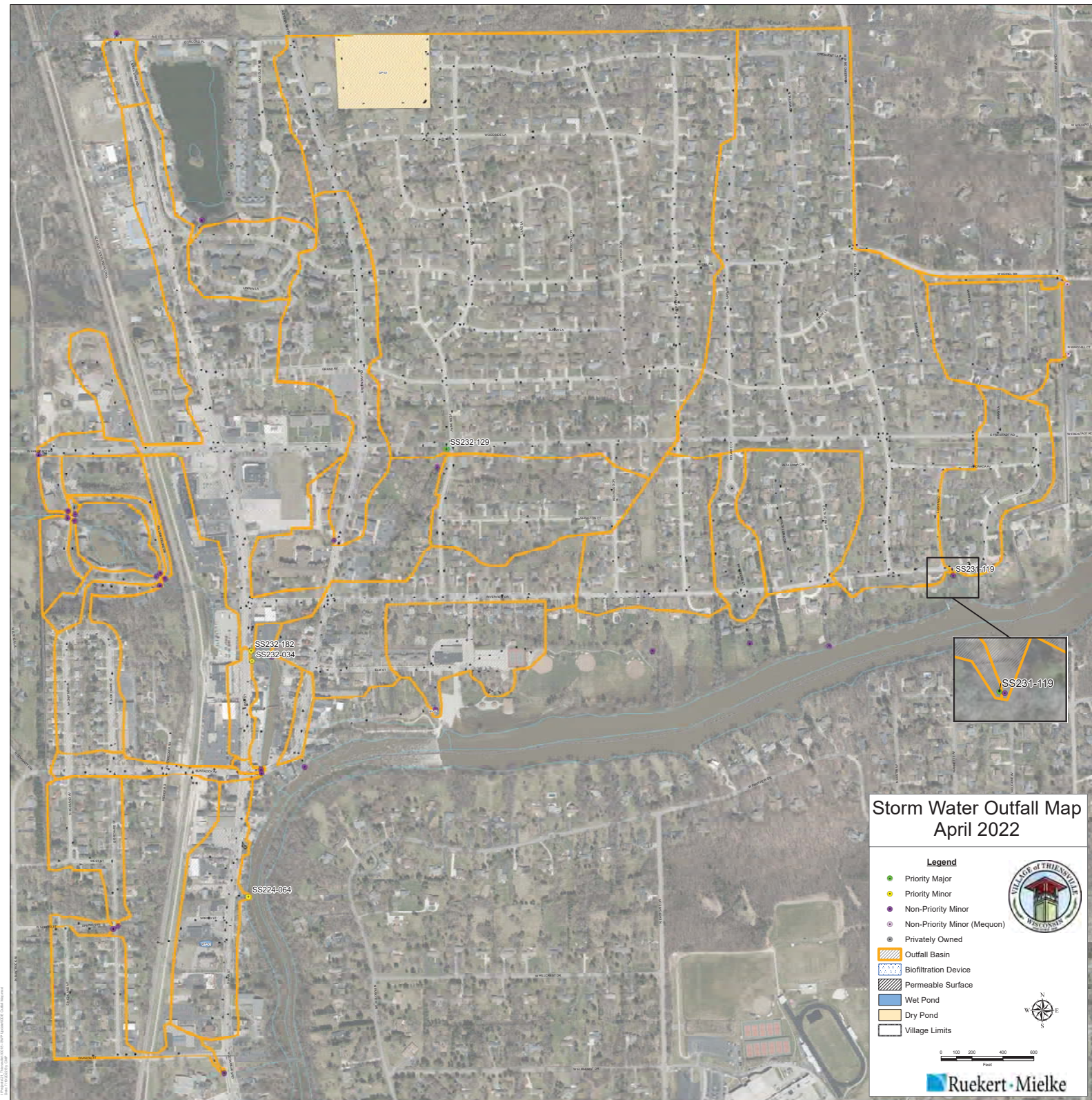
A complete list of the storm water conveyance outfalls identified within the Village and the assigned categorization is provided in Attachment A.

Attachments

ATTACHMENT A	Village of Thiensville Storm Water Outfall Inventory
ATTACHMENT B	Map of Storm Water Outfalls
ATTACHMENT C	Outfall Inspection Form (Blank)

Village of Thiensville
Storm Water Outfall Inventory
April 2022

Outfall Structure ID	Outfall Size (Inches)	Drainage Basin Size (Acres)	Outfall Classification	Priority
SS232-129	48x108	151	Major	Yes
SS231-119	29x45	86	Major	Yes
SS232-182	15	44	Minor	Yes
SS224-064	48	13	Minor	Yes
SS232-034	21	2	Minor	Yes
SS231-016	18	13	Minor	No
SS232-173	36	20	Minor	No
SS232-183	15	18	Minor	No
SS232-122	12	17	Minor	No
SS232-045	15	16	Minor	No
SS231-001	12	14	Minor	No
SS133-007MQ	18	13	Minor	No
SS232-014	24x36	12	Minor	No
SS224-071	24	10	Minor	No
SS221-042	21x36	9	Minor	No
SS154-039	8	8	Minor	No
GS-12	-	8	Minor	No
GS-05A	-	1	Minor	No
GS-05B	-	4	Minor	No
GS-05C	-	1.2	Minor	No
GS-05D	-	1	Minor	No
SS231-002	24	6	Minor	No
GS-08A	-	2	Minor	No
GS-08B	-	3	Minor	No
GS-08C	-	1	Minor	No
SS232-162	24	3	Minor	No
SS154-055	12	2	Minor	No
SS221-057	15	2	Minor	No
SS232-154	12	1	Minor	No
SS133-002MQ	36	1	Minor	No
SS224-034	12	1	Minor	No
SS232-161	24	1	Minor	No



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID:		Subwatershed:	
Inspection Date:		Inspection Time:	
Investigators:		Form Completed By:	
Temperature (°F):	Rainfall In Last:	24 hours (in.):	48 hours (in.):
Nearest Intersection / Location:			
Land use in drainage area:			
Notes (e.g., origin of outfall, if known):			

SECTION 2: Outfall Description

Location Description		Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
☐ Closed Pipe ☐ Open Drainage						
Flow Present?		☐ Yes ☐ No				
Flow Description:		☐ Trickle ☐ Moderate ☐ Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)		Time of Travel (sec.)	Time To Fill (sec.)

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
☐ Odor	☐ Sewage ☐ Rancid/Sour ☐ Petroleum/Gas ☐ Sulfide ☐ Other : _____	☐ Outfall Damage	☐ Spalling, Cracking or Chipping ☐ Corrosion ☐ Peeling Paint
☐ Color	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other: _____	☐ Deposits/Stains	☐ Oily ☐ Flow Line ☐ Paint ☐ Other: _____
☐ Turbidity	☐ 1 - Slight Cloudiness ☐ 2 - Cloudy ☐ 3 - Opaque	☐ Abnormal Vegetation	☐ Excessive ☐ Inhibited
☐ Floatables	☐ Sewage ☐ Suds ☐ Petroleum (Oil Sheen) ☐ Other : _____	☐ Poor Pool Quality	☐ Odors ☐ Suds ☐ Floatables ☐ Yellow ☐ Oil Sheen ☐ Excessive Algae ☐ Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? ☐ Yes ☐ No		2. If yes, collected from: ☐ Flow ☐ Pool	
3. Measurements: Sample Temperature (°F):		pH: Total Coliform:	
Copper (mg/l):		Phenols (mg/l):	
Ammonia (mg/l):		Surfactants (mg/l):	
		Detergents (mg/l):	

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

Appendix F: Construction Site Storm Water Program



CONSTRUCTION SITE STORM WATER PROGRAM 2022

Objective

To meet the MS4 permit requirements of Section II.D Construction Site Pollution Control, the Village of Thiensville (Village) has summarized their existing Construction Site Erosion Control and Storm Water Program. The Village requirements are modeled on Wisconsin Administrative Code NR 151.11 and 151.23, Wis. Adm Code.

Erosion Control

To assist in compliance of the construction site erosion control program, the Village has implemented a process for new development and redevelopment projects. This process includes a permit application, plan set review, site inspection, and enforcement authority. The Village requirements for construction site erosion control are detailed in Attachment A: Checklist 1.

During the application process, the Village Engineer reviews plan sets of the proposed projects prior to construction. The plan review process follows goals set forth by the Village ordinance and DNR technical standards. The current ordinance references performance standards per Wisconsin Administrative Code 151.121 and 151.241. Pre-construction meetings may be required and are dependent upon project scale, potential risks, and by request of the Village Board. If a pre-construction meeting is required, the meeting shall take place during or after permit approval has been granted.

Prior to construction, the Village approves or denies the project based on technical standards detailed in the ordinance. The Village requires routine project site inspections. These inspections are completed at a frequency laid out by the Village at the time of permit approval.

Enforcement of erosion control plan requirements are applicable under the Village's ordinance, and meet Chapter NR 216.46, Wis. Admin Code.

Erosion control requirements are detailed in Attachment B: Checklist 2. Enforcement of erosion control is summarized in Attachment C: Erosion Control Enforcement Procedure Flow Chart. Violations are handled by the Village Director of Community Services/Public Works. Enforcement is carried out by the Village of Thiensville Police Department.

Storm Water Management

The Village reviews plan sets for the post-construction storm water management of new and redeveloped project sites, and property division or subdivision activities. The plan review process for storm water management follows goals set forth in Village ordinances and DNR technical standards.

Enforcement of storm water management plan requirements are applicable under the Village's ordinance, and meet chapter NR 216.47, Wis. Admin Code. Violations are handled by the Village Director of Community Services/Public Works. Enforcement is carried out by the Village of Thiensville Police Department.

Post-Construction Storm Water Management

The Village ordinance chapter 30-127 is modeled after Wisconsin Administrative Code NR 151.121 through 151.125 and requires post construction runoff practices to be outlined in new and redeveloped sites. Village ordinance provides enforcement authority of long-term maintenance agreements for post-construction storm water management facilities. The Village follows Chapter 13 of Milwaukee Metropolitan Sewage

District Rules as stated in the Village ordinance chapter 30-6. The Village's ordinance specifies design criteria shall apply to both new development and redevelopment of sites greater than one acre or less than one acre, provided the latter is part of a larger plan of development or sale.

Village ordinance requires the following minimum TSS reductions:

Development Type	TSS Reduction Requirement
New Development	80%
Redevelopment	40%

Regulatory mechanisms are expected, at minimum, to meet the DNR technical standards for Post-Construction Storm Water and to be regularly maintained as noted in the Village's ordinance.

The Village will complete post-construction reviews for all sites with more than one acre of disturbance.

The Village will maintain a record of all Storm Water Management Facilities in the Storm Water Facility Inspection Program as noted in chapter NR 216.47, Wis. Admin Code for performance standards.

Public Input

The Village allows opportunities for public input regarding new and redevelopment within the Village at municipal board and committee meetings. Meeting information is provided on the Village website and through the Village newsletter.

Attachments

Attachment A: Checklist 1 – Construction Site Plan Map & Erosion Control Plan Requirements

Attachment B: Checklist 2 – Construction Site Erosion Control Plan Requirements

Attachment C: Village of Thiensville Erosion Control Enforcement Procedure Flow Chart



**Village of Thiensville
Construction Site Plan Map &
Erosion Control Plan Requirements
2022**

All items on this list are required for all Erosion Control and Storm Water Management Permit Applications. Additional items must be shown on erosion control plans for sites that disturb one acre or more (see Checklist #2). A site plan map and supporting data regarding site conditions at a scale of 1:100 (unless otherwise noted) shall delineate or display the below applicable items.

The following existing and proposed site features must be provided for all permit applications. Items listed below must be shown on the site and within an appropriate distance in each direction of the site boundaries.

- ☐ 1. Property location description by public land survey system (1/4 section, section, township, range, county);
- ☐ 2. Ownership boundaries, bearings, lengths and other survey references that will accurately identify the site location for all land divisions;
- ☐ 3. Name and complete **contact information** for the applicant, landowner, developer and project engineer or planner;
- ☐ 4. Existing **site topography** to a contour interval not to exceed 2 feet, including **spot elevations** physical features such as storm sewers (invert elevations), retaining walls, road and ditch centerlines and topographic high and low points;
- ☐ 5. Location and name, if applicable, of all lakes, streams, channels, ditches and other **water bodies** or areas of **channelized flow** on or adjacent to the site;
- ☐ 6. Location and name, if applicable, of all **wetlands** and identification of source of delineation. For final land divisions, these boundaries shall be field verified;
- ☐ 7. Boundaries and elevation of the **100-year floodplains, flood fringes and floodways**. For final land divisions, these boundaries and elevations shall be field verified.
- ☐ 8. Boundaries and soil symbol for each **soil mapping unit** and the identification of all **hydric soils** and defined by the USDA-Natural Resources Conservation Service;
- ☐ 9. Locations of all soil borings and **soil profile evaluations** with unique references to supplemental data report forms;
- ☐ 10. Location and description of **isolated natural area** boundaries as defined by the Southeastern Wisconsin Regional Planning Commission, **woodland areas**, as defined in the storm water ordinance and other **vegetative cover types**;
- ☐ 11. Location of **natural drainage patterns** on and adjacent to the site

- ☐ 12. Location of utilities, structures, roads, highways, and paving
- ☐ 13. Boundaries and descriptive notes for all applicable setbacks and for "protective areas"
- ☐ 14. Location and descriptive notes for any existing or proposed easements, right-of-ways, vision corners or other known site restrictions. Road right-of-ways and building setbacks shall be in compliance with all applicable administrative codes, adopted plans and ordinances;
- ☐ 15. Location and descriptive notes for preplanned building sites, when limited by site features;
- ☐ 16. A scaled map or plan showing the location of the proposed land disturbance, stockpiles of temporary soil or dirt piles, direction of flow for runoff entering and leaving the disturbed area, upslope drainage area (if known), proposed BMPs, existing and proposed slopes, ground cover, drainageways, trees, utilities and other structures within 50 feet of the proposed disturbance.
- ☐ 17. Schedule of anticipated starting and completion dates for each land disturbing activity
- ☐ 18. Provisions for maintenance of BMPs during construction
- ☐ 19. Description of vegetation used for site stabilization during construction including a schedule for maintenance
- ☐ 20. Location and dimensions of erosion and sediment control measures
- ☐ 21. Other site information that the Village of Thiensville determines is necessary to administer the ordinance.

***NOTE:** *If necessary, items should be displayed on more than one map to ensure clarity. Each map must include proposed structures, setbacks, easements, right-of-ways, etc.*



Village of Thiensville Construction Site Erosion Control Plan Requirements 2022

Under Village ordinance, significant grading activity (greater than one acre) may trigger the need for a storm water permit for construction site erosion control. An erosion control plan is designed to protect downstream water resources and property owners from water pollution and other damage caused by sediment runoff from construction sites. Erosion control plans designed to meet the requirements of the Village ordinance shall adhere to the following guiding principles:

- 1) Propose grading that best fits the terrain of the site, avoiding steep slopes, wetlands, floodplains and environmental corridors;
- 2) Minimize, through project phasing and construction sequencing, the time the disturbed soil surface is exposed to erosive forces;
- 3) Minimize soil compaction, the loss of trees and other natural vegetation and the size of the disturbed area at any one time;
- 4) Locate erosion control BMPs upstream from where runoff leaves the site or enters waters of the state and outside of wetlands, floodplains, primary secondary environmental corridors or isolated natural areas;
- 5) Emphasize the use of BMPs that prevent soil detachment and transport over those aimed to reduce soil deposition (sedimentation) or repair erosion damage.

Erosion Control Plans Must Include the Following:

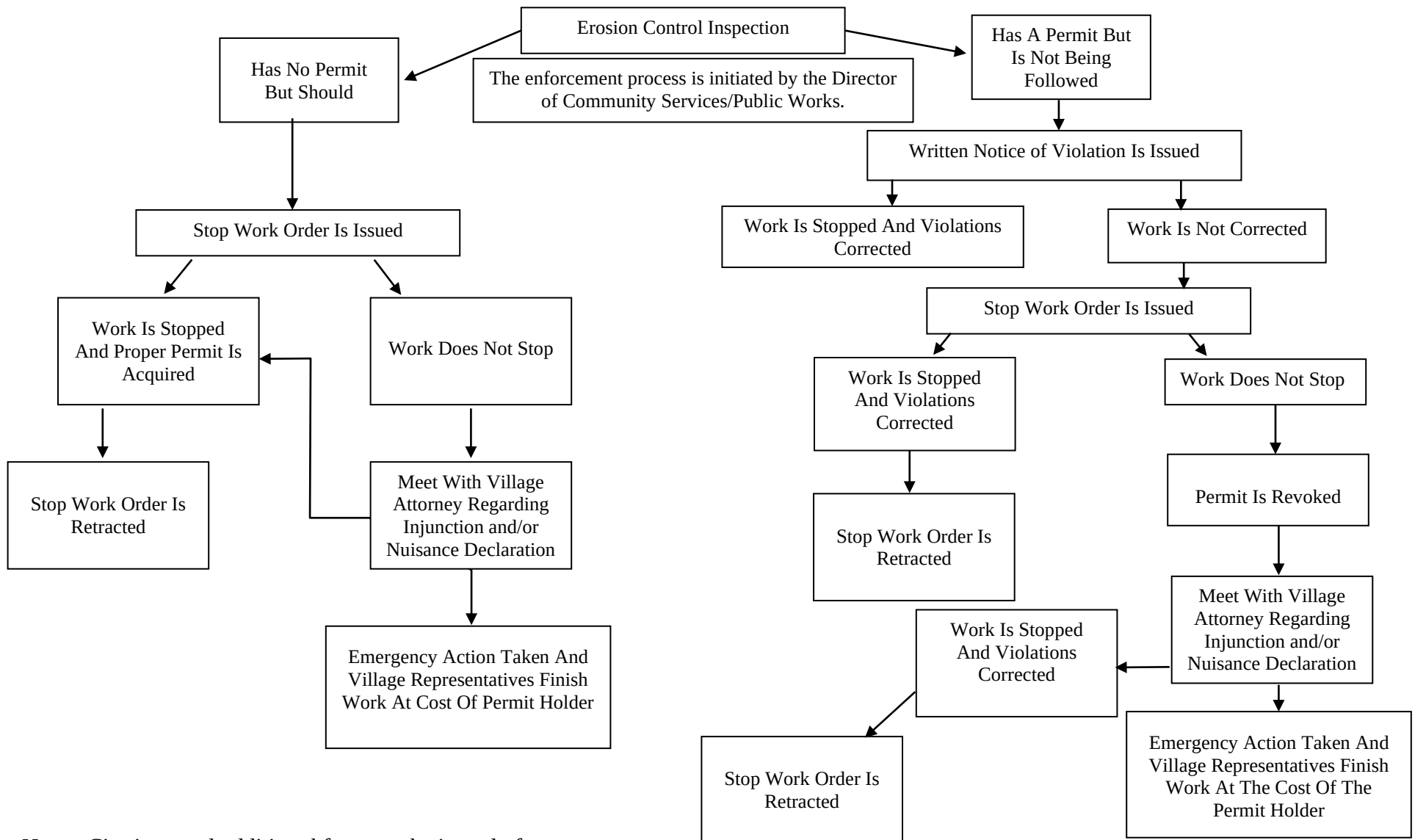
- ☐ 1. A **site map** in accordance with Checklist #1. Digital submittal required. All other map elements listed below shall be delineated and labeled at a scale of 1-inch equals no more than 100 feet, unless otherwise noted.
- ☐ 2. Proposed site topography at contour intervals not to exceed two feet, proposed percent slope for all open channels side-slopes and all runoff **discharge points** from the site.
- ☐ 3. Temporary **access drive** and specified surface material (3 to 6 inch clear or washed stone), minimum depth (minimum 12 inches) and minimum 50 feet long;
- ☐ 4. Temporary **flow diversion** devices for upslope or roof runoff until site is stabilized;
- ☐ 5. Temporary **sediment trapping devices** for site perimeter and inlets to culverts and storm drains;
- ☐ 6. Temporary settling basin or other BMP to be used for **site dewatering** during utility or other subsurface work;
- ☐ 7. Temporary **soil stockpile sites** indicating setbacks (minimum 25 feet) from channelized flow, nearby water resources or environmental corridors and the proposed erosion protection methods;
- ☐ 8. **Detailed drawings** and **cross sections** for any sediment traps, basins other major cut or fill areas showing side slopes and elevations;

- ☐ 9. Final **stabilization measures** for open channels and erosion protection for pipe and channel inlets, outlets and emergency spillways;
- ☐ 10. Final **site stabilization** instructions and time schedule for all disturbed areas, showing areas to be stabilized in acres, depth of applied topsoil (minimum 4 inches), seed types, rates and methodology, fertilizer, sod or erosion matting specifications, maintenance requirements until plants are well established, and other BMPs used to stabilize the site;
- ☐ 11. Detailed **construction notes** clearly explaining all necessary procedures to be followed to properly implement the plan including estimated starting date of grading, timing and sequence of construction or demolition, any construction stages or phases, utility installation, dewatering plans, refuse disposal, inspection requirements, and the installation, use and maintenance of BMPs in the plan;
- ☐ 12. Small drainage areas with overland flow of less than one acre require a filter fence or equivalent BMP in downslope areas and along sideslope areas as well.
- ☐ 13. Other items specified by the Village of Thiensville as necessary to ensure compliance with the ordinance.

Provide Supporting Information:

- ☐ 1. A **narrative summary** of the erosion control plan, briefly explaining the overall plan and any unique information that led to the selection of BMPs and how the plan meets the guiding principles above.
- ☐ 2. **Summary of design data** for any structural BMP such as sediment basins or sediment traps. A professional engineer, licensed in the State of Wisconsin, shall stamp and sign a statement approving all designs and certifying that they have read the requirements of this ordinance and that, to the best of their knowledge, the submitted plans comply with the requirement
- ☐ 3. **Soil profile evaluation reports** with unique references and elevations that match the map above.
- ☐ 4. Estimated time soil stockpiles will exist to support the selected BMPs for erosion control.
- ☐ 5. Documentation of any other calculations used to demonstrate compliance with the performance standards in this section.

Village of Thiensville Erosion Control Enforcement Procedure Flow Chart



Note: Citations and additional fees may be issued after any violation. Citations are issued by the Village of Thiensville Police Department.

Appendix G: Storm Water Facility Inspection & Maintenance Program



STORM WATER FACILITY INSPECTION & MAINTENANCE PROGRAM 2022

Introduction

Routine inspection and maintenance are necessary for storm water treatment facilities to remove sediment, nutrients, and other pollutants. In accordance with the Village's WPDES Municipal Separate Storm Sewer System (MS4) Discharge Permit, the Village of Thiensville has developed the following approach to ensure inspection and maintenance of storm water facilities occurs on a routine basis.

Documentation

Village staff utilize GIS software for storm water facility record drawings, maintenance plans, inspection records, and long term maintenance agreements.

Publicly-Owned Storm Water Facilities

Village staff will inspect facilities per the inspection frequency listed on the long-term maintenance plan. Inspections shall occur at least once every five years.

- Complete one inspection report form for each facility and submit to the Director of Public Works.
- Complete any routine maintenance identified during the inspection within 30 days.
- Record the date maintenance was completed on the inspection form. Re-submit to Director of Public Works to record and report the completed maintenance to DNR via the MS4 annual report.

Privately-Owned Storm Water Facilities

Per Village Ordinance (Ch. 30-127), an agreement for long term maintenance is required for privately owned storm water facilities. Property owners or owners' representative shall inspect facilities per the frequency listed on the corresponding Long Term Maintenance Agreement. Requirements for the long term maintenance agreement are listed in Ch. 30-127(7)(c)(7) of the Village code.

- Complete one inspection report form for each facility and submit to the Director of Public Works within 14 days of inspection.
- Send inspection reports to: Director of Public Works, 250 Elm St., Thiensville, WI 53092
- If an inspection is not completed at least once every five years, Village staff (or their designee) will complete the inspection and expenses will be charged back to the facility owner(s). The Village shall ensure privately owned storm water facilities have been inspected at least once every five years through receipt of completed inspections or inspections completed by Village staff.
- Complete any routine maintenance identified during the inspection within a reasonable timeframe (Ch 30-127(7)(5)).
- If maintenance is not completed within a reasonable timeframe, Village staff will either complete the maintenance or schedule the maintenance to be completed by an outside party; maintenance expenses will be charged back to the facility owner(s).

- Record the date maintenance was completed on the inspection form. Re-submit to Director of Public Works to record and report the completed maintenance to DNR via the Village's MS4 annual report.

Outreach to Property Owners

The Village posts information about storm water facility maintenance to the Village website:

<https://www.village.thiensville.wi.us/190/Education>

Village staff maintain a database of contact information for property owners with storm water facilities.

Enforcement Response Procedures

Village staff are authorized to access properties with privately owned storm water facilities and enforce inspection and maintenance via long term maintenance agreements and Village code (Ch. 30-127(7)). If inspection records are not available to Village staff upon request, or if a document inspection has not been completed according to the specifications in the long-term maintenance agreement, Village staff may complete the inspection and forward charges to the owner.

If required maintenance has not been completed within a reasonable timeframe, the Village may complete the maintenance. The costs and expenses shall be entered on the tax roll as a special assessment against the property (Ch 30-127(7)(6)).

Attachments

ATTACHMENT A	STORM WATER FACILITY TABULAR INVENTORY
ATTACHMENT B	STORM WATER FACILITY INSPECTION FORM
	PERMEABLE PAVEMENT INSPECTION AND MAINTENANCE CHECKLIST
	PROPRIETARY DEVICE INSPECTION CHECKLIST
ATTACHMENT C	WAUKESHA COUNTY MAINTENANCE GUIDELINES FOR BIORETENTION BASINS
	WAUKESHA COUNTY MAINTENANCE GUIDELINES FOR INFILTRATION BASINS
	WAUKESHA COUNTY MAINTENANCE GUIDELINES FOR STORM WATER PONDS

Village of Thiensville Storm Water Facility Inventory						
October 2022						
Identification (label)	Reachshed	Type of BMP	Property Owner	Location (Address/intersection)	Year Constructed (year)	Legal Authority/ Long Term Maintenance Agreement
Publicly Owned Facilities						
BF-01	MI-25	Bioswale	Village	Fishway	2008	Yes
DP-01	MI-26	Dry Pond & Low Flow Bioswale	Village	Crescent Lane Detention Pond	2011	Yes
PP-01	MI-27	Permeable Pavers	Village	Molyneux Park	2010	Yes
PP-02	MI-26	Permeable Pavers	Village	Dianne's Bridge	2014	Yes
PP-03	MI-25	Permeable Pavers	Village	Village Park	2017	Yes
Privately Owned Facilities with Maintenance Agreement						
PD-01	MI-26	Stormceptor	Walgreens	Walgreens, Freistadt Rd.	1998	Yes
Privately Owned Facilities without Maintenance Agreement						
WP-01	MI-27	Wet Pond	White Coach Condo Association	White Coach, 213 S Main Street	1960	No

Pond Information							
Pond ID:				Pond Type:			
Location:							
Subdivision:				Watershed:			
Capacity:				Acres:			
Overflow Elev:				100 Year Elev:			
Year Constructed:				Date Input:			
Water Quality:				Private:			
Inspection Details							
Inspector Name(s):							
Inspection Date:			Start Time:			End Time:	
Weather Condition:					Last Rainfall Date:		
Issue	Checked			Maintenance Needed			Comments
	Y	N	N/A	Y	N	N/A	
Dry Pond							
1. Standing water or wet spots?	N/A			N/A			
2. Sediment or trash accumulation?	N/A			N/A			
3. Low flow channels unobstructed?	N/A			N/A			
4. Other?	N/A			N/A			
Wet Pond							
1. Removal of floating debris required?	N/A			N/A			
2. Visible oil/chemical presence?	N/A			N/A			
3. Evidence of wave action?	N/A			N/A			
4. Safety shelf erosion or failure?	N/A			N/A			
5. Other?	N/A			N/A			
Infiltration Basin							
1. Standing water or wet spots?	N/A			N/A			
2. Sediment or trash accumulation?	N/A			N/A			
3. Under drain functioning?	N/A			N/A			
4. Other?	N/A			N/A			

Issue	Checked			Maintenance Needed			Comments
	Y	N	N/A	Y	N	N/A	
Vegetation							
1. Adequate vegetation cover?			N/A			N/A	
2. Appropriate vegetation?			N/A			N/A	
3. Presence of invasive or undesirable vegetation/woody growth?			N/A			N/A	
4. Excessive nuisance aquatic vegetation present?			N/A			N/A	
5. Other?			N/A			N/A	
Sediment Forebays							
1. Is sediment accumulation >50%? If yes, maintenance is needed immediately.			N/A			N/A	
2. Evidence of excessive velocity/scour?			N/A			N/A	
3. Maintenance access clear of obstructions?			N/A			N/A	
4. Other?			N/A			N/A	
Embankment & Emergency Spillway							
1. Is the spillway level?			N/A			N/A	
2. Adequate Freeboard? (min 1' from top of bank to highest outlet)			N/A			N/A	
3. Embankment erosion evident?			N/A			N/A	
4. Cracking, bulging or sliding of embankment?			N/A			N/A	
5. Evidence of animal burrows?			N/A			N/A	
6. Seepage evident on exterior face of embankment?			N/A			N/A	
7. Vertical & horizontal alignment of top of dam as per plans?			N/A			N/A	
8. Emergency spillway clear of obstructions & debris?			N/A			N/A	
9. Maintenance access clear of obstruction?			N/A			N/A	
10. Other?			N/A			N/A	

Issue	Checked			Maintenance Needed			Comments
	Y	N	N/A	Y	N	N/A	
Riser & Outfall Spillway							
1. Low flow orifice obstructed?			N/A			N/A	
2. Low flow trash rack debris/corrosion?			N/A			N/A	
3. Weir trash rack debris/corrosion?			N/A			N/A	
4. Excessive sediment accumulation inside the riser?			N/A			N/A	
5. Sediment accumulation in outlet pipe?			N/A			N/A	
6. Outfall channels functioning?			N/A			N/A	
7. Under drain functioning?			N/A			N/A	
8. Slope protection or rip-rap failures?			N/A			N/A	
9. Other?			N/A			N/A	
Other							
1. Encroachments on pond or easement area?			N/A			N/A	
2. Complaints from residents?			N/A			N/A	
3. Odor?			N/A			N/A	
4. Mowing required?			N/A			N/A	
5. Graffiti removal needed?			N/A			N/A	
6. Insects in excess?			N/A			N/A	
7. Public hazards?			N/A			N/A	
8. Other?			N/A			N/A	
Summary:							
Inspector Remarks:							

IMAGE

IMAGE

IMAGE

IMAGE

Site Name:

Location:

Owner Name:

Inspector Name:

Date:

Time:

Site Conditions:

*****Conduct maintenance inspection in the spring of each year.

Pavement Type: Pervious Concrete/Asphalt ☐ Modular Pavers ☐ Grass/Gravel Pavers ☐

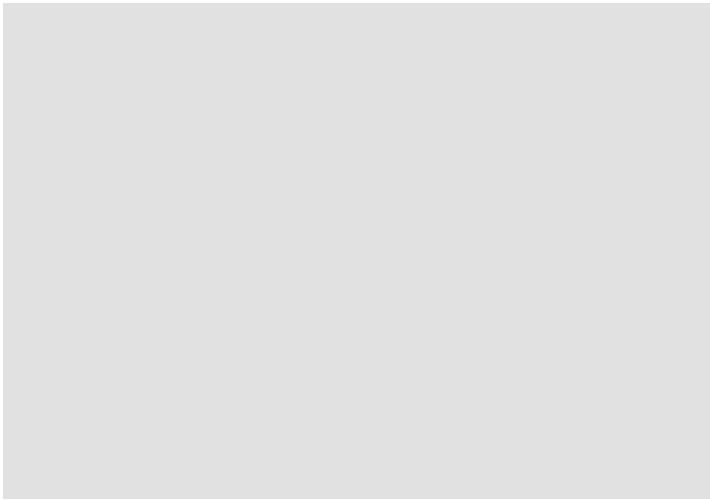
Inspection Frequency Key: A= annual (required); M=monthly (recommended); S=after major storms (recommended)

Inspection Items	Inspection Frequency	Inspected? Yes/No	Maintenance Needed? Yes/No	Comments/ Description
Pavement Area				
Pavement area free of debris?		Yes No ☐ ☐	Yes No ☐ ☐	
Staining or sediment?		Yes No ☐ ☐	Yes No ☐ ☐	
Inlets and outlets unobstructed and sediment free?		Yes No ☐ ☐	Yes No ☐ ☐	
All contributing drainage area free of erosion and sources of sediment?		Yes No ☐ ☐	Yes No ☐ ☐	
Water standing after a storm event?		Yes No ☐ ☐	Yes No ☐ ☐	
Any evidence of clogged pores that require vacuum sweeping?		Yes No ☐ ☐	Yes No ☐ ☐	
Has area been vacuum swept in the past 12 months?		Yes No ☐ ☐	Yes No ☐ ☐	
Is observation well capped?		Yes No ☐ ☐	Yes No ☐ ☐	
Structural integrity of the pavement intact? Look for deterioration such as: slumping, cracking, spalling, or broken pavers.		Yes No ☐ ☐	Yes No ☐ ☐	

Inspector Comments:

Inspected by: (signature)

Inspected by: (printed)



Inspector Name(s):			Weather Conditions:			
Inspection Date:			Location:			
Type of Inspection	Drainage System Feature	Problem	Conditions to Check For	Recommended Action	Maintenance Needed (Yes/No)	Comments
Inspections are performed in accordance with the maintenance agreement or owners recommendation	Settling Chamber	Sediment accumulation	Sediment capacity reached (varies depending on the model, see attached table)	Sediment should be removed using vactor truck	☐ N/A ☐ Yes ☐ No	
	Settling Chamber	Trash and floatable debris accumulation	Excessive trash and floatable debris accumulation.	Remove trash or other floatable debris.	☐ N/A ☐ Yes ☐ No	
	Settling Chamber	Excessive Oil	Oil exceeds 8" in depth or evidence of a spill	Clean out oil	☐ N/A ☐ Yes ☐ No	
	Manhole Cover	Cover Damaged/Not Working	Corrosion or deformation of cover. (One maintenance person cannot remove lid after applying 80 pounds of lift.)	Repair cover to proper working specifications or replaced.	☐ N/A ☐ Yes ☐ No	
	Disk Insert	Disk insert inlet/outlet obstructed	Inlet or outlet piping obstructed.	Remove obstruction blocking inlet or outlet piping.	☐ N/A ☐ Yes ☐ No	
	Structure	Structure has cracks in wall, bottom, and damage to frame and/or top slab	Cracks wider than ½ inch or evidence of soil particles entering the structure through the cracks, or maintenance/inspection personnel determine that the vault is not structurally sound.	Repair or replace vault to meet design specifications and is structurally	☐ N/A ☐ Yes ☐ No	
	Structure Joints	Structure has cracks at the joint of any inlet/outlet pipe.	Cracks wider than ½ inch at the joint of any inlet/outlet pipe or evidence of soil particles entering through the cracks.	Repair vault so that no cracks exist wider than 0.25 inches at the joint of inlet/outlet	☐ N/A ☐ Yes ☐ No	

Comments:

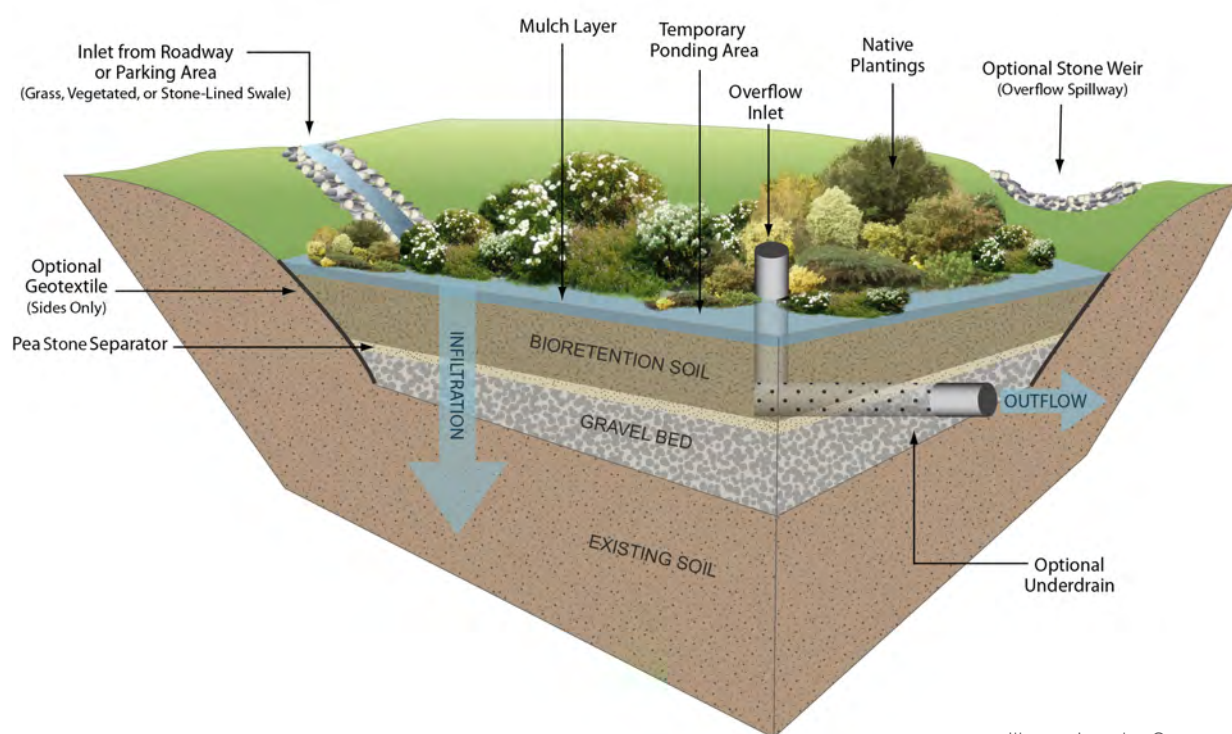
BIORETENTION BASINS

Guidelines for Maintenance

A **bioretention basin** is a storm water best management practice (BMP) that uses an engineered soil mix to reduce water pollution in urban runoff before it enters our lakes and streams. Runoff reaches the basin through a combination of underground pipes, ditches and overland flow. A bioretention basin is carefully designed to capture and treat runoff from small watersheds, usually less than two acres in size. Runoff will generally pond on the surface of the basin up to one foot in depth, but for no more than three days before it infiltrates. An overflow pipe and/or spillway will handle runoff events that exceed the design capacity. A small catch basin may be located near the inflow to trap sediment and other debris before it enters the basin.

In bioretention basins, the existing soil has been replaced with an engineered soil mix containing a high percentage of sand, intended to encourage infiltration and filter pollutants in the runoff. Under the engineered soil layer is a gravel bed that serves to temporarily store runoff, allowing it to infiltrate the underlying native soil. A perforated drainage pipe at the top of the gravel layer allows excess water to flow out of the basin, if necessary.

With this design, bioretention basins are commonly used in areas where the existing soil has a limited ability to absorb runoff. During the growing season, a cover of tall grasses and native wildflowers help make this BMP very effective at reducing water pollution, as illustrated below.



THE NATIVE LANDSCAPE

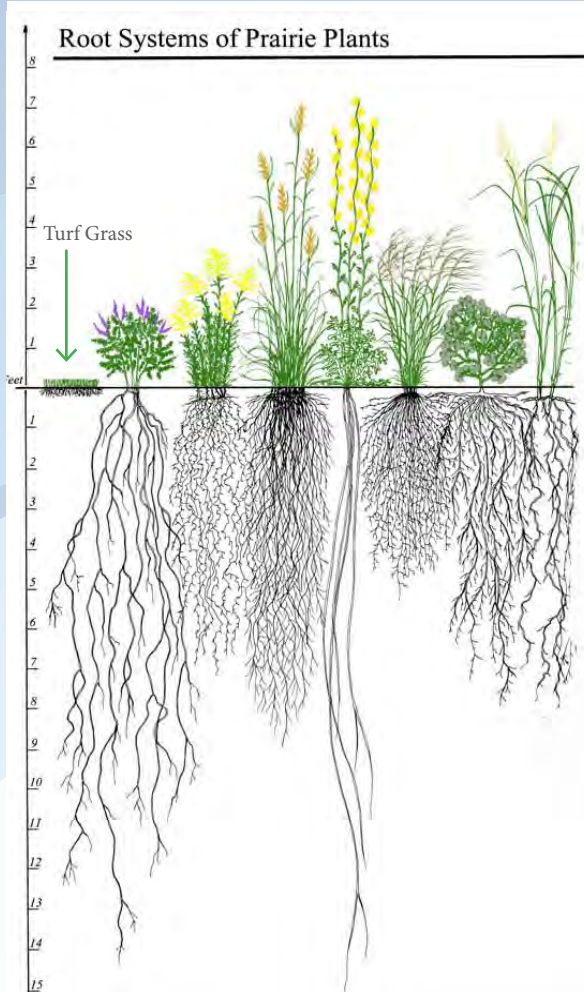


Image Source: Conservation Resource Institute

Before our landscape was developed, very little rainfall actually ran off the ground. Most of it soaked into the soil, where it was either used by plants or became part of the groundwater system. Native plants are used in bioretention basins to help replicate some of these conditions. Native plants have very deep root systems with as much as two-thirds of the plant being underground. This massive root system improves the soil, creating more pathways for infiltration, and making the basin more effective at soaking up runoff and filtering pollutants. By comparison, turf grass only has a few inches of root mass. Other benefits of using native plants include:

- Creating habitat and food sources for birds, butterflies, bees and other wildlife.
- Absorbing more nutrients in runoff like phosphorous and nitrogen, which cause algae blooms and excessive weed growth in lakes and streams.
- Improving aesthetics of the bioretention basin, providing year-round interest and color with a mix of wildflowers and grasses.
- Reducing maintenance needs (once established), such as mowing, watering (plants are drought resistant), or use of fertilizer or pesticide.

MANAGING THE WATERSHED: WHAT PROPERTY OWNERS CAN DO

In addition to maintaining the bioretention basin, there are actions that owners can take to manage the land that drains to the basin. The following will help extend the life of the basin and reduce water pollution at the same time:

- Regularly sweep litter and grass clippings off sidewalks, driveways, streets and parking lots.
- Test the soil in landscaped areas, and follow recommended application rates for fertilizers and pesticides.
- Pick up after pets to keep excess nutrients and bacteria out of the basin.
- Minimize salt application to impervious areas. Salt generally passes through the basin soils, damaging the plants and polluting the receiving surface and ground water resources.
- Prevent sediment from leaving construction sites. The more sediment that enters the basin, the sooner it will require expensive maintenance like replacing the engineered soil.

MAINTENANCE FOR BIORETENTION BASINS

DO-IT-YOURSELF

There are some maintenance jobs that can—and should—be regularly attended to by the owner of the bioretention basin. This includes:

- Inspect and remove debris and sediment in the inflow area or near the overflow pipe and spillway.
- Repair any erosion in the embankment or other areas. Staked erosion matting works best. Use plant plugs to replace native plants.
- Water native plants during establishment only. Once established, watering won't be necessary.
- Remove small trees and weeds by carefully spot-applying herbicide rather than by pulling. This is because pulling them disturbs the soil and provides an opening for invasive species to grow.
- Remove excessive dead plant material in the early spring.
- Replant with different species if an original plant dies out. The original plant may have been unsuitable for the soil type or degree of wetness.

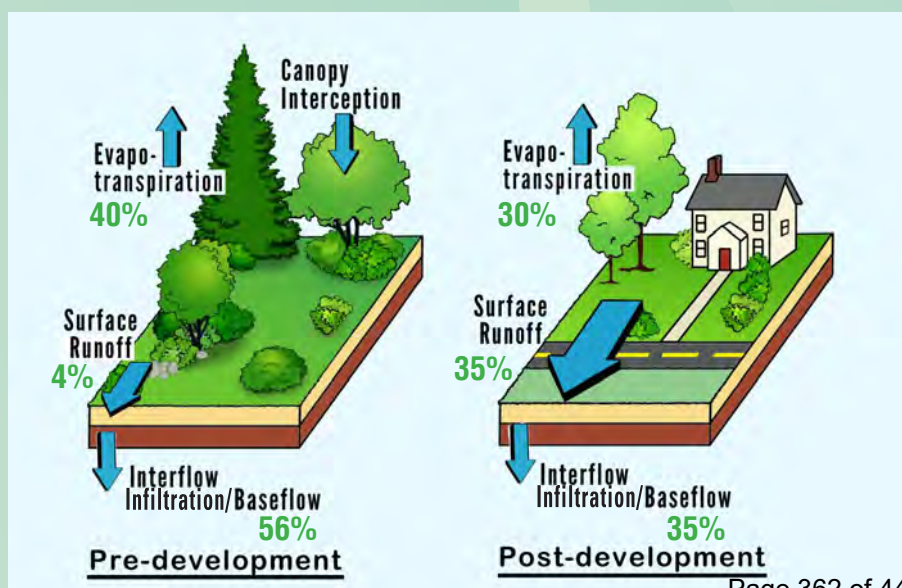
ENLIST A PROFESSIONAL

Besides the maintenance that an owner can do, a qualified inspector should be hired annually to inspect and repair the following, as needed:

- The underdrain system, checking for obstructions like roots, sediment or animal nests.
- The condition of outlet structures, checking for obstructions or damage.
- The observation pipe (if there is one), checking during dry spells to see if runoff is infiltrating out of the gravel storage layer.
- The condition of embankments, looking for soft spots, settling and erosion.
- Diagnose any reported prolonged ponding (more than THREE days).
- Collect soil cores to evaluate engineered soil and gravel layers, if necessary.
- Remove accumulated sediment on the surface, replace engineered soil, and/or reestablish native vegetation, as needed to improve performance.
- Burn every-other-year in April where feasible. Otherwise, mow in late spring or very early summer to a height of 4 to 6 inches. The purpose is to cut the weeds before they can go to seed, and do it before the native plants start to really shoot up. This cutting height generally requires a brush hog or similar device. A normal lawn mower will cut it too short.

For a sample inspection report, visit the Waukesha County website at www.waukeshacounty.gov/cleanwater.

Development greatly increases the amount of runoff. Runoff carries many different pollutants to our water bodies. At the same time, the amount of water that is able to soak into the ground and replenish groundwater is greatly reduced. About 80% of the population of Wisconsin relies on groundwater for their drinking water.



Enforcement of Bioretention Maintenance

Maintenance responsibilities for bioretention basins are usually documented as a deed restriction or a maintenance agreement that was recorded on the property when the basin was built. Maintenance can also be required through a local ordinance to meet clean water laws. The local municipality or storm water utility district is the likely regulatory agency for maintenance. Either way, the regulatory agency can require the owner(s) of a bioretention basin to perform and report inspections and to complete repairs and maintenance activities as needed. If the owner(s) fails to comply, the regulatory agency may resort to citations or other enforcement measures, or may perform the maintenance activities itself and recover the costs through special charges on the property tax bill.

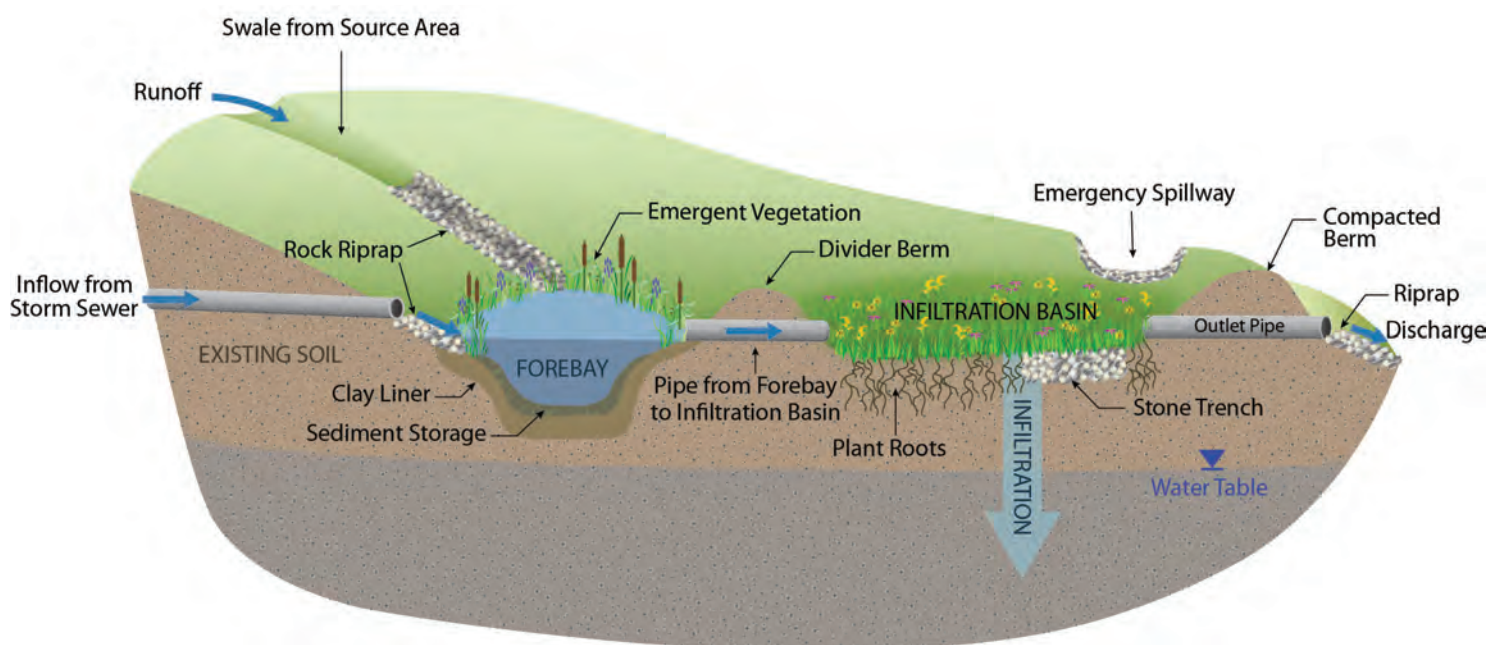
INFILTRATION BASINS

Guidelines for Maintenance

An **infiltration basin** is a storm water best management practice (BMP) designed to capture runoff and let it soak into the ground—a process called infiltration. The basin is carefully engineered to infiltrate runoff volumes from the specific land area, or watershed that drains to the basin. Runoff will enter the infiltration basin through a combination of underground pipes, ditches and overland flow. A small pond, or forebay, is usually constructed at the inflow area to trap sediment and attached pollutants before entering the infiltration basin. This can help prevent plugging the soils in the infiltration basin.

The bottom of the infiltration basin is flat, wide and planted with vegetation specifically designed to encourage infiltration (see page 2). There may be a stone-filled trench constructed within the basin bottom or near the perimeter to further enhance infiltration, especially during frozen ground periods. The basin will usually have an overflow pipe and an emergency spillway to handle runoff events that exceed the design capacity. The infiltration basin is generally designed not to pond runoff in the basin for more than a few days at a time.

An infiltration basin may act like a leaky pond, but they are very effective at protecting local lakes, rivers and downstream properties from water pollution and flooding caused by urban runoff. Infiltrating runoff also helps replenish the groundwater, the source of drinking water for 80% of Wisconsin residents. Groundwater also supports water levels in local lakes and base flows in streams, especially during periods of dry weather.



Note: Rain gardens are essentially small infiltration basins. They are designed to capture and infiltrate runoff from small watersheds such as a rooftop, driveway or small parking lot. Some roadside or backyard swales are also designed as small infiltration practices.

NOT TO SCALE

Illustrations by Geosyntec Consultants, Inc.

THE NATIVE LANDSCAPE

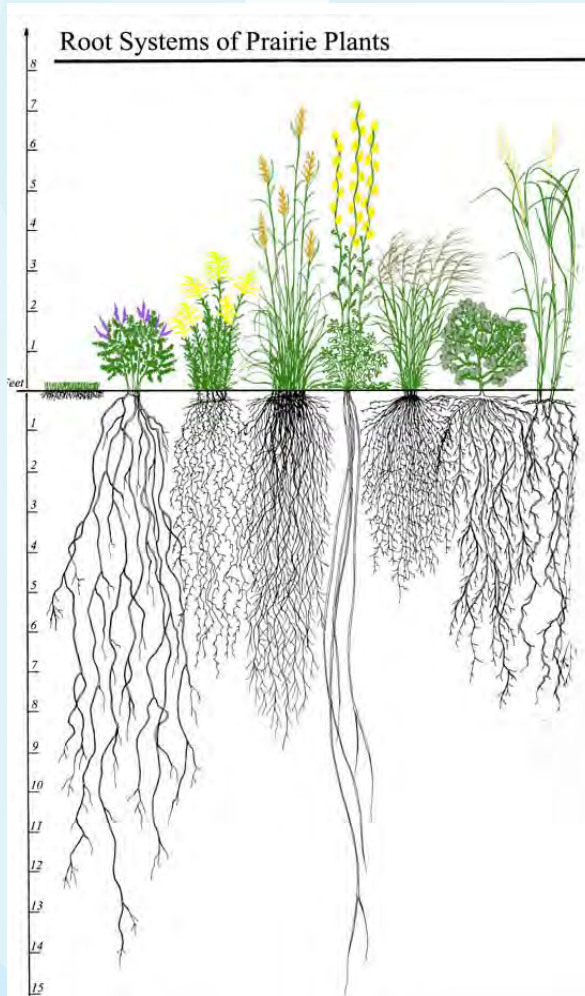


Image Source: Conservation Resource Institute

Before our landscape was developed, very little rainfall actually ran off the ground. Most of it soaked into the soil, where it was either used by plants or became part of the groundwater system. Native plants are used in infiltration basins to help replicate some of these conditions. Native plants have very deep root systems with as much as two-thirds of the plant being underground. This massive root system improves the soil, creating more pathways for infiltration, and making the basin more effective at soaking up runoff and filtering pollutants. By comparison, turf grass (pictured at far left in the illustration) only has a few inches of root mass. Other benefits of using native plants include:

- Creating habitat and food sources for birds, butterflies, bees and other wildlife.
- Absorbing more nutrients in runoff like phosphorous and nitrogen, which cause algae blooms and excessive weed growth in lakes and streams.
- Improving aesthetics of the infiltration basin, providing year round interest and color with a mix of wildflowers and grasses.
- Reducing maintenance needs (once established), such as mowing, watering (plants are drought resistant), or use of fertilizer or pesticide.

MANAGING THE WATERSHED: WHAT HOMEOWNERS CAN DO

Many infiltration basins are owned by a group of landowners and maintained through a homeowner association within a subdivision. In addition to maintaining the basin, there are actions that each homeowner can take to manage the land that drains to the basin. The following will help extend the life of the basin and reduce water pollution at the same time:

- Regularly sweep litter and grass clippings off sidewalks, driveways, streets and parking lots.
- Test the soil in landscaped areas, and follow recommended application rates for fertilizers and pesticides.
- Pick up after pets. This also helps keep excess nutrients and bacteria out of the basin.
- Minimize salt application to impervious areas. Salt generally passes through the basin soils, damaging the plants and polluting the receiving surface and groundwater resources.
- Prevent sediment from leaving construction sites. The more sediment that enters the basin, the sooner it will require expensive soil restoration or replanting.

MAINTENANCE FOR INFILTRATION BASINS

DO-IT-YOURSELF

There are some maintenance jobs that can—and should—be regularly attended to by the owner of the infiltration basin. This includes:

- Inspect and remove debris in the forebay, or near the inflow or outlet pipes, stone trench and spillway.
- Remove weeds by carefully spot-applying herbicide rather than by pulling. This is because pulling weeds disturbs the soil and provides an opening for invasive species to grow.
- Remove excessive dead plant material in the early spring.
- Replant with different species if an original plant dies out. The original plant may have been unsuitable for the soil type or degree of wetness.
- Water native plants during establishment only. Once established, watering won't be necessary.

ENLIST A PROFESSIONAL

Besides the maintenance that an owner can do, a qualified inspector should be hired annually to inspect and repair the following, as needed:

- The condition of the forebay, including the amount of sediment build-up or liner damage. Take soil cores if needed to evaluate liner. Patch holes and remove burrowing animals, if necessary.
- The condition of the pipes, swales or structures where water flows into and out of the basin.
- Erosion of side slopes, embankments, inlet/outlet, and emergency spillway, including the condition of rock riprap and underlying filter fabric.
- Detect the presence of invasive species. Develop a plan for their removal if necessary.
- Soft spots or settling that may have occurred in the embankment.
- Diagnose any reported prolonged ponding (more than three days). Evaluate the condition of the soils, taking core samples and testing infiltration rates, if needed.
- Burn every-other-year in April where feasible. Otherwise, mow in late spring or very early summer to a height of 4 to 6 inches. The purpose is to cut the weeds before they can go to seed, and do it before the native plants start to really shoot up. This cutting height generally requires a brush hog or similar device. A normal lawn mower will cut it too short.
- Remove any large trees growing in the embankment and re-compact the soil as needed.
- Develop plans to repair damaged structures, plantings or forebay liners, to remove sediment or enhance soil infiltration rates (aeration, tillage, etc.), if necessary.

For a sample inspection report, visit:
www.waukeshacounty.gov/cleanwater.

Enforcement of Infiltration Basin Maintenance

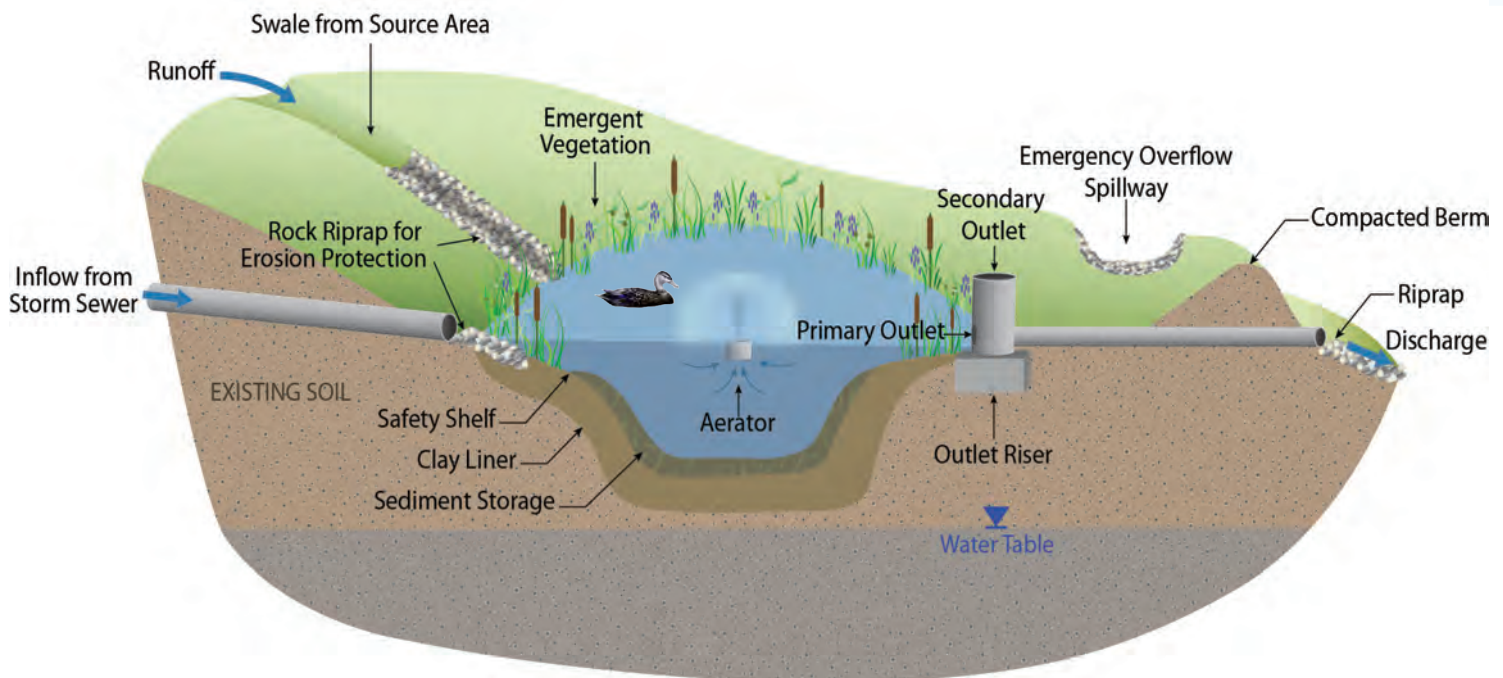
Maintenance responsibilities for infiltration basins are usually documented as a deed restriction or a maintenance agreement that was recorded on the property when the basin was built. Maintenance can also be required through a local ordinance to meet clean water laws. The local municipality or storm water utility district is the likely regulatory agency for maintenance. Either way, the regulatory agency can require the owner(s) of an infiltration basin to perform and report inspections and to complete repairs and maintenance activities as needed. If the owner(s) fails to comply, the regulatory agency may resort to citations or other enforcement measures, or may perform the maintenance activities itself and recover the costs through special charges on the property tax bill.

STORMWATER PONDS

Guidelines for Maintenance

A **stormwater pond** is a best management practice (BMP) that collects and holds storm runoff to remove pollutants carried by the water before they enter our rivers and lakes. Water reaches the stormwater pond through a combination of underground pipes, ditches and overland flow. Once the runoff enters the stormwater pond, sediment and other pollutants settle to the bottom. The water that entered as polluted runoff leaves the pond gradually, resulting in cleaner water draining into our lakes and streams and reduced flooding problems downstream.

Stormwater ponds are carefully designed to hold and treat runoff. Over time, the pond fills in with sediments and begins to lose its ability to remove pollutants. A smaller “forebay” may be present, which may fill up with sediment first. Maintenance is needed for the pond to continue to function the way it was designed, to protect our lakes and streams. Maintenance is also required by an agreement on file with the municipality.



ANNUAL MAINTENANCE FOR STORMWATER PONDS

DO-IT-YOURSELF

There are some maintenance jobs that can—and should—be regularly attended to by the owner of the stormwater pond. This includes:

- Remove vegetation/debris obstructions around the outlet pipes and trash rack. Outlets come in a variety of shapes and designs and may look different from the drawing on page 1.
- Check the sediment depth—most easily done through hole in ice when frozen. Many ponds will have a forebay where the runoff flows in, intended to trap the bulk of the sediment and which will fill up first. (See page 3.)
- Record water levels including depth along the safety shelf. This is best done by reading a depth gauge that is permanently mounted in the pond.
- Visually assess water quality and estimate percent weed/algae cover in early and late summer.
- Remove trash, litter and invasive plants. Cattails or reeds around the edge of the pond (safety shelf) help deter children and geese from entering the water and should be left uncut.
- Remove trees sprouting along the embankments. Left to grow, tree roots threaten the structural integrity of the embankments.
- Be sure to check the engineering design before doing any digging. Ponds often have a clay or synthetic lining that could be punctured or damaged resulting in a pond that no longer holds water.
- Inspect any fencing or signage for damage.
- Replace spent mosquito control devices.
- Invite bats to the area by installing bat houses to provide natural mosquito control.
- Aeration is sometimes added for algae control. While it helps with the aesthetics of a pond, it detracts from the sediment trapping abilities. Turn off aerators during rain or snow melt periods to allow settling of sediment.

ENLIST A PROFESSIONAL

Besides the maintenance that owners can do, a qualified inspector should be hired to annually inspect the pond and check for the following:

- The condition of the pipes, swales or structures where water flows into and out of the basin.
- Erosion of sideslopes, embankments, inlet/outlet, and emergency spillway, including the condition of rock riprap and underlying fabric.
- The condition of the pond liner (if present). Patch holes and remove burrowing animals, if necessary.
- The presence of invasive species. Develop a plan for their removal if necessary.
- The permanent pool elevation and sediment depth by surveying and referencing to a vertical benchmark (known elevation).
- Soft spots or settling that may have occurred in the embankment.

For a sample inspection report, visit the Waukesha County website at www.waukeshacounty.gov/cleanwater.

CHECKING SEDIMENT DEPTH



Simply use an ice auger to drill a hole and insert a measuring pole or rod into the hole to get the total depth. If distance from water surface to top of sediment is less than 3 feet, refer to a professional for advice on possible sediment removal. A reference to as-built surveys and design water levels is necessary. You may have less than 3 feet if water levels are low, so record water from the depth gauge levels at the same time. (See page 2.)

MANAGING THE WATERSHED: WHAT HOMEOWNERS CAN DO

Many stormwater ponds are owned by a group of landowners and maintained through a homeowner association within a subdivision. In addition to maintaining the ponds, there are actions that each homeowner can take to manage the land that drains to the ponds. The following will help extend the life of the ponds and reduce water pollution at the same time:

- Regularly sweep litter and grass clippings off sidewalks, driveways, streets and parking lots.
- Test the soil in landscaped areas, and follow recommended application rates for fertilizers and pesticides.
- Pick up after pets. This also helps keep excess nutrients and bacteria out of the pond.
- Minimize salt application to impervious areas. Salt generally passes through the pond soils, damaging the plants and polluting the receiving surface and groundwater resources.
- Prevent sediment from leaving construction sites. The more sediment that enters the pond, the sooner it will require expensive soil restoration or replanting.



Ponds that fill up with sediment over time will have to be cleaned out, requiring expensive maintenance like dredging. Proper care and maintenance of your pond will extend its life.

Enforcement of Stormwater Pond Maintenance

Maintenance responsibilities for stormwater ponds are usually documented as a deed restriction or a maintenance agreement that was recorded on the property when the pond was built. Maintenance can also be required through a local ordinance to meet clean water laws. The local municipality or stormwater utility district is the likely regulatory agency for maintenance. Either way, the regulatory agency can require the owner(s) of a stormwater pond to perform and report inspections and to complete repairs and maintenance activities as needed. If the owner(s) fails to comply, the regulatory agency may resort to citations or other enforcement measures, or may perform the maintenance activities itself and recover the costs through special charges on the property tax bill.

Appendix H: Storm Sewer & Sanitary Sewer Cross-Connection Program



STORM SEWER AND SANITARY SEWER CROSS-CONNECTION PROGRAM 2022

Introduction

The Village of Thiensville is covered under the Wisconsin Department of Natural Resources (WDNR) WPDS Municipal Separate Storm Sewer System (MS4) Permit program. A Total Maximum Daily Load (TMDL) analysis was developed for the Milwaukee River Basin and issued by the EPA in March 2018. The TMDL specifically addresses the high Total Suspended Solids (TSS), phosphorus, and bacteria loads that are currently impairing the designated uses of the local waterways.

Concern for potential cross-connections between sanitary sewer and storm water systems stems from a lack of treatment systems in place for municipal storm water systems. Without treatment systems, bacteria and related pathogens that enter storm water conveyance facilities may proceed unabated into local waterways.

This program was developed to address potential cross-connections between sanitary sewer systems and the municipal storm water conveyance system. The goal of this program is to reduce the potential discharge of bacteria and related pathogens into local waterways.

Identification of Potential Cross-Connections

Potential sources of cross-connections include:

- Aged or deteriorating sewer infrastructure may result in sewer discharges seeping into storm water conveyance systems,
- Periods of snow melt or rain events in areas with a seasonal high groundwater table which may increase the potential for discharges from the sewer system, and
- Frequent rain events and flooding which may cause elevated groundwater tables to increase the potential for the sewer system to overflow.

Each of the above cross-connections may result in bacteria loading from the sanitary sewer system into the storm water conveyance system and subsequent downstream receiving waters.

The Village's municipal storm water conveyance system is comprised of roadside vegetated swales and curb and gutter with underground pipe.

Vegetated swale systems allow for infiltration of storm water runoff during normal rain events. Pollutants carried in the storm water runoff gather in the swale and infiltrate into the underlying soils. Infiltration in vegetated swale systems reduces the pollutants that proceed to downstream lakes, streams, and wetlands. Large rain events resulting in localized flooding or high groundwater tables may result in sanitary sewer discharges into the vegetated swale systems.

To address these potential circumstances, site observations and follow-up on complaints of these discharges may result in the identification of sources of overflow or cross-connections between sanitary and storm sewer systems.

A curb and gutter system directs storm water into inlets along the curbs, then into a network of underground storm pipe consisting of many different sizes, ages, and conditions. Storm water then discharges from the underground storm pipes and into local streams, lakes, and wetlands. Privately owned storm sewer under parking lots and private roads also drains into the Village's storm sewer system. Aged and deteriorated

storm pipe may have cracks, damage, or gaps where sections of pipe have shifted apart over time. Non-storm water flows can enter storm pipe in these damaged areas, which results in pollutants mixing with storm water flows and impacting local waterways.

Evaluation of Potential Cross-Connection Areas

A desktop analysis of the Village's sanitary sewer system that could potentially leak into the nearby municipal storm water conveyance system has identified sites in the Village to be evaluated further for potential infiltration of sanitary sewer discharges into the Village's storm sewer system. Considerations for areas of cross-connection concern have been included in the Village's Bacteria Source Identification Map. Areas of concern should be observed for potential sanitary and storm sewer cross-connections after large rain events and during seasonal high groundwater during spring.

The Village performs annual Illicit Discharge Detection and Elimination (IDDE) screening per their IDDE Program. The annual screenings include a parameter for evidence of staining, flows, and odors that could be associated with improper sewer connections and leaking underground septic systems. The screening report findings are utilized for further development of source identification, tracking, and elimination.

Education and Outreach

An education and outreach program describing the contributors to and impacts of bacteria pollution to the local lakes, streams and wetlands may be developed. Target audiences for this storm water education topic may include residents, private property owners, industry specialists and inspectors, including those in the plumbing and underground infrastructure inspection industries, and community leaders, decision makers and elected officials.

Proposed Response Procedures for Potential Cross-Connections

A focus on bacteria pollutants has been incorporated into the Village's IDDE Program. The IDDE Program also includes response procedures for screenings that result in bacteria results outside of the acceptable range.

Appendix I: Recommendations for Bacteria Source Elimination



RECOMMENDATIONS FOR BACTERIA SOURCE ELIMINATION 2022

Bacteria Source Identification and Elimination

The Milwaukee River TMDL Report (2018) notes the impact of bacteria loading on local waterways. According to the report, environmental and public health agencies have turned to *E. coli* monitoring as an indicator of fecal contamination in waterways. High levels of fecal contamination in a waterbody lead to an increased risk of human illness from water ingested during recreational activities. To mitigate the increased risk of pathogen ingestion, waterbodies may be assigned restrictions on recreational use.

With the goal of eliminating the bacteria impairment of the Milwaukee River, MS4-permitted municipalities, including the Village of Thiensville, continue to develop measures to identify and reduce bacteria sources within the Milwaukee River basin.

Potential Bacteria Sources

Identification of potential bacteria sources within the Village will enable a targeted approach to reduce bacteria loading. The Village may incorporate this information into their Illicit Discharge Detection and Elimination prioritization of storm water outfall testing.

The Village has analyzed urban sources of bacteria including areas with large rooftops or parking lots that attract birds, aged storm water ponds that attract waterfowl and other wildlife, uncovered dumpsters, dog parks, businesses that sell or keep livestock/other animals, dense industrial development, and aged infrastructure that is more likely to have illicit connections or damaged sewer lines.

The Village has identified 6 locations from which bacteria could potentially enter the Village's storm water conveyance system. The locations are summarized in Table 1 and indicated on the attached map.

Table 1. Potential Bacteria Sources

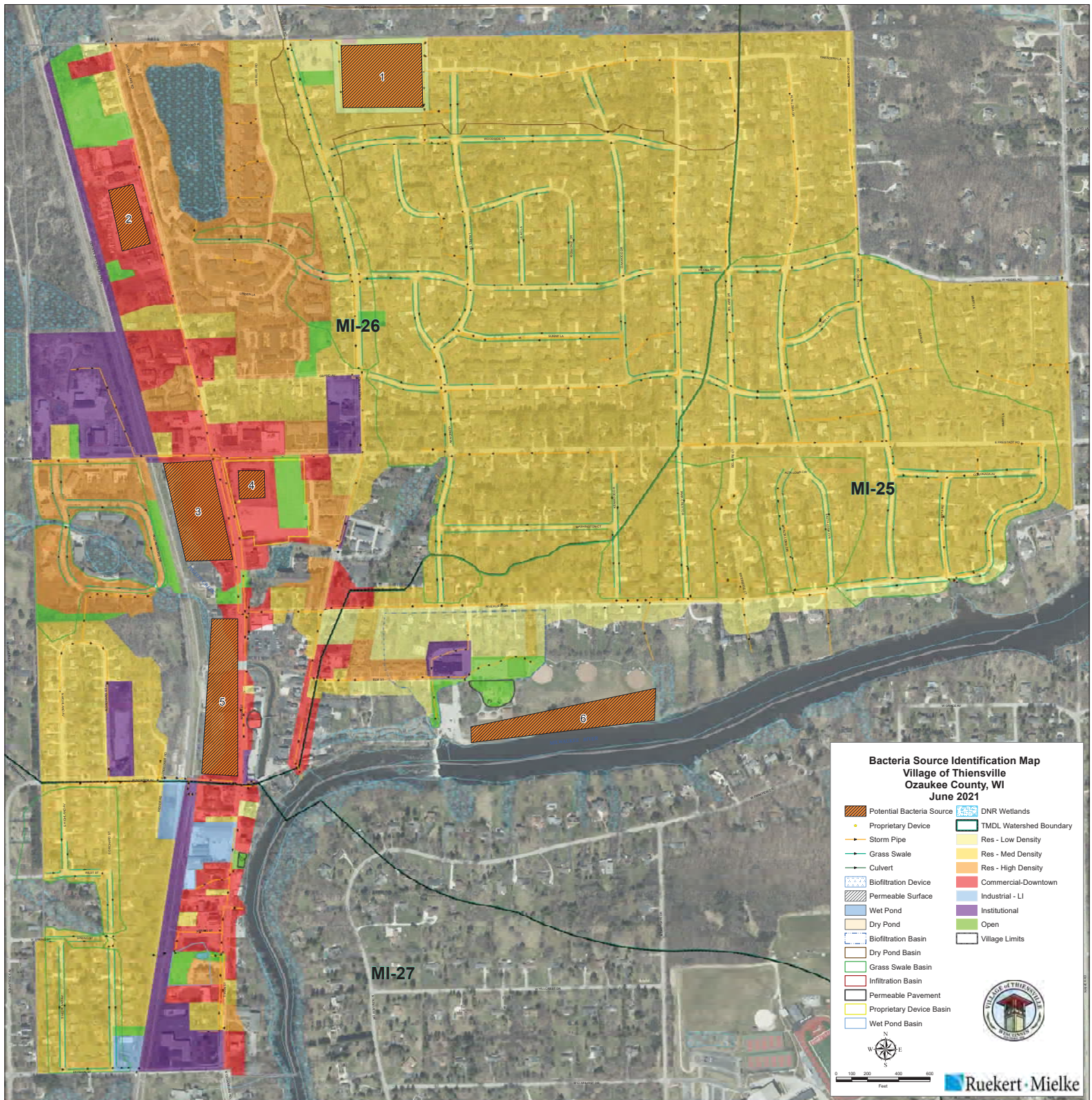
Map ID	Location	Land Use	Potential Bacteria Source
1	Dry Pond 1 – North boundary of Village; Crescent Lane and Laurel Drive	Park/Open Space	Pond/Wetland habitat surrounded by manicured lawn may attract nuisance geese
2	Thiensville Hardware & Frenz Garden Center	Commercial	Large flat rooftops may attract nuisance birds
3	Main Street Strip Mall	Commercial	Large flat rooftops and large parking lot may attract nuisance birds
4	Walgreens on Freistadt	Commercial	Large flat rooftop may attract nuisance birds
5	Suburban Motors Harley Davidson & Gordi Boucher Ford Dealership	Commercial	Large flat rooftops and large parking lots may attract nuisance birds
6	Village Park Riverfront	Park/Open Space	Manicured lawn along Milwaukee River may attract geese

Bacteria Targets

Bacteria targets and data for modeling bacteria load and removal mechanisms are limited. In addition, the wasteload allocations for bacteria as shown in the TMDL Report have not been represented in a “percent reduction” approach. Rather, the wasteload allocations are represented as annual load allocations in billions of cells per season and per day. In lieu of the implementation of a modeling approach, municipalities may evaluate and identify potential bacteria sources and take steps to reduce and eliminate those sources. This allows MS4 permittees to commit to steps that are achievable and unique to the funding, planning, and priorities of the community.

Testing Protocol Development

The Village currently performs bacteria tests on storm water outfalls, as detailed in the Illicit Discharge Detection and Elimination Program. Follow-up testing and investigation are performed on outfalls that test beyond the action limit parameters. As testing protocol and guidance are developed, the Village will continue to evaluate methods for bacteria source identification and elimination.



Appendix J: Construction & Post- Construction Erosion Control Ordinance



VILLAGE OF THIENSVILLE CONSTRUCTION AND POST-CONSTRUCTION EROSION CONTROL ORDINANCE

The Village of Thiensville currently has ordinances in place for construction site erosion control and post-construction storm water management. The following are recommendations for ordinance revisions, displayed as “tracked changes.”

ARTICLE VI. - CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT^[5]

Footnotes:

--- (5) ---

Editor's note— Ord. No. 2004-03, adopted March 15, 2004, amended §§ 30-121—30-135 in their entirety to read as herein set out. Former §§ 30-121—30-135 pertained to the same subject matter and derived from Ord. No. 2001-093, adopted June 18, 2001.

Sec. 30-121. - Authority.

This article applies to land disturbing and land development activities on lands within the jurisdiction of the Village of Thiensville and is adopted under the authority granted by Wis. Stats. §§ 61.354 and 281.33. The requirements of this article do not preempt more stringent stormwater management requirements that may be imposed by stormwater permits issued by the Wisconsin Department of Natural Resources (WDNR) under Wis. Stats. § 283.33.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-122. - Findings of fact.

The village board of the Village of Thiensville finds that uncontrolled stormwater runoff and construction site erosion from land development and land disturbing activity has a significant impact upon water resources and the health, safety, general welfare of the community and diminishes the public enjoyment and use of natural resources. Specifically, uncontrolled stormwater runoff can:

- (1) Degrade physical stream habitat by increasing stream bank erosion, increasing stream bed scour, diminishing groundwater recharge, and diminishing stream base flows;
- (2) Diminish the capacity of lands and streams to support fish, aquatic life, recreational, and water supply uses by increasing loadings of nutrients and other urban pollutants;
- (3) Alter wetland communities by changing wetland hydrology and by increasing pollutant loads;
- (4) Reduce the quality of groundwater by increasing pollutant loading;
- (5) Threaten public health, safety, property, and general welfare by overtaxing storm sewers, drainage ways, and other minor drainage facilities;
- (6) Threaten public health, safety, property, and general welfare by increasing major flood peaks and volumes;
- (7) Undermine floodplain management efforts by increasing the incidence and levels of floodings.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-123. - Definitions.

- (1) *Applicant* means any landowner, land user(s), their agent, or contractor responsible for submitting and carrying out the requirements of this article. Applicant shall also mean any subsequent land owner to whom this article applies.

- (2) *Approved stormwater management system plan* means a regional stormwater management system plan certified by the Village Engineer and adopted by the village board.
- (3) *Agricultural land use* means use of land for planting, growing, cultivating and harvesting of crops for human or livestock consumption and pasturing or yarding of livestock, including sod farms and tree nurseries.
- (4) *Best management practice* or *BMP* means a practice, technique or measure that is employed to:
 - (a) Avoid or minimize sediment of pollutants carried in runoff to waters of the state; or
 - (b) Manage the rate of volume of runoff.
- (5) *Common plan of development or sale* means all lands included within the boundary of a certified survey or subdivision plat created for the purpose of development or sale of property where integrated multiple separate and distinct land developing activity may take place at different times and on different schedules.
- ~~(6) *Village* means Village of Thiensville.~~
- ~~(67)~~ *Critical time* means the period starting at the time of peak rainfall intensity with a duration equal to the time of concentration of the watershed.
- ~~(78)~~ *Design storm* means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency, and total depth of rainfall.
- ~~(98)~~ *Discharge volume* means the quantity of runoff discharged from the land surface as the result of a rainfall event.
- ~~(409)~~ *Effective infiltration area* means the area of the infiltration system that is used to infiltrate runoff and does not include the area used for site access, berms or pretreatment.
- ~~(4410)~~ *Erosion* means the detachment and movement of soil, sediment or rock fragments by water, wind, ice or gravity.
- ~~(4211)~~ *Erosion and sediment control plan* means a written description and detailed site plan of best management practices designed to meet the requirements of this article submitted by the applicant for review and approval by the department of public works.
- ~~(4312)~~ *Final stabilization* means that all land disturbing construction activities at the construction site have been completed and that a uniform, perennial, vegetative cover has been established, with a density of at least 70 percent of the cover, for the unpaved areas and areas not covered by permanent structures, or employment of equivalent permanent stabilization measures.
- ~~(4413)~~ *Groundwater enforcement standard* means a numerical value expressing the concentration of a substance in groundwater which is adopted under Wis. Stats. § 160.07 and [Wis. Adm. Code] § NR 140.10 or Wis. Stats. § 160.09 and [Wis. Adm. Code] § NR 140.12.
- ~~(4514)~~ *Groundwater preventive action limit* means a numerical value expressing the concentration of a substance in groundwater which is adopted under Wis. Stats. § 160.15 and [Wis. Adm. Code] § NR 140.10, 140.12, or 140.20.
- ~~(4615)~~ *Impervious surface* means any pavement or structural element that prevents rain, surface water runoff, or melting snow from infiltrating into the ground below, including, but not limited to, roofs and paved roads, driveways, and parking lots.
- ~~(4716)~~ *In-fill area* means undeveloped area of land located within existing development.
- ~~(4817)~~ *Infiltration* means the process by which rainfall or surface runoff percolates or penetrates into the underlying soil.
- (18) *Karst feature* means an area or surficial geologic feature subject to bedrock dissolution so that it is likely to provide a conduit to groundwater, and may include caves, enlarged fractures, mine features, exposed bedrock surfaces, sinkholes, springs, seeps or swallets.

- (19) *Land development activity* means the construction of buildings, roads, parking lots, paved and unpaved storage areas, patios, seawalls and similar facilities, but not including general maintenance of parking lots and drives.
- (20) *Land disturbing activity* means any man-made change of the land surface including removing vegetative cover, cutting of trees, demolition, excavating, filling and grading but not including agricultural land uses such as planting, growing, cultivating and harvesting of crops; growing and tending of gardens; and harvesting of trees, and tree nurseries. It is the intent of this definition to prohibit the cutting of trees in primary and secondary environmental corridors and isolated natural areas without an approved construction site erosion and sediment control plan and permit or other authorization set forth in state and local shoreland management codes. This definition does not prohibit the selective cutting of diseased or fallen trees.
- (21) *Landowner* means any person holding title to or having an interest in land.
- (22) *Land user* means any person operating, leasing, renting or having made other arrangements with the landowner by which the landowner authorizes use of his or her land.
- (23) *Local municipality* means a town, village, or city.
- (24) *Maintenance agreement* means a legal document that is filed with the county register of deeds and which provides for long-term maintenance of stormwater management practices.
- (25) ~~MEP or m~~Maximum extent practicable (MEP) means a level of implementing best management practices in order to achieve a performance standard specified in this article which takes into account the best available technology, cost effectiveness and other competing issues such as human safety and welfare, endangered and threatened resources, historic properties and geographic features. MEP allows flexibility in the way to meet the performance standards and may vary based on the performance standard and site conditions.
- (26) *Nonresidential development* means all development excluding residential development and agricultural use.
- (27) *Non-storm discharge* means a discharge to the storm sewer system created by some process other than the runoff of rain.
- (28) *Ordinary high-water mark* has the meaning given in Wis. Adm. Code §. NR 115.03(6).
- (29) *Peak flow* means the maximum rate at which a unit volume of stormwater is discharged.
- (30) *Percent fines* means the percentage of a given sample of soil, which passes through a #200 sieve. *Note:* Percent fines can be determined using the "American Society for Testing and Materials", volume 04.02, "Test Method C117-95 Standard Test Method for Materials Finer than 75-µm (No. 200) Sieve in Material Aggregates by Washing". Copies can be obtained by contacting the American Society for Testing and Materials, 100 Barr Harbor Drive, Conshohocken, PA 19428-2959, or phone 610-832-9585, or on line at:
<http://www.astm.org>.
- (31) *Pervious surface* means a surface that infiltrates rainfall during a large portion of the design rainfall event. Well managed lawns, field and woodlands are examples of pervious surfaces.
- (32) *Post-construction stormwater discharge* means any stormwater discharged from a site following the completion of land disturbing construction activity and final site stabilization.
- (33) *Post-development condition* means the extent and distribution of land cover types, anticipated to occur under conditions of full development, that will influence rainfall runoff and infiltration.
- (34) *Predevelopment condition* means the extent and distribution of land cover types present before the initiation of land development activity assuming that all land uses prior to development activity are managed in an environmentally sound manner.

- (35) *Pretreatment* means the treatment of stormwater prior to its discharge to the primary stormwater treatment practice in order to reduce pollutant loads to a level compatible with the capability of the primary practice.
- (36) *Public right-of-way* means any road, alley, street, parking lot, sidewalk, plaza, mall, or pathway owned by or dedicated to a governmental unit.
- (37) *Recreational trail* means a path that is:
- (a) Distinctly set apart from a roadway, street, or sidewalk;
 - (b) Designed for activities such as jogging, walking, hiking, bird-watching, bicycle riding, roller skating, or similar recreational activities not involving the use of motorized vehicles; and
 - (c) Not a sidewalk according to Wis. Stats. § 340.01(58).
- (38) *Regional flood* means the peak flow and peak elevation of water with a one percent probability of occurring during any one year, considering rainfall time and intensity patterns, rainfall duration, area distribution, antecedent moisture, and snow melt. The common misnomer, "100-year flood or floodplain" implies a temporal element rather than a one in 100 random probability of the event.
- (39) *Redevelopment* means new construction, modification or replacement of older development.
- (40) *Residential development* means that which is created to house people, including the residential dwellings as well as all attendant portions of the development including lawns, driveways, sidewalks, garages, and access streets. This type of development includes single-family, multifamily, apartment, and trailer parks.
- (41) *Runoff* means the rainfall, snowmelt, dewatering or irrigation water flowing over the ground surface.
- (42) *Site* means the entire area of land disturbing or land development activity.
- (43) *Stabilize* means that vegetation is well established or other surfacing material is in place and the risk of further soil erosion is minimal.
- (44) *Stormwater management measure* means a practice, technique, or measure to reduce the discharged volume, peak flow rate, or pollutants in stormwater including, but not limited to structural stormwater measures.
- (45) *Stormwater management plan* means a document that identifies what actions will be taken to reduce stormwater discharge volume. Peak flow rates and pollutant loads from land development activity to levels meeting the purpose and intent of this article.
- (46) *Stormwater management system plan* is a comprehensive plan developed to address stormwater drainage and nonpoint source water pollution control problems under both existing and planned conditions within a logical planning area such as a watershed or subwatershed. Such a system plan is intended to establish objectives, standards, and design criteria, which can be used to evaluate alternatives and select a recommended plan. The system plan shall be certified by the village engineer and adopted by the village board.
- (47) *Stormwater runoff* means that portion of the precipitation falling during a rainfall event that runs off the surface of the land and into the natural or artificial conveyance or drainage network.
- (48) *Structural stormwater management measure* means a practice that is designed to control stormwater runoff pollutant loads, discharge volumes, and peak flow discharge rates.
- (49) *Surface waters* means all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within the Village of Thiensville.
- (50) *TR-55* means the United States Department of Agriculture, Natural Resources Conservation Service (previously Soil Conservation Service), Urban Hydrology for Small Watersheds, Second Edition, Technical Release 55, June 1986.

(51) *Type II distribution* means a rainfall type curve as established in the "United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published 1973". The Type II curve is applicable to all of Wisconsin and represents the most intense storm pattern.

~~(524)~~ *Village means Village of Thiensville.*

(532) *Waters of the state* has the meaning given in Wis. Stats. § 281.01(18).

(5354) *Water quality management* means the stormwater standards and duties established under the Clean Water Act, 33 U.S.C. 1251 et seq., parallel state law regulating the discharge of pollutants, and implementing regulations.

(5455) *Water quantity management* means stormwater duties and practices to abate peaks flood flows during regional storm events pursuant to Chapter 13 of the Milwaukee Metropolitan Sewerage District rules as implemented and enforced by this municipality.

(5556) *Wetland functional value* means the type, quality, and significance of the ecological benefits provided by wetland resources, such as: flood storage, water quality protection, groundwater recharge and discharge, shoreline protection, fish and wildlife habitat, and floral diversity.

(5657) *Working day* means a calendar day, except Saturdays, Sundays and state and village recognized legal holidays.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-124. - General administration.

The department of public works is designated to administer and enforce the provisions of this article. The department of public works shall oversee the administration of this article and issue permits and review in conjunction with the village engineer, erosion and sediment control and stormwater management plans as provided herein and make recommendations, where appropriate, to the village board or the zoning board of appeals (appeal body) relative to matters related to erosion and sediment control and stormwater management.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-125. - Design criteria, standards and specifications.

The following methods shall be used in designing the water quality, peak flow shaving and infiltration components of stormwater practices needed to meet the requirements of this article:

- (1) Technical standards identified, developed or disseminated by the Wisconsin Department of Natural Resources under Wis. Adm. Code subch. V of ch. NR 151.
- (2) All construction site erosion and sediment control and stormwater management measures required to comply with this article shall meet the design and maintenance criteria, standards and specifications in the latest edition of the Wisconsin Construction Site Best Management Practice Handbook as published and amended from time-to-time by the State of Wisconsin Department of Natural Resources and Chapter IV of the Field Office Technical Guide as published by the United States Department of Agriculture Natural Resource Conservation Service. Design criteria, standards and specifications for construction site erosion and sediment control and stormwater management measures not contained in the Wisconsin Construction Site Best Management Practice Handbook and Chapter IV of the Field Office Technical Guide shall not be permitted unless approved by the department of public works. In the event of a conflict between the above named design criteria, standards and specifications, the most restrictive shall apply.

- (3) Where technical standards have not been identified or developed by the Wisconsin Department of Natural Resources, other technical standards may be used provided that the methods have been approved by the village.
- (4) The most recent rainfall data available from the Southeastern Wisconsin Regional Planning Commission or more protective data shall be the basis for the analyses required by this article.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-126. - Construction site erosion and sediment control.

- (1) *Maintenance of construction site erosion and sediment control measures.* All best management practices necessary to meet the requirements of this article shall be maintained consistent with the maintenance standards contained in the Wisconsin Construction Site Best Management Practice Handbook. The applicant and any subsequent landowner shall be responsible for maintaining the best management practices during the period of land disturbing activity and land development activity on the site until the site is stabilized. Implementation of maintenance standards for best management practices that are not included in the Wisconsin Construction Site Best Management Practice Handbook shall not be permitted unless prior approval is granted by the department of public works.
- (2) *Erosion and sediment control plan content and permit application submittal and approval.* No person may commence a land disturbing or land development activity subject to this article without receiving prior approval of an erosion and sediment control plan for the site and a permit from the department of public works. At least one landowner or land user controlling or using the site and desiring to undertake a land disturbing or land development activity subject to this article shall submit an application for a permit and an erosion and sediment control plan and pay an application fee to the village clerk-treasurer. Submission of an application authorizes the department of public works to enter the site to obtain information required for the review of the erosion and sediment control plan.
 - (a) *Erosion and sediment control plans for sites of one acre or less, excluding one-family and two-family dwellings and related structures.* The erosion and sediment control plan for sites of land disturbing activity or land development activity of one acre or less shall contain the following:
 1. The location of existing and proposed dwellings, other buildings and improvements with respect to the property lines.
 2. The direction of slopes before and after land disturbance or land development on the site.
 3. A description of all temporary best management practices required by this article and Wisconsin law. Other best management practices shall be implemented during construction as deemed necessary by the department of public works.
 4. A site stabilization plan and time schedule.
 5. Any other information deemed necessary by the department of public works.
 - (b) *Erosion and sediment control plans for sites of more than one acre.* The erosion and sediment control plan for sites of land disturbing activity or land development activity of more than one acre shall contain the following:
 1. *Existing site map.* A map on a scale of at least one inch equals 100 feet showing the following existing conditions and immediate adjacent areas:
 - a. Site boundaries and adjacent lands, which accurately identify site location;
 - b. Lakes, ponds, streams, wetlands, channels, ditches and other watercourses on and immediately adjacent to the site;
 - c. 100-year floodplains, and floodways;
 - d. Vegetative cover, types and location;

- e. Location of natural drainage patterns on the site and immediately adjacent to the site and the size, slope and land cover of the upslope and downslope drainage areas, including peak discharge, velocities, direction and destination of flows;
 - f. Locations and dimensions of utilities, structures, roads, highways, and paving;
 - g. Site topography at a minimum contour interval of two feet; and
 - h. Any other information deemed necessary by the department of public works.
2. *Site development plan.* A site development plan including:
- a. Locations and dimensions of all proposed land disturbing and land development activities;
 - b. Locations and dimensions of all temporary soil or dirt stockpiles;
 - c. Locations and dimensions of all best management practices necessary to meet the requirements of this article;
 - d. Schedule of anticipated starting and completion date of each land disturbing or land development activity including the installation of site best management practices needed to meet the requirements of this article;
 - e. Provisions for maintenance of the best management practices during construction;
 - f. Description of vegetation and other materials to be used to stabilize the site including a schedule for installation and maintenance; and
 - g. Location and dimensions of erosion and sediment control measures including but not limited to post development peak flows, drainage system dimensions and computations. Provide certification of all computations, designs and final construction by a registered professional engineer, for engineered practices.

(c) *Plan review and permitting process.*

1. *Village requirements.* Within 60 working days of receipt of the application for a permit and erosion and sediment control plan, and fee for sites of more than one acre of land disturbance or land development or within 30 working days of receipt of the application and erosion and sediment control plan and fee for sites of one acre or less of land disturbance or land development, the department of public works shall review the application and erosion and sediment control plan to determine if the requirements of this article are met. If the requirements of this article are met, the department of public works shall approve the plan, and issue a permit to the applicant.

If the requirements of the ordinance are not met, the department of public works shall inform the applicant in writing of what additional information is needed to meet the requirements of the ordinance. Within 60 working days of receipt of needed information for sites of more than one acre, or within 30 working days of receipt of needed information for sites of one acre or less, the department of public works shall again determine if the requirements of this article are met. If the erosion and sediment control plan meets the requirements of this article, the department of public works shall inform the applicant in writing of approval and any conditions if applicable and issue a permit.

If the erosion and sediment control plan is not approved, the department of public works shall inform the applicant in writing of the reasons for disapproval. If the department of public works fails to act within the timeline set within this section, unless extended with the agreement of the applicant, the erosion and sediment control plan shall be deemed approved and the permit shall be issued.

2. *Duration.* Permits and erosion and sediment control plan approvals shall be valid for a period of 180 days, or the length of the building permit or other relevant construction authorizations, or until release of the financial guarantee as set forth in section 30-128, whichever is longer from the date of issuance. The department of public works may extend the period one or

more times for up to an additional 12 months. The department of public works may require additional best management practices as a condition of the extension if they are necessary to meet the requirements of this article.

3. *Erosion and sediment control plan conditions.* All permits and approved erosion and sediment control plans shall require the applicant to:
 - a. Notify the department of public works within two working days of commencing any land disturbing or land development activity;
 - b. Notify the department of public works of completion of any control measures within three working days after their installation;
 - c. Obtain permission in writing from the department of public works prior to a material modification to the erosion and sediment control plan;
 - d. Install all best management practices as identified in the approved erosion and sediment control plan;
 - e. Maintain all road drainage systems and tracking provisions, stormwater drainage systems, control measures and other facilities identified in the erosion and sediment control plan;
 - f. Repair any siltation or erosion damage to adjoining surfaces and drainageways resulting from land development or disturbing activities;
 - g. Inspect the best management practices within 24 hours after each rain of 0.5 inches or more and at least once each week and make needed repairs;
 - h. Allow the department of public works to enter the site for the purpose of inspecting compliance with the erosion and sediment control plan or for performing any work necessary to bring the site into compliance with the erosion and sediment control plan; and
 - i. Keep a copy of the erosion and sediment control plan on the site.

(3) *Control of erosion, sediment, and pollutants during land disturbance and development activities.*

- (a) *Applicability.* Section 30-126 applies to any of the following sites of land development or land disturbing activities:
 1. Those sites requiring a subdivision plat or certified survey.
 2. Those sites providing for the construction of commercial, industrial or institutional buildings or additions there to on lots of record having an affected surface area of 3,000 square feet or more and/or 400 cubic yards of excavation or fill material.
 3. Those involving grading, removal of protective ground cover or vegetation, demolition, excavation, land filling or other land disturbing activity affecting a surface area of 3,000 square feet or more.
 4. Those involving excavation or filling or a combination of excavation and filling affecting 400 cubic yards or more of dirt, sand or other excavation of fill material, or in excess of 15 cubic yards in aggregate on sites within 1,000 feet of a lake or pond or 300 feet of stream, wetland, channel, ditch, floodplain or other watercourse.
 5. Those sites involving the laying, repairing, replacing or enlarging of an underground pipe or facility for a distance of 300 feet or more.
6. Temporary BMPs that are no longer necessary for erosion, sediment, and pollutant control, shall be removed by the responsible party.
- (b) *Exemptions.* This article does not apply to the following activities:

1. Construction projects that are exempted by federal statutes or regulations from the requirement to have a national pollutant discharge elimination system permit for land disturbing construction activity.
2. Transportation facilities, except transportation facility construction projects that are part of a larger common plan of development such as local roads within a residential or industrial development.
3. Nonpoint discharges from agricultural facilities and practices.
4. Non-point discharges from silviculture activities
5. Routine maintenance for project sites that have less than 5 acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.

~~Those state funded or conducted sites involving street, highway, road, or bridge construction activities, meeting requirements contained in the department of transportation, department of natural resources cooperative agreement memorandum of understanding on erosion control.~~

- ~~2. Underground pipe or facility placement which is plowed into the ground outside areas of channelized runoff.~~

(c) Erosion, sediment, and other pollutant control requirements. The following requirements shall be met on all sites covered by this article:

1. Temporary best management practices. The following temporary best management practices shall be used to control sediment where erosion of the site, including dirt piles, during construction will result in sediment reaching surface waters, runoff enters waters of the state, rights-of-way, public storm sewers or other off site areas:
 - a. Small drainage areas with overland flow less than one acre shall require a filter fabric fence or equivalent best management practice placed along the downslope areas and along the sideslope areas as required.
 - b. Drainage areas of one to two acres with concentrated or channelized flow shall require a filter fabric barrier or equivalent best management practice placed downslope of the disturbed area.
 - c. Drainage areas of more than two acres to five acres with concentrated or channelized flow shall require a sediment trap or equivalent best management practice placed downslope of the disturbed area.
 - d. Drainage areas of more than five acres with concentrated or channelized flow shall require a sediment basin or equivalent best management practice placed downslope of the disturbed area.
 - e. Steep slopes, which are slopes of 12 or more percent, shall require use of additional best management practices.
 - f. Environmentally sensitive areas, which are sites within 1,000 feet of a lake or pond or 300 feet of a stream, wetland, channel, ditch, floodplain or other watercourse, may require use of additional best management practices.
 - g. Soil stockpiles existing for more than 7 days, shall require use of additional best management practices.
2. Site stabilization. The disturbed area shall be stabilized by seeding, sodding or other permanent means as set forth below:
 - a. For building sites, the disturbed areas shall be stabilized or other best management practices utilized and approved by the department of public works within seven days after foundation backfilling.

- b. For other sites, the disturbed area shall be stabilized according to the schedule and materials described in the erosion and sediment control plan.
 - c. When land disturbing construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.
 - ed. When the disturbed area is properly stabilized by established vegetation or other permanent means, the temporary best management practices shall be removed.
- 3. *Tracking prevention and cleanup.* Each site shall have a #3 stone entrance road, access drive and/or parking area of sufficient width and length to prevent sediment from being tracked onto public or private roadways. Sediment reaching a public or private road shall be removed by street cleaning before the end of each work day. Flushing may not be used unless the sediment will be controlled by a filter fabric barrier, sediment trap, sediment basin or equivalent best management practice.
 - 4. *Drain inlet protection.*
 - a. Protect storm sewer drain inlets;
 - b. Seal sanitary sewer connection points (foundation drains and cleanouts);
 - 5. *Site dewatering.* Water pumped from the site shall be treated by an appropriately sized filter fabric barrier, sediment trap, sediment basin or equivalent best management practice. Water may not be discharged in a manner that causes erosion or damage to adjacent properties or receiving channels. Site dewatering requirements set forth by the Wisconsin Department of Natural Resources shall be adhered to.
 - 6. *Sediment cleanup.* All off-site sediment deposits shall be cleaned up by the end of each work day unless environmental damage will occur in which case clean up shall occur at the direction of the department of public works.
 - 7. *Waste and material management and disposal.* All waste and unused building materials shall be properly managed and disposed of to prevent pollutants and debris from being carried by runoff off the site.
 - 8. *Soil or dirt storage piles.* Soil or dirt storage piles shall be located at least 25 feet from any downslope road, lake, stream, wetland, ditch, channel or other watercourse and protected in accordance with section 30-127(7)(b). Piles located in the street or within 25 feet of any downslope road, lake, stream, wetland, ditch, channel, floodplain or other watercourse shall require the use of additional best management practices.
 - 9. The proposed surface water runoff shall not be diverted so as to concentrate flow directly onto adjacent property or adversely affect adjoining property.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-127. - Stormwater management plans.

(1) *Intent.* It is the intent of the Village that this ordinance regulates post-construction storm water discharges to waters of the state. This ordinance may be applied on a site-by site basis. The Village recognizes, however, that the preferred method of achieving the storm water performance standards set forth in this ordinance is through the preparation and implementation of comprehensive, systems-level storm water management plans that cover hydrologic units, such as watershed, on a municipal and regional scale. The standards for onsite stormwater management measures set forth in subsections 30-127(4)(c)2. and 30-127(4)(c)3. do not apply in areas where such plans have been prepared. Such plans may prescribe regional storm water devices, practices, or systems, any of which may be designed to treat runoff from more than one site prior to discharge to waters of the state. Where such plans are in conformance with the performance standards developed under s. 281.16 Wis. Stats., for regional storm water management measures and have been approved by the Village, it is the intent of this ordinance

that the approved storm water management plan as defined herein (see definitions (44), (45), and (46)) be used to identify post-construction management measures acceptable for the community.

~~This article is not intended to limit activity or land divisions permitted under the applicable zoning and land division ordinances. The village board recognizes that the preferred method of addressing stormwater management problems and needs is through the preparation of comprehensive stormwater management system plans for logical subwatershed areas which are designed to meet the purpose and intent of this article. Accordingly, the standards for onsite stormwater management measures set forth in subsections 30-127(4)(c)2. and 30-127(4)(c)3. do not apply in areas where such plans have been prepared. In those areas for which stormwater management system plans have been prepared, all land development activities will include stormwater management measures set forth in those approved stormwater management system plans as defined herein (see definitions (44), (45) and (46)). It is the general intent of the village in cooperation with the village engineer to achieve its purpose through:~~

- (a) Managing long-term, post-construction stormwater discharges from land development activities;
- (b) Providing two options for developing stormwater management requirements including:
 - 1. Application of generic requirements in this article on a site by site basis in areas for which no approved stormwater management system plan exists; and
 - 2. Implementation of management practices set forth in detailed stormwater management plans in areas, which are covered, by a stormwater management system plan.

(2) *Applicability.*

- (a) *Applicability.* The stormwater management provisions apply to land development activities which meet the applicability criteria specified in this section.
 - 1. The water quality management duties apply to property development disturbing one or more acres and property redevelopment that increases exposed parking lots or roads, and the water quantity management duties apply to development that increases impervious surface by one-half acre or more, unless the site is exempt under paragraph 2. or 3.
 - 2. A site meeting any one of the following criteria is exempt from stormwater quality requirements:
 - a. A redevelopment post-construction site with no increase in exposed parking lots or roads.
 - b. A post-construction site with less than ten percent connected imperviousness based on complete development of the post-construction site, provided the cumulative area of all parking lots and rooftops is less than one acre.
 - c. Nonpoint discharges from agricultural facilities and practices.
 - d. Nonpoint discharges from silviculture activities.
 - e. Routine maintenance for project sites under five acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.
 - f. Underground utility construction such as water, sewer and fiberoptic lines. This exemption does not apply to the construction of any above ground structures associated with utility construction.
 - 3. Water quantity management duties do not apply if:
 - a. Residential infill where the lot is five acres or less, the development is exclusively residential, the net increase in the area of impervious surface is less than 20 percent of

the area of the site; and each boundary of the site is contiguous to: sites that contain earlier development served by sanitary sewers, streets, or public water supply when the governmental unit receives the plans for the new development or parkland; or other public land, a utility right-of-way, or a watercourse; or

- b. Sites where the area of impervious surface after development will be five percent or less of the total area of the site;
- c. Recreational trails if the trail is less than or equal to ten feet in width and has a continuous pervious buffer at least five feet wide on each side, disregarding interruption by streets, driveways, or other impervious surfaces crossing the trail.
- d. Notwithstanding the applicability requirements in paragraph (a), this article applies to post-construction sites of any size that, in the opinion of the village, is likely to result in runoff that exceeds the capacity of the existing drainage facilities or the level of flooding protection in a watercourse that causes undue channel erosion, that increases water pollution by scouring or the transportation of particulate matter or that endangers property or public safety.

(3) *Design criteria, standards and specifications.*

- (a) Design criteria, standards and specifications for stormwater management measures shall be made available by the village clerk in cooperation with the village engineer.
- (b) Peak flow shaving components of stormwater structures shall be designed in accordance with standard engineering practice.
- (c) Stormwater discharge volumes and peak flow rates used in designing the water quantity and quality components of stormwater structures shall be based on the principles of the document entitled Urban Hydrology for Small Watersheds (Technical Release 55: Engineering Division, United States Department of Agriculture, June 1992), or other methods approved by the village engineer.
- (d) All stormwater management plans shall be prepared and sealed by a registered professional engineer in the State of Wisconsin.

(4) *Stormwater management standards.*

- (a) *Responsible party.* The responsible party shall implement a post-construction stormwater management plan that incorporates the requirements of this section.
- (b) *Plan.* A written stormwater quality and quantity management plan in accordance with section 30-127(6) shall be developed and implemented for each post-construction site.
- (c) *Requirements.* The water quality plan required under subsection (b) shall include the following:
 - 1. *Total suspended solids.* BMPs shall be designed, installed and maintained to control total suspended solids carried in runoff from the post-construction site as follows:
 - a. For new development, by design, reduce to the maximum extent practicable, the total suspended solids load by 80 percent, based on the average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80 percent total suspended solids reduction to meet the requirements of this subdivision.
 - b. For redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40 percent, based on the average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40 percent total suspended solids reduction to meet the requirements of this subdivision.
 - c. For in-fill development under five acres that occurs within ten years after the effective date of March 15, 2004, by design, reduce to the maximum extent practicable, the total suspended solids load by 40 percent, based on an average annual rainfall, as compared

to no runoff management controls. No person shall be required to exceed a 40 percent total suspended solids reduction to meet the requirements of this subdivision.

- d. For in-fill development that occurs ten or more years after the effective date of March 15, 2004, by design, reduce to the maximum extent practicable, the total suspended solids load by 80 percent, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80 percent total suspended solids reduction to meet the requirements of this subdivision.
- e. Notwithstanding subsections a. to d., if the design cannot achieve the applicable total suspended solids reduction specified, the stormwater management plan shall include a written and site-specific explanation why that level of reduction is not attained and the total suspended solids load shall be reduced to the maximum extent practicable.

Note: Pollutant loading models such as SLAMM, P8 or equivalent methodology may be used to evaluate the efficiency of the design in reducing total suspended solids.

2. ~~Water quantity and management of peak runoff. Peak Runoff.~~

~~a. BMPs shall manage the volume, timing, and peak flow rate of runoff to prevent increases in the regional flood and stream bank erosion rates. By design, BMPs shall be employed to maintain or reduce the 1-year, 24-hour and the 2-year, 24-hour post-construction peak runoff discharge rates to the 1-year, 24-hour and the 2-year 24-hour pre-development peak runoff discharge rates respectively, or to the maximum extent practicable. The runoff curve numbers in Table 1 shall be used to represent the actual pre-development condition.~~

~~ba.~~ These BMPs may be implemented on either a watershed basis or an individual site basis.

~~eb.~~ When implemented on a watershed basis, the BMPs implemented at a particular site shall comply with the findings of the relevant local or regional stormwater management plan, rather than subsections ~~dc.~~ and ~~ed.~~

~~dc.~~ (i) For the 50 percent/two-year, 24-hour design storm, BMPs shall be designed to either: maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to predevelopment conditions or achieve a maximum runoff release rate of 0.15 cubic feet per second per acre, whichever is more stringent.

(ii) Predevelopment conditions shall assume "good hydrologic conditions" for appropriate land covers as identified in TR-55 or an equivalent methodology. The meaning of "hydrologic soil group" and "runoff curve number" are as determined in TR-55. However, when predevelopment land cover is cropland, woodland, and grassland, rather than using TR-55 values for cropland, the runoff curve numbers in Table 1 shall be used.

Table 1 B Maximum Pre-development Runoff Curve Numbers <u>for Cropland Areas</u>				
<u>Runoff Curve Number</u>	<u>Hydrologic Soil Group</u>			
<u>Hydrologic Soil Group</u>	A	B	C	D
<u>Runoff Curve Number</u> <u>Cropland</u>	55 6	70 69	79 8	83

Woodland	30	55	70	77
Grassland	39	61	71	78

ed. For the one percent/100-year, 24-hour design storm, BMPs shall be designed to achieve a runoff release rate that is less than or equal to either:

- (i) 0.5 [or a more stringent value] cubic feet per second per acre; or
- (ii) A rate determined for the individual site that distributes runoff over the critical time sufficient to comply with subsection 1.

Note: 13.11(3)(b)(2), MMSD Rules, permits an individual site exemption from the 0.5 cfs release rate if an analysis shows that the runoff will be distributed over the critical time (a defined term) so as not to reduce the level of protection downstream.

- 3. *Infiltration.* BMPs shall be designed, installed, and maintained to infiltrate runoff to the maximum extent practicable in accordance with the following, except as provided in subsections e. through g.

a. Low imperviousness. For development up to 40 percent connected imperviousness, such as parks, cemeteries, and low-density residential development, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than one percent of the post-construction site is required as an effective infiltration area.

b. Moderate imperviousness. For development with more than 40 percent and up to 80 percent connected imperviousness, such as medium- and high-density residential, multi-family development, industrial and institutional development, and office parks, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 75 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2 percent of the post-construction site is required as an effective infiltration area.

c. High imperviousness. For development with more than 80 percent connected imperviousness, such as commercial strip malls, shopping centers, and commercial downtowns, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2 percent of the post-construction site is required as an effective infiltration area.

ad. For residential developments one of the following shall be met:

- (i) Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90 percent of the predevelopment infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than one percent of the project site is required as an effective infiltration area.
- (ii) Infiltrate 25 percent of the post-development runoff from the two-year, 24-hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes and not composite curve numbers as defined in TR-55. However, when designing appropriate

infiltration systems to meet this requirement, no more than one percent of the project site is required as an effective infiltration area.

- be.** For nonresidential development, including commercial, industrial and institutional development, one of the following shall be met:

For this subdivision only, the “project site” means the rooftop and parking lot areas.

- (i) Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60 percent of the predevelopment infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than two percent of the project site is required as an effective infiltration area.
- (ii) Infiltrate ten percent of the runoff from the two-year, 24-hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes, and not composite curve numbers as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than two percent of the project site is required as an effective infiltration area.

- fe.** Predevelopment condition shall be the same as in subsection 2.

Note: A model that calculates runoff volume, such as SLAMM, P8, or an equivalent methodology may be used. Information on how to access SLAMM and P8 is available from the storm water coordinator in the runoff management section of the bureau of watershed management at dnr.wi.gov.

- gd.** Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.

Note: To achieve the infiltration requirement for the parking lots or roads, maximum extent practicable should not be interpreted to require significant topography changes that create an excessive financial burden. To minimize potential groundwater impacts, it is desirable to infiltrate the cleanest runoff. To achieve this, a design may propose greater infiltration of runoff from low pollutant sources such as roofs, and less from higher pollutant source areas such as parking lots.

- he.** Infiltration exclusions. The runoff from the following areas are prohibited from meeting the requirements of this paragraph:

- (i) Areas associated with tier 1 industrial facilities identified in Wis. Adm. Code § NR 216.21(2)(a), including storage, loading, rooftop and parking.
- (ii) Storage and loading areas of tier 2 industrial facilities identified in Wis. Adm. Code § NR 216.21(2)(b).

Note: Runoff from tier 2 parking and rooftop areas may be infiltrated but may require pretreatment.

- (iii) Fueling and vehicle maintenance areas.
- (iv) Areas within 1,000 feet upgradient or within 100 feet downgradient of karst features. “Karst feature” means an area or surficial geologic feature subject to bedrock dissolution so that it is likely to provide a conduit to groundwater, and may include caves, enlarged fractures, mine features, exposed bedrock surfaces, sinkholes, springs, seeps or swallets.

- (v) Areas with less than three feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock, except this subsection 5.e. does not prohibit infiltration of roof runoff.
- (vi) Areas with runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than five feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.
- (vii) Areas within 400 feet of a community water system well as specified in Wis. Adm. Code § NR 811.16(4), or within 100 feet of a private well as specified in Wis. Adm. Code § NR 812.08(4), for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development.
- (viii) Areas where contaminants of concern, as defined in Wis. Adm. Code § NR 720.03(2), are present in the soil through which infiltration will occur.
- (ix) Any area where the soil does not exhibit one of the following soil characteristics between the bottom of the infiltration system and the seasonal high groundwater and top of bedrock: at least a three-foot soil layer with 20 percent fines or greater; or at least a five-foot soil layer with 10 percent fines or greater. This does not apply where the soil medium within the infiltration system provides an equivalent level of protection. This subsection does not prohibit infiltration of roof runoff.

Note: The areas listed in subsection e. are prohibited from infiltrating runoff due to the potential for groundwater contamination.

if. Infiltration exemptions. The following are not required to meet the requirements of this paragraph:

- (i) Areas where the infiltration rate of the soil is less than 0.6 inches per hour measured at the site.
- (ii) Parking areas and access roads less than 5,000 square feet for commercial and industrial development.
- (iii) Redevelopment post-construction sites.
- (iv) In-fill development areas less than 5 acres.
- (v) Infiltration areas during periods when the soil on the site is frozen.
- (vi) Roads in commercial, industrial and institutional land uses, and arterial residential roads.

ig. Infiltration systems.

- (i) Infiltration systems designed in accordance with this paragraph shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive action limit at a point of standards application in accordance with Wis. Adm. Code ch. NR 140. However, if site specific information indicates that compliance with a preventive action limit is not achievable, the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.
- (ii) Notwithstanding par. (i), the discharge from BMPs shall remain below the enforcement standard at the point of standards application.

4. *Protective areas.*

- a. "Protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this

paragraph, a protective area does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.

- (i) For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in [Wis. Adm. Code] § NR 103.04, 75 feet.
 - (ii) For perennial and intermittent streams identified on a United States geological survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.
 - (iii) For lakes, 50 feet.
 - (iv) For highly susceptible wetlands, ~~750~~ 75 feet. Highly susceptible wetlands include the following types: fens, sedge meadows, bogs, low prairies, conifer swamps, shrub swamps, other forested wetlands, fresh wet meadows, shallow marshes, deep marshes and seasonally flooded basins. Wetland boundary delineations shall be made in accordance with [Wis. Adm. Code] § NR 103.08(1m). This paragraph does not apply to wetlands that have been completely filled in accordance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in accordance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed.
 - (v) For less susceptible wetlands, ten percent of the average wetland width, but no less than ten feet nor more than 30 feet. Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass.
 - (vi) In subsections a. ~~(i)~~, (iv) and (v), determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in [Wis. Adm. Code] § NR 103.03.
 - (vii) For concentrated flow channels with drainage areas greater than 130 acres, ten feet.
- b. This paragraph applies to post-construction sites located within a protective area, except those areas exempted pursuant to subsection d.
- c. The following requirements shall be met:
- (i) Impervious surfaces shall be kept out of the protective area to the maximum extent practicable. The stormwater management plan shall contain a written site-specific explanation for any parts of the protective area that are disturbed during construction.
 - (ii) Where land disturbing construction activity occurs within a protective area, and where no impervious surface is present, adequate sod or self-sustaining vegetative cover of 70 percent or greater shall be established and maintained. The adequate sod or self-sustaining vegetative cover shall be sufficient to provide for bank stability, maintenance of fish habitat and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Nonvegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion, such as on steep slopes or where high velocity flows occur.

Note: It is recommended that seeding of nonaggressive vegetative cover be used in the protective areas. Vegetation that is flood and drought tolerant and can provide long-term bank stability because of an extensive root system is preferable. Vegetative cover can be measured using the line transect method described in the University of Wisconsin Extension publication number A3533, titled “An Estimating Residue Using the Line Transect Method.”

- (iii) Best management practices such as filter strips, swales, or wet detention basins, that are designed to control pollutants from nonpoint sources may be located in the protective area.

Note: Other regulations, such as Wis. Stats. ch. 30 and Wis. Adm. Code chs. NR 103, 115, 116 and 117, and their associated review and approval process may apply in the protective area.

d. This paragraph does not apply to:

- (i) Redevelopment post-construction sites.
- (ii) In-fill development areas less than five acres.
- (iii) Structures that cross or access surface waters such as boat landings, bridges and culverts.
- (iv) Structures constructed in accordance with Wis. Stats. § 59.692(1v).
- (v) Post-construction sites from which runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.

Note: A vegetated protective area to filter runoff pollutants from post-construction sites described in subsection d.(v) is not necessary since runoff is not entering the surface water at that location. Other practices, necessary to meet the requirements of this section, such as a swale or basin, will need to be designed and implemented to reduce runoff pollutants before the runoff enters a surface water of the state.

- 5. *Fueling and vehicle maintenance areas.* Fueling and vehicle maintenance areas shall, to the maximum extent practicable, have BMPs designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.

Note: A combination of the following BMPs may be used: oil and grease separators, canopies, petroleum spill cleanup materials, or any other structural or nonstructural method of preventing or treating petroleum in runoff.

(d) *General considerations for on-site and off-site stormwater management measures.* The following considerations shall be observed in managing runoff:

- 1. Natural topography and land cover features such as natural swales, natural depressions, native soil infiltrating capacity, and natural groundwater recharge areas shall be preserved and used, to the extent possible, to meet the requirements of this section.
- 2. Emergency overland flow for all stormwater facilities shall be provided to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.
- 3. BMPs for water quantity management shall utilize the following techniques, in order of preference:
 - a. Preservation of the natural features of development sites, including natural storage and infiltration characteristics;
 - b. Preservation of existing natural streams, channels, and drainage ways;
 - c. Minimization of new impervious surfaces;
 - d. Conveyance of stormwater in open vegetated channels;
 - e. Construction of structures that provide both quantity and quality control, with structures serving multiple sites being preferable to structures serving individual sites; and

- f. Construction of structures that provide only quantity control, with structures serving multiple sites being preferable to structures serving individual sites.
- (e) *Location and regional treatment option.*
1. The BMPs may be located on-site or off-site as part of a regional stormwater device, practice or system within the same watershed.
 2. Runoff within a nonnavigable drainage way that flows into a BMP, such as a wet pond, is not required to meet water quality performance standards unless designed to provide treatment.
Note: This regional treatment option does not supersede any other federal, state or local regulation of post-construction runoff, such as [Wis. Adm. Code] ch. NR 103 and Wis. Stats. ch. 30.
 3. The discharge of runoff from a BMP, such as a wet pond, or after a series of such BMPs is subject to this chapter.
 4. The village may approve off-site management measures provided that all of the following conditions are met:
 - a. The village determines that the post-construction runoff is covered by a stormwater management system plan that is approved by the Village of Thiensville and that contains management requirements consistent with the purpose and intent of this article.
 - b. The off-site facility meets all of the following conditions:
 - (i) The facility is in place.
 - (ii) The facility is designed and adequately sized to provide a level of stormwater control equal to or greater than that which would be afforded by on-site practices meeting the performance standards of this article.
 - (iii) The facility has a legally obligated entity responsible for its long-term operation and maintenance.
 5. Where a regional treatment option exists such that the village exempts the applicant from all or part of the minimum on-site stormwater management requirements, the applicant shall be required to pay a fee in an amount determined in negotiation with the village. In determining the fee for post-construction runoff, the village shall consider an equitable distribution of the cost for land, engineering design, construction, and maintenance of the regional treatment option.
- (f) *Alternate requirements.* The village may establish stormwater management requirements more stringent than those set forth in this section if the village determines that an added level of protection is needed to protect sensitive resources.
- (g) *Credit for removal of impervious surfaces.*
1. *Same site credit.* The village may use the removal of pavement, covered structures or other impervious surfaces at the same property to calculate the net post construction impervious acreage and corresponding water quantity management duties. Credit may equal, but not be larger than the acreage of impervious surfaces removed when runoff release rates and detention are the best management practices utilized at the site. When best management practices with a higher order of preference are utilized in lieu of detention, equivalent credit may be granted as determined by the village with the concurrence of the MMSD. Credit for reducing impervious surfaces at a site, not utilized by the development on the site, belongs to the village and may be banked for allocation to other development within the watershed under subsection 2.
 2. *Dispersed site in same watershed credit.* The village may bank the removal of impervious surfaces, which individually must be one-half acre or more, within the same watershed,

where the volume, timing and peak flow of runoff will be distributed over the critical time sufficient to assure the level of protection provided by MMSD flood abatement projects will not be reduced. The village may allocate banked credit to promote a policy of smart growth. The total acreage banked or allocated, or both, shall be reported, by watershed or subwatershed, annually to the MMSD for concurrence.

Note: Wis. Stats. § 1.13 (a/k/a Smart Growth) outlines 14 comprehensive planning goals which, collectively or individually, would seem to support any allocation of credits a local government thought to be in its best interest.

(5) *Permitting requirements and procedures.*

- (a) *Permit required.* No land owner or land operator may undertake a land development activity subject to this article without receiving a permit from the department of public works prior to commencing the proposed activity.
- (b) *Permit application and fee.* Unless specifically excluded by this article, any land owner or operator desiring a permit shall submit to the department of public works a permit application made on a form provided by the department of public works for that purpose.
 - 1. Unless otherwise excepted by this article, a permit application must be accompanied by the following in order that the permit application be considered by the department of public works: a stormwater management plan under section 30-127(6); a maintenance agreement under section 30-127(7); any payment of "fees in lieu" prior to permit issuance, as provided for under section 30-127(4)(e); and a nonrefundable permit application fee.
 - 2. The stormwater management plan shall be prepared to meet the requirements of section 30-127(6) of this article, the maintenance agreement shall be prepared to meet the requirements of section 30-127(7) of this article, and fees shall be those established by the village board as set forth in section 30-129 of this article.
- (c) *Review and approval of permit application.* The department of public works in cooperation with the village engineer shall review any permit application that is submitted with a stormwater management plan, maintenance agreement, and the required fee. The following approval procedure shall be used:
 - 1. Within 60 working business days of the receipt of a complete permit application, including all items as required by section 30-127(5)(b) the department of public works shall inform the applicant in writing whether the application, plan and maintenance agreement are approved or disapproved. The department of public works in cooperation with the village engineer shall base the decision on requirements set forth in section 30-127(4), (5) and (6) of this article.
 - 2. If the stormwater permit application, plan and maintenance agreements are approved, the department of public works shall issue the permit.
 - 3. If the stormwater permit application, plan or maintenance agreements are disapproved; the department of public works shall detail in writing of the reasons for disapproval.
 - 4. If additional information is submitted, the department of public works shall have 60 working days from the date the additional information is received to inform the applicant that the plan and maintenance agreement are either approved or disapproved.
 - 5. Failure by the department of public works to inform the permit applicant of a decision within 60 working days of a required submittal unless such time is extended by the agreement of the applicant or by the applicant's later submission of additional material as described above shall be deemed to mean approval of the submittal and the applicant may proceed as if a permit had been issued.
- (d) *Permit conditions.* All permits issued under this article shall be subject to the following conditions, and holders of permits issued under this article shall be deemed to have accepted these conditions. The department of public works may suspend or revoke a permit for violation of a permit condition, following written notification of the permittee. An action by the department of

public works to suspend or revoke this permit may be appealed in accordance with section 30-132 of this article.

1. Compliance with this permit does not relieve the permit holder of the responsibility to comply with other applicable federal, state, and local laws and regulations.
2. The permit holder shall design, install, and maintain all structural and nonstructural stormwater management measures in accordance with the approved stormwater management plan, maintenance agreement, and the permit.
3. The permit holder shall notify the department of public works at least two working days of commencing any work in conjunction with the stormwater management plan, and within three working days upon completion of the stormwater management measures. If required as a special condition, the permit holder shall make additional notification according to a schedule set forth by the department of public works in cooperation with the village engineer, so that practice installations can be inspected during construction.
4. Completed structural water management measures must pass a final inspection to determine if they are in accordance with the approved stormwater management plan and ordinance. The department of public works in cooperation with the village engineer shall notify the permit holder in writing of any changes required in such practices to bring them into compliance with the conditions of this permit. The practice installation required as part of this article shall be certified as built by a licensed professional engineer in the State of Wisconsin representing the landowner and/or permittee.
5. The permit holder shall notify the department of public works and village engineer of any significant modifications it intends to make to an approved stormwater management plan. The department of public works in cooperation with the village engineer may require that the proposed modifications be submitted for approval prior to incorporation into the stormwater management plan and execution.
6. The permit holder shall maintain all stormwater management measures specified in the approved stormwater management plan until the measures either become the responsibility of the local municipality, or are transferred to subsequent private owners as specified in the approved maintenance agreement.
7. The permit holder authorized the village board, following written notification, to perform or contract or otherwise arrange for the performance of any work or operations necessary to bring stormwater management measures into conformance with the approved stormwater management plan, and consents to placing associated costs upon the tax roll as a special charge pursuant to Wis. Stats. § 66.60(16) which if not paid, shall become a lien against the property, or to charging such cost against the financial guarantee posed for the project.
8. If so directed by the village board in cooperation with the village engineer, the permit holder shall repair at the permit holder's own expense all damage to adjoining municipal facilities and public drainage ways caused by stormwater runoff from the holder's permit site, where such damage is caused by activities that are not in compliance with the approved stormwater management plan.
9. The permit holder shall permit property access to the department of public works and village engineer for the purpose of inspecting the property for compliance with the approved stormwater management plan and this permit.
10. Where a stormwater management plan involves changes in direction, increases in peak rate and/or total volume of runoff off of a site, the village board in cooperation with the village engineer may require the permittee to make appropriate legal arrangements with adjacent property owners concerning the prevention of endangerment to downstream property or public safety.
11. The permit holder is subject to the enforceable actions detailed in section 30-131 of this article if the permit holders fail to comply with the terms of this permit.

- (e) *Permit duration.* Permits and stormwater management plan approvals shall be valid for period of 180 days, or the length of the building permit or other relevant construction authorizations, or until release of the financial guarantee as set for in section 30-128 whichever is longer from the date of issuance. The department of public works may extend the period one or more times for up to an additional 12 months.
- (6) *Stormwater management plans.*
- (a) *Plan requirements.* The stormwater management plan required under section 30-127(5)(b) of this article shall contain the following information:
1. Name, address, and telephone number for the following or their designees: landowner; developer; project engineer for practice design and certification; person(s) responsible for installation of stormwater management measures; person(s) responsible for maintenance of stormwater management measures prior to the transfer, if any, of maintenance responsibility to another party.
 2. A proper legal description of the property proposed to be developed referenced to the U.S. Public Land Survey system or to block and lot numbers within a recorded land subdivision plat.
 3. Predevelopment site conditions, including:
 - a. A site map, at a scale of not less than one inch equals 100 feet or at a scale as requested by the department of public works or village engineer. The site map shall show the following: Site location and legal property description; predominant soil types and hydrologic soil groups; existing cover type and condition; topographic contours of the site not to exceed two-foot interval; topography and drainage network including enough of the contiguous properties to show runoff patterns onto, through, and from the site; watercourses that may affect or be affected by runoff from the site; flow path and direction for all stormwater conveyance sections, including time of travel and time of concentration applicable to each; watershed boundaries used in determinations of peak flow discharge rates and discharge volumes from the site; lakes, streams, wetlands, channels, ditches, and other watercourses on and immediately adjacent to the site; limits of the 100-year floodplain, location of wells located within 1,200 feet of stormwater detention ponds, infiltration basins, or infiltration trenches; delineation of wellhead protection areas delineated pursuant to Wis. Adm. Code NR 811.16.
 - b. Computations of the peak flow discharge rates and discharge volumes, from each discharge point in the development. At a minimum, computations must be made for the following storms: two-year, ten-year, 100-year. All major assumptions used in developing input parameters shall be clearly stated. The areas used in making the calculations shall be clearly cross-referenced to the required map(s).
 4. Post-development site conditions, including:
 - a. Explanation of any restrictions on stormwater management measures in the development area imposed by wellhead protection plans and ordinances.
 - b. A site map at a scale of not less than one inch equals 100 feet, or at a scale as requested by the department of public works or village engineer, showing: Revised pervious land use including vegetative cover type and condition; impervious land use including all buildings, structures, and pavement; revised topographic contours of the site not to exceed two feet; revised drainage network including enough of the contiguous properties to show runoff patterns onto, through, and from the site; locations and dimensions of drainage easement; location of maintenance easements specified in the maintenance agreement; flow path and direction for all stormwater conveyance sections, including time of travel and time of concentration applicable to each; location and type of all stormwater management conveyance and treatment practices, including the on-site and off-site tributary drainage area; locations and type of conveyance system that will carry runoff from the drainage and treatment practices to the nearest

adequate outlet such as a curbed street, storm drain, or natural drainageway; watershed boundaries used in determinations of peak flow discharge rates and discharge volumes; any changes to lakes, streams, wetlands, channels, ditches, and other watercourses on and immediately adjacent to the site.

- c. Computations of the peak flow discharge rates and discharge volumes, from each discharge point in the development, including analysis of the capacity of downstream drainage conveyance systems. At a minimum, computations must be made for the following storms: two-year, ten-year, 100-year. All major assumptions used in developing input parameters shall be clearly stated. The areas used in making the calculations shall be clearly cross-referenced to the required map(s).
 - d. Investigations of soils and groundwater required for the placement and design of stormwater management measures.
 - e. Results of impact assessments on wetland functional values.
 - f. Design computations and all applicable assumptions for stormwater conveyance (open channel, closed pipe) and stormwater treatment measures (sedimentation type, filtration-type, infiltration-type) as needed to show that practices are appropriately sized and capable of meeting the discharge performance standards of this article.
 - g. Detailed drawings including cross-sections and profiles of all permanent stormwater conveyance and treatment measures.
5. A stormwater measure installation schedule.
 6. A maintenance plan developed for the life of each stormwater management measure including the required maintenance activities and maintenance activity schedule.
- (b) *Exceptions.* The department of public works in cooperation with the village engineer may prescribe alternative submittal requirements for applicants seeking an exemption to on-site stormwater management performance standards under this article.
- (c) *Waivers.* The village board in cooperation with the village engineer may waive some of the requirements of these requirements to accommodate smaller scale projects.

(7) *Maintenance.*

- (a) *Maintenance agreement required.* The maintenance agreement required for stormwater management measures under section 30-127(5) of this article shall be an agreement between the Village of Thiensville and the permittee. The agreement or recordable document shall be recorded with the Ozaukee County Register of Deeds so that it is binding upon all subsequent owners of land served by the stormwater management measures.
- (b) *Language for satisfying requirements.* The following language, when recorded with the Ozaukee County Register of Deeds office, as part of the development proposal, satisfies the ordinance requirements:
1. The property owner(s) (herein referred to as the responsible parties) (insert responsible party, i.e., village, lot owners in subdivision) shall be responsible for maintenance of the stormwater management measures.
 2. The responsible parties shall maintain the stormwater management measures in accordance with the approved stormwater management plan (insert date) on file in the offices of the department of public works as required by the Village of Thiensville construction site erosion and sediment control and stormwater management ordinance [this article].
 3. The Village of Thiensville is authorized to access the property to conduct inspections of stormwater practices as necessary to ascertain that the practices are being maintained and operated in accordance with the approved stormwater management plan.
 4. The responsible party, on an annual basis, shall provide maintenance of each stormwater management measure, including but not limited to, removal of debris, maintenance of

vegetative areas, maintenance of structural stormwater management measures and sediment removal.

5. Upon notification of the responsible parties, by the Village of Thiensville, of maintenance problems, which require correction, the specified corrective actions shall be taken within a reasonable time frame as set by the Village of Thiensville.
6. The Village of Thiensville is authorized to perform the corrected actions identified in the inspection report if the responsible parties do not make the required corrections in the specified time period. The costs and expenses shall be entered on the tax roll as a special assessment against the property and collected with any other taxes levied thereon for the year in which the work is completed.

(c) *Agreement provisions.* The maintenance agreement shall contain the following provisions:

1. Identification of the landowner(s), organization or municipality responsible for maintenance of the stormwater management measures.
2. The landowner(s), organization or municipality shall maintain stormwater management practices in accordance with the stormwater practice maintenance provisions contained in the approved stormwater management plan submitted under section 30-127(6) of this article.
3. The Village of Thiensville is authorized to access the property to conduct inspections of stormwater practices as necessary to ascertain that the practices are being maintained and operated in accordance with the approved stormwater management plan.
4. A schedule for regular maintenance of each aspect of the property's stormwater management system.
5. That if the Village of Thiensville notifies the party designated under the maintenance agreement of maintenance of problems which require corrections, the specified corrective actions shall be taken within a reasonable time frame as set by the Village of Thiensville.
6. The Village of Thiensville is authorized to perform the corrected actions identified in the inspection report if the landowner does not make the required corrections in the specified time period. The costs and expenses shall be entered on the tax roll as a special assessment against the property and collected with any other taxes levied thereon for the year in which the work is completed.
7. Identification of the structural stormwater measures design components and designation of the drainage area served by the measures.
8. Inspections by an independent engineer or licensed land surveyor and recertified that the BMP complies with the original design standards before transfer to the homeowner's association or condominium association for residential development, or prior to an occupancy permit for commercial development. Thereafter, the responsible party would be responsible to recertify the BMP as follows and supply to the Village upon completion:
 - a. All initially constructed BMPs must be inspected within two years from the date of adoption of the ordinance.
 - b. All BMPs shall be inspected and recertified in one additional two-year cycle and every five years thereafter.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-128. - Financial guarantee.

The village board may require the applicant to furnish a financial guarantee; the form and type of which shall be acceptable to the village attorney prior to release of the permit. The financial guarantee shall be in an amount determined by the village engineer to be the cost of constructing and installing the erosion and

sediment control and stormwater management practices. A financial guarantee shall not be required of departments, boards, municipalities, commissions, public offices and corporations having the authority of eminent domain as defined under Wis. Stats. ch. 32.

The financial guarantee must be sufficient to cover all phases of the plan from the clearing and stockpiling operations to final grading, landscaping, and maintenance and shall give the village board, the authority to use the funds to complete the project if the applicant defaults or does not properly implement the approved plan. The financial guarantee may not be released until the site has been stabilized with vegetative cover including vegetative cover required as a result of utility distribution system installation and the best management practice installation required as part of this article has been certified as built by a licensed professional engineer in the State of Wisconsin.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-129. - Fee schedule.

The fees referred to in other sections of this article shall be established administratively through the Village of Thiensville budget process, will be established by resolution, and amended from time to time by board resolution. A schedule of the fees shall be available for review in the office of the village clerk.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-130. - Inspection.

At any reasonable time and for any proper purpose, the department of public works is authorized to enter upon any land and make inspections to determine conformance with the terms of this article and any permits or plan approvals pursuant to the provisions of Wis. Stats. ch. 66.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-131. - Enforcement.

- (1) *Issuance of stop work order.* The department of public works may post a stop work order if:
 - (a) Any land disturbing or land development activity regulated under this article is occurring without a permit and an approved erosion and sediment control plan; or
 - (b) The conditions of the permit and approved erosion and sediment control plan are not being complied with. The department of public works shall provide written notification of the modifications needed and provide the permittee with an opportunity for corrective action before posting a stop work order.
- (2) *Intent to perform work.* After posting a stop-work order, the village board may issue a notice of intent to the applicant or landowner or land user of its intent to perform work necessary to comply with this article, permit or erosion and sediment control plan. If conditions are likely to result in sediment from the site damaging adjacent properties or reaching surface water, the village may enter the land and take emergency actions necessary to prevent sediment or other pollutants from damaging adjacent properties or reaching surface waters, public rights-of-way and storm sewers. The costs incurred by the village plus interest and legal costs shall be billed to the owner of title of the property.
- (3) *Violation of permit.* In addition, and not to the exclusion of any other remedies described herein, any individual who violates this article, the conditions of a permit granted pursuant to this article, or permits erosion, sediment deposits, tracking or deposition of soil on adjacent land, public rights-of-way or surface waters shall be deemed to be in violation of this article and subject to the penalties provided herein.

- (a) *Penalties.* Any person, firm, company or corporation who violates, disobeys, omits, neglects, refuses to comply with or who resists the enforcement of any of the provisions of this article shall be subject to a fine of not less than \$50.00 and not to exceed the sum of \$500.00 for each offense, together with the costs of the action, and in default of the payment thereof shall be imprisoned in the county jail of Ozaukee County for a period of not to exceed six months or until such fine and the subsequent costs have been paid. Each day that a violation is permitted to exist shall constitute a separate violation and be punishable as such.
- (b) *Enforcement by injunction.* Compliance with the provisions of this article may also be enforced by injunctive order at the suit of the village or one or more owners of real estate situated within an area affected by the regulations of this article. It shall not be necessary to prosecute for fine or imprisonment before restoring to injunctive proceedings.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-132. - Appeals.

- (1) *Establishment.* The village board of appeals (appeal body) created pursuant to Wis. Stats. § 62.23, is hereby authorized to serve as the board of appeals for considering appeals to this article. The organization in terms of members and terms of office for that board are set forth in the Village of Thiensville Zoning Code.
- (2) *Rules.* The rules established for the Village of Thiensville Board of Appeals (appeal body) as provided in the Village of Thiensville Zoning Code shall apply.
- (3) *Powers.* The board of appeals (appeal body) shall have the powers defined by the Wisconsin Statutes and as follows:
 - (a) To hear and decide appeals where it is alleged there is error in any order, requirement, decision or determination made by the department of public works in the enforcement of provisions of this article or as provided in Wis. Stats. § 61.35.
 - (b) To authorize upon appeal in specific cases such variances from the terms of this article as will not be contrary to the public interest, where owing to special conditions a literal enforcement of the provisions of this article will in practical difficulty or unnecessary hardship, so that the purpose of this article shall be observed public safety and welfare secured and substantial justice done.
- (4) *How filed.* Appeals to the board of appeals (appeal body) may be taken by any person aggrieved or by any officer, department, board or bureau of the municipality affected by a decision of the department of public works. Such appeal shall be taken within 20 days from the date of the decision of the department of public works by filing with the board of appeals (appeal body) a notice of appeal specifying the grounds thereof together with the proper fee as established by this article. A copy of the appeal shall also be forwarded to the department whose decision is being appealed. The officer whose decision is being appealed shall immediately transmit to the board all the papers constituting the record upon which the action appealed from was taken.
- (5) *Stay.* An appeal shall stay all legal proceedings in furtherance of the action appealed from unless the officer from whose decision and appeal is taken certifies to the board of appeals (appeal body) after the notice of appeal shall have been filed that by reason of facts stated in the certificate a stay would cause imminent peril to life or property. In such cases proceedings shall not be stayed otherwise than by a restraining order, which may be granted by the board of appeals (appeal body) or by a court of record on application, on notice to the officer from whom the appeal is taken, and on due cause shown.
- (6) *Hearing.* Each appeal shall be heard within a reasonable time and not to exceed 90 days from the time the appeal was filed with the board of appeals (appeal body). Notice of hearing shall be given by publishing in a newspaper of general circulation in the vicinity of the appeal at least once each week for two consecutive weeks and not less than seven days from the date of hearing. In addition, written notice shall be given to the village board and any other administrative officer appealed from, and by certified mail to the petitioner, the village clerk, the owners of each parcel of land within 100 feet of the

land in question, and any other specifically interested parties. At the hearing, any party may appear in person or by an agent or attorney.

- (7) *Decision.* The decision on any appeal shall be made within 15 days after completion of the hearing thereon.
- (8) *Additional requirements.* In making its determination, the board of appeals (appeal body) shall consider whether the proposed variance from the terms of this article would be hazardous, harmful, noxious or offensive or a nuisance to the surrounding neighborhood or surface waters by reason of pollution or other physical or economic effects and may impose such requirements and conditions with respect to construction, location, maintenance and operation or best management practices in addition to any which may be stipulated in this article as may be deemed necessary and appropriate for the protection of adjacent properties and the public interest and welfare.
- (9) *Performance standards.* In order to reach a fair and objective decision, the board of appeals (appeal body) may utilize and give recognition to appropriate performance standards and methodologies which are available in model codes or ordinances or which may have been developed by planning, manufacturing, health, architectural, engineering, soil and agricultural agencies or other appropriate organizations.
- (10) *Enforcement of decision.* In exercising the above-mentioned powers, such board of appeals (appeal body) may, in conformity with the provisions of this article, reverse or affirm, wholly or partly, or may modify the order, requirements, decision or determination appealed from, and may make such order, requirement, decision or determination as ought to be made, and to that end shall have all the powers of the officer or department official from whom the appeal is taken and may issue or direct the issue of a permit provided that no such action shall have the effect of permitting the best management practices in contradiction to the purpose of this article or the Wisconsin Statutes or cause pollution or of granting variances to any other state, county or local ordinance.
- (11) *Required vote.* The concurring vote of three members of the board shall be necessary to reverse any order, requirement, decision or determination of any such administrative official, or to decide in favor of the applicant on any matters upon which it is required to pass under this article, or to effect any variation there from. The grounds of every such determination shall be stated.
- (12) *Further appeal.* Any person or persons, jointly or severally, aggrieved by a decision of the board of appeals (appeal body), or any taxpayer or any officer, department, board or bureau of the municipality, may appeal from a decision of the board of appeals (appeal body) within 30 days after the filing of the decision in the office of the board of appeals (appeal body) in the manner provided in Wis. Stats. § 62.23.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-133. - Repeal of conflicting ordinance.

All other ordinances or parts of ordinances in conflict with the provisions of this article are hereby repealed.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-134. - Validity.

The several sections, subsections and paragraphs of this article are hereby declared to be severable. If any section, subsection, paragraph or subparagraph of this article shall be declared by a decision of a court of competent jurisdiction to be invalid, such decisions shall not effect the validity of the other provisions of this article or of the section of which the invalid portion or paragraph may be a part.

(Ord. No. 2004-03, 3-15-04)

Sec. 30-135. - Effective date.

This article shall be effective upon passage, approval and publication and shall apply to all projects of land disturbing and land development activities commenced after the above effective date of the ordinance, except that this article shall not apply to construction activities for which a building permit or other construction authorization has been issued as of the above effective date.

(Ord. No. 2004-03, 3-15-04)

Appendix K: Illicit Discharge Ordinance



VILLAGE OF THIENSVILLE ILLICIT DISCHARGE ORDINANCE

The Village of Thiensville currently has ordinances in place regarding illicit discharges to the Village's storm water conveyance system. The following are recommendations for ordinance revisions, displayed as "tracked changes."

Plumbing

DIVISION 4. - STANDARDS

Sec. 14-301. - State regulations adopted.

- (a) *By reference.* Wis. Stats. ch. 145 and the state plumbing code, chapter ILHR 81-84 of the Wisconsin Administrative Code are adopted by reference in this section. Failure to comply with any of the provisions of such regulations shall constitute a violation of this article, punishable according to the penalties provided in this article.
- (b) *On file.* A copy of the state plumbing code shall be on file in the offices of the plumbing inspector and the village clerk.

(Code 1984, § 15.01; Ord. No. 1995-06, § 15.01, 10-16-95)

Sec. 14-302. - Rain and surface water connections.

- (a) No person shall connect any building or premises sewer or drainage system with any public sanitary sewer by a drain or connection by which rain or clear water shall enter the village sanitary sewer system.
- (b) The village plumbing inspector or his designee, upon identification, may enter any building or premises supplied with public water service or public sewer facilities for the purpose of inspecting and testing all plumbing, together with all form of clear water drainage, to ascertain quantity, quality and condition of sanitary and clear water sewage facilities.
- (c) All building foundation drains shall terminate in a sump pit. An approved ejector pump shall be maintained to be functional.
- (d) All sump pumps installed for the purpose of discharging clear waters from foundation drains and ground infiltration, and where the building is not serviced by a storm sewer, shall either discharge into a conduit leading to a drainage ditch or shall discharge onto the ground at least three feet out from the building and one foot above the permanent grade. The sump discharge pipe shall be to the front of the building except where a public drainage ditch, street or drainage easement is on another side of the property, it may be located on that side of the building at least three feet from the corner of the building and be located in such a manner that the drainage shall be across the owner's property toward a street or drainage easement so as not to run on adjacent properties or to create a nuisance.
- (e) All other rulings pertaining to clear water connections shall be as governed by the Wisconsin Administrative Code.

(Code 1984, § 15.14; Ord. No. 1995-06, § 15.07(1)—(5), 10-16-95)

Sec. 14-303. - Clear water compliance inspections.

- (a) *Inspection of sump pumps.* Upon resale or change of ownership of any residential or commercial building, the village administrator or plumbing inspector shall cause all sump pumps to be inspected.
- (b) *Fees.* Fees for such inspection shall be as provided by resolution of the village board and on file in the village clerk's office.

(Code 1984, § 15.14; Ord. No. 1995-06, § 15.07(6), 10-16-95)

Sec. 14-304. - Repairs and construction.

When an old or defective fixture is removed to be replaced by a new one, the reconstruction of the soil, waste and vent piping shall conform to the requirements of this article.

(Code 1984, § 15.17; Ord. No. 1995-06, § 15.08, 10-16-95)

Sec. 14-305. - Sanitary facilities.

Every building intended for human habitation or occupancy, or premises abutting on a street in which there is a public sewer, shall have a connection with the sewer. Any building abutting on a street in which there is a public sewer and which is used exclusively for dwelling purposes shall have available to its occupants a water closet, wash basin and bathtub all in clean, working order and shall be provided with a water supply piping adequate in size to properly cleanse or flush all fixtures.

(Code 1984, § 15.20; Ord. No. 1995-06, § 15.09, 10-16-95)

Sec. 14-306. - Drain junctions.

- (a) *Clerk to keep record.* The village clerk shall keep a record of all connections to the public sewer system. They shall also maintain proper records recording the charges for and the collection of sewer rentals at the rates as provided for in chapter 78.
- (b) *Location of drain junctions.* No persons except licensed plumbers shall tap or make connections with the public sewer system or any part thereof. Such information as the plumbing inspector or the superintendent of the sewage plant may have with regard to the location of sewer junctions or slants will be furnished to the plumbers at their risk as to the accuracy of same. When, in accordance with the measurements furnished by the plumbing inspector or the superintendent of the sewage plant, the junction is not found within three feet of both ways of measurement given, a slant connection with a one-eighth inch bend shall be used and such connection shall be made under the direction of the plumbing inspector.

(Code 1984, § 15.24; Ord. No. 1995-06, § 15.13, 10-16-95)

Sec. 14-307. — Storm Water and Sewer Illicit Discharge Connectionsregulations.

- (a) No person shall dump or dispose of materials other than stormwater into the municipal separate storm sewer system. The accidental discharge of substances other than stormwater into the municipal separate storm sewer or bodies of water in the village shall immediately be reported to the village department of public works, village police department or Wisconsin Department of Natural Resources.
- (b) No person shall discharge polluted stormwater from industrial activity into the municipal separate storm sewer system.
- (c) In the event that a Village of Thiensville storm sewer connects to a downstream storm sewer maintained by the City of Mequon, or in the event that a City of Mequon storm sewer is connected to a downstream Village of Thiensville storm sewer, an appropriate intermunicipal agreement shall be created to control the contribution of pollutants from one municipal separate storm sewer system to another.
- (d) The Village of Thiensville shall carry out inspections, surveillance and monitoring procedures to detect illicit discharges into the municipal separate storm sewer system.
- (e) Whenever the Village of Thiensville finds that a person (or entity) has violated or failed to meet a requirement of this section, the Village may order compliance by written notice of violation to the responsible person. Such notice may require, without limitation:
 - (1) The performance of monitoring, analyses, and reporting:

(2) The elimination of illicit connections or discharges;

(3) That violating discharges, practices, or operations shall cease and desist;

(4) The immediate abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and

(5) The implementation of source control or treatment BMPs. If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed within 72 hours of notification. Said notice shall further advise that should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

(fe) No person shall discharge, spill or otherwise deposit substances or materials which are not entirely composed of stormwater onto driveways, sidewalks, parking lots or other impervious or pervious areas that drain into the streams and watercourses within the village.

(gf) The following discharges are exempt from the provisions of this article:

- (1) Discharges authorized by a permit issued by the Wisconsin Department of Natural Resources;
- (2) Discharges resulting from fire fighting activities;
- (3) Discharges from uncontaminated groundwater, portable water sources, roof drains, foundation drains and foundation drain sump pump discharges, air conditioning condensation, lawn watering, watering main and hydrant flushing and swimming pools, if the pool water has been dechlorinated;
- (4) Discharges from individual automobile washing by automobile owners not involving any commercially zoned site;
- (5) Agricultural activities if such activities are done in a manner consistent with good soil and water conservation practices;
- (6) Facility maintained activities undertaken by any federal, state, county or municipal agency if facility maintenance is done in accordance to all applicable construction erosion control measures.

(Ord. No. 2004-05, 3-16-04)

Secs. 14-308—14-330. - Reserved.

Appendix L: Bacteria Ordinance Recommendations



VILLAGE OF THIENSVILLE BACTERIA ORDINANCE RECOMMENDATIONS 2022

Introduction

The Village of Thiensville (Village) falls within the Milwaukee River Basin. In 2018, the EPA approved a Milwaukee River Basin Total Maximum Daily Load (TMDL) Report. The TMDL details the impacts of bacterial contamination on surface water, as it can carry pathogens that cause water borne illness. High levels of bacteria loading in waterways may result in recreational use impairments. To be proactive, the Village requested a draft bacteria ordinance to understand how bacteria can be addressed and where it might fit within the municipal code.

Draft Wildlife Ordinance

Wildlife waste is a source of bacteria that enters the storm water system, and ultimately contributes to bacteria levels found in surface water. One method to reduce the amount of concentrated excess animal waste that enters surface water is to deter residents from feeding wildlife. A draft ordinance to minimize these activities is outlined below and an example is provided in Attachment A.

Feeding of Wildlife

Findings of Fact:

Feeding of wildlife can result in increased bacterial contamination of surface waters. Providing food for wildlife through scattering, throwing, directly feeding, or any other means of distribution will attract wildlife to that area. Feeding of wildlife can result in an increase of wildlife feces, which causes runoff of bacteria into surface water.

The Following Terms Shall Have the Meanings Designated Below:

Feed: To give, place, expose, deposit, distribute, or scatter any edible material by any person with the intent of feeding, attracting, or enticing migratory waterfowl; or to cause the same, or to provide food for the same.

Migratory Waterfowl: Those species of birds commonly known as ducks, geese, and swans, including all migratory bird species identified in the categories of “duck,” “goose,” and “swan” within Title 50, Part 10, Subpart B, Section 10.13 of the Code of Federal Regulations (CFR), titled “list of Migratory Birds.”

Ordinance Stipulations:

Bird Feeders

Bird feed must be placed in a feeder at least 4 feet off the ground.

Feeders must be 6 feet from the nearest climbable object to prevent access by other rodents.

Bird feed must not be placed on the ground to avoid attraction of other rodents and geese.

Migratory Waterfowl

No feeding of migratory waterfowl is permitted. No person or persons shall feed migratory waterfowl on any public or private property.

Deer

The feeding of deer shall be permitted only if authorized by the Village of Thiensville solely for the purpose of assisting in any program for the management of deer or for the removal of deer from the Village. Under no other conditions shall a person feed any deer in the Village.

Draft Pet Waste Ordinance

Pet waste is an additional contributor to bacteria loads on surface water. A pet waste removal ordinance may be implemented to provide the Village with guidance and enforcement authority regarding pet waste removal. A draft ordinance using this method is provided in Attachment B.

Pets must be on lease while on public property.

Person with charge, care, or control of pet must have properly sized waste receptacles on their person. Fecal matter must be picked up and disposed of promptly and in a sanitary manner, if not on the pet owner's property.

Any new or revised ordinance language should be accompanied by public outreach efforts to educate local residents, property owners and elected officials on the benefits of minimizing the bacteria that unnecessarily enters the local waterways.

Attachment A – Sample Wildlife ordinance from New Braunfels, Texas

Attachment B – Draft Pet Waste Ordinance for the Town of West Bend

ORDINANCE NO. 2018- 58

AMENDING THE CITY OF NEW BRAUNFELS, TEXAS, CODE OF ORDINANCES CHAPTER 82- OFFENSES AND MISCELLANEOUS PROVISIONS, CREATING SECTIONS 82-24 TO 82-28, THAT WILL CONTIAN NEW PROVISIONS RELATED TO PROHIBITING THE FEEDING OF WILDLIFE; PROVIDING DEFINITIONS AND PENALTIES; REPEALING ALL ORDINANCES IN CONFLICT; CONTAINING A SAVINGS CLAUSE AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City of New Braunfels finds that feeding of wildlife has resulted in overabundant and highly concentrated populations of wildlife throughout the City and within City parks; and

WHEREAS, the feeding of deer has been shown to increase the concentration of deer in urbanized areas, thereby increasing the likelihood of collisions between vehicles and deer, and increasing damage to residential and commercial vegetation and landscaping in the City; and

WHEREAS, the City finds that overabundant deer and avian wildlife populations have contributed to an increase of bacteria pollution in the Comal River and Dry Comal Creek; and

WHEREAS, the feeding of wildlife can cause concentrated areas of biological waste, containing bacteria, nitrogen and phosphorus, which can lead to water quality degradation, thereby impacting popular contact recreation waterways; and

WHEREAS, the City and the Texas Parks and Wildlife Department find that discouraging and prohibiting the artificial feeding of wildlife is in the best interest of the health, safety and welfare of the community and wildlife populations.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF NEW BRAUNFELS, TEXAS, THAT:

Section 1

The findings and recitations set out in the preamble to this Ordinance are found to be true and correct and are hereby adopted by the City Council and made a part hereof for all purposes.

Section 2

That Chapter 82, "Offenses and Miscellaneous Provisions", as it currently exists is amended by creating sections 82-24 to 82-28, related to prohibiting the feeding of wildlife, to read as follows:

Sec. 82-24. Definitions.

- (a) “Food” means bread products, corn, fruit, oats, hay, nuts, wheat, alfalfa, salt blocks, feed, grain, vegetables, and commercially sold wildlife feed, or livestock feed, but excludes live naturally growing shrubs, live crops, plants, flowers, vegetation, gardens, trees, and fruit or nuts that have fallen on the ground or are within reach of wildlife.
- (b) “Wildlife” means undomesticated animals living in the wild.

Sec. 82-25. Feeding of wildlife prohibited.

- (A) Except as provided below in 82-26, (A) and (B), a person commits an offense if the person intentionally feeds wildlife by making food available for consumption on private or public property within the territorial limits of the city.
- (B) A person shall be deemed to have purposely fed or caused wildlife to be fed if the person places food, as defined in this section, in any form, (not including live vegetation such as ornamental landscaping or flowers) on the ground, or within reach of wildlife.
- (C) A person who violates any provision of this ordinance commits an offense.

Sec. 82-26. Exceptions; Affirmative Defenses

- (A) This ordinance does not apply to the placement of food into feeders kept at a minimum of 5 feet above the ground surface and intended for birds.
- (B) This ordinance does not apply to an animal control officer, veterinarian, peace officer, City employee, federal or state wildlife official, who is acting pursuant to a lawfully authorized program to treat, manage, capture, trap, hunt, or remove wildlife and who is acting within the scope of the person’s authority.
- (C) This ordinance does not apply to individuals who possess a “Hunting Land Permit” as described in Section 82-3(d) and set out feed for the purpose of baiting and attracting game animals.
- (D) It is an affirmative defense to prosecution under this section if a person places food, in good faith, for the purpose of feeding domestic livestock or domestic pets located on their property.

Sec. 82-27. Enforcement.

- (A) Animal Control Officers, Park Rangers, Code Compliance Officers and Police Officers are hereby given full power and authority to enforce this ordinance.

(B) It is a violation to hinder, molest or interfere with anyone authorized or empowered to perform any duty under this ordinance.

Sec. 82-28. Penalties.

(A) A person who commits a violation of this ordinance will first be given a warning and will be provided information on the negative impacts of wildlife feeding. A second offense will result in prosecution in municipal court. Any violation of this ordinance is deemed a Class C misdemeanor punishable by a fine of not less than \$75.00 or more than \$500.00. Each day any violation of any provision of this Code shall continue shall constitute a separate offense.

(B) Nothing in this section shall be construed as to limit any civil action the city may take to enforce the terms of this ordinance.

Section 3

It is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses and phrases of this Ordinance are severable and, if any phrase, clause, sentence, paragraph or section of this Ordinance should be declared invalid by the final judgment or decree of any court of competent jurisdiction, such invalidity shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this Ordinance.

Section 4

All provisions of the Code of Ordinances of the City of New Braunfels not herein amended or repealed shall remain in full force and effect.

Section 5

All Ordinances or parts thereof in conflict herewith are repealed to the extent of such conflict only.

Section 6

In accordance with the provisions of the City Charter, this Ordinance may be read and published by descriptive caption only. This Ordinance has been publicly available in the office of the City Secretary prior to its adoption.

Section 7

This Ordinance shall become adopted and effective upon its second reading, signature required by City Charter, filing with the City Secretary's Office and then following a six-month grace period that allows for community education and outreach. This Ordinance must also be published in a newspaper of general circulation at least one time within ten (10) days after its final passage, as required by the City Charter of the City of New Braunfels.

PASSED AND APPROVED: First reading this 27th day of August 2018.

PASSED AND APPROVED: Second reading this 10 day of September 2018.

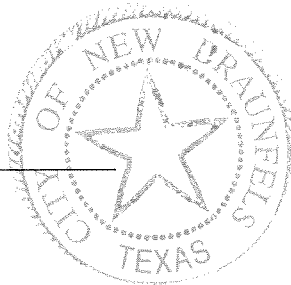
CITY OF NEW BRAUNFELS, TEXAS

By: _____

Barron Casteel, Mayor

ATTEST:

Patrick D. Aten, City Secretary



APPROVED AS TO FORM:

Valeria M. Acevedo, City Attorney

Pet Waste Ordinance

Ordinance # [] - Pet Waste

SECTION I. Purpose:

An ordinance to establish requirements for the proper disposal of pet solid waste in the Village of Thiensville, WI, so as to protect public health, safety and welfare, and to prescribe penalties for failure to comply.

SECTION II. Definitions:

For the purpose of this ordinance, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

- a. Immediate – shall mean that the pet solid waste is removed at once, without delay.
- b. Owner/Keeper – any person who shall possess, maintain, house or harbor any pet or otherwise have custody of any pet, whether or not the owner of such pet.
- c. Person – any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to municipal jurisdiction.
- d. Pet - a domesticated animal (other than a disability assistance animal) kept for amusement or companionship.
- e. Pet solid waste – waste matter expelled from the bowels of the pet; excrement
- f. Proper disposal – placement in a designated waste receptacle, or other suitable container, and discarded in a refuse container which is regularly emptied by the municipality or some other refuse collector; or disposal into a system designed to convey domestic sewage for proper treatment and disposal. [Disposal into a stormdrain or stormwater system is strictly prohibited. From Morris, NJ ordinance, full reference below]

SECTION III. Requirement for Disposal:

All pet owners and keepers are required to immediately and properly dispose of their pet's solid waste deposited on any property, public or private, not owned or possessed by that person.

SECTION IV. Exemptions:

Any owner or keeper who requires the use of a disability assistance animal shall be exempt from the provisions of this section while such animal is being used for that purpose.

SECTION V. Enforcement:

The provisions of this Article shall be enforced by the Police Department and the local Board of Health of the Village of Thiensville, Wisconsin.

SECTION VI. Violations and Penalty:

Any person(s) who is found to be in violation of the provisions of this ordinance shall be subject to a fine not to exceed **[insert amount]**.

SECTION VII. Severability:

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

SECTION VIII. Effective date:

This Ordinance shall be in full force and effect from and after its adoption and any publication as may be required by law.

ALL OF WHICH IS ADOPTED this _____ day of _____, 200_, by the _____.

Appendix M: Infiltration Rate Test Results

VILLAGE OF THIENSVILLE

RESOLUTION NUMBER 2023-03

A RESOLUTION APPROVING THE
VILLAGE OF THIENSVILLE STORM WATER MANAGEMENT PLAN

It is hereby ordained by the Village Board of the Village of Thiensville, Ozaukee County as follows:

WHEREAS, the Wisconsin Department of Natural Resources (WDNR) regulates municipalities who meet specific thresholds of population density for discharges from municipal separate storm sewer systems (MS4s); and

WHEREAS, to meet required components of the MS4 permit, a Storm Water Management Plan has been developed for the Village of Thiensville to use and update as the Village grows and manages new or additional pollutants or unforeseen events; and

WHEREAS, development of this Plan provides the Village up-to-date program documents with the relevant information to perform effective storm water management and minimize the discharge of pollutants.

THEREFORE, the Village Board approves Resolution 2023-03 a resolution approving a Storm Water Management Plan, Dated December 2022 prepared by Ruekert & Mielke, Inc.

PASSED AND ADOPTED by the Village Board of the Village of Thiensville this 23rd day of January, 2023.

APPROVED

VILLAGE OF THIENSVILLE

Van A. Mobley, Village Board President

ATTEST

Amy Langlois, Village Clerk

VILLAGE OF THIENSVILLE
RESOLUTION 2023-04

A RESOLUTION AUTHORIZING THE SUBMISSION OF A VIBRANT SPACES GRANT
APPLICATION TO THE WISCONSIN ECONOMIC DEVELOPMENT CORPORATION
(WEDC)
FOR THIESVILLE VILLAGE PARK

WHEREAS, the Village of Thiensville (the “Village”) recognizes that Thiensville Village Park is the central gathering place in the our heart of the Village and is committed to the continued improvement and enhancement of the park to bolster community engagement and support the business district; and

WHEREAS, the Vibrant Spaces Grant is a pilot program within the Community Development Investment (CDI) Grant Program, is designed to assist with creating vibrant and engaging communities that make it easier to recruit and retain residents, sustain a robust labor force and enhance local quality of life; and

WHEREAS, a resolution authorizing the submission of a grant application by the Village is a prerequisite for submission of a Vibrant Spaces grant application; and

WHEREAS, the Village has committed local financial matching funds to the proposed project; and

WHEREAS, in this action by the Village Board, the Village Board has declared its intent to complete Vibrant Spaces Grant activities described in the grant application if awarded funds; and

NOW, THEREFORE BE IT RESOLVED by the Village Board of the Village of Thiensville that the Village requests funds available from the WEDC through the Vibrant Spaces Grant Program and will comply with all requirements of the program and hereby authorizes the Village Administrator to act on behalf of the Village to submit a Vibrant Spaces application to WEDC, sign documents and take necessary action to undertake, direct and complete approved grant activities.

PASSED AND ADOPTED by the Village Board of the Village of Thiensville, County of Ozaukee, State of Wisconsin on this 23rd day of January, 2023.

Van A. Mobley, Village President

Amy L. Langlois, Village Clerk

VIBRANT SPACES GRANT

PILOT PROGRAM ENCOURAGES PLACEMAKING EFFORTS

The new **Vibrant Spaces Grant**, a pilot program within the Community Development Investment (CDI) Grant Program, is designed to assist with creating vibrant and engaging communities that make it easier to recruit and retain residents, sustain a robust labor force and enhance local quality of life. With the help of this grant, public gathering places will foster community connections and provide accessible locations for the programming and amenities local residents desire—with the additional benefit of boosting foot traffic for area businesses.

How it works

Grants in amounts from \$25,000 to \$50,000 are available to help local communities develop and enhance public spaces. The application must come from the municipality, and only one application per municipality will be considered. (A Vibrant Spaces Grant application does not affect a community's broader eligibility for a CDI Grant.) In the FY23 competitive grant cycle, no more than 30 grants will be awarded. Applicants must agree to provide a 1:1 match of the grant amount.

How to qualify

Competitive projects will:

- Incorporate multiple improvements within or associated with one public space
- Demonstrate community engagement and support via a community document/plan and/or via letters of support from public, private and civic partners
- Be ready to begin construction during 2023
- Increase the number and type of audiences using the space
- Create visible and lasting transformations that foster public activity

Review criteria

Applications will be evaluated based on criteria including:

- Creation of visible and pedestrian-oriented public space
- Potential of the space to attract multiple user groups and activities
- Impact of the project on the community, the district and nearby businesses
- Demonstrated community support for the project (e.g., multiple funding partners, civic organization participation)
- Ability of the project to be started in 2023

INFORMATION AND APPLICATION

For more information about applying for a Vibrant Spaces Grant, contact a WEDC regional economic development director or call 855-INWIBIZ toll-free.

You can find the list of regional directors and territories covered at wedc.org/regional.

NEW PROGRAM ALERT

VIBRANT SPACES GRANT



PILOT GRANT TO ASSIST WITH PLACEMAKING EFFORTS

Creating vibrant and engaging communities helps communities recruit and retain residents, sustaining a robust labor force and enhancing the quality of life. Creating public gathering places in the heart of our communities fosters community connections and creates accessible locations for programming and amenities desired by local residents, with the additional benefit of boosting foot traffic for nearby businesses.

If your community has a vacant or underutilized space within a key commercial corridor, this grant could be your opportunity to create a community gathering space.

Competitive projects will:

- » Incorporate multiple improvements within or associated with one public space
- » Demonstrate community engagement and support via a community document/plan and/or letters of support from public, private and civic partners
- » Be ready to begin construction during 2023
- » Increase the number and types of audiences using the space
- » Create visible and lasting transformation that fosters public activity

Review criteria:

- » Creation of visible and pedestrian-oriented public space
- » Potential of the space to attract multiple user groups and activities
- » Impact of the project on the community, district and nearby businesses
- » Demonstrated community support for the project (multiple funding partners, civic organization participation)
- » Ability of the project to be started in 2023



**GRANTS OF
\$25,000-\$50,000**
to help local communities
develop and enhance
public spaces

KEY PROGRAM FACTS

- » 1:1 match required
- » **Application deadline:**
Jan. 31, 2023
- » Local government applicants only
- » One application per community
- » Competitive application cycle with up to 30 grants awarded



NEW PROGRAM ALERT

VIBRANT SPACES GRANT

APPLICATION PROCESS

Those interested in applying for the Vibrant Spaces Grant should:

- 1) Talk to your local municipality, since they will need to serve as the lead applicant.
- 2) To access more information, FAQ page and the webinar recording, visit <https://wedc.org/programs-and-resources/vibrant-spaces/>
- 3) Reach out to your WEDC regional economic development director for a program application. Map and contact info: wedc.org/inside-wedc/contact-us/#regional
- 4) Collect relevant documents:
 - a. Municipal resolution to apply
 - b. Community plan, community document and/or letters of support that identify the project as a positive community investment
 - c. Completed budget and cost estimates
 - d. Photos and plans for the space (pictures of the amenities to be installed or project renderings)
- 5) Write a narrative about the space. Who uses it now? What is the vision for the space? How will the district and community benefit from the public space transformation?
- 6) Upload application to Network Wisconsin by Jan. 31, 2023.

THE FINE PRINT:

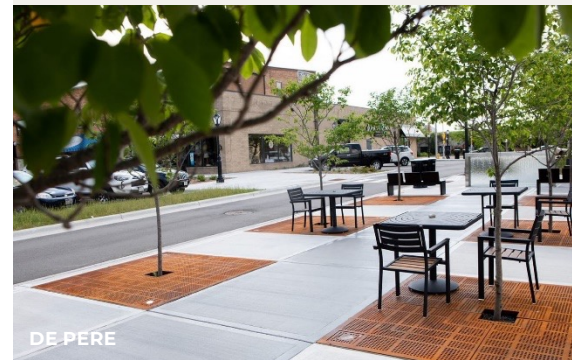
» Eligible activities include:

- o Public space improvements (projects activating alleys, programmable park spaces, vacant parcels and underutilized parking lots)
- o Public space enhancements (e.g., public art, landscaping, benches, bike racks)
- o Public signage (wayfinding, interpretive signage, kiosks associated with the space)
- o Public infrastructure (restrooms, water features, electrical, lighting)
- o Seasonal equipment with the intent to use annually (tables, chairs, umbrellas, heaters)

» Ineligible activities and costs include:

- o Building improvements, other than restrooms for public space use
- o District- or community-wide improvement projects
- o Events, staffing, programming, ongoing maintenance
- o Private spaces not accessible to the public
- o Activities eligible to be funded through other WEDC programs
- o Ineligible for grant or match: Past costs, in-kind contributions, indirect expenses/soft costs

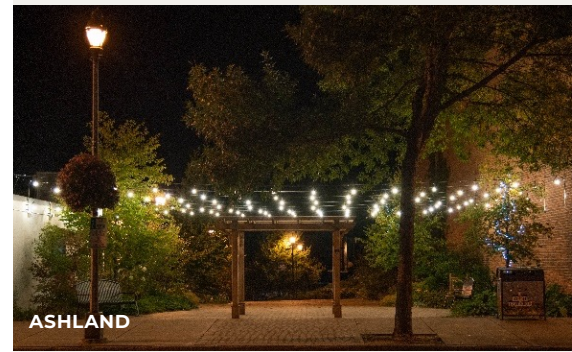
EXAMPLE PROJECTS



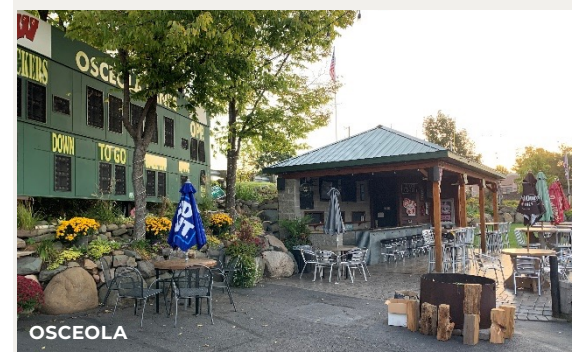
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ASHLAND



OSCEOLA

January 16, 2023

Mr. Andy LaFond
Director of Community Services/Public Works
Village of Thiensville
250 Elm Street
Thiensville, Wisconsin 53092

RE: Freistadt Road and Main Street Water Main Extension

Dear Mr. LaFond:

Bids for the above project were opened on December 22, 2022 at 10:00 a.m. at the Village Hall and were as follows:

	BIDDER	BASE BID (Open Cut)	Cost Difference Between Open Cut & Directional Drill	ALTERNATE BID (Directional Drill)
1.	Kruczek Construction, Inc.	\$1,274,000.00	-\$25,550.00	\$1,248,450.00
2.	Dorner, Inc.	\$1,280,975.80	\$9,039.00	\$1,290,014.80
3.	Vinton Construction	\$1,343,934.00	\$45,250.00	\$1,389,184.00
4.	PTS Contractors	\$1,350,000.00	N/A	\$0.00
5.	UPI	\$1,360,150.00	N/A	\$0.00
6.	Mid-City Corp.	\$1,366,708.00	\$120,455.00	\$1,487,163.00
7.	Globe Contractors, Inc.	\$1,803,478.00	-\$176,280.00	\$1,627,198.00

We reviewed the documentation submitted by the apparent low bidder and found that:

1. The Bid Form has been appropriately completed.
2. We have no objections to the low bidder.
3. Low bidder has successfully completed similar projects over the last several years.

On these bases, we recommend that Kruczek Construction, Inc. be awarded the Freistadt Road and Main Street Water Main Extension contract, including the Alternate Bid, contingent on DNR approval of project in the amount of \$1,248,450.00. This amount is based on the bid unit prices and estimated quantities. Actual quantities, and therefore the final contract price, may vary. On all construction projects unpredictable factors may increase the final contract amount. For this reason, we recommend that the Village include a 10 percent contingency when preparing the financial plan for this work.

Our review did not include an evaluation of bidder's current financial condition nor of their permanent safety program.

Should you decide to accept our recommendation, we have prepared the enclosed Notice of Award for your use. After Village Board approval has been received, please have the appropriate official sign where indicated and forward a signed copy of the Notice of Award to our office. We will then fill in the date at the top of page one and forward it, with contracts for execution, to the Contractor. One fully completed Notice of Award will be returned to you for your records.

Mr. Andy LaFond
Village of Thiensville
January 16, 2023
Page 2

Bids remain subject to acceptance until February 20, 2023, unless Bidder agrees to an extension. Please advise us of your award decision or call if there are any questions.

Respectfully,

RUEKERT & MIELKE, INC.



Violet V. Razo, P.E. (WI)
Project Manager
vrazo@ruekert-mielke.com

VVR:sjs

Encl: Notice of Award
Bid Tabulation

cc: Jerad J. Wegner, P.E., Ruekert & Mielke, Inc.

NOTICE OF AWARD

Date of Issuance: _____

Contract: Freistadt Road and Main Street Water Main Extension	Owner:	Village of Thiensville
Bidder: Kruczek Construction, Inc.	Engineer:	Ruekert & Mielke, Inc.
Address: 3636 Kewaunee Road	Engineer's Project No.:	21-10033.200
Green Bay, WI 54311		

TO BIDDER:

You are notified that your Bid dated December 22, 2022 for the above Contract has been accepted by Owner and you are the Successful Bidder and are awarded a Contract for:

Freistadt Road and Main Street Water Main Extension Project, plus Alternate Bids MA1 – through MA7

The Contract Price of your Contract is: \$1,248,450.00

Two (2) copies of the proposed Contract Documents (except Drawings) accompany this Notice of Award, or have been transmitted or made available to Bidder electronically.

Two (2) sets of the Drawings will be delivered separately, or otherwise made available to Bidder electronically.

Bidder must comply with the following conditions precedent within 15 days of the date of issuance of this Notice of Award:

1. Deliver to Engineer one (1) fully executed counterparts of the Contract Documents.
2. Deliver with the executed Agreement the Performance Bond, Payment Bond as specified in the Instructions to Bidders (Article 21), General Conditions (Paragraph 6.01).
3. Deliver with the executed Agreement certificates and other evidence of insurance as specified in the General Conditions (Article 6) and the Supplementary Conditions modifying Article 6 of the General Conditions.

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within 10 days after you comply with the above conditions, Engineer will return to you one fully executed counterpart of the Agreement.

Owner: VILLAGE OF THIENSVILLE

Signature: _____
Authorized Signature

Title: _____

Date: _____

Copy: Engineer

COST COMPARISON OF BIDDERS

OWNER: Village of Thiensville
PROJECT: Freistadt Road and Main Street Water Main Extension
BID OPENING DATE: December 22, 2022

BASE BID				Kruczek Construction, Inc.		Dorner, Inc.		Vinton Construction Company		PTS Contractors, Inc.	
ITEM #	ITEM DESCRIPTION	UNIT	QTY.	UNIT \$	TOTAL	UNIT \$	TOTAL	UNIT \$	TOTAL	UNIT \$	TOTAL
1	Traffic Control	L.S.	1	\$80,538.00	\$80,538.00	\$64,984.00	\$64,984.00	\$95,000.00	\$95,000.00	\$107,360.00	\$107,360.00
2	Silt Fence	L.F.	100	\$3.50	\$350.00	\$4.00	\$400.00	\$3.95	\$395.00	\$4.00	\$400.00
3	Inlet Sediment Guard, Type D	EA.	22	\$127.00	\$2,794.00	\$127.00	\$2,794.00	\$125.00	\$2,750.00	\$130.00	\$2,860.00
4	12-inch Water Main-Open Cut w/ Granular Backfill	L.F.	1,290	\$208.00	\$268,320.00	\$213.00	\$274,770.00	\$217.00	\$279,930.00	\$222.00	\$286,380.00
5	12-inch Water Main-Directional Drill	L.F.	100	\$357.00	\$35,700.00	\$327.00	\$32,700.00	\$410.00	\$41,000.00	\$380.00	\$38,000.00
6	8-inch Water Main-Open Cut w/ Granular Backfill	L.F.	1,300	\$156.00	\$202,800.00	\$173.00	\$224,900.00	\$160.00	\$208,000.00	\$167.00	\$217,100.00
7	8-inch Water Main-Jack & Bore w/ 18-inch Steel Casing	L.F.	90	\$665.00	\$59,850.00	\$868.00	\$78,120.00	\$868.00	\$78,120.00	\$1,020.00	\$91,800.00
8	6-inch Water Main / Hydrant Lead-Open Cut w/ Granular Backfill	L.F.	220	\$167.00	\$36,740.00	\$136.00	\$29,920.00	\$182.00	\$40,040.00	\$186.00	\$40,920.00
9	6-inch Water Main / Hydrant Lead-Directional Drill	L.F.	310	\$230.00	\$71,300.00	\$154.00	\$47,740.00	\$186.00	\$57,660.00	\$150.00	\$46,500.00
10	12-inch Water Main Valve	EA.	5	\$4,900.00	\$24,500.00	\$4,843.00	\$24,215.00	\$4,469.00	\$22,345.00	\$4,350.00	\$21,750.00
11	8-inch Water Main Valve	EA.	4	\$2,700.00	\$10,800.00	\$2,746.00	\$10,984.00	\$2,503.00	\$10,012.00	\$2,440.00	\$9,760.00
12	6-inch Water Main Valve	EA.	7	\$2,000.00	\$14,000.00	\$2,064.00	\$14,448.00	\$1,766.00	\$12,362.00	\$1,850.00	\$12,950.00
13	Hydrant Assembly w/ Valve	EA.	10	\$8,200.00	\$82,000.00	\$8,007.00	\$80,070.00	\$7,788.00	\$77,880.00	\$7,100.00	\$71,000.00
14	2-inch Water Service-Open Cut	L.F.	200	\$122.00	\$24,400.00	\$109.00	\$21,800.00	\$160.00	\$32,000.00	\$136.00	\$27,200.00
15	2-inch Water Service-Augered	L.F.	330	\$123.00	\$40,590.00	\$108.00	\$35,640.00	\$167.00	\$55,110.00	\$181.00	\$59,730.00
16	Tap, Saddle, and Corporation Valve	EA.	14	\$560.00	\$7,840.00	\$697.00	\$9,758.00	\$2,043.00	\$28,602.00	\$795.00	\$11,130.00
17	Curb Valve and Curb Box	EA.	14	\$642.00	\$8,988.00	\$718.00	\$10,052.00	\$1,400.00	\$19,600.00	\$740.00	\$10,360.00
18	4-inch Thick Insulation	L.F.	100	\$15.00	\$1,500.00	\$11.00	\$1,100.00	\$38.00	\$3,800.00	\$10.00	\$1,000.00
19	Slurry Backfill	TON	50	\$153.00	\$7,650.00	\$176.00	\$8,800.00	\$50.00	\$2,500.00	\$110.00	\$5,500.00
20	Full Depth Sawcutting	L.F.	5,700	\$2.00	\$11,400.00	\$2.00	\$11,400.00	\$3.00	\$17,100.00	\$2.00	\$11,400.00
21	Crushed Aggregate Base Course	TON	1,400	\$15.00	\$21,000.00	\$22.00	\$30,800.00	\$16.00	\$22,400.00	\$17.00	\$23,800.00
22	9-inch Concrete Pavement Replacement	S.Y.	1,900	\$69.00	\$131,100.00	\$70.00	\$133,000.00	\$64.80	\$123,120.00	\$73.00	\$138,700.00
23	9-inch Colored Stamped Concrete Pavement Replacement	S.F.	130	\$57.00	\$7,410.00	\$23.70	\$3,081.00	\$55.50	\$7,215.00	\$57.00	\$7,410.00
24	2-inch Asphaltic Concrete Surface Course	TON	190	\$172.00	\$32,680.00	\$150.20	\$28,538.00	\$127.50	\$24,225.00	\$135.00	\$25,650.00
25	3-inch Asphaltic Concrete Binder Course	TON	290	\$135.00	\$39,150.00	\$133.70	\$38,773.00	\$105.50	\$30,595.00	\$112.00	\$32,480.00
26	Concrete Curb and Gutter, Type A	L.F.	300	\$41.00	\$12,300.00	\$38.60	\$11,580.00	\$46.75	\$14,025.00	\$41.00	\$12,300.00
27	4-inch Concrete Sidewalk Replacement	S.F.	400	\$18.00	\$7,200.00	\$12.70	\$5,080.00	\$18.50	\$7,400.00	\$16.50	\$6,600.00
28	Concrete Driveway Replacement	S.F.	200	\$19.00	\$3,800.00	\$14.90	\$2,980.00	\$20.00	\$4,000.00	\$18.00	\$3,600.00
29	Asphalt Driveway Replacement	S.F.	100	\$25.00	\$2,500.00	\$27.90	\$2,790.00	\$23.80	\$2,380.00	\$7.00	\$700.00
30	Pavement Marking, Epoxy, 24-inch Solid White	L.F.	72	\$30.00	\$2,160.00	\$46.80	\$3,369.60	\$28.00	\$2,016.00	\$30.00	\$2,160.00

COST COMPARISON OF BIDDERS

OWNER: Village of Thiensville
PROJECT: Freistadt Road and Main Street Water Main Extension
BID OPENING DATE: December 22, 2022

BASE BID				Kruczek Construction, Inc.		Dorner, Inc.		Vinton Construction Company		PTS Contractors, Inc.	
ITEM #	ITEM DESCRIPTION	UNIT	QTY.	UNIT \$	TOTAL	UNIT \$	TOTAL	UNIT \$	TOTAL	UNIT \$	TOTAL
31	Pavement Marking, Epoxy, 16-inch Solid White	L.F.	80	\$25.00	\$2,000.00	\$31.10	\$2,488.00	\$25.00	\$2,000.00	\$27.00	\$2,160.00
32	Pavement Marking, Epoxy, 8-inch Solid White	L.F.	400	\$5.60	\$2,240.00	\$15.70	\$6,280.00	\$5.50	\$2,200.00	\$6.00	\$2,400.00
33	Pavement Marking, Epoxy, 4-inch Solid Yellow	L.F.	570	\$2.00	\$1,140.00	\$7.80	\$4,446.00	\$2.10	\$1,197.00	\$2.50	\$1,425.00
34	Pavement Marking, Epoxy, 4-inch Solid White	L.F.	350	\$2.00	\$700.00	\$7.80	\$2,730.00	\$2.10	\$735.00	\$2.50	\$875.00
35	Pavement Marking, Epoxy, Words & Arrows	EA.	12	\$280.00	\$3,360.00	\$496.10	\$5,953.20	\$275.00	\$3,300.00	\$290.00	\$3,480.00
36	Topsoil, Seed, Fertilizer, and Mulch	S.Y.	200	\$13.00	\$2,600.00	\$17.60	\$3,520.00	\$12.00	\$2,400.00	\$13.00	\$2,600.00
37	Topsoil, Seed, Fertilizer, and Erosion Mat	S.Y.	40	\$15.00	\$600.00	\$24.30	\$972.00	\$13.00	\$520.00	\$14.00	\$560.00
38	WATCO Railroad Flagman Cash Allowance	L.S.	1	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
TOTAL OF ALL ESTIMATED PRICES (ITEMS 1 - 38)					\$1,274,000.00		\$1,280,975.80		\$1,343,934.00		\$1,350,000.00
OPTIONAL ALTERNATE BIDS											
MA1	Directional Drill 12-inch Water Main in lieu of Open Cut (Bid Item No. 4)	L.F.	1,290	\$280.00	\$361,200.00	\$305.00	\$393,450.00	\$290.00	\$374,100.00		\$0.00
MA2	Directional Drill 8-inch Water Main in lieu of Open Cut (Bid Item No. 6)	L.F.	1,300	\$175.00	\$227,500.00	\$205.00	\$266,500.00	\$231.00	\$300,300.00		\$0.00
MA3	Full Depth Sawcutting (Bid Item No. 20)	L.F.	2,500	\$3.00	\$7,500.00	\$2.00	\$5,000.00	\$4.00	\$10,000.00		\$0.00
MA4	Crushed Aggregate Base Course (Bid Item No. 21)	TON	220	\$21.00	\$4,620.00	\$22.00	\$4,840.00	\$16.00	\$3,520.00		\$0.00
MA5	9-inch Concrete Pavement Replacement (Bid Item No. 22)	S.Y.	540	\$110.00	\$59,400.00	\$114.00	\$61,560.00	\$85.00	\$45,900.00		\$0.00
MA6	2-inch Asphaltic Concrete Surface Course (Bid Item No. 24)	TON	40	\$242.00	\$9,680.00	\$230.00	\$9,200.00	\$200.00	\$8,000.00		\$0.00
MA7	3-inch Asphaltic Concrete Binder Course (Bid Item No. 25)	TON	55	\$200.00	\$11,000.00	\$194.00	\$10,670.00	\$160.00	\$8,800.00		\$0.00
TOTAL OF ALL ESTIMATED PRICES (ITEMS MA1-MA7)					\$680,900.00		\$751,220.00		\$750,620.00		\$0.00
TOTAL OF ALL ESTIMATED PRICES					\$1,954,900.00		\$2,032,195.80		\$2,094,554.00		\$1,350,000.00

COST COMPARISON OF BIDDERS

OWNER: Village of Thiensville
PROJECT: Freistadt Road and Main Street Water Main Extension
BID OPENING DATE: December 22, 2022

BASE BID				UPI, LLC		Mid City Corporation		Globe Contractors, Inc.	
ITEM #	ITEM DESCRIPTION	UNIT	QTY.	UNIT \$	TOTAL	UNIT \$	TOTAL	UNIT \$	TOTAL
1	Traffic Control	L.S.	1	\$25,000.00	\$25,000.00	\$22,500.00	\$22,500.00	\$24,000.00	\$24,000.00
2	Silt Fence	L.F.	100	\$3.00	\$300.00	\$5.00	\$500.00	\$10.00	\$1,000.00
3	Inlet Sediment Guard, Type D	EA.	22	\$145.00	\$3,190.00	\$105.00	\$2,310.00	\$125.00	\$2,750.00
4	12-inch Water Main-Open Cut w/ Granular Backfill	L.F.	1,290	\$232.00	\$299,280.00	\$210.00	\$270,900.00	\$287.00	\$370,230.00
5	12-inch Water Main-Directional Drill	L.F.	100	\$569.00	\$56,900.00	\$500.00	\$50,000.00	\$600.00	\$60,000.00
6	8-inch Water Main-Open Cut w/ Granular Backfill	L.F.	1,300	\$167.00	\$217,100.00	\$160.00	\$208,000.00	\$270.00	\$351,000.00
7	8-inch Water Main-Jack & Bore w/ 18-inch Steel Casing	L.F.	90	\$1,000.00	\$90,000.00	\$1,350.00	\$121,500.00	\$1,300.00	\$117,000.00
8	6-inch Water Main / Hydrant Lead-Open Cut w/ Granular Backfill	L.F.	220	\$209.00	\$45,980.00	\$285.00	\$62,700.00	\$500.00	\$110,000.00
9	6-inch Water Main / Hydrant Lead-Directional Drill	L.F.	310	\$162.00	\$50,220.00	\$235.00	\$72,850.00	\$300.00	\$93,000.00
10	12-inch Water Main Valve	EA.	5	\$4,750.00	\$23,750.00	\$4,500.00	\$22,500.00	\$6,000.00	\$30,000.00
11	8-inch Water Main Valve	EA.	4	\$2,500.00	\$10,000.00	\$2,500.00	\$10,000.00	\$3,500.00	\$14,000.00
12	6-inch Water Main Valve	EA.	7	\$1,900.00	\$13,300.00	\$1,850.00	\$12,950.00	\$3,000.00	\$21,000.00
13	Hydrant Assembly w/ Valve	EA.	10	\$8,150.00	\$81,500.00	\$7,500.00	\$75,000.00	\$9,000.00	\$90,000.00
14	2-inch Water Service-Open Cut	L.F.	200	\$145.00	\$29,000.00	\$200.00	\$40,000.00	\$220.00	\$44,000.00
15	2-inch Water Service-Augered	L.F.	330	\$114.00	\$37,620.00	\$165.00	\$54,450.00	\$220.00	\$72,600.00
16	Tap, Saddle, and Corporation Valve	EA.	14	\$2,017.00	\$28,238.00	\$1,250.00	\$17,500.00	\$1,300.00	\$18,200.00
17	Curb Valve and Curb Box	EA.	14	\$1,785.00	\$24,990.00	\$1,200.00	\$16,800.00	\$2,000.00	\$28,000.00
18	4-inch Thick Insulation	L.F.	100	\$13.00	\$1,300.00	\$15.00	\$1,500.00	\$12.00	\$1,200.00
19	Slurry Backfill	TON	50	\$80.00	\$4,000.00	\$100.00	\$5,000.00	\$200.00	\$10,000.00
20	Full Depth Sawcutting	L.F.	5,700	\$2.00	\$11,400.00	\$2.50	\$14,250.00	\$2.00	\$11,400.00
21	Crushed Aggregate Base Course	TON	1,400	\$19.00	\$26,600.00	\$19.00	\$26,600.00	\$30.00	\$42,000.00
22	9-inch Concrete Pavement Replacement	S.Y.	1,900	\$76.00	\$144,400.00	\$72.50	\$137,750.00	\$80.00	\$152,000.00
23	9-inch Colored Stamped Concrete Pavement Replacement	S.F.	130	\$22.00	\$2,860.00	\$21.50	\$2,795.00	\$25.00	\$3,250.00
24	2-inch Asphaltic Concrete Surface Course	TON	190	\$147.00	\$27,930.00	\$127.50	\$24,225.00	\$128.00	\$24,320.00
25	3-inch Asphaltic Concrete Binder Course	TON	290	\$173.00	\$50,170.00	\$160.00	\$46,400.00	\$232.00	\$67,280.00
26	Concrete Curb and Gutter, Type A	L.F.	300	\$60.00	\$18,000.00	\$40.00	\$12,000.00	\$40.00	\$12,000.00
27	4-inch Concrete Sidewalk Replacement	S.F.	400	\$16.00	\$6,400.00	\$11.50	\$4,600.00	\$11.00	\$4,400.00
28	Concrete Driveway Replacement	S.F.	200	\$16.00	\$3,200.00	\$13.50	\$2,700.00	\$13.00	\$2,600.00
29	Asphalt Driveway Replacement	S.F.	100	\$6.70	\$670.00	\$23.80	\$2,380.00	\$8.00	\$800.00

COST COMPARISON OF BIDDERS

OWNER: Village of Thiensville
PROJECT: Freistadt Road and Main Street Water Main Extension
BID OPENING DATE: December 22, 2022

BASE BID				UPI, LLC		Mid City Corporation		Globe Contractors, Inc.	
ITEM #	ITEM DESCRIPTION	UNIT	QTY.	UNIT \$	TOTAL	UNIT \$	TOTAL	UNIT \$	TOTAL
30	Pavement Marking, Epoxy, 24-inch Solid White	L.F.	72	\$29.00	\$2,088.00	\$28.00	\$2,016.00	\$28.00	\$2,016.00
31	Pavement Marking, Epoxy, 16-inch Solid White	L.F.	80	\$26.00	\$2,080.00	\$25.00	\$2,000.00	\$25.00	\$2,000.00
32	Pavement Marking, Epoxy, 8-inch Solid White	L.F.	400	\$6.00	\$2,400.00	\$5.50	\$2,200.00	\$6.00	\$2,400.00
33	Pavement Marking, Epoxy, 4-inch Solid Yellow	L.F.	570	\$2.20	\$1,254.00	\$2.10	\$1,197.00	\$2.10	\$1,197.00
34	Pavement Marking, Epoxy, 4-inch Solid White	L.F.	350	\$2.20	\$770.00	\$2.10	\$735.00	\$2.10	\$735.00
35	Pavement Marking, Epoxy, Words & Arrows	EA.	12	\$285.00	\$3,420.00	\$275.00	\$3,300.00	\$275.00	\$3,300.00
36	Topsoil, Seed, Fertilizer, and Mulch	S.Y.	200	\$19.00	\$3,800.00	\$18.00	\$3,600.00	\$15.00	\$3,000.00
37	Topsoil, Seed, Fertilizer, and Erosion Mat	S.Y.	40	\$26.00	\$1,040.00	\$25.00	\$1,000.00	\$20.00	\$800.00
38	WATCO Railroad Flagman Cash Allowance	L.S.	1	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
TOTAL OF ALL ESTIMATED PRICES (ITEMS 1 - 38)					\$1,360,150.00		\$1,366,708.00		\$1,803,478.00
OPTIONAL ALTERNATE BIDS									
MA1	Directional Drill 12-inch Water Main in lieu of Open Cut (Bid Item No. 4)	L.F.	1,290		\$0.00	\$325.00	\$419,250.00	\$340.00	\$438,600.00
MA2	Directional Drill 8-inch Water Main in lieu of Open Cut (Bid Item No. 6)	L.F.	1,300		\$0.00	\$275.00	\$357,500.00	\$217.00	\$282,100.00
MA3	Full Depth Sawcutting (Bid Item No. 20)	L.F.	2,500		\$0.00	\$2.50	\$6,250.00	\$10.00	\$25,000.00
MA4	Crushed Aggregate Base Course (Bid Item No. 21)	TON	220		\$0.00	\$19.00	\$4,180.00	\$50.00	\$11,000.00
MA5	9-inch Concrete Pavement Replacement (Bid Item No. 22)	S.Y.	540		\$0.00	\$77.50	\$41,850.00	\$100.00	\$54,000.00
MA6	2-inch Asphaltic Concrete Surface Course (Bid Item No. 24)	TON	40		\$0.00	\$200.00	\$8,000.00	\$300.00	\$12,000.00
MA7	3-inch Asphaltic Concrete Binder Course (Bid Item No. 25)	TON	55		\$0.00	\$210.00	\$11,550.00	\$350.00	\$19,250.00
TOTAL OF ALL ESTIMATED PRICES (ITEMS MA1-MA7)					\$0.00		\$848,580.00		\$841,950.00
TOTAL OF ALL ESTIMATED PRICES					\$1,360,150.00		\$2,215,288.00		\$2,645,428.00

Use of Force Annual Report



Thiensville Police Department 2022

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Executive Summary

This *2022 Annual Use of Force (UOF) Report* has been assembled in accordance with the Thiensville Police Department's Chapter 5, Management of Resistance and Aggression policies. Good reporting procedures represent the best defense that a police department can have against allegations of excessive force, either by individual officer incidents or as a matter of general department behavior. Failure by the department to respond to excessive UOF allegations because of a failure to collect essential information on use of force incidents risks not only the professional careers of police officers but also the department's overall credibility within the community.

Starting on November 18, 2019 the Thiensville Police Department (THPD) implemented a Management of Resistance and Aggression Policy requiring a written report to be submitted for all use of force incidents in accordance with Standard 5.3.1 Use of Force Reporting. By policy, the following situations require the completion of a use of force report:

1. Any action resulting in the discharge of a firearm, except for training or for lawful recreational purposes;
2. Any action involving the pointing of a firearm at a person;
3. Any action that results in, or is alleged to have resulted in, injury or death of another person;
4. Any force applied through the use of lethal or less-lethal weapons;
5. Any action involving the pointing of a Electronic Control Device (ECD) at a person or the use of a (ECD) which contributes to the control of the subject.
6. Any action involving weaponless physical force at a level of compliance holds and above pursuant to the Use of Force Disturbance Resolution Model.

Starting on October 12, 2020 the Thiensville Police Department (THPD) reports all Use of Force and Arrest Related Death incidents, via Badger TraCS, to the Federal Bureau of Investigation (FBI) in collaboration with the Wisconsin Department of Justice in an effort to coordinate national UOF collection efforts. By policy, the following situations require the completion of a use of force report to the FBI:

1. Any time that an officer uses force that results in the death of a person, or any time that a person dies while arrested, detained, or in the course of being arrested.

2. Any time that an officer uses force that results in the great bodily harm of a person.
3. Any time that an officer discharges a firearm at or in the direction of a person.

On December 28, 2022 the Thiensville Police Department's Use of Force policy was certified by the Wisconsin Law Enforcement Accreditation Group (WILEAG) certifying that the Thiensville Police Department meets certain eligibility requirements set forth by the U.S. Department of Justice (Presidential Executive Order on Safe Policing for Safe Communities, Executive Order No. 13929). These requirements are:

1. That the Thiensville Police Department adhere to all applicable federal, state, and local laws; and
2. That the Thiensville Police Department maintains use-of-force policies that prohibit the use of choke holds, except in those situations where the use of deadly force is allowed by law.

The goal is to improve the manner in which the Thiensville Police Department captures, maintains, analyzes, and utilizes use of force data specific to our agency. Because of the importance of use of force reporting, the department has developed a mechanism by which each incident is reviewed to ensure compliance with department policy along with federal and state statutes/requirements. This mechanism involves a two-tiered review process for each use of force incident. The first level of review involves the Lieutenant followed by the Chief of Police. One of the two UOF analysts is a Unified Tactical Instructor certified by the State of Wisconsin. Use of force incidents are reviewed to ensure that the specific force used was in compliance with department policy and guidelines established by the Wisconsin Department of Justice, Law Enforcement Standards Board.

How often do Thiensville police officers use force? Data for 2022 shows that the Communications Division logged 8,108 calls for service resulting in 182 formal complaints that required some form of police action. While investigating these complaints, Thiensville police officers were required to use force on only 7 occasions or about .04% for each formal complaint.

In this summary report, the seven (7) Use of Force reports submitted by Thiensville police officers have been analyzed in a variety of ways to reveal patterns or trends that could indicate training needs and/or modifications to department policy.

Use of Force Synopsis by Month

A review of the 2022 THPD Use of Force reports by month illustrates that August and October were the most active months with two (2) use of force reports for each month. February, July, and November each had one (1) report. There was no use of force reports for the months of January, March, April, May, June, September, or December. No discernable pattern exists.

Use of Force Synopsis by Day of Week

The highest incidences of force used by THPD officers took place on a Sunday (3 Reports) during the 2022 calendar year followed by Thursday and Friday with two (2) reports for each day. No discernable pattern exists.

Use of Force Synopsis by Watch

Use of Force reports were also analyzed by Watch. The THPD serves the community utilizing three Watch groups. The hours for each Watch are as follows: Watch I (7:45 A.M. to 4:00 P.M.), Watch II (3:45 P.M. to 12:00 A.M.), and Watch III (11:45 P.M. to 8:00 A.M.). For the purpose of this analysis, UOF reports occurring during the overlap "hours" are assigned to the Watch group that the officer was assigned to work on that particular day. Watch I had two (2) use of force incidents, Watch II had four (4) use of force incidents, and Watch III had one (1) use of force incident. No discernable pattern exists.

Use of Force Synopsis by Application

THPD officers are required to include the specific force application which they used to gain control of the resistive subject. Wisconsin police officers are trained in a variety of force applications while attending the basic police academy. This training continues on an annual basis during department in-service training. The training is organized by a THPD Defense and Arrest Tactics (DAAT) instructor. A close analysis of selected force applications provides insight into what training is beneficial for the officers.

In 2022, the applications used by THPD officers were categories classified as: Point Firearm (3), Destroy Animal (3) and Other (1). Pointing of a Firearm is behavior which has caused or imminently threatens to cause death or great bodily harm to an officer or to another person or persons. Other may be a technique that is not trained but justified because the application of force was dynamic in nature. Destroy Animal is to dispatch an animal that is suffering due to illness or injury. Each application was reviewed and determined to be justified.

Use of Force Synopsis by Offense Type

Use of Force reports are analyzed by offense type. The top type of offense in which THPD officers were required to use force on a citizen in 2022 was for mutual aid while assisting another department (2 incidents). One (1) incident of use of force was in conjunction with the taking an individual into Protective Custody.

Analysis of TASER Deployments

THPD officers are required to submit a use of force report anytime they actually fire the Taser, or threaten to use the Taser on a subject. Both the actual firing and threats to use the Taser on a subject are considered a use of an Electronic Control Device (ECD) and are reviewed. There were no incidents in 2022 where an officer actually fired or threatened to use the Taser on a subject.

Use of Necessary Force

In conclusion, the preferred mode of control in any police/citizen encounter remains verbal dialog. It is recognized that this method is not always effective or appropriate in gaining compliance and it then becomes necessary to escalate the degree of force. THPD officers have both a legal and moral responsibility to use force wisely and judiciously. It is expected that once an individual is under control that the officer reverts to the lowest degree of force necessary to maintain that control.

Respectfully submitted,



Curtis Kleppin
Chief of Police

Table 1: Use of Force Reporting by Officer (2022)

Kleppin, C	0
Wucherer, C	1
Neuman, B	0
Janzer, G	2
Stone, M	1
Mejchar, J	0
Schmit, N	2
Rogers, B	1
Total	7

Table 2: Use of Force Yearly Comparison by Officer (2018-2022)

	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>
Kleppin, C	NA	0	0	3	0
Wucherer, C	NA	0	2	2	1
Neuman, B	NA	0	0	1	0
Janzer, G	NA	1	1	0	2
Stone, M	NA	0	2	1	1
Fischer, T	NA	0	3	1	NA
Mejchar, J	NA	1	1	3	0
Schmit, N	NA	NA	NA	0	2
Rogers, B	NA	NA	NA	0	1
Total	NA	2	9	11	7

Table 3: Use of Force Synopsis by Month (2018-2022)

	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>
January	NA	NA	1	1	0
February	NA	NA	0	1	1
March	NA	NA	0	0	0
April	NA	NA	0	1	0
May	NA	NA	1	1	0
June	NA	NA	1	1	0
July	NA	NA	0	1	1
August	NA	NA	0	1	2
September	NA	NA	4	2	0
October	NA	NA	1	0	2
November	NA	1	0	1	1
December	NA	1	1	1	0
Total	NA	2	9	11	7

Table 4: Use of Force Synopsis by Day of Week (2018-2022)

	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>
Monday	NA	0	1	1	0
Tuesday	NA	0	3	1	0
Wednesday	NA	0	0	0	0
Thursday	NA	0	0	2	2
Friday	NA	1	3	2	2
Saturday	NA	1	1	3	0
Sunday	NA	0	1	2	3
Total	NA	2	9	11	7

Table 5: Use of Force Synopsis by Watch (2018-2022)

	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>
Watch I	NA	1	0	2	2
Watch II	NA	0	9	5	4
Watch III	NA	1	0	4	1
Total	NA	2	9	11	7

Table 6: Use of Force Synopsis by Application (2018-2022)

	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>
Forearm Strike	NA	0	0	0	0
Foot Strike	NA	0	0	0	0
Impact Weapon	NA	0	0	0	0
Deadly Force	NA	0	0	0	0
Hand Strike	NA	0	0	0	0
Decentralization	NA	0	2	0	0
OC Spray	NA	0	0	0	0
Point Firearm	NA	2	5	4	3
Knee Strike	NA	0	0	0	0
Body Stun	NA	0	0	0	0
Pressure Points	NA	0	0	0	0
Compliance Holds	NA	0	1	2	0
TASER -	NA	0	0	0	0
Display/Threat	NA	0	0	0	0
TASER - Deployed	NA	0	0	0	0
TASER – Animal	NA	0	0	0	0
Impact Weapon (SIMS)	NA	0	0	0	0
Destroy Animal	NA	0	1	2	3
Other	NA	0	0	3	1
Total	NA	2	9	11	7

Table 7: Use of Force Synopsis by Watch Application (2018-2022)

	18			19			20			21			22		
	Watch			Watch			Watch			Watch			Watch		
	I	II	III	I	I	II	I	II	III	I	II	III	I	II	III
Forearm Strike	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Foot Strike	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Impact Weapon	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Deadly Force	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Hand Strike	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Decentralization	NA	NA	NA	0	0	0	0	0	0	0	2	0	0	0	0
OC Spray	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Point Firearm	NA	NA	NA	1	0	1	3	0	1	0	5	0	1	2	0
Knee Strike	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Body Stun	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Pressure Points	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Compliance Holds	NA	NA	NA	0	1	1	0	0	0	0	1	0	0	0	0
TASER - Display/Threat	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
TASER - Deployed	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
TASER Animal	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Impact Weapon (SIMS)	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
Destroy Animal	NA	NA	NA	0	0	1	1	0	0	0	1	0	1	2	0
Other	NA	NA	NA	0	1	2	0	0	0	0	0	0	0	0	1
Total	NA	NA	NA	1	2	5	4	0	1	0	9	0	2	4	1

Table 8: Use of Force Synopsis by Offense Type (2018-2022)

	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>
Disorderly Conduct	NA	0	1	1	0
Protective Custody	NA	0	1	1	1
Battery/Disorderly Conduct Domestic Abuse	NA	0	2	1	0
Operate Motor Vehicle while Intoxicated	NA	0	0	2	0
Endangering Safety (Felony) (Domestic Abuse)	NA	0	1	0	0
Underage Drinking Violations	NA	0	0	0	0
Warrant/Runaway Arrests	NA	0	0	0	0
Suspicious Acts	NA	0	0	0	0
Drug Related Offenses	NA	0	0	0	0
Trespass	NA	0	0	1	0
Knowingly Fleeing an Officer (Felony)	NA	0	0	0	0
Criminal Damage to Property	NA	0	0	0	0
Cause Bodily harm to Child	NA	0	0	0	0
Theft	NA	0	0	0	0
Endangering Safety (Felony)	NA	0	0	0	0
Robbery	NA	0	0	0	0
Assist Other Department	NA	2	2	3	2
Destroy Animal (Firearm)	NA	0	1	2	3
Operate Motor Vehicle Without Owner's Consent	NA	0	0	0	0
Assist Other Department (OWI Blood Draw)	NA	0	0	0	0
Battery	NA	0	0	0	0
Burglary (Felony)	NA	0	0	0	0
Homicide	NA	0	0	0	1
Total	NA	2	8	11	7

Analysis of TASER Display/Deployments

* There were (0) TASER deployments or display in 2022.



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Office of Joint Mequon-Thiensville Bike and Pedestrian Way Commission

TO: Joint Mequon-Thiensville Bike and Pedestrian Way Commission
FROM: Cole McCraw, Assistant City Engineer
DATE: January 5, 2023
SUBJECT: Master Plan RFP Response Discussion

Background

The Commission received proposals on November 21st and completed evaluation forms for proposals by December 6th. The interview committee elected to use the interview slot to further evaluate the proposals. The Commission was waiting for clarification from the potential consultant to discuss further.

Analysis

The interview team met on December 13th to discuss the proposals and possible recommendations. At the December 15th meeting, the interview committee shared the strategy for recommending award. City staff reached out to the potential consultant for clarification on some tasks as well as inquiring about cost savings by awarding the full contract. The email response is attached.

Fiscal Impact

The fiscal impact is yet to be determined based on elected scope to recommend to Common Council.

Recommendation

The Commission may discuss the proposal and recommend award of all or a portion of the contract. Staff recommends the City of Mequon portion be fully recommended for award or with the possible removal of Task 4B.

Attachments:

2022-12-16 MSA Email (PDF)

From: Amy Bennett
Sent: Friday, December 16, 2022 10:07 AM
To: Cole McCraw
Cc: Kristen Lundeen, Engineering Shared Mailbox

Excerpt:

1. On page 18 under the plan approach/existing condition map, it mentions that your team will gather all bike-ped network GIS data from the City. There is no base GIS information that the City has, only legacy AutoCAD linework. How does that impact the cost for Phase 3?

We can likely convert the AutoCAD data into GIS, though it will likely need to be a City-wide dataset to be useful. Because the number/mileage of streets with sidewalks and/or marked bike lanes is low, this is not expected to be a huge task. We estimate additional cost of \$2,200 to do both communities..

2. If both communities were to both award the full project with all tasks, what would be the revised breakdown be by task and community?

If both communities pursue the full project we can achieve some economy of scale and are willing to reduce the fee to each by 10%. A revised pricing list for that scenario is below. Task 2A is added as described above, split 2/3 to Mequon and 1/3 to Thiensville. Task 3 is not reduced but is split 2/3 to Mequon and 1/3 to Thiensville. Task 9 is Mequon only and is not reduced. The bottom line in this scenario is \$35,700 for Mequon and \$17,100 for Thiensville.

3. If the Commission was concerned regarding the overall cost, is there anything you would recommend (scope modifications, extension of proposed project schedule, etc.) that could make the project more cost efficient? What are the associated cost savings?

We would first drop the bike/ped traffic counts (4B) – these aren't likely critical to your policy decisions (total savings \$5,130 of the combined, discounted cost). After that it gets harder to cut things. You could combine the public meeting with the 3rd or 4th commission meeting and save maybe \$800. Further cutting of engagement or plan content could leave unsatisfactory gaps in your plan.

4. Is the timing of the proposed counts appropriate for the season/anticipated volumes given school schedules, etc.?

We planned this for May, which is an appropriate month to capture higher walking and biking counts.

If you have any questions, please feel free to let me know.

Attachment: 2022-12-16 MSA Email (8029 : Master Plan RFP Response Discussion and Recommendation)

Fees by community and task if all tasks completed for both communities			
		Revised	
task	description	Mequon	Thiensville
Task 1	Inventory	\$5,130	\$1,710
Task 1A	Bike/Ped Network Mapping	\$1,452	\$726
Task 2	Community Assessment	\$2,700	\$1,800
Task 3	Meetings, Policy Updates, Document Updating/Assembly*	\$8,791	\$4,396
Task 4A	Bike Corridor ID	\$1,440	\$720
Task 4B	Bicycle and Pedestrian Counts	\$3,420	\$1,710
Task 5	Route Alternatives and Design Treatments	\$3,600	\$1,800
Task 6	Safety Component	\$1,800	\$1,440
Task 7	Prioritization per Planning Criteria	\$1,350	\$1,080
Task 8	Cost and Funding	\$2,376	\$1,728
Task 9	Impact Fee Evaluation	\$3,600	\$0
PROJECT TOTALS*		\$35,659	\$17,110