A G E N D A
CITY OF WAUPUN BOARD OF PUBLIC WORKS AND FACILITIES COMMITTEE
Waupun City Hall – 201 E. Main Street, Waupun WI
Wednesday, August 10, 2022 at 4:30 PM

The Waupun Board of Public Works and Facilities Committee will meet in-person, virtual, and teleconference. Instructions to join the meeting are provided below:

Join Zoom Meeting
https://us02web.zoom.us/j/83430608522?pwd=N1pSZ05zUStFdVEybWxwSHcyc2JyUT09

Meeting ID: 834 3060 8522
Passcode: 630201
By Phone: (312) 626 6799

CALL TO ORDER

ROLL CALL

PERSONS WISHING TO ADDRESS THE BOARD OF PUBLIC WORKS--*State name, address, and subject of comments. (2 Minutes)*

No Public Participation after this point.

FUTURE MEETINGS AND GATHERING INVOLVING THE BOARD OF PUBLIC WORKS

CONSIDERATION - ACTION
1. Approve Minutes of the July 12, 2022 meeting.
2. Capital Projects Ranked for 2023 budgeting
3. Fall yard waste cleanup dates
4. Waupun Hockey information per agreement with the City of Waupun
5. Storm System Problem Areas due to water entering the storm sewer from farmland

ADJOURNMENT
Upon reasonable notice, efforts will be made to accommodate disabled individuals through appropriate aids and services. For additional information, contact the City Clerk at 920-324-7915.

MINUTES—CITY OF WAUPUN BOARD OF PUBLIC WORKS & FACILITIES

Tuesday, 12-July-2022 – City Council Chambers

CALL TO ORDER
Chairman Peter Kaczmarki called the meeting to order at 4:30 PM

ROLL CALL
Roll call was taken:

Alderpersons—Peter Kaczmarski, Mike Matoushek, William Langford
Citizens—Dale Heeringa, Ryan Mielke, Dave Rens (absent with notification), Gregg Zonnefeld (departed at 5:06)
Ex-officio—Mayor Rohn Bishop, DPW Director Jeff Daane, Recreation Director Rachel Kaminski, City Clerk Kathy Schlieve

PERSON WISHING TO ADDRESS THE BOARD OF PUBLIC WORKS & FACILITIES COMMITTEE
There were no guests for public comment portion of the meeting.

FUTURE MEETINGS AND GATHERINGS OF THE BOARD OF PUBLIC WORKS & FACILITIES COMMITTEE
Next meeting will be on Wednesday, August 10th at 4:30PM.

CONSIDERATION - ACTION

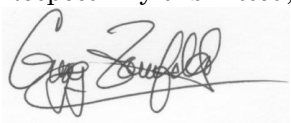
1. Approve minutes of the June 14th, 2022 Board of Public Works & Facilities Meeting.
   Minutes of the June 14th meeting were presented. Motion (Matoushek/Langford) to approve minutes as presented. **MOTION CARRIED (6-0)**

2. Capital Improvement budget items for review, rating, and approval for 2023 budget
   DPW Director Jeff Daane shared detailed information on potential capital improvement projects. Over the past several years the budget for capital improvement funds have been decreasing, and the projection is that this will be continuing for 2023. Board members are to turn in rankings of capital improvements to Jeff.

3. Equipment budget items for review, rating, and approval for the 2023 budget process
   DPW Director Daane shared capital replacement list items. Motion (Mielke/Matoushek) to let staff use discretion on replacement list items. **MOTION CARRIED (6-0)**

ADJOURNMENT
Motion (Matoushek/Heeringa) to adjourn the meeting of the BPW at 5:27PM. **MOTION CARRIED (6-0)**

Respectfully submitted,



Gregg Zonnefeld, BPW Clerk

AGENDA SUMMARY SHEET

MEETING DATE: August 10th,2022

TITLE: Capital Projects Ranked for 2023 budgeting

AGENDA SECTION: Consideration/Action

PRESENTER: Jeff Daane

DEPARMTENT GOAL(S) SUPPORTED *(if applicable)*	**FISCAL IMPACT**	

ISSUE SUMMARY

At the July meeting this group discussed future capital projects. As the council and departments work through finalizing budgets for 2023. The Board of Public works would like to pass along the capital ranked in this order. This ranking may change as some of these projects are funded through different sources and other grants may become available.

The Senior Center project scored the highest as a project that this board would like to see completed and the rest fall in line down to the field turf replacement at the ball complex.

STAFF RECCOMENDATION:

Recommend passing along this information to Council

ATTACHMENTS:

Ranking sheet

RECCOMENDED MOTION:

1. Approve capital project rankings for staff and council to use when working through the 2023 budget.

Capital Project Ranking 2023 Budget							Average
Field Turf Replacement Baseball Complex	10	10	12	11	12	7	**10.333**
Wilcox Park Playgroudn Replacement	7	8	10	5	11	11	**8.667**
Community Center Lot Repair	12	11	4	6	6	10	**8.167**
Museum Improvements	9	12	11	4	3	9	**8.000**
Welcome to Waupun Entry Signs	4	7	9	9	5	8	**7.000**
Bayberry Lan Extension	5	1	8	7	7	12	**6.667**
McCune Park ADA Upgrades	11	5	5	3	9	6	**6.500**
Shaler Park Memorial ADA and Landscape	3	9	6	10	4	5	**6.167**
Wilson Dr. and Shaler Dr. Extension	6	2	7	8	8	2	**5.500**
Sidewalk Replacement Program	2	6	3	1	10	3	**4.167**
City Hall Projects	8	4	2	2	2	4	**3.667**
Senior Center Design and Build	1	3	1	12	1	1	**3.167**

AGENDA SUMMARY SHEET

MEETING DATE: August 10th,2022

TITLE: Fall yard waste cleanup dates

AGENDA SECTION: Consideration/Action

PRESENTER: Jeff Daane

DEPARMTENT GOAL(S) SUPPORTED *(if applicable)*	**FISCAL IMPACT**	

ISSUE SUMMARY
We are looking to set the fall cleanup dates weather permitting will be October 10th through November 14th. Everything needs to be at the curb on November 14th at 7am.

STAFF RECCOMENDATION:
Approve dates as provided

ATTACHMENTS:

RECCOMENDED MOTION:
1. Approve fall cleanup dates weather permitting October 10th through 7am November 14th.

AGENDA SUMMARY SHEET

MEETING DATE: August 10th,2022

AGENDA SECTION: Consideration/Action

PRESENTER: Jeff Daane

TITLE: Waupun Hockey information per agreement with the City of Waupun

DEPARMTENT GOAL(S) SUPPORTED *(if applicable)*	**FISCAL IMPACT**	

ISSUE SUMMARY

Each year in August as part of the agreement with the city of Waupun the Hockey Association turns in public skating hours, financial statement, benefits to youth and achievements/goals for review.

STAFF RECCOMENDATION:

ATTACHMENTS:
Financials
Ice Schedule
Goals/Achievements

RECCOMENDED MOTION:

1. Approve hockey association information for the 2022-2023 season.

WAUPUN HOCKEY ASSOCIATION INC
BALANCE SHEET
June 30, 2022
ASSETS

CURRENT ASSETS				
CASH ON HAND	$	0.00		
CASH IN BANK /CHECKING		49,182.15		
CASH IN BANK/SAVINGS		0.00		
CASH IN BANK - CD		1,515.56		
EDWARD JONES ACCOUNT		202,918.71		
INNER ASSOCIATION TRANSFERS		0.00		
TOTAL CURRENT ASSETS			$	253,616.42
FIXED ASSETS				
LAND,BLDGS,EQUIP	$	220,312.86		
IMPROVEMENTS		103,093.97		
RESERVE FOR DEPRECIATION		0.00		
TOTAL FIXED ASSETS			$	323,406.83
TOTAL ASSETS			$	577,023.25

LIABILITIES AND CAPITAL

CURRENT LIABILITIES				
SALES TAX PAYABLE	$	0.00		
NOTE PAYABLE/1		0.00		
TOTAL CURRENT LIABILITIES			$	0.00
CAPITAL				
RETAINED EARNINGS	$	518,805.86		
COMMON STOCK		0.00		
CURRENT INCOME		58,217.39		
TOTAL CAPITAL			$	577,023.25
STATEMENT OUT OF BALANCE				0.00
TOTAL LIABILITIES & CAPITAL			$	577,023.25

PREPARED WITHOUT AUDIT
FROM CLIENT INFORMATION
R. PETERS & ASSOCIATES, LTD

WAUPUN HOCKEY ASSOCIATION INC
INCOME STATEMENT
FOR THE PERIOD ENDED June 30, 2022

	1 Month Ended Jun. 30, 2022	Pct	11 Months Ended Jun. 30, 2022	Pct
REVENUE	$ 2,614.61	100.00	$ 136,060.47	100.00
OPERATING EXPENSES				
ADVERTISING	$ 0.00	0.00	$ 0.00	0.00
WAGES	0.00	0.00	0.00	0.00
POSTAGE/FREIGHT	14.00	0.54	142.00	0.10
POSTAGE	0.00	0.00	0.00	0.00
OFFICE SUPPLIES	0.00	0.00	95.94	0.07
INSURANCE	0.00	0.00	6,059.00	4.45
OCCUPANCY	(704.44)	(26.94)	14,153.49	10.40
CABLE TV	0.00	0.00	0.00	0.00
WEBSITE EXPENSE	0.00	0.00	0.00	0.00
TELEPHONE, INTERNET & CABLE TV	0.00	0.00	2,508.01	1.84
EQUIP MAINT&RNT	1,974.19	75.51	17,034.84	12.52
ACCOUNTING FEES	260.00	9.94	2,409.00	1.77
ADVISORY FEES	0.00	0.00	0.00	0.00
SUPPLIES	107.81	4.12	278.40	0.20
CONFERENCES,CONVENTIONS,MEET	0.00	0.00	386.22	0.28
REG - FEES - TOURN EXPENSES	0.00	0.00	22,795.81	16.75
REFEREE/INSTRUCTOR PAY	0.00	0.00	9,390.00	6.90
SALES TAX EXPENSE	0.00	0.00	0.00	0.00
DUES/PROMO/SUBSC	0.00	0.00	1,313.32	0.97
PRINTING & REPRODUCTION	0.00	0.00	0.00	0.00
MISCELLANEOUS	0.00	0.00	0.00	0.00
TRAVEL	0.00	0.00	156.83	0.12
LICENSES	498.00	19.05	568.00	0.42
SANITATION	0.00	0.00	0.00	0.00
BANK/CR CARD FEES	0.00	0.00	632.22	0.46
TOTAL EXPENSES	$ 2,149.56	82.21	$ 77,923.08	57.27
OPERATING INCOME	$ 465.05	17.79	$ 58,137.39	42.73
OTHER INCOME	$ 10.00	0.38	$ 80.00	0.06
OTHER EXPENSES	0.00	0.00	0.00	0.00
TOTAL OTHER	$ 10.00	0.38	$ 80.00	0.06
NET INCOME	$ 475.05	18.17	$ 58,217.39	42.79

PREPARED WITHOUT AUDIT
FROM CLIENT INFORMATION
R. PETERS & ASSOCIATES, LTD

WAUPUN HOCKEY ASSOCIATION INC
INCOME STATEMENT DETAIL
FOR THE PERIOD ENDED June 30, 2022

	1 Month Ended Jun. 30, 2022	Pct	11 Months Ended Jun. 30, 2022	Pct
REVENUE				
CONTRIBUTIONS & GRANTS	$ 2,391.57	91.47	$ 32,272.39	23.72
PROGRAM SERVICE REVENUE	(370.33)	(14.16)	33,155.38	24.37
MEMBERSHIP DUES	646.05	24.71	38,165.11	28.05
FUNDRAISING	333.63	12.76	36,275.98	26.66
LESS: FUNDRAISING EXPENSES	0.00	0.00	(4,642.60)	(3.41)
INVENTORY SALES	(0.20)	(0.01)	33,885.35	24.90
LESS:COGS FOR SALES OF INVENT	(386.11)	(14.77)	(33,061.89)	(24.30)
OTHER REVENUE	0.00	0.00	10.75	0.01
TOTAL REVENUE	$ 2,614.61	100.00	$ 136,060.47	100.00

PREPARED WITHOUT AUDIT
FROM CLIENT INFORMATION
R. PETERS & ASSOCIATES, LTD

SEPTEMBER 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	01	02	03
04	05	06	07	08	09 FDL Fall Fire Up	10 **Volk Fest 10am to 11pm**
11 FDL Fall Fire Up Compressor Start-up	12 **Board Pull out**	13	14	15	16 **Board setup**	17
18	19	20	21	22	23 **Ice Painting**	24
25	26	27	28 515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	29 515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	30 5-645 Open Youth Hockey 7pm WFSC	01

OCTOBER 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26	27	28	29	30	01 8am WFS 1p-3p Skills Session Open 330p-8p
02 Open 8a-630p 7pm WFS	03 330p Captains 515p Cross Ice 615p Squirt A&B 730 Squirt A&B	04 515p GOALIES 615p PeeWee 730p Bantam	05 530p WFSC	06 515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	07 5-645 Open Youth Hockey 7p WFSC	08 8am WFS Open 11a-3p 1p-3p Skills Session Open 330p-8p
09 Open 8a-630p 7pm WFS	10 330p Captains 515p Cross Ice 615p Squirt A&B 730 Squirt A&B	11 515p GOALIES 615p PeeWee 730p Bantam	12 530p WFSC	13 515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	14 **H.S. clear ice by 4pm** **Cowan 19U Girls tournament**	15
16 **Cowan 19U Girls Tournament** 7pm WFS	17 330p Captains 515p Cross Ice 615p Squirt A 730 Bantam	18 515p GOALIES 615p Squirt B 730p PeeWee	19 530p WFSC	20 515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	**21** **Hockey Unlimited**	22 8am WFS 245p-415p Skills Session **Cowan Games 1130a, 115p, 430p, 615p**
23 **Cowan Games 9a, 1145a, 130p, 315p** 445p Public Skate (First one) 7pm WFS	24 330p Captains 515p Cross Ice 615p Squirt A 730 Bantam	25 515p GOALIES 615p Squirt B 730p PeeWee	26 530p WFSC	27 515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	28 **H.S. clear ice by 4pm** **2-Day Adult tournament**	29
30 **Open 8a-4p** 5p-7p Halloween Skate 7pm WFS	31 515p Cross Ice 615p Squirt A 730 Bantam					

NOVEMBER 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31	01	02	03	04	05
			330p H.S.			8am WFS
	515p Cross Ice	515p GOALIES	530p WFSC	515p Cross Ice	515p Public Skate	11am THFF/ ATOMS
	615p Squirt A	615p Squirt B		615p Squirt a&b		1245 CI
	730 Bantam	730p PeeWee		730p Pee Wee		230p SA
	830 Open	830 Open		830p Bantam	7p WFSC	415p SB
						530p PeeWee
						7p Bantam
						Opening Day!
06	07	08	09	10	11	12
9a Open			330p H.S.			8am WFS
1015a CI	515p Cross Ice	515p Skills Session	530p WFSC	515p Cross Ice	515p Public Skate	11am LTS
1115a SB	615p Squirt A	615p Squirt B		615p Squirt a&b		1245p CI
1230pm SA	730 Bantam	730p PeeWee		730p Pee Wee		2p SA
2p PeeWee	830 Open	830 Open		830p Bantam		315p Bantam
315p Bantam					7p WFSC	445p CI
445p Public Skate						6p SA
7pm WFS						715p Bantam
						8pm Open
13	14	15	16	17	18	19
9a Open			330p H.S.		H.S. clear ice by 4	
1015a Open	515p Cross Ice	515p GOALIES	530p WFSC	515p Cross Ice		FDL 14U Girls Tournament
1115a SB	615p Squirt A	615p Squirt B		615p Squirt a&b		
1230pm PeeWee	730 Bantam	730p PeeWee		730p Pee Wee	530pm FDL 14U Girls	
2p SB	830 Open	830 Open		830p Bantam		
315p PeeWee						
445p Public Skate						
7pm WFS						
20	21	22	23	24	25	26
			330p H.S.			8am WFS
FDL 14U Girls Tournament	515p Cross Ice	515p Cross Ice	530p WFSC		515p Public Skate	11am LTS
	615p Squirt a&b	615p Squirt a&b				1245p CI
	730p Pee Wee	730p Pee Wee		Thanksgiving		2p SA
	830p Bantam	830p Bantam				315p Bantam
						445p CI
445p Public Skate						6p SA
7pm WFS						715p Bantam
						8pm Open
27	28	29	30	01	02	03
9a Open		330p H.S.				
1015a Open	515p Cross Ice	515p Skills Session	530p WFSC			
1115a SB	615p Squirt A	615p Squirt B				
1230pm PeeWee	730 Bantam	730p PeeWee				
2p SB	830 Open	830 Open				
315p PeeWee						
445p Public Skate						
7pm WFS						

SUNDAY

Break for skill competition

145p-215p

330p-4p

630p-7p

DECEMBER 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	29	30	01	02	03
	330p H.S.					8am WFS
			530p WFSC		515p Public Skate	1pm Varsity (Northland Pines)
				6p JV (Shawano)		
					7p WFSC	4p CI 515p SB
						630 PeeWee 745 SB
04	05	06	07	08	09	10
915a Open 1030a Open 1115a SA 1230pm Bantam 2p SA 315p Bantam 445p Public Skate 7pm WFS	330p H.S. 515p Skills Session 615p Squirt B 730p PeeWee 830 Open	515p Cross Ice 615p Squirt A 730p Bantam 830 Open	530p WFSC	515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	7pm Varsity (Tomah) Skate w/Warrior & Youth night	8am WFS 11am LTS 1245p CI 2p SB 315p PeeWee 430p CI 545p SB 7p PeeWee 8p Open
11	12	13	14	15	16	17
915a Open 1030a Open 1115a SA 1230pm Bantam 2p SA 315p Bantam 445p Public Skate 7pm WFS	330p H.S. 6p JV (Kenosha) 745 PeeWee&Bantam No CI practice this week	5pm SA&SB 7pm Varsity (Oshkosh)	530p WFSC	5pm SA&SB 7pm JV (Cedarburg)	**H.S. clear ice by 4pm** Squirt A & B Tournament	
18	19	20	21	22	23	24
915a Open 1030a Open 1115a SA 1230pm Bantam 2p SA 315p Bantam 445p Skate w/Santa 7pm WFS	330p H.S. 530p JV (St. Mary's Springs) 730pm PeeWee 830pm Bantam	515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	530p WFSC	515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	7pm Varsity (Beaver Dam)	Christmas
25	26	27	28	29	30	31
Christmas	330p H.S. 530p Goalies 630p Pee Wee 730p Bantam	515p Cross Ice 615p Squirt b 730 Squirt a	530p WFSC	515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	**530p-745p Public Holiday Skate**	New Years Eve

JANUARY 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01 **New Years Day**	02 330p H.S. 515p Cross Ice 615p Squirt A&B 730 PeeWee 830 Bantam	03 530pm JV (DeForest) 730 PeeWee 830 Bantam	04 530p WFSC	05 7p Varsity (Monona Grove) Youth Night	06 515p Public Skate 715p WFSC	07 8am WFS 11am LTS 1245p CI 2p SA 315p Bantam 445p SA 7pm Alumni Game
08 9a Open 1015a Open 1115a SB 1230pm PeeWee 2p SB 315p PeeWee 445p Public Skate 7pm WFS	09 330p H.S. 5pm JV (Muskego) 630p Squirt A&B 730 PeeWee 830 Bantam	10 7pm Varsity (Muskego)	11 330p H.S. 530p WFSC	12 515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	13 PeeWee & Bantam Tournament	14
15 Pee Wee & Bantam tournament 7pm WFS	16 330p H.S. 530pm JV (ST Mary Springs) 730p PeeWee 830p Bantam	17 5pm CI 7pm Varsity (Springs)	18 530p WFSC	19 5pm SA&SB 7pm Varsity (Stoughton)	20 **H.S. clear ice by 4pm**	21 8am WFS 11am LTS 1230p CI 145p SA 3p Bantam 430p SA 7pm Varsity (McFarland) PinkOut
22 9a Open 1015a Open 1115a SB 1230pm PeeWee 2p SB 315p PeeWee 445p Public Skate 7pm WFS	23 330p H.S. 515p Cross Ice 615p Squirt A 730 Bantam 830 Open	24 515p Skills session 615p Squirt B 730p PeeWee 830 Open	25 330p H.S. 530p WFSC	26 530pm JV (Fondy) 730p Pee Wee 830p Bantam	27 7pm Varsity (Antigo)	28 8am WFS 11am LTS 1245p CI 2p SA 315p Bantam 445p CI 6p SA 715p Bantam
29 9a Open 1015a Open 1115a SB 1230pm PeeWee 2p SB 315p PeeWee 445p Public Skate 7pm WFS	30 330p H.S. 5pm JV (Baraboo) 730 PeeWee 830 Bantam	31 515p Cross Ice 615p Squirt A&B 730p PeeWee 830 Open	01 330p H.S.	02	03	04

FEBRUARY 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	01	02	03	04
	330p H.S.				**H.S. clear ice by 4pm**	
			530p WFSC	515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	Play Downs	
05	06	07	08	09	10	11
			330p H.S.			8am WFS
Play Downs	515pm Cross Ice 630p Squirt A&B 730pm Pee Wee 830pm Bantam	530p JV (Oshkosh) 7pm Pee Wee 8pm Bantam	530p WFSC	515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	515p Public Skate	11am LTS 1230p CI 145p SB 3p PeeWee
515 Public Skate 7pm WFS					7p WFSC	415p CI 530p SB 645p PeeWee
12	13	14	15	16	17	18
			330p H.S.			8am WFS
915a Open 1030a Open 1115a SA 1230pm Bantam 2p SA 315p Bantam 445p Public Skate 7pm WFS	515 Squirt B 615p Pee Wee 730 Open	515p Cross Ice 615p Squirt A 730p Bantam	530p WFSC	515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	515p Public Skate 7p WFSC	11am LTS 1245p CI 2p SB 315p PeeWee 430p CI 545p SB 7p PeeWee 8p Open
19	20	21	22	23	**24**	25
	330p H.S.				**H.S. clear ice by 4pm**	
915a Open 1030a Open 1115a SA 1230pm Bantam 2p SA 315p Bantam 445p Public Skate 7pm WFS	515 Squirt B 630p Pee Wee 730 Open	515p Cross Ice 615p Squirt A 730p Bantam	530p WFSC	515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	**FDL Mite Jamboree**	
26	27	28	01	02	03	04
	330p H.S.					Feb 1 Varsity away Feb 4 Varsity away Feb 5 Varsity away Feb 8 JV away
FDL Mite Jamboree	515 Squirt B 630p Pee Wee 730 Open	515p Cross Ice 615p Squirt A 730p Bantam				
515 Public Skate 7pm WFS						

MARCH 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	01	02	03	04
	330p H.S. Captains?					
		515p Cross Ice 615p Squirt A 730p Bantam	530p WFSC	515p Cross Ice 615p Squirt a&b 730p Pee Wee 830p Bantam	515p Public Skate 7p WFSC	Hosting Girls U10 A State
					State Tournament Squirt & Bantam	
05	06	07	08	09	10	11
	330p H.S. Captains?					
Hosting Girls U10 A State 7pm WFS	5p Open 630p Open 730p Open	5p PeeWee 615p Open 730p Open	530p WFSC	515p PeeWee Ice Out Party	530p WFSC Figure Skaters Setup for competition State tournament PeeWee	8am WFS
12	13	14	15	16	17	18
Figure Skater Competition	5pm Open	5pm WFSC	530p WFSC	5pm Open	S.C.T.	
19	20	21	22	23	24	25
S.C.T.	5pm Open	5pm WFSC	5pm WFSC	5pm Open	5pm WFSC	8am WFS
26	27	28	29	30	31	01
8am WFS	5pm WFSC	5pm WFSC	5pm WFSC	5pm WFSC	Figuer Skater Show	

APRIL 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	01
					Figuer Skater Show	
02	03	04	05	06	07	08
Figuer Skater Show					**Board Pull Out**	
Compressor Shut Down						
09	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Waupun Hockey Association Program

Benefits to our Youth

The Waupun Hockey Association is a community-based, non-profit organization formed to instruct, promote and provide an affordable opportunity for our youth to compete in the sport of ice hockey and figure skating. We are committed but not limited to:

- Putting our children's interest first!
- Providing a positive and proactive environment of learning how to skate and the great game of hockey.
- Promoting and developing mutual respect for our facility, for ourselves, our teammates, our coaches, our community, and our competition.
- Providing and promoting a safe environment for everyone.
- Providing an environment where all members are welcome and encouraged to: ask questions, communicate concerns, and offer suggestions.
- Developing life skills through building character, self-reliance, teamwork, and the value of hard work and honesty.
- Developing our youth as they as team members teaching them lifelong skills through building character, self-reliance, teamwork, and the value of hard work and honesty. They will carry these skills with them in the future as they grow and become coworkers, coaches, start careers or businesses and families of their own.
- Keeping our youth active as hockey is one of greatest interval training you can do in the fitness world. Skating and hockey combine numerous areas of our youth from mental agility, decision making/reasoning skills, fitness and strength. We attempt to reach out and make skating available to all youth in our community.
- Remembering that we are only successful as long as our youth are having fun!

Achievements (Season ending 2022)

- Squirt B State Tournament Qualified
- PeeWee A State Tournament Qualified
- Bantam A State Tournament Qualified
- Zero Safe Sport Complaints/Investigations
- More Ice time available/filled then the last 5 years
- Special Public skate events added including Halloween costume contest, Skate with Santa & New Years Eve party.
- Youth Nights at High School games
- Senior Class tournament was brought back
- Condenser was replaced at the start of the season
- Adult tournament & Alumni game brought back
- Youth tournaments hosted at each level
- Upgraded internet network/Streaming H.S. games & youth tournaments
- Added an End of the season Softball fundraiser
- LTS offered 2 days, 1-ran by hockey, 1-ran by figure skating

Goals (Season starting 2022)

- Floor replacement fundraising outreach (replacement 2026)
- Partnering and helping bring back Volks Fest to the community
- Continue to fill ice time/utilize the rink to the best of our ability
- Concession stand refaced (in progress)
- Partnering with other rinks to fill ice time to help promote/grow the sport
- On going outreach by participating in local events and parades
- Continue to keep our youth participant numbers high!

AGENDA SUMMARY SHEET

MEETING DATE: August 10th,2022

AGENDA SECTION: Discussion

PRESENTER: Jeff Daane

TITLE: Storm System Problem Areas due to water entering the storm sewer from farmland

DEPARMTENT GOAL(S) SUPPORTED *(if applicable)*	**FISCAL IMPACT**	

ISSUE SUMMARY

The City continues to see considerable flooding and high water flow from area farm fields. The impacts are flooded streets, flooded parking lots and some basement flooding. We have had MSA look into a few of these areas in the past and have now just revisited these areas.

The area of Hazel/Lincoln and Pleasant Ave. has roughly 40 acres that drains toward the City. This floods W. Lincoln St. that is closed for periods of time. The Rensway apartments has significant flooding sometimes a few feet of water.

The area of Edgewood Dr. has roughly 50 acres that drain into the City. When this subdivision was built a 24" main was installed at the field edge. This is just not large enough to handle the flows. Water flows around numerous homes in the area. Some owners have tried to install a berm to divert the water flow. The water floods the street with a high volume of water.

The area of Hawthorne Dr. has been an issue as well. The farm field to the North sheds water onto and around homes. This also floods the street bringing in dirt and debris. The water has significant flow and causes basements to flood as well.

What if anything can be done. We have looked into a few options with MSA.

The area of Hazel/Lincoln and Pleasant Ave. could we look at upsizing pipes, adding additional pipes or purchasing property to add ponds. If you look at the map some of the best options look at adding another pipe to the Harris Creek and a bypass to the south of the homes along W. Lincoln St. We could look at purchasing land just south of Rensway and adding a large pond, possibly holding and slowing the flow down of the current water so that the current pipes could function as they are.
If the best option is adding another pipe in the easement to the creek we would want to do this before CWC starts their ballfield project.

The Edgewood area we can look at adding a large pond in the SW corner of the field and build a berm along some of the properties. This can capture most of the water and we can control the flow at which the pond outlet lets the water out. This pond can be sized for the entire field area that way if this field is ever developed this could be the storm water control.

The Hawthorne Dr. project has been looked in the past as well. The most studied idea adds a berm and drainage ditch along the properties. This could divert the water to the storm that dead ends on Summer Ave. Another option would be to purchase a larger area to the west of Rosewood Dr. and install a pond. We would then need divert the water either through a ditch in the open lots or adding another storm pipe along Summer Ave. to Rosewood Dr.

As you can see all of these project would require some type of land acquisition. In some talks with the property owner's the conversations have not gone well.

All would require some significant work with ponds and pipe installation.

The City does have a storm water utility that has been used for projects like the Harris Creek work and Madison St reconstruction projects.

We do have an agreement with the DNR on a storm water quality plan. This plan as you know was slowed down due to limited funds. We will continue to apply for grants through the DNR, these grants only pay 50% up to $150,000. Most ponds are going to cost significantly more. The storm water utility will have all it can do to try and support this work. We are going to need to look at the current rates and the future projects we are looking at to see if these rates need to be increased.

This does not leave much if any money from that fund to help out with projects like these. That would mean doing projects like this would need some type of borrowing and impact our capital project needs.

STAFF RECCOMENDATION:

ATTACHMENTS:
Hazel / Pattee Area
Edgewood Dr.
Hawthorne Dr

RECCOMENDED MOTION:

AGENDA ITEM:	#14

DATE:	MAY 8, 2018

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MEMO

To: Dick Flynn, Director of Public Works, City of Waupun

From: Uriah Monday, PE, CFM, MSA Professional Services

Subject: Storm Sewer Capacity Improvements
Hazel/Pattee Neighborhood and West Lincoln Street

Date: March 29, 2016

Existing System Description

West Lincoln Street contains a main storm sewer trunk line that conveys storm flow from the Hazel Street/Pattee Drive neighborhood westerly to Harris Creek (approximately 750 feet west of Mulder Street). Along this corridor, the street grade drops a total of 5 feet over about 2,300 feet of distance – a net gradient of about 0.2%. There are several sag points along the corridor as the street grade rises and falls. Along the corridor there is also a storm sewer trunk line, which varies somewhat in slope but generally follows the net street gradient of 0.2%. A map of the area entitled "Existing Storm Sewer System" is attached as **Exhibit A** to this memo. The map demonstrates aerial contours (2' vertical interval), the alignment of the storm sewer, and estimated surcharged capacity of several representative segments of the system. At the downstream end (in the vicinity of Pleasant Avenue and Mulder Street, and westerly to the creek) the system has a capacity of approximately 20 cubic feet per second (CFS). For the majority of the system's length, it has a capacity of approximately 5 CFS.

Watershed Hydrology and Problem Statement

This storm sewer system services approximately 75.1 acres of developed and undeveloped lands. Along Lincoln Street and within one block north and south, there is mostly single-family home development, with an area of apartments southeast of the Lincoln/Rens intersection and a school parking lot northwest of the Pleasant/West intersection. The total amount of developed area is about 33.8 acres. South of the dead end of Pattee Drive, there is mainly agricultural land with sparse development, totaling 41.3 acres. A hydrologic analysis to determine flow rates from this watershed to each of eleven (11) separate inlet points was conducted with HydroCAD software for 1-year, 2-year, 5-year, and 10-year 24-hour rainfall events using the most up-to-date NOAA Atlas 14 Volume 2 rainfall data. **Note the 10-year storm event is commonly used as the design storm for storm sewers, and hereinafter all quoted runoff rates are for the 10-year rainfall event.** Several areas with flooding concerns were noted, either as reported by City staff or as inferred from model results:

- Excessive runoff from the agricultural lands causing flooding at the end of Pattee Drive (City has constructed a large breaker-run stone check dam to slow and detain flow)
- Street flooding at low points on Hazel Street and Lincoln Street
- Parking lot flooding at apartments south of Lincoln Street at Rens Way
- Parking lot flooding in the Central Wisconsin Christian School parking lot near Pleasant Avenue

- Flooding in a low area on the interior of the block bounded by West/Pleasant/Mulder/Lincoln Streets

A map of the area entitled "Contributing Watersheds & Runoff Rates" is attached as **Exhibit B** to this memo. The map lists runoff rates from the various land use areas, and lists cumulative peak flow rates at several points along the system. Note that the cumulative flow rates in the storm sewer are lower than the generated runoff amounts; this is due to the storage effect of ponding in existing roadway sag points and natural low areas. It can be seen that the contributing runoff rates are greatly in excess of existing storm sewer's capacity. For example:

- The contributing runoff from the agricultural land south of Pattee Drive, even when considering the effect of ponding behind the check dam in the low area of the field, is **three times greater** than the receiving pipe's capacity.
- At a rate of 2.8 CFS per acre of developed area, the storm sewer in Lincoln Street would be at capacity with only two acres of contributing area; by comparison, the block bounded by Hazel/Pattee/Lincoln/Beaver Dam Streets is 5 acres.

Stormwater System Improvement Strategies

The watershed runoff model demonstrates that multiple system conditions are causing the majority of the system's problems. Therefore the overall system improvement must be made up of several strategies addressing multiple contributing areas. These improvements are presented in an incremental step-by-step approach below, with the goal of achieving a condition where the ponding of water in streets is eliminated in a 10-year storm event.

- **Improvement Concept #1: Detention Basin at Pattee Drive**
  - The existing storm sewer capacity in Pattee Drive is approximately 5 CFS as shown on Exhibit A. To limit the impact of runoff from the existing agricultural lands south of Pattee Drive a detention basin should be constructed, replacing the stone check dam that exists at this location now, and designed to limit peak discharge to 5 CFS. This would avoid the need for replacing the storm sewer in Pattee Drive itself. Such a basin would be approximately 1 acre in size and would be excavated to approximately 4 feet below the existing ground level. Estimated cost for land acquisition and construction of this basin is $80,000. Engineering design fees (from plan production through bidding) are preliminarily estimated to be $8,000.
  - This improvement, while reducing rates to a tolerable level at the Pattee/Hazel intersection, does not by itself alleviate excessive flows to Lincoln Street. Its impact on flow rates to Lincoln Street is as follows (note that all flow rates remain considerably higher than the existing system capacity of 5 CFS):
    - At Lincoln and Pattee, flow rates will be cut to 15 CFS vs. 29 CFS in the existing condition.
    - At Lincoln and Rens, flow rates will be cut to 26 CFS vs. 43 CFS in the existing condition.
    - Mid-block between Mulder and West Streets, flow rates will be cut to 41 CFS vs. 59 CFS in the existing condition.

- **Improvement Concept #2: Disconnection of Rensway Apartments Storm Sewer**
  - The existing Rensway Apartments and the agricultural areas to the south collectively generate about 15 CFS of runoff. There is a detention basin on the westerly perimeter of the site that reduces rates to approximately 6 CFS before discharging to the Lincoln Street storm sewer. To reduce the impact of runoff from the apartments and adjacent agricultural lands, the pipe discharging from the basin could be disconnected and re-routed westerly. To accommodate this, a new storm sewer would need to be constructed, running parallel to Lincoln Street but south of the existing residential lots, then turning northward to end at the dead-end of Lincoln. Estimated cost for land acquisition and construction of the storm sewer is $135,000. Engineering design fees (from plan production through bidding) are preliminarily estimated to be $12,000.
  - This improvement, while somewhat reducing stormwater contributions to Lincoln Street, does not alleviate excessive flows to Lincoln Street even when combined with Concept #1, above. The cumulative impact on flow rates to Lincoln Street if both concepts are implemented is as follows (note that all flow rates remain considerably higher than the existing system capacity of 5 CFS):
    - At Lincoln and Pattee, flow rates will be cut to 15 CFS vs. 29 CFS in the existing condition.
    - At Lincoln and Rens, flow rates will be cut to 23 CFS vs. 43 CFS in the existing condition.
    - Mid-block between Mulder and West Streets, flow rates will be cut to 39 CFS vs. 59 CFS in the existing condition.

- **Improvement Concept #3: Upsize of Storm Sewer between Lincoln St. and Pleasant Ave.**
  - Where there are storm sewer capacity limits throughout a system, there are occasionally cases where relieving a particular constriction would have a benefit to the system as a whole – a "weakest link" scenario. MSA explored a concept of upsizing the existing storm sewer that runs northerly from Lincoln and Pleasant at the location mid-block between West Street and Mulder Street. The aim of this concept was to check whether relieving this segment would have enough effect on the remainder of the system in Lincoln to alleviate street flooding. It was determined that while an upsize to this segment would sufficiently relieve street flooding in the area of Lincoln between West Street and Mulder Street, the relieved hydraulic grade line would not extend sufficiently far upstream (easterly) in the system to have any benefit to the Rens/Lincoln intersection or the low area on Lincoln between Rens and Pattee. Therefore this concept was not pursued further.

- **Improvement Concept #4: Reconstruction of Lincoln Street Storm Sewer**
  - Because the previous three concepts presented cannot reduce the contribution of stormwater to Lincoln Street to an acceptable level, an alternative which also increases the capacity of the storm sewer must be introduced. Referencing the stormwater contribution rates reported in Concept #2, above:
    - the capacity east of Rens must be increased to about 15 CFS,
    - the capacity immediately west of Rens must be increased to about 23 CFS, and
    - the capacity from the low point between West Street and Mulder Street and westerly must be increased to about 39 CFS.

This would require storm sewer sized in the range of 30" diameter RCP on the easterly end and 42" RCP on the westerly end. In this stretch of Lincoln Street, however, high bedrock exists. When the sanitary sewer and water main utility in this area were constructed, the bedrock was avoided and therefore the service laterals are higher than normal. Reconstructing storm sewer in this vicinity to diameters as indicated above would require excavation to elevations 18" to 24" lower than the existing storm sewer; this excavation would incur excessive costs due somewhat to rock excavation but more so due to the potential for replacing (lowering) sewer and water lines as well – particularly between Rens Way and Mulder Street. Therefore, the concept of replacing the entire storm sewer in Lincoln Street was not pursued further, but was refined in an alternative concept presented below.

- **Improvement Concept #5: Construction of Lincoln Street Storm Sewer Bypass**
  - To avoid the issue of high sewer and water lateral interference discussed in Concept #4, the concept of creating a bypass route for an upsized storm sewer line was investigated. This bypass would follow a similar route as was presented in Concept #2 – following the rear of the existing residential lots southerly of Lincoln Street from Rens Way westerly. To fully utilize the capacity of this bypass, system upsizes east of Rens and west of Mulder would also be required. The system improvements would consist of:
    - An additional storm sewer parallel to the existing sewer west of Mulder Street (770 LF), sized at 29"x45" elliptical RCP (equivalent to a 36" round)
    - Construct the storm sewer bypass southerly of and parallel to Lincoln Street from Mulder Street easterly to Rens Way (1,490 LF), sized as a 29"x34" elliptical RCP
    - Abandon the storm sewer from the Rensway Apartments to Lincoln Street, replacing it with a 30" RCP running from Lincoln southerly in Rens Way (300 LF) and reconnecting the existing pond outlet to a new manhole near the apartment driveway entrance
    - Reconstruct the storm sewer in Lincoln Street from Rens Way easterly to Pattee Drive (710 LF), sized as a 30" round RCP. Note that this block has only three service laterals which are anticipated to be lower than the laterals on the blocks further west; therefore the additional deeper excavation is not anticipated to incur additional cost due to utility interference. If, prior to development of more comprehensive plans, it is determined that utility laterals would cause some interference, two alternatives appear feasible. One alternative would be to construct the storm sewer line in the northerly half of the street (or even in the terrace area) adjacent to the ball fields, which have no service laterals. A second alternative is to use a pair of parallel 19"x30" elliptical pipes instead of a single 30" pipe; the twin parallel pipes would be laid at the same depth as the existing storm sewer and would not require deeper excavation.
  - Estimated cost for land acquisition and construction of the storm sewer is $643,000. Engineering design fees (from plan production through bidding) are preliminarily estimated to be $53,000.
  - This improvement, in combination with construction of the pond discussed in Concept #1, alleviates the system in Lincoln Street to the point where street flooding should not occur in the 10-year event.

A map entitled "Storm Sewer System Improvements", attached as **Exhibit C** to this memo, shows the conceptual locations/layout of all the alternatives. It is **recommended** that:

- Concept #1 (detention pond at the south end of Pattee) be constructed, alleviating overload of the storm sewer system in Pattee Drive
- Concept #5 (new storm sewer within Lincoln Street east of Rens, and bypassing Lincoln Street west of Rens) be constructed, increasing system capacity within Lincoln Street and alleviating stormwater contributions to the problem area mid-block between West Street and Mulder Street
- Concept #2 (re-routing of Rensway Apartments pond outlet) should be implemented as a part of Concept #5.

The preliminary estimated construction cost for this recommendation is $778,000 and engineering design fees (from plan production through bidding) are preliminarily estimated to be $65,000.

Future Development Considerations

It can be anticipated that future development may occur in several areas, and there should be a strategy to address these future conditions. Each area is discussed briefly below along with a strategy to address the storm water impacts of development. Note that no immediate capital improvement or expenditure is necessary, and it is anticipated that the cost for implementing these strategies will be either borne solely by the development or by some future cost-sharing arrangement between the City and the development. A demonstration of the particular potential development areas is shown on the map entitled "Future Development Stormwater Management Limitations", attached as **Exhibit D** to this memo.

- The agricultural lands south of Pattee Drive, west of Beaver Dam Street, and east of Rens Way are likely to be developed at some point in time, as a mix of single-family, multi-family, and/or apartment residential development. Current City ordinance will require any development to limit peak flow rates to existing runoff conditions and detention ponds will be required within the development (conceptual locations are shown on the exhibit; actual future locations, sizes, and number of ponds may vary).
- The Central Wisconsin Christian School parking lot storm sewer appears to be slightly undersized, and appears to cause some ponding within the parking lot. This ponding limits the contribution to the City storm sewer to about 6 CFS in a 10-year event. In the case that the school reconstructs the lot in the future, some control should be implemented to prevent a greater runoff rate than 6 CFS from entering the City system.
- Similarly, the apartment complex south of Rens Way and Lincoln Street appears to have some ponding within the parking lot in the 10-year event, limiting the contribution to the City storm sewer to about 6 CFS. In the case that parking lot reconstruction occurs in the future, some control should be implemented to prevent a greater runoff rate than 6 CFS from entering the City system.

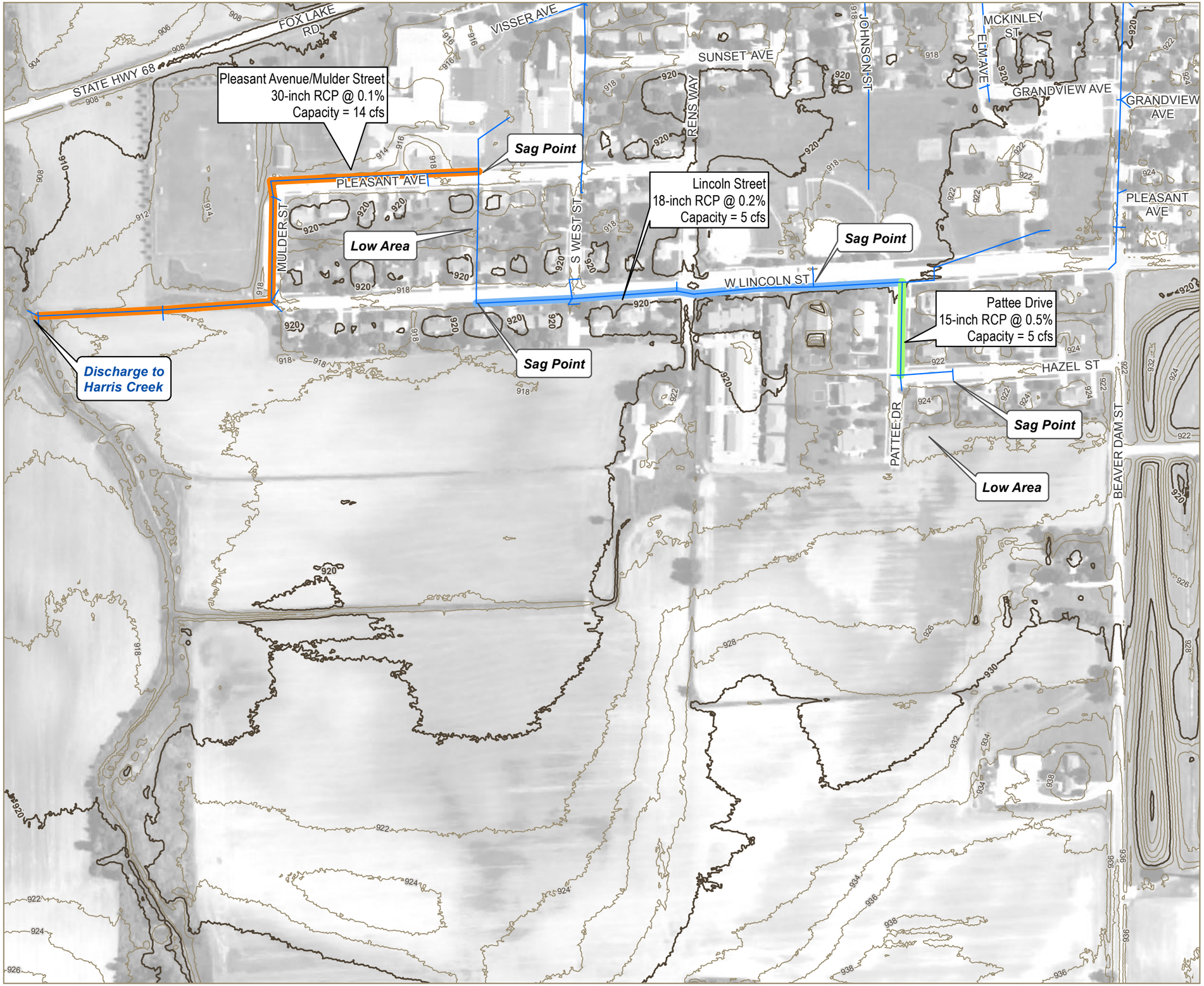
Citywide Stormwater Management Goals

Two final remarks should be made regarding the relationship of the storm water system improvements discussed in this memo to other Citywide storm water management goals:

- While it would have little to no impact on the size or cost of Lincoln Street storm sewer improvements, a detention basin could be constructed westerly of the end of Lincoln Street in order to reduce pollutant contributions to the Rock River watershed and help the City meet TDML requirements.
- Any detention basins constructed within the watershed could help to reduce peak runoff rates to the Harris Creek waterway. This may have some positive (albeit limited) impact on flooding concerns near Harris Avenue and Main Street.

EXHIBIT A: EXISTING STORM SEWER SYSTEM

HAZEL/PATTEE/ LINCOLN/PLEASANT STUDY AREA



- Existing Storm Lines
- Trunk Line
- Lincoln Street
- Pattee Drive
- Pleasant Avenue/Mulder Street

DATA SOURCES:
EXISTING STORM SEWER PROVIDED BY THE CITY.
AERIAL IMAGERY AND CONTOURS PROVIDED BY THE COUNTY.

CITY OF WAUPUN
DODGE COUNTY, WI

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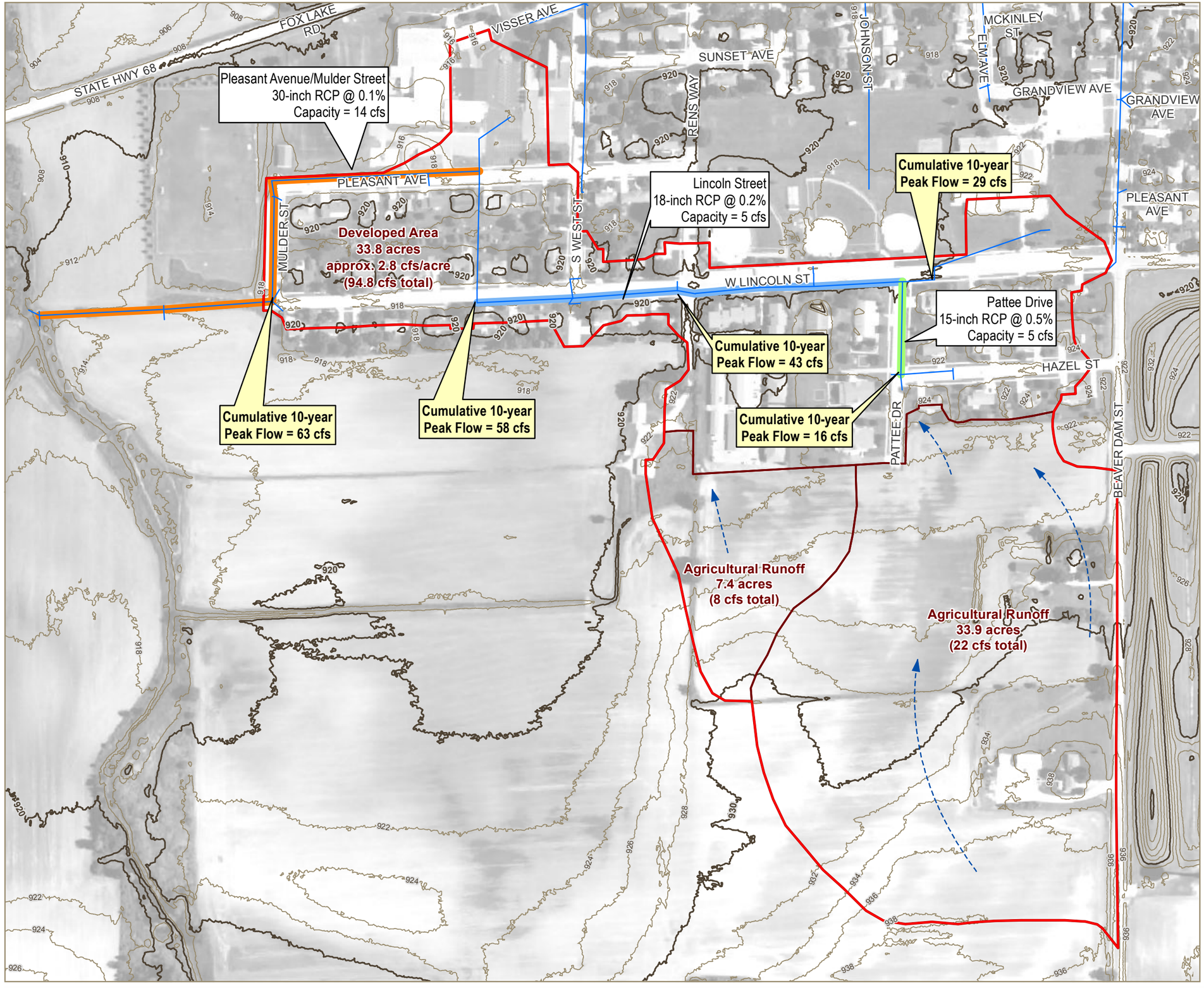
EXHIBIT B: CONTRIBUTING WATERSHEDS AND RUNOFF RATES

HAZEL/PATTEE/ LINCOLN/PLEASANT STUDY AREA



Contributing Watershed to Storm Sewer at Hazel/Pattee

Subwatershed

Existing Storm Lines

Trunk Line

Lincoln Street

Pattee Drive

Pleasant Avenue/Mulder Street

DATA SOURCES:
EXISTING STORM SEWER PROVIDED BY THE CITY.
AERIAL IMAGERY AND CONTOURS PROVIDED BY THE COUNTY.

CITY OF WAUPUN
DODGE COUNTY, WI

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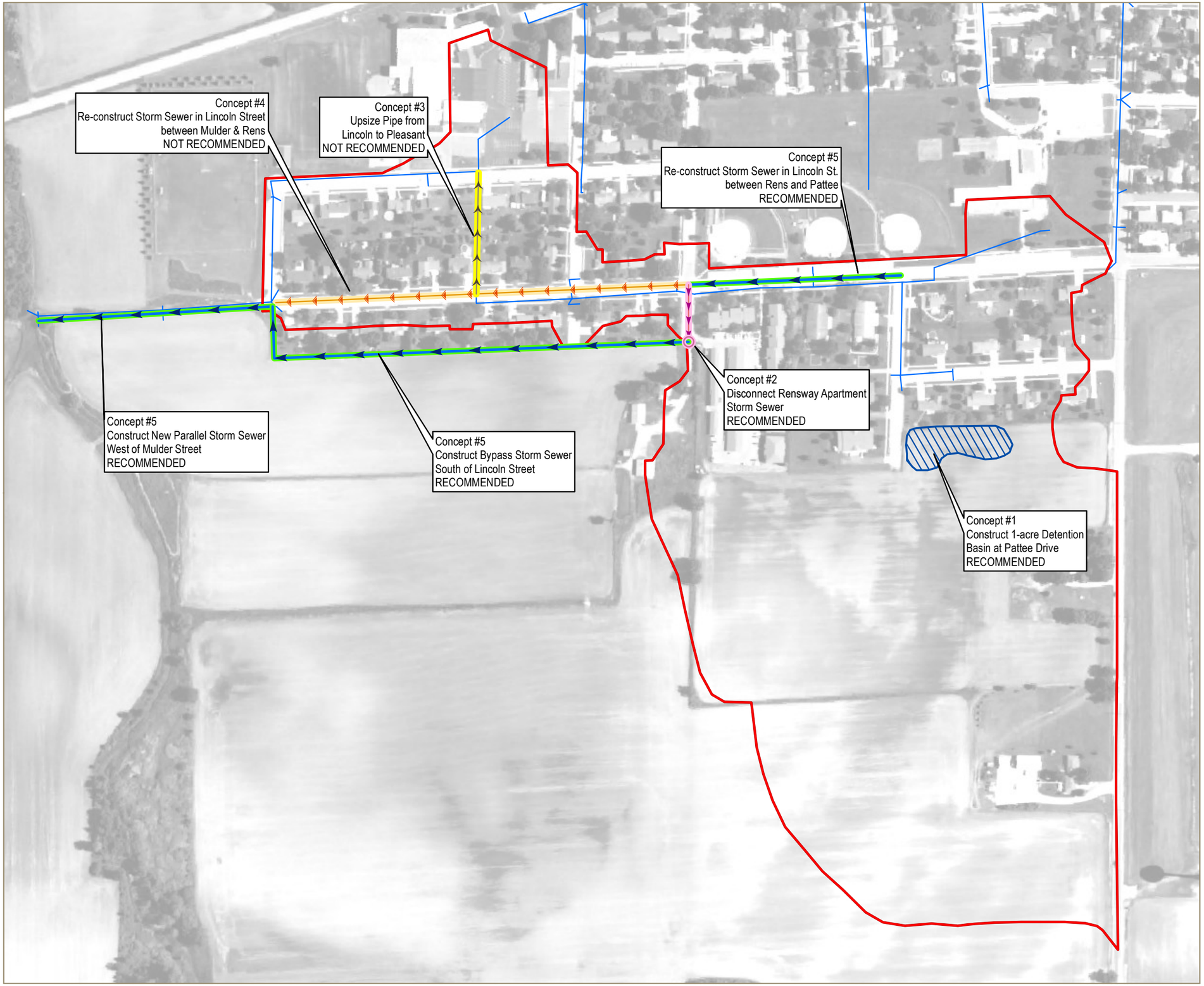
EXHIBIT C: STORM SEWER SYSTEM IMPROVEMENTS



HAZEL/PATTEE/ LINCOLN/PLEASANT STUDY AREA

- Contributing Watershed to Storm Sewer at Hazel/Pattee
- Existing Storm Lines

Proposed Improvements

- Concept #1
- Concept #2
- Concept #3
- Concept #4
- Concept #5

DATA SOURCES:
EXISTING STORM SEWER PROVIDED BY THE CITY.
AERIAL IMAGERY AND CONTOURS PROVIDED BY THE COUNTY.

CITY OF WAUPUN
DODGE COUNTY, WI

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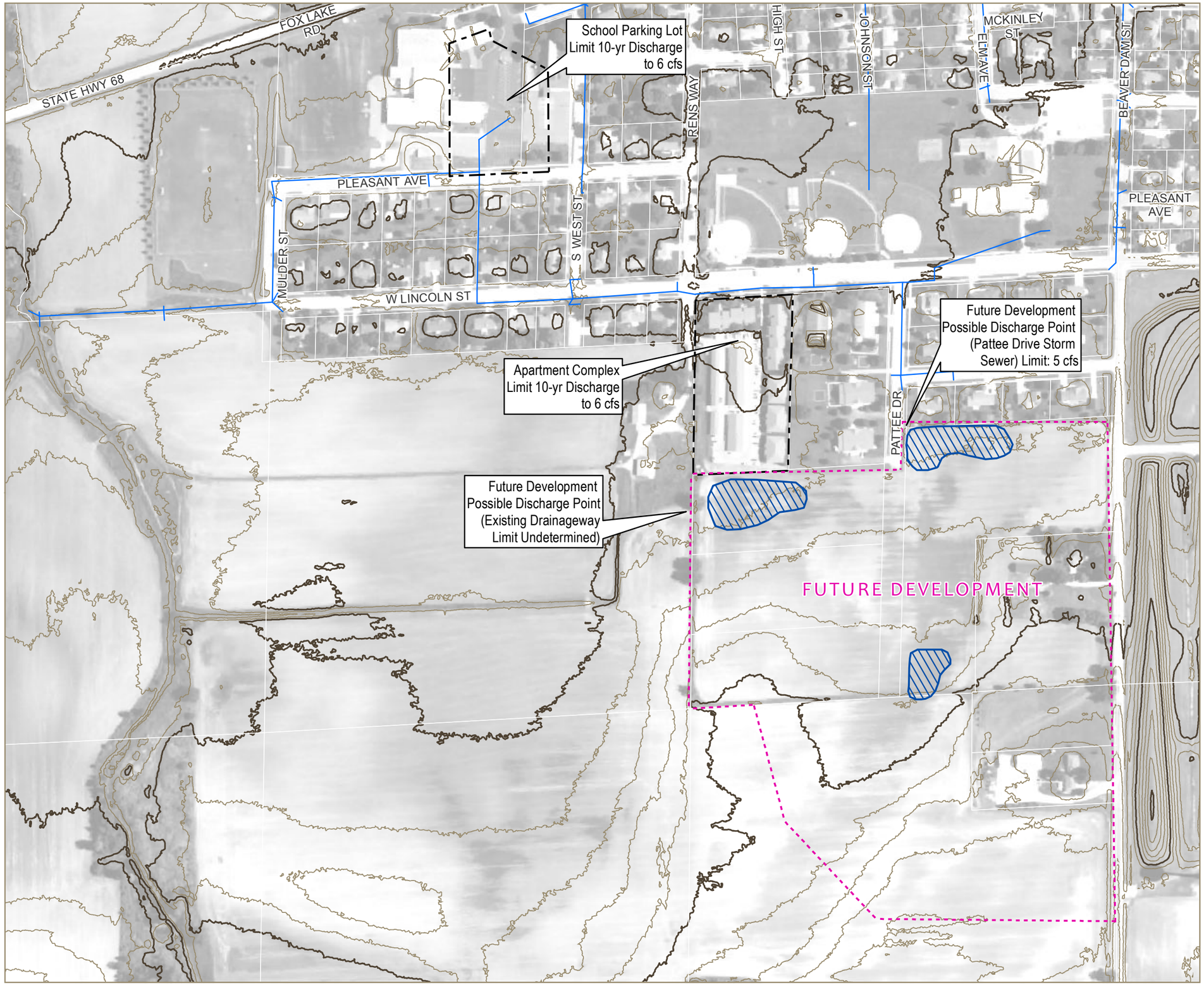
EXHIBIT D:
FUTURE DEVELOPMENT STORMWATER MANAGEMENT LIMITATIONS

HAZEL/PATTEE/ LINCOLN/PLEASANT STUDY AREA



- Existing Storm Lines
- Future Detention Basin by Developer (for concept only)

DATA SOURCES:
EXISTING STORM SEWER PROVIDED BY THE CITY.
AERIAL IMAGERY AND CONTOURS PROVIDED BY THE COUNTY.

CITY OF WAUPUN
DODGE COUNTY, WI

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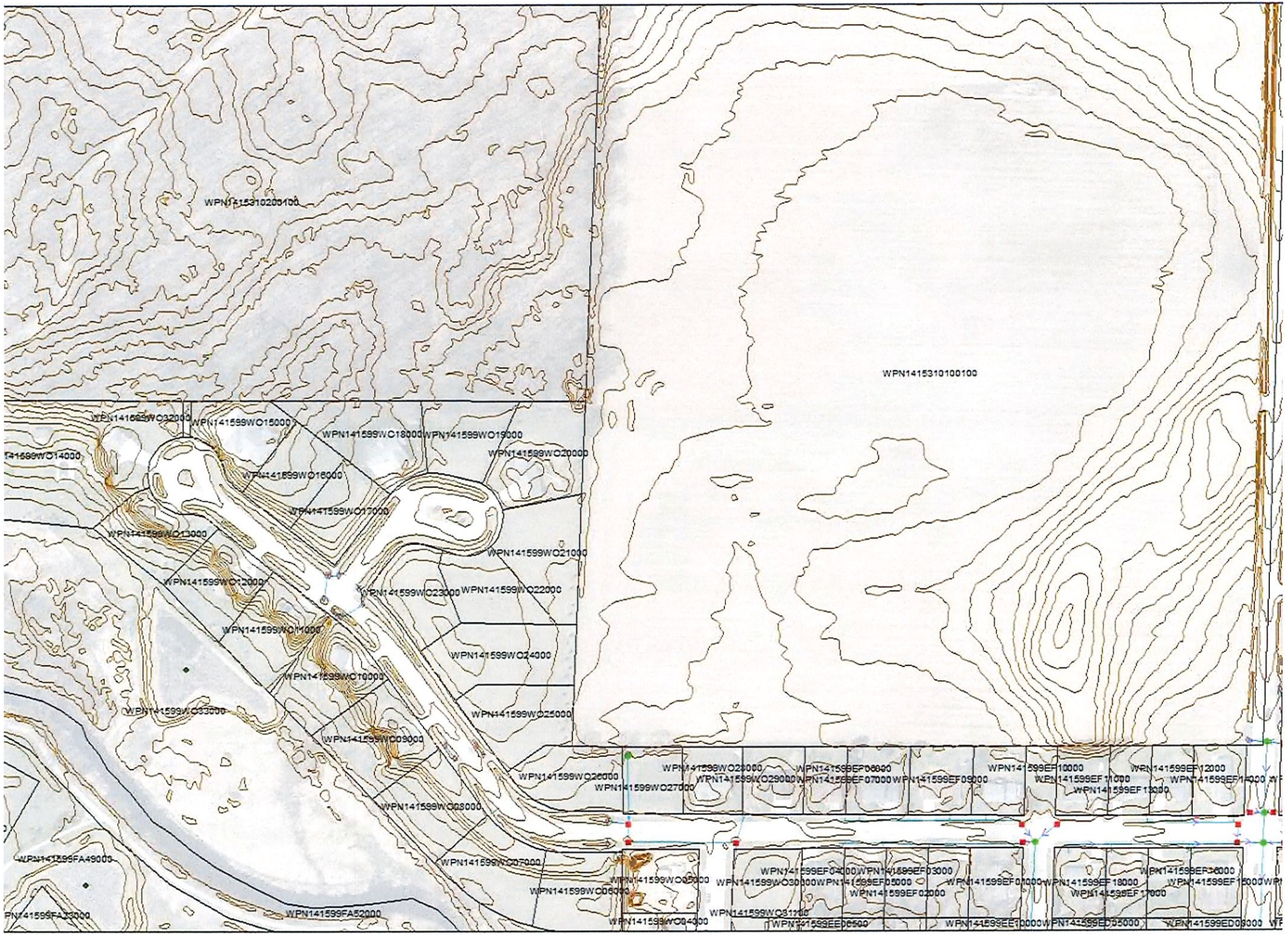
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MEMO

To: Dick Flynn, Director of Public Works, City of Waupun

From: Uriah Monday, PE, CFM, MSA Professional Services

Subject: Storm Sewer Capacity – Area North of Hawthorne Drive

Date: October 22, 2015

This memorandum documents the findings of a study of the drainage area tributary to the trunk storm sewer flowing down Autumn Avenue. The 50.2-acre study area is generally bounded by Hawthorne Drive on the north, Winter Avenue on the east, Summer Avenue on the west, and Bittersweet Lane on the south. The storm sewer system also collects runoff from agricultural lands behind the residential lots on the north side of Hawthorne Drive. A map of the area entitled "Storm System Overview" is attached to this memo which demonstrates the extents of the watershed boundary. It can be seen that while much of the agricultural area is able to drain either along side lot lines or is directed toward dead-end streets at Winter Avenue and Summer Avenue, some of the runoff area (about 2.2 acres) is directed to a low area behind 434 West Hawthorne Drive. At this location, there are two small drains that capture runoff; however, some flooding has been reported during heavy rains.

A hydrologic analysis to determine flow rates and runoff volumes from this watershed to each of the storm sewer segments was conducted using HydroCAD software. Additionally, a determination of the storm sewer system capacity from the location behind 434 West Hawthorne, within Hawthorne Drive itself, and down Autumn Avenue was included in the analysis. The analysis determined that system has 10-year capacity within most of Autumn Avenue and within all of Hawthorne Avenue including the inlets behind 434 Hawthorne, and 5-year capacity from Edgewood Drive down to the system outlet.

These findings indicate that the flooding at 434 Hawthorne is likely not the result of pipe backups; rather, it is more likely a case of insufficient inlet capacity. The inlet appears to consist of a grate set in the "bell" end of an upturned 18" storm sewer pipe, with a rim elevation of 892.5. Calculations based on a similar Neenah Foundry inlet grate (Type R-4370-5) determined that:

- Ponding depth over the grate is approximately 1.5-inches for a 1-year storm event
- Ponding depth over the grate is approximately 4-inches for a 10-year storm event
- During a 100-year storm event or during frozen ground conditions, ponding depth over the grate would need to reach a foot or more (in this case, before ponding became this deep, runoff would flood the backyard and run between homes out to the street)

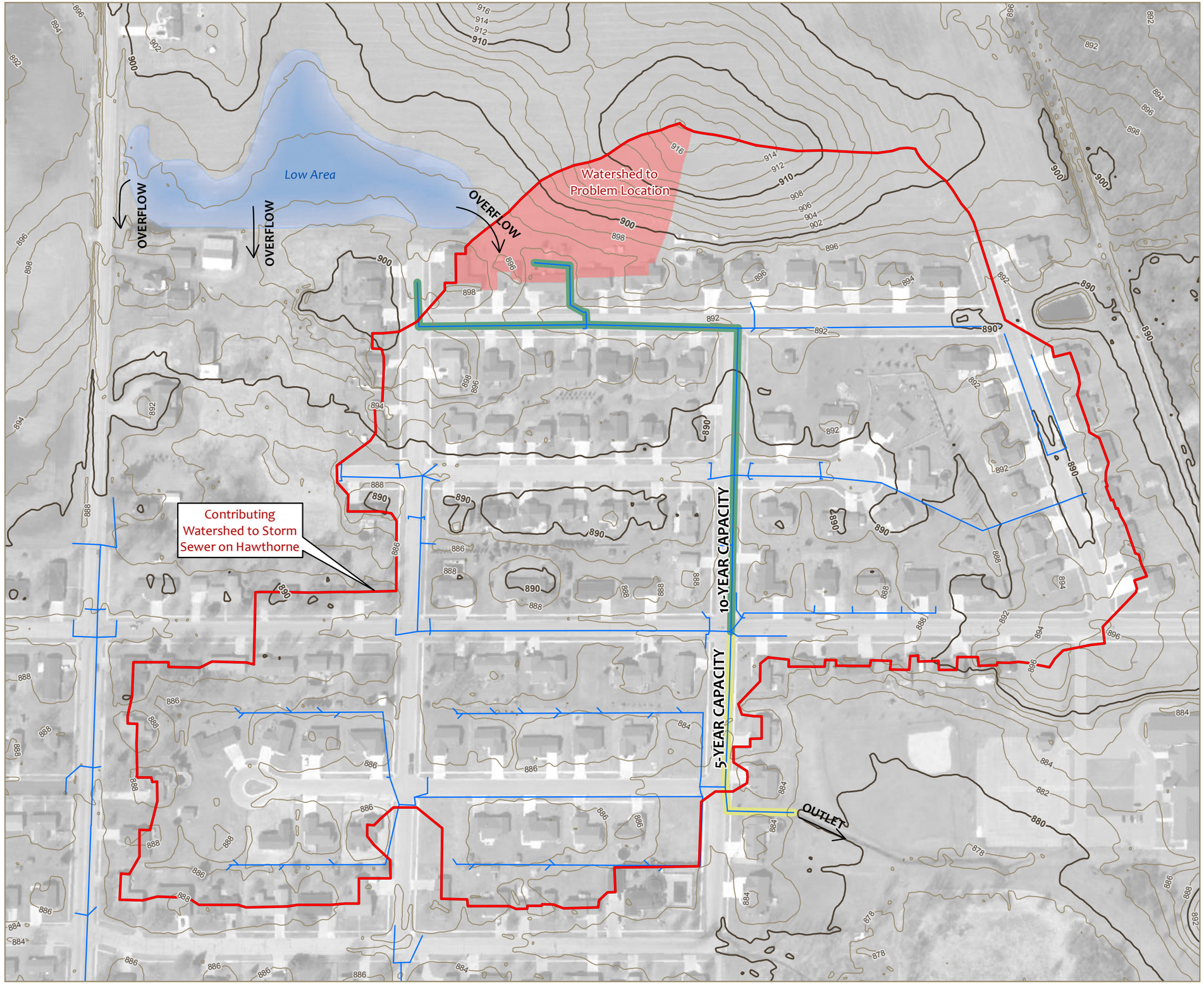
It is noted that a low area exists in the farm field northwesterly of the reported problem location. While the ground in this area appears to be lower than the backyard at the location of the drain, the outlet/overflow point from the low area is not well defined or readily apparent. It is possible that

overflow from this area may contribute to the backyard location during very heavy rains or snowmelt conditions.

The second attached map entitled "Storm System Problem Location" shows the area in more detail, and outlines both a short-term solution and a long-term solution as follows:

- The short-term solution would be to eliminate the need for water to pond over a grate, by extending the pipe toward the field line and allowing water to enter the open end of the pipe (similar to a culvert). If the invert of the pipe was set to elevation 891.0, with a low area excavated along with grading to redirect flow to its location, a 10-year runoff event would be limited to an elevation of approximately 892. This elevation is half a foot lower than the existing grate elevation, and is at least a foot lower than the ground elevation at the home. A precise cost estimate has not been determined here, due to some uncertainty with regard to pipe length, grading extents, etc.; however it is likely that the required effort could be conducted by City crews or a privately-hired general contractor for less than $10,000.
- The long-term (future) solution would be triggered if/when the land to the north is developed. As a condition of development, the development grading plan could be required to construct a ditch or swale parallel with the rear lot line that would convey runoff toward the end of Summer Avenue which could then be directed into an extension of the sewer on Summer Avenue. A precise cost estimate has not been determined as costs would be borne by any party developing the property.

STORM SYSTEM OVERVIEW



HAWTHORNE AVENUE SYSTEM

LEGEND

- Contributing Watershed to Storm Sewer on Hawthorne — 50.2 acres
- Watershed to Problem Location — 2.2 acres
- Low Area
- Existing Storm Lines

Trunk Line Capacity

- 10-year
- 5-year

DATA SOURCES:
EXISTING STORM SEWER PROVIDED BY THE CITY.
CONTOURS PROVIDED BY THE COUNTY.

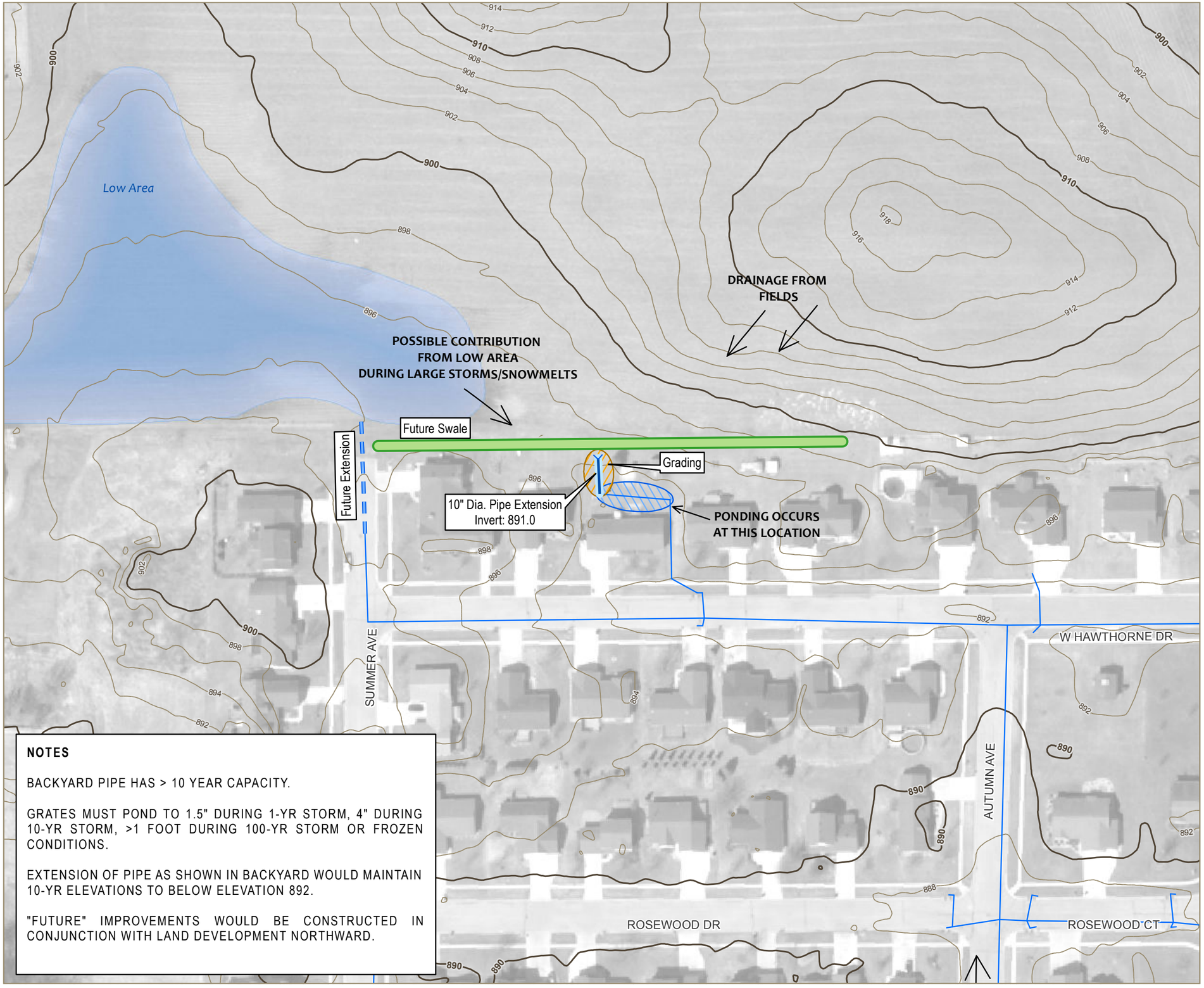
CITY OF WAUPUN
FOND DU LAC COUNTY, WI

MSA PROFESSIONAL SERVICES

N

0 50 100 200 Feet

STORM SYSTEM PROBLEM LOCATION



NOTES

BACKYARD PIPE HAS > 10 YEAR CAPACITY.

GRATES MUST POND TO 1.5" DURING 1-YR STORM, 4" DURING 10-YR STORM, >1 FOOT DURING 100-YR STORM OR FROZEN CONDITIONS.

EXTENSION OF PIPE AS SHOWN IN BACKYARD WOULD MAINTAIN 10-YR ELEVATIONS TO BELOW ELEVATION 892.

"FUTURE" IMPROVEMENTS WOULD BE CONSTRUCTED IN CONJUNCTION WITH LAND DEVELOPMENT NORTHWARD.

HAWTHORNE AVENUE SYSTEM

LEGEND

- Low Area
- Ponding Location
- Existing Storm Lines
- Future Extension
- Future Swale
- Pipe Extension
- Proposed Grading Location

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N

0 25 50 100 Feet