



WASTEWATER & YOU

NOT ALL **WASTE** WATER FLOWS DOWN HILL.

How the City's Wastewater Conveyance System and Treatment Facilities have changed over the years. And through these changes we have seen a great deal of progress in enhancing the lives of our residents.

City of Marshfield

- Wastewater Collection System
- Sanitary Sewer System Manholes - 2462



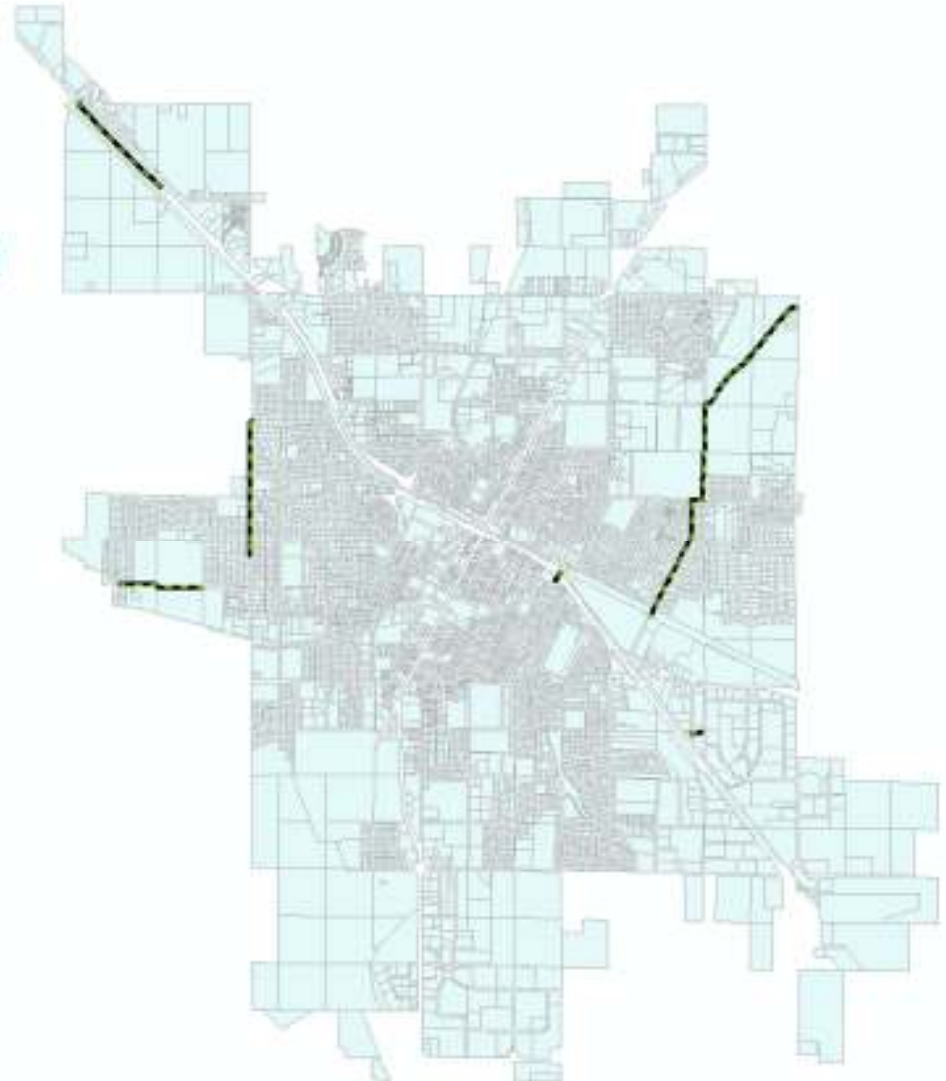
City of Marshfield

- Wastewater Collection System
- Sanitary Sewer System Manholes - 2462
- Sanitary Sewer Gravity Mains



City of Marshfield

- Wastewater Collection System
- Sanitary Sewer System Manholes - 2462
- Sanitary Sewer Gravity Mains
- Sanitary Sewer Force Mains



City of Marshfield

- Wastewater Collection System
- Sanitary Sewer System Manholes - 2462
- Sanitary Sewer Gravity & Force Mains – 135 Miles



City of Marshfield

- Wastewater Collection System
- Sanitary Sewer Gravity & Force Mains – 135 Miles
- PVC Sanitary Sewer Mains – 325,695 lf – 45.7%



City of Marshfield

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- Concrete Sanitary Sewer Mains – 128,914 lf – 18.1%



City of Marshfield

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- Concrete Sanitary Sewer Mains – 128,914 lf – 18.1%
- Vitrified Clay Sanitary Sewer Mains – 49,850 lf – 7%



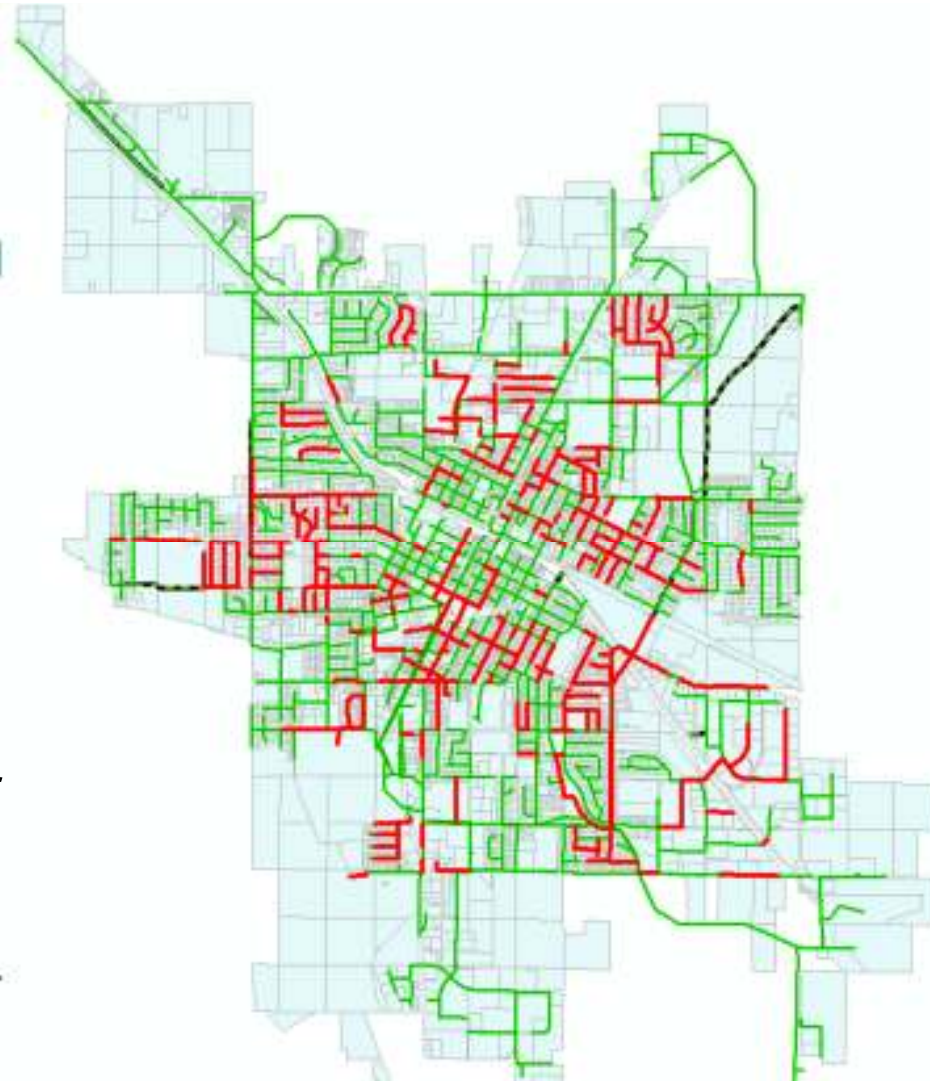
City of Marshfield

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- All others Sanitary Sewer Mains – 20,681 lf – 2.9%



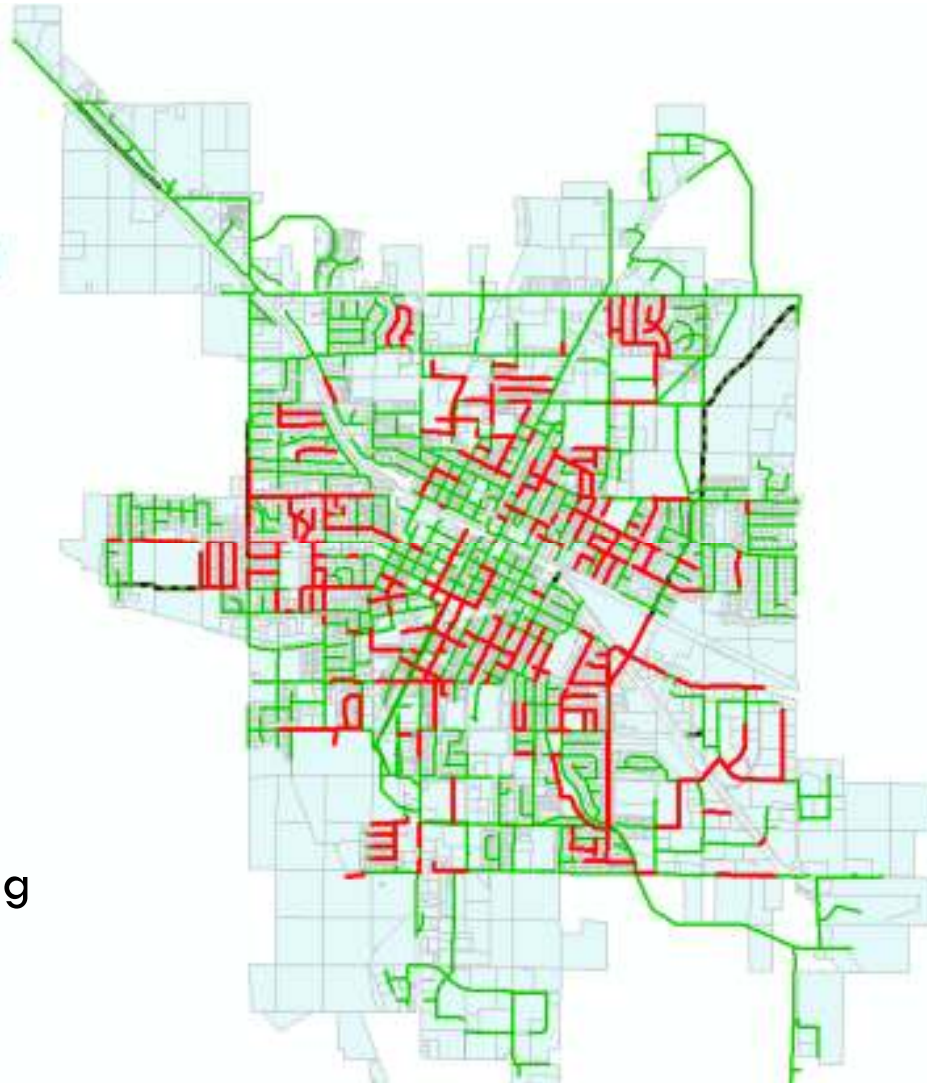
City of Marshfield

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- LINED Sanitary Sewer Mains - 227,106 lf – 31.4%



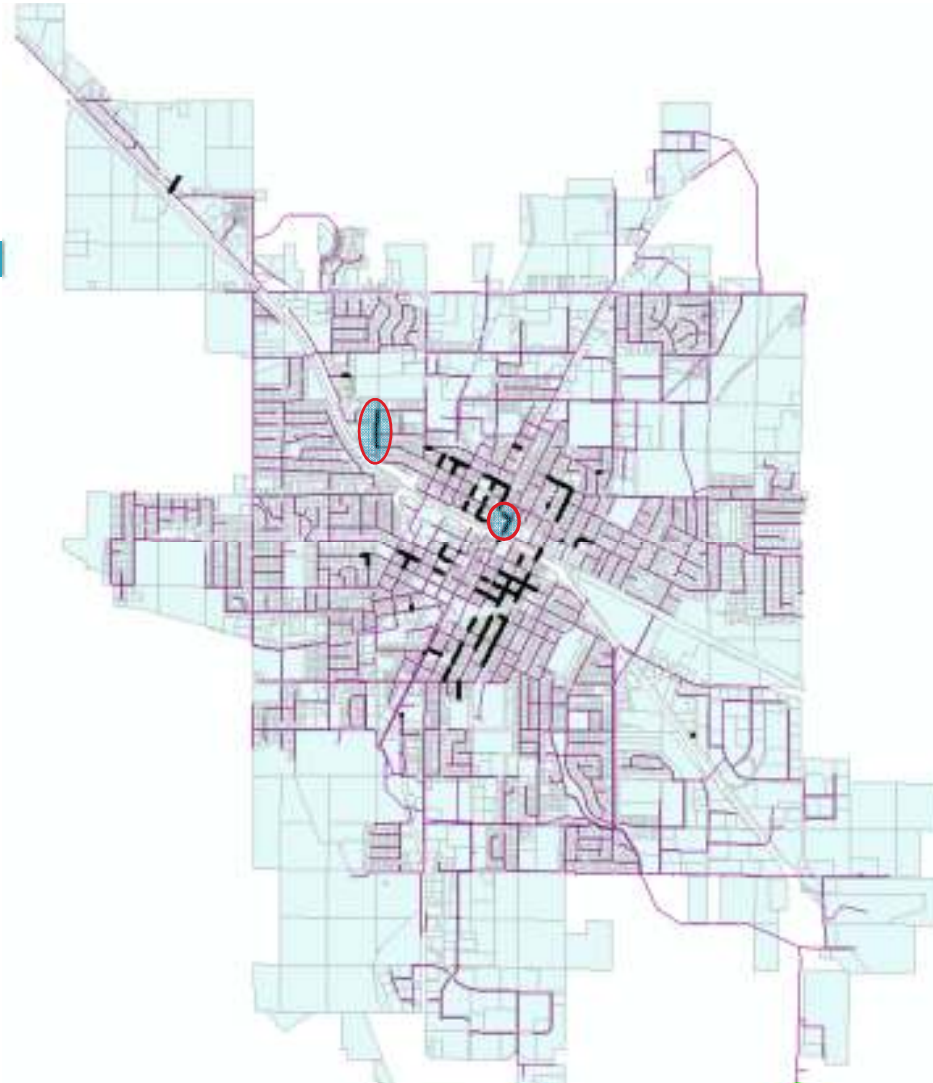
City of Marshfield

- Wastewater Collection System
- Future Lining?
- Vitrified Clay Sanitary Sewer Mains – 49,850 lf – 7%
- Concrete Sanitary Sewer Mains – 128,914 lf – 18.1%
- Not All of These Remaining Pipes Can be Lined Depending on Condition & Size



City of Marshfield

- Wastewater Collection System
- What is there left to replace 6" Vitrified Clay – 17,519 lf – 2.4%
- Some of the existing Vitrified Clay & Concrete is in Good Shape – Do Nothing for now.
- Some of the existing Vitrified Clay & Concrete is Beyond lining and will need to be replaced.



City of Marshfield

- ❑ Wastewater Collection System
- ❑ Clearwater Committee
- ❑ Over the past several decades select staff meet quarterly to discuss the collection system. From here mainline problems & issues are placed on the list by type of repair best suited the specific issue.

MAIN REPLACEMENT LIST					
January 23, 2018					
HIGH PRIORITY					
Location	Segments	sqm	length(ft)	est. cost	
2nd - Main to Pig's mouth	011-06-06	888	600	40	108,800
Brookway - Bridgport	Coada Interch	888			212,000
E 1st - Maple to Park	011-060-011	888	262	8V	148,992
Clinton - Wilson to Dodge	041-016-000-016-016	888	016	0V-0V	1,000,000
Control in Clinton & Clinton	104-110-104-110	888	004	0V	104,000
W 1st - Chestnut to 1st	112-022-112-022	888	022	0V	400,000

MAIN LIVING LIST				
LOW PRIORITY				
Location	Segments	sqm	length(ft)	est. cost
E 3rd - Frank to Polkston	M61-M60-M58	304	8V	114,800
E 2nd - Cedar to Cherry	010-016	690	8C	25,990
W 2nd - Broadway to the East	W28-W29	710	8V	54,160
W 1st - Lincoln to Adams	Y32-Y31-Y30-Y29-Y28	1,500	8V-8V	108,250
E 2nd St - Down to Argon	011-008-010-014-010	1,500	8V-0V	215,210
Adams - and back to Franklin	029-028	189	8C	65,880
Adams - Adams to 2nd	020-020	188	8V-0V	25,494
Apple - 2nd to 2nd	025-030-025	521	8C	175,884
Argon - 2nd to the 2nd at	010-016-014-010-010	1,263	8V	442,411
parkway - parking lot to West	015-018	124	8V	23,600
Cedar - Street to 1st	010-018-018-018	875	8C-8V-0V	148,878
W Central - Chestnut to Grand	03-04-03-04-03-04-03	1,518	8V-8V-8V	441,018
E Central - Adams to Argon	017-160-161	641	8C	112,168
Argon St - Broadway to 2nd	038-037-036-034-033-031	1,520	8C	138,428
1st St - Oak to 2nd to Polk	015-014	688	8C	95,880
Brookway - 2nd to 1st	136-137-135	425	8C	15,108
Maple - Adams to Argon	010-016-014-010	1,264	8C	154,488
W Main - Chestnut to Dodge	017-08	326	8C	95,188
Jumper - Central to Becker	115-114	311	8C	68,210
Lowell - 1st to 1st	Y04-Y05	311	8V-0V	211,310
Maple - 1st to 2nd	011-016-014-08	875	8V	119,168
Marshall - Grand to Lincoln	A61-A60-A58-A58	302	8C	110,810
Bellevue - Marshall to Lincoln	A69-A70-A70	341	8C	135,310
Central - Broadway to Omaha	W10-W9-W7	540	8V	140,810
W 1st - Argon to Broadway	028-028-028	640	8V	114,110
Lincoln - Polkston to Polkston	P10-P14-P10-P11	1,090	8C	315,890
Wheat - Adams to Grand	024-020-026	421	8V	95,188
Wisconsin - Adams to 1st	W18-W15-W18-W17-W18	1,318	8V	331,810

MANHOLE SPOT REPAIR LIST				
Location	Repair needed	sqm	length(ft)	est. cost
7th - E Forest to	Grout extending into line			
1st - Frank and 1st	grout bottom manhole			

8" MAIN REPLACEMENT LIST				
Location	Segments	sqm	length(ft)	est. cost
E 3rd - Van to Cedar	100-118-112	118	8V	198,888
E 4th - Van to Maple	011-012-011-010-010	364	8V	114,288
E 1st - Cherry to Maple	108-101-105	360	8V	194,288
E 2nd - Van to Cherry	014-011	390	8V	214,388
Central - Adams to Lincoln	0-6-08-01	640	8V	101,488
Central - Broadway to Argon	08-010	365	8V	111,588
W Main - Broadway to Adams	011-016-015-014	841	8V	185,588
E Cedar - 1st to 1st	110-11	110	8V	170,900
E Cedar - 1st to 1st	10-10-11	641	8V	117,530
E Cedar - 4th to 3rd	015-010	345	8V	140,110
E Cedar - 1st to 1st	11-10-10-10-10-10-10-10-10-10	1,410	8V	1,048,430
E Van - 1st to 1st	114-105-113-104	641	8V	1160,110
Chestnut - Chestnut to Grand	011-01	640	8V	185,888
W Argon - Central to Grand	10-10	316	8V	165,840

MAIN PIPE BURSTING LIST				
January 23, 2018				
Location	Segments	sqm	length(ft)	est. cost
Maple - Broadway to 1st street	01-02-01-01-02-02	1,045	8C	124,845

City of Marshfield

- Wastewater Collection System
- Discussions also include main capacity, known surcharges, storm water infiltration and any other topics that will assist in producing a better collection system.

CLEARWATER COMMITTEE MEETING AGENDA



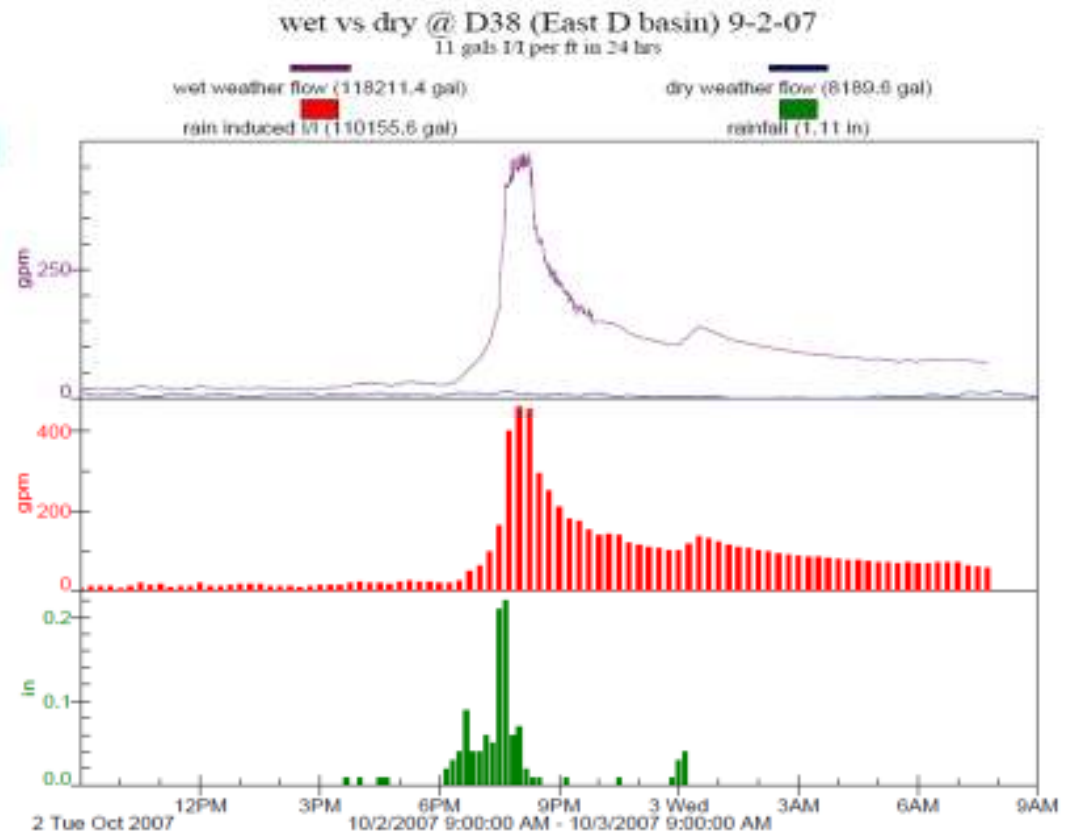
TO: Dan Knoeck/Mike Winch/Tom Ott/Mark Kryala/Tom Turchi/Tim Cassidy/Kris Hawley/Josh Mauritz
FROM: Sam Warp Jr.

There will be a Clearwater Committee meeting at 1:00 P.M., **Tuesday, January 23, 2018** in the Wastewater Conference Room.

- 1) Reports – **Engineering**
 - > Updates to and direction for the living project in 2018
 - > Any concerns or updates from 2018 projects
 - o 29th St. is, contractor, bids, water main, sanitary access cover, etc.
 - o Hume Ave north of Becker, Conflicts with NEPS forsmen.
 - o Blodgett, Peach to Apple, 6" replacement
 - > Spare parts on hand for forcemain repairs.
 - > Should we hire a consultant to evaluate the condition of or replacement of NEPS forcemains.
 - > Update on Hume Ave. apartments and Hume extension behind Walmart.
 - > Lateral replacement on North Central Ave.
 - > Wenzel Plaza water feature
- 2) Reports – **Streets**
 - > List on proposed 2018 spot repairs and manhole rehabilitations and projects
 - > Any known 2018 issues that will need to be addressed
 - > Policy for replacing covers, castings, external seals on Mill in place projects?
- 4) Reports – **Tom**
 - > Working with MU on lead service line and sanitary lateral replacements
 - > Report on \$500 incentive for lateral replacements
 - > Cross connection policy at MCHS
- 5) Reports – **Sam**
 - > Vactor Pad update
 - > Replacing 6 inch sanitary main
 - > Possible pipe bursting on Lincoln Ave., Blodgett north to the lift station.
- 6) Reports – **Mark**
 - > Cleaning Blowback and 6" lines
 - > Recap of Dukes root control in 2017
 - > Manhole inspection, repair and future considerations
 - > Sanitary & Storm sewer cleaning and televising
 - > Sanitary sewer backup calls
 - > Flow monitoring to catch recaps and requests, Doege and Palmetto.

City of Marshfield

- Wastewater Collection System
- Flow monitoring is an important part of the process of identifying specific needs within the collection system.



City of Marshfield

Creating a class 'A' wastewater system takes a tremendous amount of effort that is only realized over a series of decades.

- A Common Council & Mayor with the foresight to create policies and plan for the future to improve the quality of life for our residents and for those who use natural resources such as Mill Creek.
- Professional staff implementing new and more cost effective techniques to improve the system.
- Construction and maintenance personal who work hard executing the plans put forth by the professional staff.
 - Manholes – replacement, mono-forming, grouting and installation of chimney seals. – (Reducing I&I)
 - Sanitary Main – Replacement, pipe bursting, lining, spot repairs and grouting. – (Main line improvements)
 - Waste Water Treatment Plant – Construction and maintenance of our state of the art treatment facility.
 - Board of Public Works – Implementing a series of incentives for homeowners to replace their old sanitary service laterals from the main to the basement floor. – (Each service lateral replaced reduces I&I and basement back-up calls.

