

VILLAGE OF GERMANTOWN
N112 W17001 MEQUON ROAD
GERMANTOWN, WI 53022

MEETING: UTILITY ADVISORY COMMITTEE
DATE AND TIME: THURSDAY, MAY 21, 2015 5:30 p.m.
LOCATION: GERMANTOWN VILLAGE HALL BOARD ROOM
N112 W17001 MEQUON ROAD

- I. **Call to Order:** This meeting has been given public notice in accordance with Section 19.83 and 19.84, Wis. Stats, in such form that will apprise the general public and news media of subject matter that is intended for consideration and action.
- II. **Roll Call:** Chairperson Warren, Jim Hansen, Dan Campbell, Lindsay Rehklaue, Benjamin Goetter and Alternate Member, Julie Reichert
- III. **CITIZEN INPUT/PUBLIC APPEARANCE:**
Please be advised per §19.84(2), information will be received from the public. It is the policy of this municipality that there be a three (3) minute time period, per person, with time extension per the Chief Presiding Officer's discretion; be further advised that there may be limited discussion on the information received, however, no action will be taken under public comments. (15 minutes)
- IV. Approval of Previous Minutes: September 29, 2014
- V. Ordinance Repealing and Recreating Subsection 13.29(8) of the Germantown Code Of Ordinances Relating to the Regulation of Private Sanitary Sewer Laterals
- VI. Education and Outreach for a Private Property Infiltration/Inflow Project Plan
- VII. Cost-Sharing Proportions for a Private Property Infiltration/Inflow Project Plan
- VIII. Sampling of Private Property Infiltration/Inflow (PP/I) Programs throughout the Milwaukee Metropolitan Sewerage District Member Municipalities, Including Investigation Work Completed in Germantown
- IX. Next Meeting Date:
- X. Adjournment:

NOTE: Please note that, upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, please contact the Village Clerk at (262) 250-4740 at least 2 days prior to this meeting.

**VILLAGE OF GERMANTOWN
UTILITY ADVISORY COMMITTEE MEETING MINUTES
SEPTEMBER 29, 2014**

CALL TO ORDER: The meeting was called to order at 5:44 p.m. by Chair Warren.

ROLL CALL: Chairman Warren, Member Hansen, Hull, Broesch, Goetter, and Reichert

This portion of the Utility Advisory Committee meeting was held concurrently with the Village Board as posted.

NEW BUSINESS:

- A. Update to the Water Rate Study – Baker Tilly Virchow Krause, LLP
Director Ludwig presented information on a water rate increase. In 2009 a study was done which looked at capacity, water flow rates, and peak volume of water than can be produced. Since that time, one of the large industries went off their well, they produce products that are water intense and now use about 0.8 million gallons per day of our water. In the fall of 2012 they needed a temporary new water source and said they would be off of our water within 2 to 3 months. It has been 16 months that we have been providing them water. It has pushed capacity to 4.9 million gallons; we are up to the utility's capacity limit. At this time, we cannot take on additional large industries in our Village without running into potential problems. Also identified in that study a deficiency within our water system a single water connection that provides water to the portion of the community is west of 41/45. Decided to make Phase I loop cost: \$600,000 all TID this year. Future years will be all water utility. We do have a shallow well investigation ongoing. Found 6 locations using noninvasive investigation. Large Industry has been contacted numerous times that they plan on being off Village water in two or three months.

Vicki Hillenbrad from Baker Tilly presented information on water rates and recommendations. A big issue is the large customer. They are staying with us through 2014, doesn't see an alarming concern to have a rate increase. Cash flow is incredibly important. At this point, two main recommendations. Large customer would like the village to be on "stand by", since they have their own well. This is very hard for the village to manage. This creates a capacity problem for the Village. Limits ability to grow. Causes a planning problem. If they pull off the system, the Village might be able to hold off building a new well. Need large customer to tell the Village what their plan is for Village water. An option is a stand by charge if large customer comes off the system, want to make sure the rest of the customers do not fill the bill for them. Need a contract in place for large customer, protects the Village and them. First recommendation is to talk to the customer, to see when they plan to come off Village water. In the meantime, Baker Tilly recommends doing a simplified rate increase. Cash flow analysis shows a 3% increase is a cost of living increase. Customers accept a smaller increase better. Doesn't get the village where you need to be in the long run. However, a 3% increase would decrease the amount of increase you need later.

NEW BUSINESS continued:

Discussion on 3% rate increase, when it would start, when would Baker Tilly come back, cash flows, information needed on what the plans are with the well, and large customer issues. Director Ludwig explained the Village is obligated to provide water to large customer but not 300 times their normal usage. Difficult to motivate them to come in person to meet with the Village President. Information we have is that it is very expensive for them to rectify since they have a contaminated well. They are occupying one of the highest capacity wells. "Set aside" water cost would have to be charged to large customer. Baker Tilly says one option is reaching out to them. Baker Tilly can prepare a letter of concerns and need information from large customer.

Vicki presented four possible options: residential flat rate, instead of declining; all customer flat rate; residential inclining rate, rest declining; and residential inclining rate, rest flat.

Baker Tilly's recommendation is an inclining rate for residential that includes multi-family and the rest of the customers would have a flat rate instead of a declining rate.

Discussion: the rate study has two components, the process will be Baker Tilly comes back and gives recommendation of what increase should be made, conservation rates, Public Services reviews and last step is a Public Hearing which PSC generally handles. Baker Tilly won't know what the rates are until PSC reviews the rate case.

MOTION (Zabel/Kaminski) to give staff the authority to work with Baker Tilly on addressing a letter to Large Customer, carried.

Discussion on what a residential inclining rate block would be the gaps between the inclines are not as great. Make sure the customer base is thoughtful with usage. One size fits all solution, family might fall into it. Declining block for business right now and residential is a flat rate. Conservation rate during the summer months, summer rate is because water is going on the lawn and not down the sewer. Most municipalities see water sprinkling is going down. What generally happens when you eliminate the sprinkler credit is the rate goes down for everyone. Those people that were not watering lawns will not see large increases. The whole reason is to try to create a mindset to get people to stop watering lawns by using a conservation rate. Bulk of users are residential, trying to get them to cut back.

Baker Tilly would like two recommendations, looking for guidance. Discussion on rates. Two main decision items: are you interested in adjusting residential flat or inclining and the second is for all other users, are you interested in keeping declining or going to flat. Exact numbers will not be known until PSC reviews. A range would be available but not exact numbers. Flat rate would not be known until PSC makes decision. Continued discussion on delivering water. Deep wells are not recharging. Need to get into a new mindset and conservation is the way to go. Only big industry has meters to know exactly what they are using. Discussion of rate options and other municipalities who use some of them.

NEW BUSINESS continued:

Baker Tilly will present more information when they come back with a rate increase. Recommends a simplified rate increase as a cost of living rate.

MOTION (Kaminski/Baum) to accept the recommended 3% simplified rate increase with a date to be determined by the Public Service Commission, give permission to apply. Discussion on the way the agenda was written and if a decision can be made or if it has to go before Village Board. General Public needs to be notified.

MOTION (Kaminski/Baum) to amend to come before the Village Board on Monday, October 6, 2014 for approval of the recommended 3% simplified rate increase. Carried.

Discussion of filing time etc. **Motion as amended, carried.**

ADJOURNMENT:

MOTION (Hansen/Goetter) to adjourn the meeting at 6:56 p.m., carried by roll call vote.

**Jilline Dobratz
Village Deputy Clerk**


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**BUSINESS OF THE UTILITY ADVISORY COMMITTEE
GERMANTOWN, WI**

MEETING DATE: May 21, 2015

AGENDA ITEM: New Business

ITEM TITLE: Ordinance Repealing and Recreating Subsection 13.29(8) of the Germantown Code of Ordinances Relating to the Regulation of Private Sanitary Sewer Laterals

SUBMITTED BY: Daniel R. Ludwig, P.E, DPW Director
Brionne R. Bischke, P.E., Village Engineer 
Timothy Zimmerman, Wastewater Utility Superintendent

SUMMARY EXPLANATION:

1. Since the Milwaukee Metropolitan Sewerage District's (MMSD) Private Property Infiltration/Inflow (PPI/I) program's inception in Year 2010, the Village only used and expended \$65,599 of the \$885,615 available to date, leaving the significant \$820,016 remainder for use.
2. During the Public Works & Highway Committee's Apr. 7, 2015 meeting, the Committee affirmed its Sep. 6, 2011 action to "forward to the Village Board with a positive recommendation the Ordinance repealing and recreating Subsection 13.29(8) of the Germantown Code of Ordinances relating to the regulation of private sanitary sewer laterals".
3. During the Village Board's Apr. 13 and 20, 2015 meetings, several Board members and residents expressed heartburn over the proposed ordinance mandating inspections at a property's time of ownership transfer. A strikethrough version of the proposed ordinance is attached that presents what this ordinance would look like without this requirement.
4. Board members also debated during the Apr. 13 and 20, 2015 meetings whether this more-centralized, detailed ordinance would be more easily discoverable for and more educationally beneficial to Wastewater Utility users (e.g., developers, property owners), as compared to the existing ordinance fragments scattered through three different sections of the existing municipal code.

ATTACHMENTS:

1. Ordinance, strike-through version (9 pages)
2. Authority to test sewer laterals, John DeStefanis, former Village Attorney, June 4, 2008

STAFF RECOMMENDATION TO COMMITTEE:

Recommend to Village Board to approve the ordinance repealing and recreating Subsection 13.29(8) of the Germantown Code of Ordinances relating to the regulation of private sanitary sewer laterals.

Proper parliamentary procedure to deny a request is to have a motion made in the affirmative and by voting NAY would deny the request if a majority vote.

STATE OF WISCONSIN VILLAGE OF GERMANTOWN WASHINGTON COUNTY

ORDINANCE NO. ____-15

ORDINANCE REPEALING AND RECREATING SUBSECTION 13.29(8)
OF THE GERMANTOWN CODE OF ORDINANCES RELATING TO THE
REGULATION OF PRIVATE SANITARY SEWER LATERALS

WHEREAS, the Village Board having previously adopted Section 10.065 of the Municipal Code of Germantown which regulates the lawn and yard maintenance requirement for certain properties within the Village; and

WHEREAS, the Village Board having determined that the maintenance requirements should apply to additional properties; and

WHEREAS, the Village Board having determined that the imposition of law and yard maintenance requirements promotes the health, safety and welfare of the Community;

NOW, THEREFORE, the Village Board of the Village of Germantown, Wisconsin, do ordain as follows:

SECTION I:

Section 13.29(8) of the Municipal Code of Germantown is hereby repealed as recreated to read as shown in the attached Exhibit A.

SECTION II:

The terms and provisions of this ordinance are severable. Should any term or provision of this ordinance be found to be invalid by a court of competent jurisdiction, the remaining terms and provisions shall remain in full force and effect.

SECTION III:

All ordinances or parts of ordinances contravening the terms of this ordinance are hereby to that extent repealed.

SECTION IV:

This ordinance shall take effect and be in full force upon its passage and the day after publication.

ORDINANCE NO. _____-15

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Introduced by _____ on March 30, 2015.

Adopted: March 30, 2015 Vote: Ayes: Nays: Absent:

Dean Wolter, Village President

ATTEST:

Approved as to form:

Barbara Goeckner, Village Clerk

Brian C. Sajdak, Village Attorney

Published: _____

EXHIBIT A TO ORDINANCE NO. ____ -15

13.29(8) PRIVATE SANITARY SEWER LATERAL CONNECTIONS

- (a) **Definitions.** The following definitions apply to this subsection and augment definitions found in the Uniform plumbing Code:

Commercial Building – shall mean any building in a commercially zoned area of the village, which is in use as a commercial occupancy, or which would be entitled to a commercial occupancy permit.

Cleanout – Shall mean a segment of pipe connected to a sewer lateral rising vertically to the surface. Cleanout shall also provide access to the lateral for the purpose of routine flushing and rodding to free plugs or remove blockages.

Maintenance – shall mean routine flushing or rodding to maintain a free flowing condition.

Private Sewer System – shall mean a sewer or system of sewers which is not owned by the Village, and which serves more than one building.

Rehabilitation – shall mean to restore to a like new condition utilizing technologies and methods approved by the Village Engineer.

Repair – shall mean the physical exposure of a section of pipe and or appurtenances and for the purpose of resuming proper operating condition.

Replacement – shall mean removal and replacement of existing pipe and/or appurtenances.

Sanitary Sewer – shall mean a pipe or conduit that carries sanitary sewage and to which stormwater and ground waters are not permitted.

Sanitary sewer overflow (SSO) is a condition whereby untreated sewage is discharged into the environment prior to reaching treatment facilities thereby escaping wastewater treatment. Also referred to as a sewage spill.

Sewage – shall mean all water or combination of liquid and water-carried solid, bio-solids, or semi-solid wastes conducted away from any dwellings, residences, business buildings, institutions, unit, firm, association, organization, public corporation, political subdivision (including the Village of Germantown), county, or district; or the State of Wisconsin; or the United States of America, or any department or agency thereof and other sources, which is known as domestic sewage, together with liquid or

water-carried solid or semi-solid wastes resulting from a manufacturing process employed in industrial establishments, including the washing, cleaning, or drain water from such process, which is known as industrial waste.

Sewer Facilities – shall mean and include the sanitary and storm sewage collection system owned and operated by the Village, all appurtenances thereto, and all portions thereof.

Sewer Lateral or Lateral – shall mean a sewer pipe that conveys sewage from plumbing of a building or structure to a Village maintained sewer main, also referred to as a “building sewer” in the Uniform Plumbing Code.

Sewer or Sewer Main – when used herein means any Village-owned sewer pipe within a Village street or public right-of-way receiving or intended to receive the discharges of more than one sewer lateral. No sewer main constructed henceforth shall be less than eight inches in diameter nor be laid or constructed in any Village street, easement, or right-of-way, under the control of the Village, except to the lines, grades and specifications approved by the Village Engineer.

Storm Sewer or Storm Drain – shall mean a pipe or conduit that carries storm and surface waters and drainage, but excludes sewage and polluted industrial wastes.

Subdivider – shall mean a person, firm, corporation, partnership, or association that causes land to be divided into a subdivision for person, firm, corporation, partnership, or association, or for others.

User – shall mean and include any dwelling, unit, firm, association, organization, public corporation, political subdivision including the Village of Germantown), county, district, the State of Wisconsin, or the United States of America, or any department or agency thereof.

Village Authorized Representative – shall mean the Director of Public Works or a Village employee designated by the Director of Public Works to sign certificates of inspection for the purpose of lateral inspections.

Village’s Fee and Rate Schedule – the most recently adopted schedule of all Village service, penalty, interest, permit fees, and hourly equipment and personnel rates.

Village of Germantown – for the purpose of this code chapter shall include the Germantown Wastewater Utility.

(b) Property Owner’s Responsibility for Lateral Repairs and Maintenance.

- (1) Property owners shall inspect, and provide to the Village a report of the results of an inspection of, the laterals on their property prepared by a licensed

plumber or contractor using closed circuit television (CCTV) inspection, and if found defective, repair the lateral, as follows:

- (A) When building a new structure on property with an existing lateral, or when otherwise proposing to connect a previously unconnected structure to an existing lateral;
 - (B) ~~Prior to the closing when the property is transferred via sale or other transfer of ownership by deed, instrument or writing; as further provided in Section 13.29(8)(d)(1)(2) below.~~
 - (C) Whenever the Village finds that a sewage overflow emanating from a lateral has reached public property, including but not limited to a city street or the city storm drain system, or has flowed onto private property owned by another property owner;
 - (D) Whenever the Village finds that a sewage overflow emanating from a lateral presents a threat to public health, even if it has not flowed across a property line.
 - (E) As part of its periodic construction and maintenance of sewer mains, the Village may discover defective laterals. The Village may order the property owner to conduct an inspection, repair or replacement of any lateral that the Village knows or reasonably suspects to be defective.
 - (F) As required by MMSD policy or rule.
- (2) The lateral shall be considered defective if it has any of the following conditions: displaced or off-set joints, root intrusion, mineral encrustation, substantial deterioration of the lines, damaged clean-out, defective clean-out, inflow, infiltration of extraneous water, exfiltration of wastes, illegal surface or ground water connections, or other conditions likely to substantially increase the chance for a lateral blockage, or if, within a period of one year, a lateral suffers two or more blockages resulting in overflows.
- (A) Whenever defective laterals are found, the property owner, at the sole expense of the property owner, or Village Board authorized subsidized cost-share program, shall repair or replace the lateral. The Village authorized representative shall determine the extent of repair required, and more limited repair than complete replacement of the lateral may be permitted at the sole discretion of the Village Public Works and Highways Committee. The following requirements shall be met:
 - (i) A replaced or repaired lateral shall not be covered or backfilled until it has been inspected by a representative of the Village.

- (ii) All new and repaired laterals must pass a visual inspection as specified by the Village.
- (iii) All repaired or replaced laterals shall be brought into compliance with the requirements of Section 13.29(8).
- (iv) In the absence of a specific deadline, all inspection work shall be completed within sixty (60) days of notification by the Village that such inspection is required.

~~(B) When a lateral is completely replaced, the property owner is not required to inspect the lateral upon sale of the property for a period of ten years following the date of complete replacement of the lateral.~~

(C) When roots, grease, or other material which have accumulated in a lateral is cleaned or maintained, it shall be prevented from entering the sewer main during the maintenance or repair of the lateral. In the event that material is permitted to enter the main causing or contributing to the cause of a sewage overflow, the same shall be a violation of this ordinance, and the property owner and/or contractor performing such maintenance work, in addition to any civil penalties imposed, shall be held civilly liable to the Village for any fines or other expenses incurred by the Village resulting from the overflow.

(c) **Right of Entry.** The Director of Public Works or their designee, may enter, inspect, collect wastewater samples, and test any buildings, structures, or premises to secure compliance or prevent a violation of any portion of this chapter. The Director of Public Works, or said Director of Public Work's designee, shall also be authorized to review repair/maintenance records. Refusal of entry or failure to comply with requests for information shall be deemed a nuisance and is a violation of this ordinance. Such refusal or reasonably suspected non-compliance which threatens or potentially threatens public health or safety shall constitute an appropriate and adequate basis for the Village to seek a special inspection warrant.

~~(d) **Change of Ownership.**~~

~~(1) Any person, firm or corporation proposing to effect the change in ownership of any single family, duplex, apartment, condominium, commercial or industrial building serviced by a sanitary sewer shall not do so until such time as certificates of compliance have first been obtained from the Village Inspection Department and Department of Public Works, as provided below. Changing ownership or accepting change of ownership without such certificate of compliance shall constitute a violation of the Germantown~~

Village Code and shall be subject to the penalties set forth in this Code, and to mandatory injunction.

Comment [BS1]: To soften the impact, maybe limit it to laterals that are X # of years old and/or have had Y # of years between certifications?

- (2) *Exemption:* This section shall not apply to a *pro forma* change of ownership without change in beneficial ownership, such as conveyance to a trust, or between spouses, or pursuant to a decree of divorce or partition unless the conveyance is made to a third party.

(e) — Inspections Required.

- (1) Upon request submitted in writing to the plumbing inspector by the owner or agent for the owner, an inspection shall be conducted by the plumbing inspector, of the premises to ensure compliance with the provisions of article 15.08, plumbing code and MMSD Chapter 3 relating to illegal surface or ground water connections into the sanitary sewer system. Such inspection shall occur on or before the sale or transfer of title of any such dwelling.
- (2) The owner shall additionally cause to be conducted a closed circuit television (CCTV) inspection of any sanitary sewer lateral serving the property greater than ten (10) years old or for which a certificate of compliance has not been issued. The CCTV inspection shall be performed by a contractor who shall be selected from a list pre-designated as approved by the Village.
- (A) The contractor shall televise the sanitary sewer lateral from the vent pipe of stack clean out to the main line connection point. In the case of a shared lateral, only that portion of the shared lateral downstream of the subject dwelling or structure needs to be televised.
- (B) A copy of the televised inspection shall be certified as a true and accurate televised recording of the property lateral and provided to the Public Works Department by the contractor within 2 business days of the completion of the inspection.
- (C) The sewer lateral shall be certified by the contractor as well as the Public Works Department as being free from infiltration and other defects as provided in 13.29(8)(b.) (2) above, the plumbing inspector shall issue a certificate of compliance of the lateral.
- (D) If the sewer lateral shall not be so certified, then the owner shall cause the lateral to be repaired or replaced so that it is restored to a condition of being free from infiltration and other defects, and certified as such. Upon such repair/replacement and certification, the plumbing inspector shall issue a certificate of compliance of the lateral.

(f) — Certificate of Compliance Required.

- (1) — A certificate of compliance shall be issued by the plumbing inspector if the building is found to be in compliance with the provisions of the plumbing code and of this section.
- (2) — If non-compliance is found, the plumbing inspector shall prepare work order listing the items required to be brought into compliance with the plumbing code, and the Village Engineer shall prepare a work order which shall reasonably apprise the owner of the defects and work necessary to bring the sewer lateral into compliance, before a certificate of compliance may be issued.
- (3) — The owner shall be given 90 days to comply with work order, which period may be extended at the reasonable discretion of the building inspector or the Village engineer. A subsequent inspection shall be made within 90 days of the issuance of the notice of noncompliance and work order or extension thereof, to determine if the building and/or the lateral is in compliance. If the state of noncompliance still exists, no new occupancies of the building shall be permitted, unless a transferee shall expressly agree in writing assume the obligation to comply with any outstanding work order, shall agree to a date certain by which such compliance shall be achieved, and shall provide such security in the form of a cash deposit to guarantee performance as shall be approved by the building inspector or Village Engineer, in which case a conditional occupancy permit may be provided. Any person, firm, or corporation who occupies or causes to occupy any building without first obtaining a certificate of compliance or a conditional occupancy permit shall be subject to the penalties of this code.

(g) — Permit Fees. The request for a certificate of compliance shall be accompanied by a fee in the amount established from time to time by the board.

(h) — Re-inspection. In the event a request for a certificate of compliance is made within (10) ten years of the issuance of a previous certificate of compliance, a re-inspection of the premises will not be required.

(i) Penalties

- (1) The Village shall have the authority to recover from a property owner the Village's expenses incurred in responding to sewer overflows on private property. In addition to any actual expenses incurred by the Village resulting from an overflow, a property owner who fails to perform any act required in this section, which failure results in an overflow reaching public or private property other than the property owner's property, shall be subject to citation and a civil penalty according to the following schedule:

(A) Up to \$250.00, plus court costs and assessments for the first violation.

(B) Up to \$500.00, plus court costs and assessments for a second violation occurring within three years after the first violation.


(C) Up to \$1,250.00, plus court costs and assessments for each additional violation exceeding two violations within a three-year period.

(2) The Village Administrator shall have the authority to establish, waive, suspend or otherwise modify any civil administrative penalty imposed by this section that exceeds the direct costs of the Village upon a showing by the property owner of severe financial hardship, or upon a showing that the property owner has satisfactorily repaired the lateral to a degree sufficient to ensure avoidance of further violations.

(j) **Appeal.** Any present or proposed owner of a building feeling aggrieved by the issuance of a notice of noncompliance may appeal to the board of appeals by following the procedure as outlined in the zoning code.

~~(k) **No Warranty.** A certificate of compliance indicates that so far as can be reasonably determined by a visual inspection of the premises and review of village records, the premises meet the requirements of this article. Neither the Village nor the plumbing inspector assume any liability in the inspection or issuance of a certificate of compliance, and the issuance of a certificate of compliance does not guarantee or warrant as to the condition of the premises inspected.~~



Village of

Germantown
Willkommen

OFFICE OF VILLAGE ATTORNEY

John L. DeStefanis
W175 N11081 Stonewood Drive, Suite 105
Germantown, WI 53022
262-253-1500 262-253-1523 Fax
attorney@johndestefanis.com

June 4, 2008

Trustee Art Zabel
Village of Germantown
N112 W17001 Mequon Road
P.O. Box 337
Germantown, WI 53022-0337

Re: Authority to test sewer laterals

Dear Trustee Zabel

You have requested my opinion regarding whether the Village Code provides authority by which the Village may compel a landowner to conduct tests of a private sewer lateral for which there is reasonable cause to believe is structurally deficient and subject to inflow and infiltration.

In my opinion, this police power authority does exist. I would first cite §13.33, Germantown Code, which prohibits the discharge of storm water into the sanitary sewer system. Note, the plain language of the ordinance does not require that the discharge be intentional or knowing, but simply that it occur. Please note also that MMSD's rules and regulations are adopted by reference in §13.27, Code, and such clear water discharge into the sanitary sewer is also proscribed in the MMSD rules and regulations. Next, I direct consideration of §15.08 (6), Code. This subsection provides authority to conduct sewer lateral testing if it is reasonably suspected that an illegal clear water discharge is occurring. While this subsection lies within a section of the Code, the subject matter of which is primarily illicit drains of any kind or character above or below ground, which drain or discharge into a sanitary sewer, subsection (6) expressly states, in part:

If the Director of Public Works or his designated agent suspects an illegal clear water discharge, as defined by this Code or any other applicable provision of the Wisconsin Administrative Code....he may....enter....

Page 2
June 4, 2008

In as much as the language specifies a discharge into the sanitary sewer which is illegal under any part of the Village Code, in my opinion, this is a proper nexus between the prohibition found in §13.33, and the ability to act provided in §15.08 (6). Code.

The proper procedure would be that the Village could permit the owner to do the testing at his expense if it wished, or if he declined or the Village determined not to permit the owner to do it, the Village would undertake to do the testing. If the owner resisted the Village's entry onto or underneath its property, if it were to be done via televising, the Village would seek a special inspection warrant from the municipal court pursuant to § 66.0119, Wisconsin Statutes.

X It should be borne in mind that all of the above is premised upon the fact that the Village's personnel must have reasonable cause to believe that the illegal discharge is occurring, and be able to articulate why such belief has been arrived at. Thus, this will come into play only wherein the Village somehow discovers a leaky sewer lateral, perhaps only by accident.

This is in contrast to a more coordinated program of inspection of laterals which would be triggered and occur at specified times, such as sale, significant remodeling or addition projects, or other similar events. Such a program would not be triggered by any cause to believe that there is an existing problem with the lateral, but seeks to determine whether there is by mandating checks at the prescribed events.

I trust that this will assist you in evaluating existing and proposed ordinances.

Very truly yours,

OFFICE OF THE VILLAGE ATTORNEY


John L. DeStefanis
Village Attorney


VI

**BUSINESS OF THE UTILITY ADVISORY COMMITTEE
GERMANTOWN, WI**

MEETING DATE: May 21, 2015

AGENDA ITEM: New Business

ITEM TITLE: Education and Outreach for a Private Property Infiltration/Inflow Project Plan

SUBMITTED BY: Daniel R. Ludwig, P.E, DPW Director
Brionne R. Bischke, P.E., Village Engineer 
Timothy Zimmerman, Wastewater Superintendent

SUMMARY EXPLANATION:

1. Since the Milwaukee Metropolitan Sewerage District's (MMSD) Private Property Infiltration/Inflow (PPI/I) program's inception in Year 2010, the Village only used and expended \$65,599 of the \$885,615 available to date, leaving the significant \$820,016 remainder for use.
2. During its March 20, 2015 meeting, Village Board members expressed desire public education and outreach of the PPI/I program.
3. Education and Outreach could include a mailing to the Wastewater Utility's 5,911 users, handouts at Village Hall counters, and/or a posting on the Village's web site.
 - a. Brookfield Example: Brookfield mailed out the attached fact sheet and flyer. The DPW Director was inundated with telephone calls for a few weeks.
 - b. Brookfield provided their original MS-Word and MS-Powerpoint files and granted the Village permission to edit and use their templates.

ATTACHMENTS:

Brookfield fact sheet and flyer

STAFF RECOMMENDATION TO COMMITTEE:

Modify the Brookfield fact sheet and flyer templates to incorporate Germantown's PPI/I program specifics.

Proper parliamentary procedure to deny a request is to have a motion made in the affirmative and by voting NAY would deny the request if a majority vote.

BASEMENT CONNECTION

FLOOD RELIEF FOR A BETTER NIGHT'S SLEEP

<http://basementconnection.mmsd.com/>

CITY OF BROOKFIELD PRIVATE PROPERTY INFILTRATION AND INFLOW REDUCTION PROGRAM FACT SHEET

Four years ago, the City of Brookfield established a Private Property Inflow/Infiltration Reduction (PPIIR) Program for selected Focus Areas of the City. You agreed to participate in this program at the time and results are now available for your property and recommendations for needed repair may be eligible for funding by the City. Please review the information provided below which gives estimates of participation rates for eligible improvements as part of this program.

Sanitary sewers are designed to convey wastewater from properties, but on occasion rainwater and groundwater makes its way into the sanitary sewers through cracks in laterals and other means. This excess water is called inflow and infiltration ("I/I"). This water should not be in the sewer and contributes to basement backups and sewer overflows. The City's PPIIR Program is an important step in addressing sources of I/I to reduce sanitary sewer overflows and basement backups. This program will only be successful if you participate in it, now that recommended improvements have been identified. To that end, the City offers to partner with homeowners to make recommended and eligible repairs.

Here are the specifics on participation rates for recommended repairs:

- Sewer Laterals – City pays 75%, up to \$8,000
- Removal of a Foundation Drain – City pays 100%, up to \$8,000
- Repair to outdoor cleanout caps / pipes – City pays 50%, up to \$100
- Installation of glass blocks in window wells to keep water out – City pays 50%, up to \$500
- Extend a roof downspout away from house foundation – City pays 50%, up to \$25 for each downspout extension
- Private drainage improvements to keep water away from basements – City pays 50%, up to \$8,000
- Total property grant funding across all categories cannot exceed \$10,000

To be eligible for cost sharing of eligible repairs under the Program, the property must be located within a Focus Area, have been inspected by the City or its consultants / contractors, and determined to be a property that needs a lateral repair or other improvements identified by the inspection.

Because this program has a limited budget, requests will be taken on a first come, first served basis. **Property owners will want to act fast to participate in the next phase of this program.**

Let's work together to keep the rain water where it belongs – **out of our homes and our sewers.**

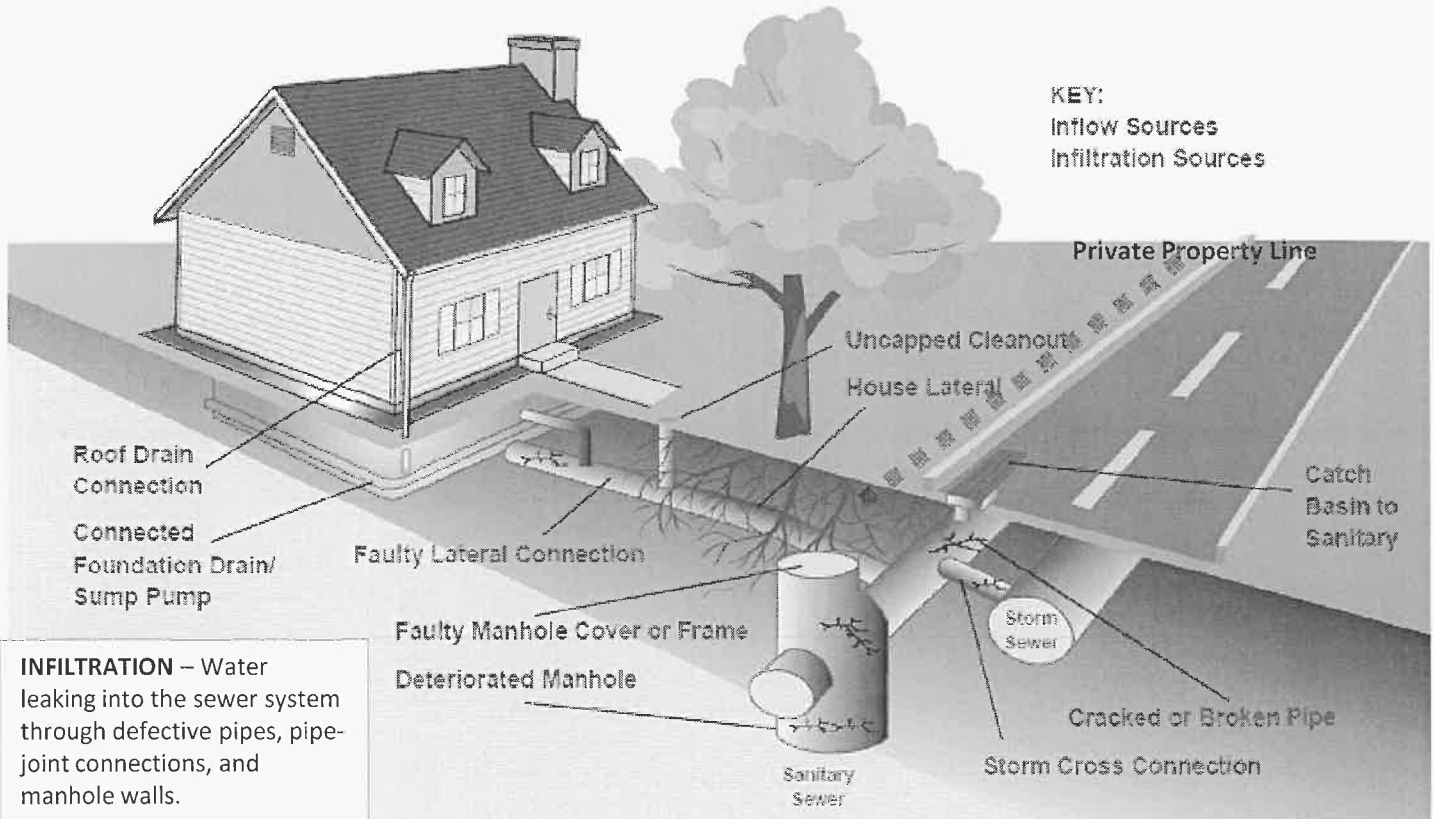
For further information, please call Tom Grisa, Director of Public Works at 262-796-6644.

Private Property Infiltration and Inflow Investigations

The City is conducting free inspections of houses and sewer laterals in areas with a history of sewer backups during large rainstorms. Your area has been given priority for participating in the City's Private Property I/I Reduction Program.

WHAT IS PRIVATE PROPERTY INFILTRATION AND INFLOW?

Water known as infiltration and inflow can enter the sewer system through leaky pipes and connections on residential property when it rains. Increased flow during storms can result in basement backups from the sewer into your house. This is a serious problem that will not go away without full cooperation from all homeowners. In fact, it will only get worse if we don't get to work.



INFILTRATION – Water leaking into the sewer system through defective pipes, pipe-joint connections, and manhole walls.

INFLOW - Water flowing freely into the sewer system through piped connections such as roof downspouts, foundation drains, and catch basins.

LATERAL – The pipe that connects the home to the City's sewer system.

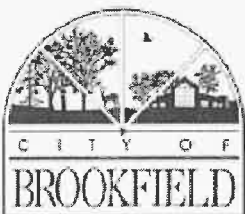
Next Steps

1. Sign Up for a Free Inspection of your basement plumbing and sewer lateral by calling Brown and Caldwell at: 414-273-8800
2. Brown and Caldwell will contact you to schedule the inspections
3. You will be contacted 1-3 days before your plumbing inspection to confirm you can be home

Questions?

Call Tom Grisa, Director of Public Works : 262-796-6644
or Brown and Caldwell : 414-273-8800

Get more information at: <http://www.ci.brookfield.wi.us/index.aspx?NID=758>



Brown AND Caldwell

VII

**BUSINESS OF THE UTILITY ADVISORY COMMITTEE
GERMANTOWN, WI**

MEETING DATE: May 21, 2015

AGENDA ITEM: New Business

ITEM TITLE: Cost-Sharing Proportions for a Private Property Infiltration/Inflow Project Plan

SUBMITTED BY: Daniel R. Ludwig, P.E, DPW Director
Brionne R. Bischke, P.E., Village Engineer *BRB*
Timothy Zimmerman, Wastewater Superintendent

SUMMARY EXPLANATION:

1. Since the Milwaukee Metropolitan Sewerage District's (MMSD) Private Property Infiltration/Inflow (PPI/I) program's inception in Year 2010, the Village only used and expended \$65,599 of the \$885,615 available to date, leaving the significant \$820,016 remainder for use.
2. During its Apr. 7, 2015 meeting, the Public Works & Highway Committee:
 - a. Affirmed and clarified the Village Board's May 16, 2011 action "to adopt the policy stating private lateral and other private property I/I remediation will be cost shared by the Utility with the utility portion to come out of the annual allocation with the following formula which was agreed to at the Public Works Committee – utility will cover 30% of the repair-rehabilitation costs and offer a 10 year loan program for the balance at 4% A.P.R. and funding of repairs shall not exceed current total allocation of \$209,376.00 or exceed successive years total allocation in the future"; and
 - b. Approved the practice that the Village fund 100% of the lateral situated in the right-of-way and that the 30%-70% formula be applied to the portion of the lateral situated in private property.
 - i. Example: For a typical 66' right-of-way with sanitary sewer centered in roadway and 50' typical home setback, this formula would result in 58% Village and 42% private property owner cost share proportion.
3. Perhaps it would simpler for utility users and the Village to develop a formula that would accommodate all right-of-way widths and zoning building setbacks.
 - a. Example: 50% Village and 50% private property owner
 - b. Example: 60% Village and 40% private property owner

ATTACHMENTS: None

STAFF RECOMMENDATION TO COMMITTEE:

Establish a simpler cost share proportion formula for utility users and the Village.


Proper parliamentary procedure to deny a request is to have a motion made in the affirmative and by voting NAY would deny the request if a majority vote.

**BUSINESS OF THE UTILITY ADVISORY COMMITTEE
GERMANTOWN, WI**

MEETING DATE: May 21, 2015

AGENDA ITEM: New Business

ITEM TITLE: Sampling of Private Property Infiltration/Inflow (PPI/I) Programs throughout the Milwaukee Metropolitan Sewerage District Member Municipalities, Including Investigation Work Completed in Germantown

SUBMITTED BY: Daniel R. Ludwig, P.E, DPW Director
Brionne R. Bischke, P.E., Village Engineer 
Timothy Zimmerman, Wastewater Utility Superintendent

SUMMARY EXPLANATION:

On May 14, 2015, the Milwaukee Metropolitan Sewerage District released minutes from their PPI/I workshop conducted on April 16, 2015. This information, along with Germantown's completed investigation work, will be useful for Committee members in working to establish Germantown's program.

ATTACHMENTS:

1. MMSD's minutes from the PPI/I workshop
2. Summary of Germantown's investigation work completed

STAFF RECOMMENDATION TO COMMITTEE:

Not applicable

Proper parliamentary procedure to deny a request is to have a motion made in the affirmative and by voting NAY would deny the request if a majority vote.



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Technical Memorandum

Prepared for: Milwaukee Metropolitan Sewerage District (MMSD)
Project Title: Private Property Infiltration/Inflow Reduction Program
Project No.: 141420.250

Technical Memorandum

Subject: Summary of 2050 Facilities Plan I/I Reduction Workshop
Date: April 16, 2015
To: Members of the Technical Advisory Team, MMSD
From: Julie McMullin, Brown and Caldwell
Copy to: Jerome Flogel, MMSD

Prepared by: _____
Julie McMullin, Principal Engineer

Reviewed by: _____
Andy Lukas, Vice President

Limitations:

This document was prepared solely for MMSD in accordance with professional standards at the time the services were performed and in accordance with the contract between MMSD and Brown and Caldwell dated November 15, 2010. This document is governed by the specific scope of work authorized by MMSD; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by MMSD and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

Contents

- Summary
- Attachment: Agenda
- Attachment: Attendance List
- Attachment: Power Point Presentations

Meeting led by:

- Jerome Fogel, Senior Project Manager of the PPII Reduction Program
- Bill Krill, Senior Project Manager of the 2050 Facilities Plan (2050 FP)
- Greg Hottinger, Senior Project Manager of Asset Management
- Andy Lukas of Brown and Caldwell.

Please refer to the attachments for the information that was scheduled to be presented. The following summary notes items that were added from discussion of the individual topics.

The last page of the power point presentation includes a list of the relevant acronyms.

Summary

1.1 Overview of Workshop Objectives

Jerome Fogel presented the objectives of the workshop, the intent of which was to identify how PPII can be used to support the 2050 FP effort.

1.2 Overview of 2050 FP Goals

Bill Krill provided an overview of the 2050 FP goals and Greg Hottinger presented how asset management is being used to guide the facility planning effort.

1.3 Typical I/I Reduction Approaches for Facility Plans

Andy Lukas presented typical approaches for evaluating I/I reduction in support of facility planning efforts.

- Tom Grisa: Regarding the “Do Nothing Approach”, foundation drains get better or stay the same over time but laterals get worse over time. Is there any research available on the rate of deterioration?
- Andy Lukas: It is difficult to find research on this information so a sensitivity analysis is typically done. For example, we assume that I/I increases by seven percent every 10 years.
- Tom Grisa: So if we fix 10 percent of the system, then 90 percent of the system falls under “Do Nothing”? This is relevant since most of the municipalities are using the PPII program to address the worst parts of the system.
- Tim Bate: Yes, the PPII program is a continuous I/I prevention program. The 2050 FP will look at how much I/I reduction is needed versus adding capacity and/or storage. The 2020 FP found that I/I reduction was not cost-effective.
- Bill Mielke: the SSES program that started in 1979 found that most of the sewers within the MMSSD service area are first generation sewers.

- Bill Krill: We need to prioritize the sewer repairs, which is why there is an emphasis on asset management for the 2050 FP.
- Greg Hottinger: We need to ask ourselves "How long will each sewer last? Do we upsize the pipe capacity when we replace it? How long will a lateral repair last?".
- Tom Simmons: The WWPFMP was set up to monitor the impact of I/I and determine whether it is getting worse or better and how fast. We do not have enough data yet to answer these questions.
- Jerome Fogel: The monitoring data will also be used for modeling and monitoring the system, as well as making real time control (RTC) decisions based on the results during an event.
- Debra Jensen: For big picture ideas, will we look at addressing the foundation drains and disconnecting them all? How effective is foundation drain disconnection (FDD) and should it be more widespread?
- For future I/I, there is a cost associated with assuming that there are no increases in I/I.
- For the AMP, we need to look at the risks in addition to the costs. Risks include basement backups (BBUs), lawsuits, and regulatory actions.
- Scott Brandmeier: A private property owner could be held responsible for damage to other homeowners as a result of I/I. For example, in Fox Point, a homeowner's riser pipe collapsed into the sanitary sewer main, resulting in a sewer obstruction that caused BBUs in neighboring homes.
- The 2050 FP will look at the risk costs that are associated with specific levels of service (LOS).

1.4 PPII Local Efforts

Staff from the City of Brookfield, the Village of Fox Point, the City of Greenfield, the City of Wauwatosa, and the City of West Allis discussed their local PPII efforts.

1.4.1 Brookfield

Tom Grisa presented on the City of Brookfield's PPII efforts and how it addressed the Consent Decree from the United States Environmental Protection Agency (US EPA). The Brookfield presentation is included as an attachment.

- From the house and lateral investigations, Brookfield found that the old clay laterals were in worse shape than the PVC or even cast iron pipe (CIP) laterals.
- This summer Brookfield will be hiring a contractor to perform the lateral rehabilitation and fix the building defects that were identified by the study. This will be a 2-year program.
- The PPII has a focus on cost-effectively addressing I/I sources and focusing on broken sewersheds.
- Tom feels that if a municipality does not have any broken sewersheds, then it should be able to perform the I/I work on its own. The municipalities can perform the I/I work responsibly and do not need MMSD's help if there are no broken sewersheds in the municipality.

1.4.2 Fox Point

Scott Brandmeier discussed the Village of Fox Point's PPII program (no slides).

- The PPII program started in 2010, before the start of the MMSD PPII program.
- In 2008, the Beach Drive lift station failed and resulted in many BBUs and overflows. There was a significant amount of I/I observed during this storm.
- In 2010, Fox Point conducted I/I investigations and monitoring. Through this work, Fox Point found direct connections and a house that was contributing 50,000 gallons of I/I during one storm event.
- Fox Point has two non-compliant sewersheds.

- Results from the I/I investigations directed the project work. Investigations included dyed water testing of the storm sewer, smoke testing, and house inspections.
- Fox Point informed property owners that they would be televising the laterals and that they had an option to opt out of the televising.
- 60 to 75 homes were included in the program.
- For repairs/rehabilitation, Fox Point has a 50/50 cost share up to \$5000.
- The Village's position is that the homeowner is responsible for the condition of the lateral and foundation drain, just like a roof or driveway.
- Fox Point has a "Quasi-voluntary" program, where homeowners are told that if they do not participate in the PPII program, then they will not be eligible for any future funding. They are also reminded that under Village policy, they cannot contribute clear water to the sanitary sewer system and may be responsible for eliminating this clear water source in the future. In addition, Fox Point places a letter in the property file that indicates that the homeowner elected not to participate in the program.
- Fox Point handles all PPII-related repairs for the homeowners. This greatly reduces questions and increases participation.
- Homeowners receive a special assessment and are billed when Fox Point receives the bill from the contractor. Homeowners that do not immediately pay will have their portion of the bill added to their property taxes.
- Homeowners sign temporary access and building (easement) rights over to Fox Point during construction.
- Fox Point may evaluate specially assessing property owners in order to maintain the program.
- All laterals in Fox Point are private from the sanitary sewer main to the house.
- Fox Point performs sanitary sewer cleaning every year, with half of the Village cleaned one year and the other half cleaned the next year.
- During the rain last week, only 30 minutes of bypass pumping was needed, anecdotally indicating that the sanitary sewers are performing better than before the PPII program was implemented.
- The biggest challenge has been getting homeowners to participate in the program.

1.4.3 Greenfield

Rick Sokol presented on the City of Greenfield's PPII program. A copy of the presentation is in the attachment.

- Greenfield's PPII program, which is called "Greener Greenfield" was initiated in 2013.
- The program is completely voluntary.
- Only targeted areas are contacted about the program. Other properties will be served if they meet PPII reduction goals.
- Greenfield focused on homes that were built between 1915 and 1954 and prioritized the areas based on the concentration of these types of homes.
- For repairs/rehabilitation, Greenfield covers 100 percent of the cost up to the first \$6000 and then 75 percent of the cost up to \$12,000.
- The process for completing work is as follows:
 1. City of Greenfield staff inspect the homeowners lateral and home inspected.
 2. Based on the inspection results, City staff identify which properties need rehabilitation.
 3. The homeowner receives quotes from three contractors for the work.

4. City staff grant conditional approval for the work to be completed.
 5. The homeowner hires a contractor and pays for the work.
 6. Greenfield reimburses the homeowner for the work.
- While homeowners must receive construction quotes from three contractors, they can ultimately select the contractor.
 - Greenfield has also addressed some plumbing emergencies on a case-by-case basis.
 - The rate of participation in this program is declining. At its current rate, the PPII program will be able to fund all repairs without additional assistance.
 - Greenfield expected that FDD would be the main repair needed but lateral rehabilitation was what actually needed to be repaired.
 - Lining laterals has been the most common and cost-effective fix.
 - The cost for lateral lining is \$85/LF but the cost is creeping up.
 - The cost for sump pump installations is about \$1500.
 - There has been a 20 percent homeowner response rate to the mailings and of those, only 22 percent follow through to perform the repairs.

1.4.4 Wauwatosa

Bill Wehrley discussed the City of Wauwatosa's PPII efforts (no slides).

- Last week, 1.2 in/hr of rain was recorded at the Wauwatosa City Hall rain gauge. Wauwatosa received 30 calls for plugged inlets in the street and homeowner lateral issues but did not have any overflows or reported BBUs due to City system capacity.
- Wauwatosa is focusing on grouting of the connection of the lateral to the sanitary sewer main. The work has been completed in a broken sewershed that includes 3200 Wauwatosa homes, and 800 Milwaukee homes. MS0411, the MMSD flow compliance point, is at the downstream end of the sewershed. After completing work on about 50 percent of the laterals, flows at MS0411 appear to have been reduced and are closer to the performance standard.
- The cost for grouting started at \$500/lateral for grouting 5-feet past the main and \$900/lateral for grouting 10-feet past the main; now the cost is \$300/lateral for grouting 5-feet past the main and \$500/lateral for grouting 10-feet past the main. Eventually the City hopes to be able to grout the first 30 feet.
- Wauwatosa is confident that it will meet the performance standard for the broken sewershed in which the grouting is being performed.
- For now, Wauwatosa is grouting the connections of the lateral to the main. It may consider lateral lining if the costs come down.
- Wauwatosa is waiting for the recommendations of the 2050 FP.
- Wauwatosa may consider lateral condition assessment in the future.
- Regarding the life of the grout, Bill Wehrley was told by the manufacturer that if the grout does not freeze or dry out then it should last past the life of the pipe.
- Grouting appears to have reduced the peak hour and peak day flows.
- Grouting was identified as a rehabilitation solution because field investigations and flow monitoring identified water transferring from the storm sewer to the lateral and then to the sanitary sewer.
- Wauwatosa approached televising by notifying the homeowners that televising was going to occur and asking homeowners to contact the City if they did not want the televising. No response was assumed to be acceptance.

1.4.5 West Allis

Joe Burtch presented on the City of West Allis' PPII program. This presentation is included as an attachment.

- West Allis' program began with a grant to flood-proof a part of the sanitary system, including lining the sanitary sewer mainlines and manholes. West Allis used MMSD PPII funds to line laterals in a portion of this first focus area.
- West Allis does not have enough MMSD PPII funds to line every lateral in need. As a result, West Allis changed its focus to FDD, which West Allis found to be less expensive.
- When a road is redone, West Allis installs storm laterals in areas where the homes have foundation drains.
- West Allis is focusing on its non-compliant sewersheds, targeting the leakiest laterals.
- West Allis has observed a dramatic reduction in flow but this reduction has not yet been quantified.
- 11,000 laterals in the City are over 75 years old and the life span of a lateral is typically 75 to 100 years.
- West Allis asks for homeowner permission to perform inspection and rehabilitation work on private property.
- Inspection is key, since in West Allis the condition of the lateral did not correlate with the age of the lateral.
- Currently, the West Allis' PPII program is not a reimbursement program.
- West Allis is planning to roll-out a formal PPII program for homeowners with sump pumps using the following process:
 1. Homeowners will hire a contractor to provide television inspection of their laterals.
 2. City staff will review the inspection, using NASSCO coding to identify the type and extent of defects. Staff will then determine whether rehabilitation is needed and will prioritize the repair.
 3. One percent of the rehabilitations (about 170 laterals) will be completed each year.
 4. West Allis will publicly bid construction of the lateral rehabilitations.
 5. Homeowners will receive a special assessment for the rehabilitation work. The special assessment will be \$3000 for an emergency repair and \$1500 for a regular rehabilitation.
- Prioritizing is key.
- A \$10 quarterly fee will be added to West Allis' utility bills to homeowners to pay for the program.
- The policy only applies to residential properties.
- For areas where the rehabilitation is funded by the MMSD PPII program, work can be completed on commercial and multi-family properties in addition to single-family residential properties.
- Tim Bate: Did West Allis account for the extra water from the foundation drain that will now be directed to the storm sewer when it previously was directed to the sanitary sewer?
- Joe Burtch: Not separately, but the foundation drain discharge should be accounted for in the design calculations of the storm sewers.

1.5 PPII Reduction Results

Andy Lukas presented the results of PPII reduction evaluations that were completed as part of the MMSD PPII project.

- There was interest to see the cost-effectiveness of the I/I projects on a volume basis to see their impact on the Water Reclamation Facilities (WRF).

1.6 Next Steps

Next steps as a result of this workshop include:

- PPII Summit 2, which will occur in late 2015. This summit will provide a comprehensive look at where I/I reduction efforts are occurring and what efforts are being done, both regionally and nationally.
- Of MMSD's 28 customer municipalities, 25 are currently participating or have participated in the PPII program.
- Jerome plans to resurrect the spec writing subcommittee.
- Jerome is looking for volunteers to serve on a TAT Subcommittee to guide how the results from the PPII program can support the 2050 FP work. Volunteers should contact Jerome directly.
- Next April (2016), the 2050 FP team will be working on the alternatives evaluation.

ORGANIZATIONNAMEOFFICE PHONEEMAIL

If you are not on this list, don't worry. There is plenty of room to sign in at the back! ☺

04/16/2015 Special TAT

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	NORTH SHORE ENGINEERING, INC	Jim HENSEL	262-241-9400	jhsensel@northshoreengineering.net
	GRAPE HAVES CORPERS	MAT BERNASIA	414 266 9043	matthew.bernaski@grapehaves.com
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	CLARK DIETZ	Mustafa Gmic	414-315-1933	Mustafa.Gmic@clarkdietz.com
	Clark Dietz	Diane Thorne	262-657-1550	diane.thorne@clarkdietz.com
	Oak Creek WTS	Doug Schwartz	414-570-8210	dschwartz@water.oak-creek.wi.us

ORGANIZATION

Germentown

NAME

Eric Bartlein

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EMAIL

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TAT Agenda

**MMSD Headquarters, Room 121
Thursday, April 16, 2015
9:00 a.m. – 12:00 noon**

1. MMSD 2050 Facilities Plan I/I Reduction Workshop
 - a. Overview of I/I Workshop Objectives
 - b. Overview of 2050 FP Goals
 - c. Typical I/I Reduction Approaches for Facility Plans
 - d. PPII Local Efforts – Program Discussion
 - i. Brookfield
 - ii. Wauwatosa
 - iii. Fox Point
 - iv. Greenfield
 - v. West Allis
- ***** BREAK *****
- e. MMSD Program PPII Project Reduction Results
 - f. Strategy for Incorporating PPII into 2050
 - g. Next steps/volunteers to serve on 2050 PPII Sub-committee

MMSD 2050 Facilities Plan I/I Reduction Workshop

April 16, 2015

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Agenda

- Overview of I/I Workshop Objectives
- Overview of 2050 FP Goals
- Typical I/I Reduction Approaches for Facility Plans
- PPII Local Efforts – Program Discussion

***** BREAK *****

- PPII Reduction Results
- Steps for Incorporating PPII into 2050 FP and Questions/Discussion
- Volunteers to Serve on 2050 PPII Team

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Workshop Objectives

- Achieve Clarity on I/I Reduction Evaluation Approaches
- Generate Ideas on How I/I Reduction Should Factor into 2050 FP FPOPs
- Identify Working Group for Continued Testing of Concepts and Approaches

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2050 FP Goals and Objectives

- Based on the 2035 Vision (& Policy Direction):
 - SSO and CSO Overflow Reduction/Elimination
 - Basement Backup Reduction/Elimination
- Plan for Growth Required by 2035 and for the Ultimate (2050) Service Area
- Development of an Asset Management Plan for the MMSD Conveyance System
- Integration of PPII

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District Asset Management Process

```

graph TD
  A[Organizational Objectives (Level of Service, Permit, Stakeholders, 2035 Vision)] --> B[Asset System Requirements (Performance, Risk, Condition)]
  B --> C[Investment Alternatives (Infrastructure, O&M, Programs, Policy)]
  C --> D[Funding Requirements (Adaptive Implementation Plan)]
  
```

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Investment Alternatives - Example

Demand Management Programs (PPII, Green Infrastructure)	Capacity Improvements (More Treatment, Larger Sewers, More Storage)
Overflow and Backup Reduction	
Operating Changes (Diversions, VRSSI, CSO Treatment)	Policy Changes (Downspouts, foundation drains, WWPFMP)

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LOS and Cost Effectiveness – questions for 2050 FP?

TBL goals established (2035 Vision & Policy Direction)

- Strive toward zero basement backups
- Evaluate feasible – eliminate SSOs & CSOs

1. LOS for basement backups?
2. What can MMSD accomplish on its own?
3. Cost effectiveness for MMSD vs. entire system?
4. What are the risks of not meeting the LOS?
5. What is the priority of this LOS?
6. Should the LOS be modified? Goal/Schedule Change?

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How Should I/I Reduction and PPII Reduction Be Factored into 2050 FP?

- I/I Increases from “Do-Nothing” Approach?
- PPII Together with Municipal I/I Reduction or PPII Stand-Alone?
- Approach-Based?
- Big Picture Changes?

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How Should I/I Reduction and PPII Reduction Be Factored into 2050 FP?

- I/I Increases from “Do-Nothing” Approach?
- PPII Together with Municipal I/I Reduction or PPII Stand-Alone?
- Approach-Based?
 - Lateral Rehab
 - Foundation Drain Disconnection
- Big Picture Changes?

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How Should I/I Reduction and PPII Reduction Be Factored into 2050 FP?

- I/I Increases from “Do-Nothing” Approach?
- PPII Together with Municipal I/I Reduction or PPII Stand-Alone?
- Approach-Based?
- Big Picture Changes?
 - Program Funding
 - Administration
 - Lateral Ownership
 - Needs Based
 - Grant Program
 - Innovative Technologies

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I/I Reduction Factored Into Conveyance AMP

- No Change from 2020 FP 5-year WWPMP Flow Limit
- Cost Effectiveness of I/I Reduction for LOS
- Develop Data on Current Levels of I/I (ongoing)
- Future I/I - assume no increases
- Consider System-wide, Targeted areas, or Tailored to a Specific Approach (or all three)
- Develop how PPII fits

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Basement Backups Legal Considerations

- Backups do result in lawsuits
- Lawsuit defense has been very costly
- Regulatory actions are increasingly addressing basement backups
- The existence of a program like PPII shows the courts that measures/programs are proactively addressing the issue

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Basement Backups Indirect Financial Considerations

- Lawsuit defense costs
- Limit of \$50,000 per person per occurrence so 200 homes result in claims of \$10 M
- Property value/marketability of a house with a history of backups negatively impacted
- Overall indirect financial impact appears to be well above costs for PPII improvements

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Total Cost Analysis for Given Level of Service

- Build Capacity Solutions
- Conveyance
- Storage
- Treatment
- I/I Reduction
- What does it cost?
- What are the expected results?

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Total Cost Analysis for Given Level of Service

- Build Capacity Solutions
- Conveyance
- Storage
- Treatment
- I/I Reduction
- What does it cost?
- What are the expected results?

Additional Considerations

- Legal costs
- Regulatory compliance costs

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Total Life Cycle Cost of Achieving Level of Service Considers Capital, O&M, and Risk Costs

- Includes Regulatory and Basement Backup Remedy Costs for Uncontrolled Events
- ▲ Includes Capital and O&M Cost for a Specified Life Cycle


At Higher LOS, Costs to Upgrade Local Storm System Capacity are Included

FPQP Life Cycle Cost to Achieve LOS

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MMSD Private Property Inflow and Infiltration Program (February 2011, July 2012, December 2013)

- \$62M Program budget 2010-2020
- District Contracts:
 - Lateral CCTV contractor
 - Engineering consultant support
 - Public outreach consultant support
- Funding distribution by property tax equalized value annually
- Voluntary participation
- CS or SS areas
- Encouraged to focus on non-compliant metersheds
- Flexibility in completing work
 - District contracts
 - Municipal procured
 - Property owner procured



<http://www.mmsd.com/rulesandregs/private-property-infiltration>

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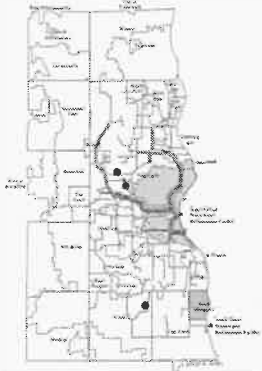
Municipal PPII Panel Discussion

- Each panel member to discuss
 - What is their PPII Policy/Program?
 - Where has the work been done?
 - What were the drivers?
 - What has been accomplished?
 - How is/has the work been funded?
 - What has been accomplished?
 - What are the biggest challenges for future PPII work?
- Brookfield, Fox Point, Greenfield, Wauwatosa, West Allis

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Flow Evaluations

- Milwaukee Cooper Park
- Wauwatosa Flow Meter 6 Basin
- Franklin 36th Street



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Milwaukee Cooper Park: Evaluation of Flow Reduction

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Milwaukee Cooper Park

Public Property Work

- 18,500 LF of Sanitary Sewer Main CIPP Lined
- 60 LF of Sanitary Sewer Main Replaced
- 82 Manholes Spray-on Lined
- \$594,000 Construction Cost



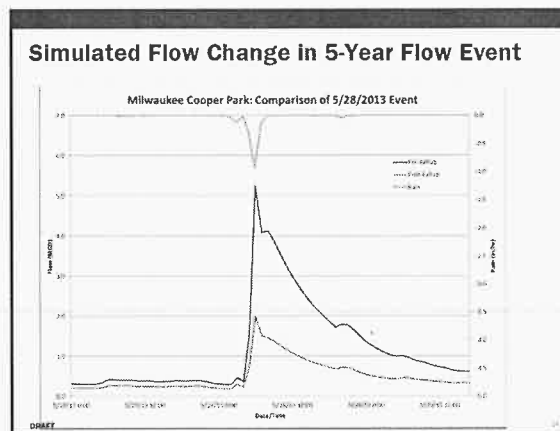
Private Property Work

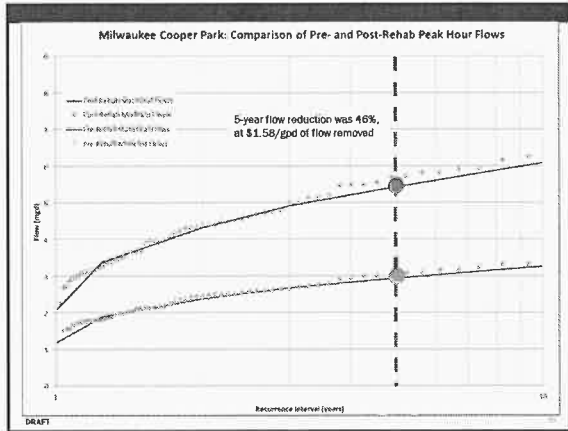
- 526 Laterals CIPP Lined (93%)
- \$3.8 Million Construction Cost
- \$7,250 per lateral – Program pays 100%
- Survey – 95% favorable opinion of project

Bottom Line

Total Construction Cost of \$4.4 Million for Both Phases

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Milwaukee Cooper Park: Flows Reduction Summary: Total Flow and I/I Only

Evaluation of Flow Reduction for Milwaukee Cooper Park

Annual Probability	Return Period (yr)	Peak Hour Flow (mgd)			Peak Day Flow (mgd)		
		Pre-rehab	Post-rehab	Reduction	Pre-rehab	Post-rehab	Reduction
0.5	2	4.34	2.39	45%	2.34	1.30	44%
0.2	5	5.45	2.96	46%	3.03	1.65	45%
0.1	10	6.11	3.28	46%	3.46	1.87	46%

$\frac{\$4.4 \text{ million}}{5.45 - 2.96 \text{ mgd}} = \$1.48/\text{gpd}$

Evaluation of I/I Reduction for Milwaukee Cooper Park

Annual Probability	Return Period (yr)	Peak Hour I/I (mgd)			Peak Day I/I (mgd)		
		Pre-rehab	Post-rehab	Reduction	Pre-rehab	Post-rehab	Reduction
0.5	2	4.21	2.27	46%	2.21	1.17	47%
0.2	5	5.32	2.83	47%	2.90	1.53	47%
0.1	10	5.98	3.14	47%	3.34	1.75	48%

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Wauwatosa Flow Meter 6: Evaluation of Flow Reduction

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Wauwatosa Flow Meter 6 Basin

N. 65th Pilot Area

- 3 blocks of Sanitary Main Relayed
 - Construction Cost of \$369,000
- 77 Laterals CIPP Lined from Main to House
 - Construction Cost of \$414,000

Phase 1 Grouting

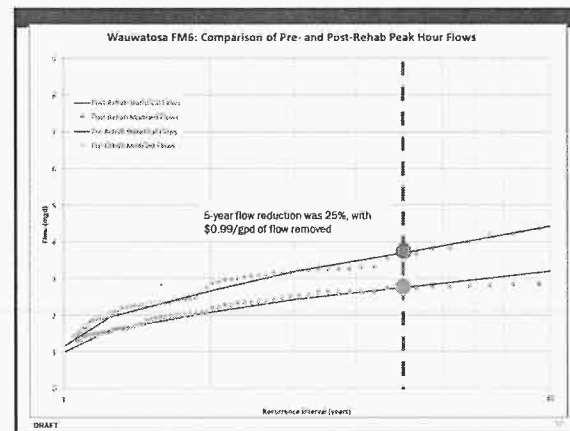
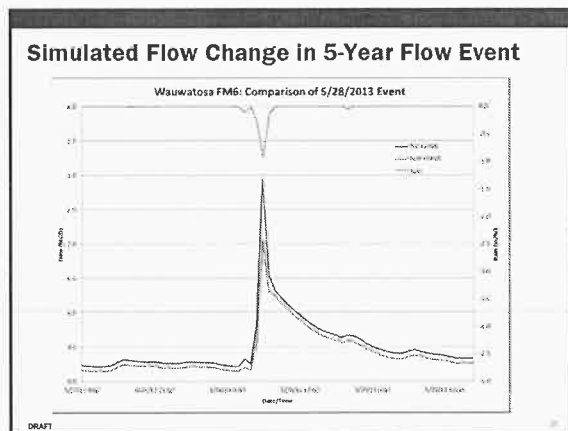
- 388 Laterals Grouted at Sewer Main Connection and First 5 Feet of Pipe
 - Construction Cost of \$145,000

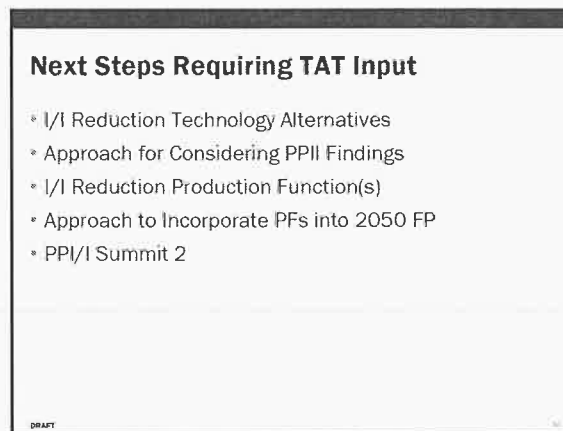
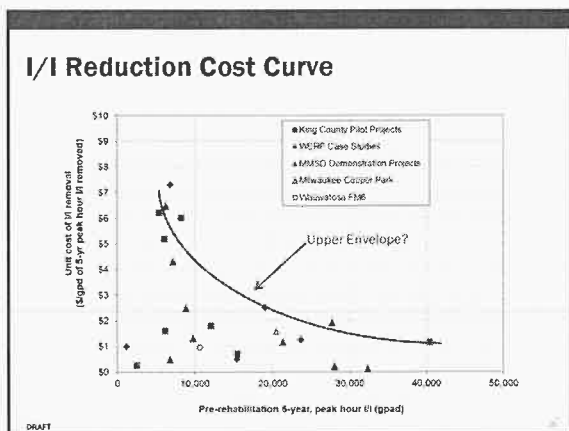
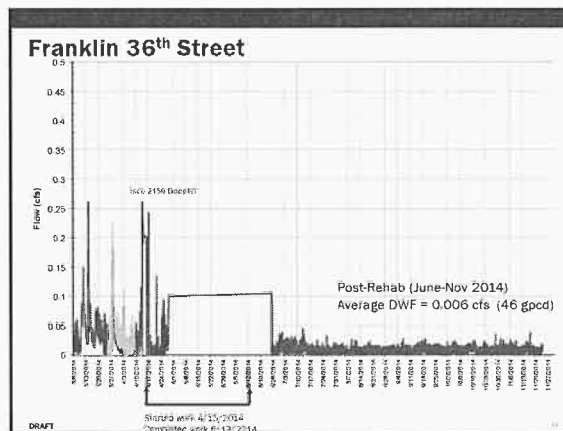
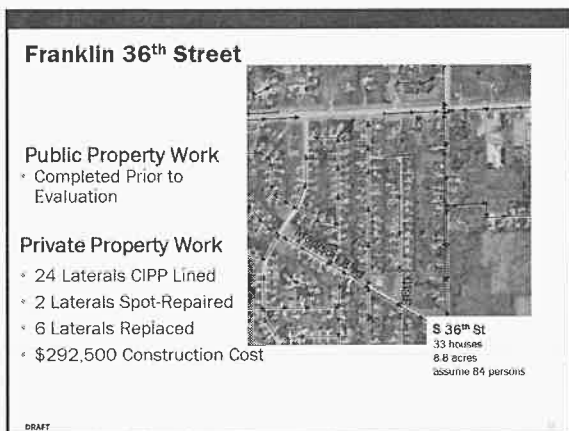
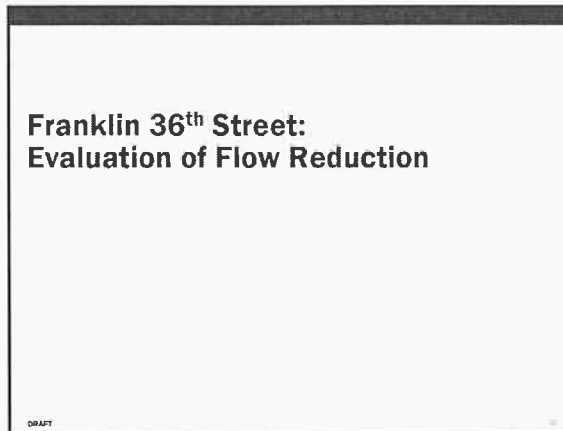
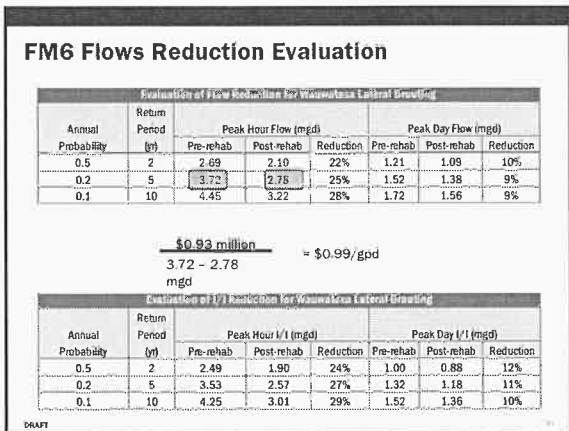
Total Construction Cost of \$928,000

*Parcels in yellow had laterals that were lined instead of grouted

93-acre total area
Pilot: 17%
Phase 1: 83%

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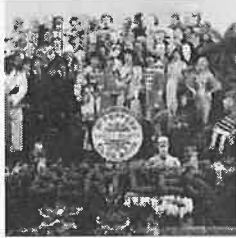


Acronyms

- AMP = Asset Management Plan
- CIPP = Cured-In-Place Pipe
- CSO = Combined Sewer Overflow
- CS = Combined Sewer
- FP = Facilities Plan
- FPOP = Facilities, Plans, Operations, and Programs
- I/I = Infiltration and Inflow
- LOS = Level of Service
- PPII = Private Property Infiltration and Inflow
- PF = Production Function
- SS = Separated Sanitary Sewer
- SSO = Sanitary Sewer Overflow
- TBL = Triple Bottom Line
- WWPFMP = Wet Weather Peak Flow Management Plan

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PPII in Brookfield



We Get by with a Little Help from our Friends
(MMSD, EPA and Mother Nature)

Targeted PPII Work Areas

- Findings of 2020 FP determined this work was not cost-effective
- No broken sewersheds
- Five 100-yr storms (G-7 to 10) in 14 years
- Identify areas where basement backups or SSOs have occurred
- EPA consent decree

Funding

- Using our own money - MMSD calls them "grant funds"
- MMSD does not tax Brookfield property owners directly, they bill the City instead
- Raise sewer rates or property taxes (but can't do that w/o cutting important programs)
- MMSD gets "grant" funds from City and gives it back... if we spend it in an acceptable way

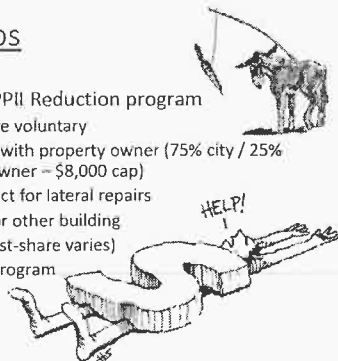


PPII Work Completed to date

- Lateral inspections
 - \$1 Million for 1565 laterals inspected
 - 379 laterals @ \$3.2 Million recommended for repair
 - Old laterals had more defects than newer ones
- Building inspections
 - \$180,000 for 1514 residential houses inspected
 - 185 defects @ \$360,000 recommended for repair
- Would only inspect "old" laterals
- Some early out projects repaired failed laterals

Next Steps


- Implement PPII Reduction program
 - Sign-ups are voluntary
 - Cost share with property owner (75% city / 25% property owner - \$8,000 cap)
 - City Contract for lateral repairs
 - Contract for other building repairs (cost-share varies)
 - Two year program
 - All \$ spent



Challenge for the Future

- When all you have is a hammer, everything looks like a nail
- PPII is a tool that is needed in some places, but not all
- Focus on:
 - Cost-effective sources
 - Broken sewersheds
- Allow for cities to perform I/I work responsibly






CITY OF Greenfield
Pledged to Progress

Presenters: Richard J Sokol, Director of Neighborhood Services
Jeff Tamblin, Environmental Engineering/GIS Technician
April 16, 2015

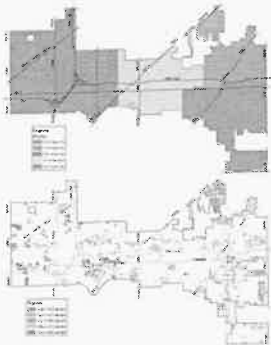

Greener Greenfield PP I/I Program

- Greener Greenfield Program is a PP I/I reduction program designed and administered by the City
- City established Work Plan and Funding Agreement with MMSD
 - \$1.3 million was initially available to the City through MMSD
 - Initial Work Plan utilized \$647 k
 - A supplemental Work Plan and Funding Agreement is needed to utilize the remaining \$677 k
- "Greener Greenfield Program" is a voluntary program
- Program helps to educate residents even if they do not follow through to construction - packet contains educational information




PP I/I Program 5-year Target Areas

- 2400 properties identified with construction before 1954
- Properties constructed before 1915 probably have no drain tile
- 500 contacts per year estimated to be manageable
- Density of target properties helped determine program areas
- Part of Year 1 area was in non-compliant metershed.

Greener Greenfield PP I/I Program

- For sanitary lateral work, foundation drain disconnection and sump pump installation the program reimburses residents up to 100% for the first \$6,000 and thereafter at a rate of 75% up to a total of \$12,000 per property.
 - \$8,000 job = \$7,500 program cost + \$500 resident cost
- For downspouts, redirecting storm water and modifying existing sump pump systems reimbursement is at a rate of 50% up to a total of \$6,000.
- To be eligible for sanitary sewer lateral rehabilitation under the Greener Greenfield Program, foundation drain disconnection must be completed prior to, or in conjunction with lateral work.
- Program was not designed to deal with plumbing emergencies.
- Residents contract directly with contractors to complete work. Residents do not incur costs and are not obligated until they sign a contract for construction. ** Lateral cleaning costs may apply during investigative phase.
- Residents are reimbursed from the City through a reimbursement process with MMSD. Reimbursement typically takes 30-60 days once City has received the required materials from resident.



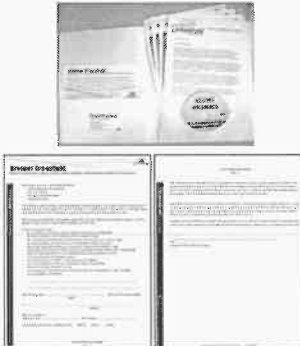

Process

Application
 Inspection - Investigation
 Data Analysis - Summary of Repairs
 Quotation
 Conditional Approval
 Construction
 Reimbursement



Application

- Information packet is mailed to targeted group
- Applications returned to Engineering Division and entered into PP I/I database
- Applicant list provided to DPW to coordinate inspection process

PP I/I Video

The image shows a DVD cover on the left with the text 'GREENER GREENFIELD' and a screenshot of a video player on the right. The video player interface includes the text: 'PRIVATE PROPERTY INFLOW / INFILTRATION REDUCTION PROGRAM', 'MMSD SANITARY SEWER SYSTEM', and 'GREENFIELD HOME INSPECTION'.

Inspection - Investigation

- Inspection takes about 1-2 hours
 - DPW - 2 man crew (NASSCO Certified)
- Property exterior
 - Site grades
 - Downspouts
- Property interior
 - Basement plumbing / clean-out
 - Floor drain / sump pump
 - Foundation wall issues
 - Illegal connections
- Televis sanitary sewer lateral
- Digital still photos taken as needed
- Follow up inspections by Plumbing Inspector may be needed

Data Analysis / Summary of Repairs

- Engineering staff reviews DPW inspection data
 - Same person does each review
 - NASSCO certified
- Research property records and permits on file
- Prepare summary letter to identify scope of work and cost estimates under program
- Resident is provided with materials and asked to obtain 3 quotations
 - Summary letter
 - List of vetted contractors
 - Checklist
 - Copy of data from DPW inspection

Quotation

The image displays two sample quotation forms. The left form is a 'Request for Quote' form with fields for 'Project Name', 'Address', 'Description of Work', and 'Contractor'. The right form is a 'Quote' form with fields for 'Contractor Name', 'Address', 'Phone', 'Email', and 'Quote Amount'.

Quotation – Contractors - 38

Jon Seibelak Gene Wagner L.H.N. Mr. Rooter Muston Brethler Inc. Hazden Plumbing Roggs Plumbing Radtke Contractors Doc's Sewer & Water Pipes Inspector LLC Badger Underground Harlab Zabacki Inc. Affordable Rate Plumbing Wilkes Plumbing Plumbing Sales & Service Fedrick's Sewer and Drain Service S&K Pump & Plumbing Vince Inghil Plumbing Elete Plumbing Birchtree Enterprises, Inc. Anderton Plumbing Inc. MT Construction	A-Zabacki Waterproofing Accurate Basement Repair Basement Specialists Badger Basement Systems Dicks Electric Bluehill Electric Mober Electric Walkowak Electric Bob Yarna Electric Engler Electric Electric Services Lamphear Electric Hoppli Tree Service Precision Tree Service Brand Managers
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Conditional Approval


- Engineering Division reviews contractor quotes and works with Owner + Contractor to verify any issues with quotations
- Engineering Division prepares Conditional Approval letter to verify final scope of work and cost estimates under program based on actual quotations
- Once Conditional Approval is granted, reimbursement for any changes must be approved by City prior to work taking place
- Multiple contractors can be used
- Resident is not obligated to use the low bid contractor. Resident pays out of pocket for extra above low bid amount

Construction

- Completion of construction is required within 6 months of Conditional Approval

Reimbursement

- Resident is required to provide a written request for reimbursement
 - Construction start and end date
 - Contractor information and final invoicing
 - Permit information
 - Digital copy of any photos or video taken
 - In the case of lateral lining, a post-lining video is required
- City uploads data to MMSD via web interface and makes formal reimbursement request
- MMSD approves and provides payment to City. City sends owner reimbursement check
- Reimbursement process typically takes 30-60 days





Results

Year	Packets Mailed	Applications Returned	Return Rate
2013	515	118	22.9%
2014	571	103	19.8%
2015	560	90	16.1%

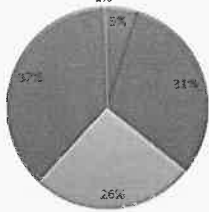
TOTAL = 311 on file

- 79 - Withdrew from program (9.3%)
- 2 - On hold at resident request (0.6%)
- 94 - Application moved to future year (30.2%)
- 23 - Inspection / Investigation (7.4%)
- 104 - Quotation (33.4%)
- 9 - Conditional Approval to perform work (2.9%)
- 7 - Reimbursement for work performed (2.3%)
- 43 - Finished (13.8%)





Results


Defects Identified (311 properties)



- Downspouts = 21
- Palmer Valves = 134
- Sump Pumps = 113
- Laterals (13,472 LF) = 162
- Other = 3




Defects Rehabilitated




- Downspouts = 5
- Palmer Valve = 36
- Sump Pump = 36
- Lateral (3,453 LF) = 46
- Other = 1

Lateral Rehabilitation (3,453 LF)



- Lining (2,810 LF) = 37
- Relay (362 LF) = 5
- Combination Line/Relay (266 LF) = 3
- Spot Repair (15 LF) = 1




Costs

Resident Construction Costs	\$360,317
Of 50 properties that have completed work, \$360,317 / 50 = \$7,206 average.	
Resident Reimbursements	\$302,680
City Costs	\$105,549
Total Costs To Date	\$408,229


Average Program Construction Costs

Sump Pump Installation	\$1,500
Electrical	\$ 300
Cap Palmer Valve	\$ 400
Lateral Lining	\$ 85 / foot
Relay / Spot Excavation	No average provided



Challenges

- DPW inspection process
 - Can't properly access basement due to clutter
 - Stuck floor drain, clean-out and vent stack covers
 - Laterals are not cleaned prior to inspection
- Contractors time is limited to quote jobs. This leads to inaccurate quoting, or outright refusal to quote, especially if they are not getting a lot of work from the program.
- We have received complaints from residents that its difficult for them to obtain the 3 quote minimum.
- Since program is based on the low quotation, steps need to be taken to ensure that the quotations are as comparable as possible and that the necessary PP / I issues are being addressed.
- Drain tile - how much should be installed as a part of new sump pump installation? Program is not designed as drain tile replacement program - difficult to determine during quotation
- Many property owners regard this program as a way to simply improve the reliability of an old sanitary sewer lateral.
- Several inquiries are made to the program as a result of plumbing emergencies.
- Contractor change of scope once work has started.



Program Sustainability

- For those properties that have completed work, average project costs are around \$7,200 / property
- City currently has 136 properties from 2013 and 2014 that are at varying stages in the program.
- Assuming a 20% application response rate for 2015, 2016 and 2017 = 288 properties
- Based on data from our first 2 years, we are seeing about a 22% construction completion rate from applications we have received.
- 22% x 424 properties (136+288) follow through to construction = 93 properties
- \$669,600 anticipated need for future construction reimbursement (93 properties x \$7,200)
- \$754,000 total funding still needed (\$670 k construction and 584 k city inspection/administration)
- Estimated funds available to City = \$913,418
- Based on current projections, the City believes it can sustain the program at the current levels for the duration of the 5-year program.
- An increase in participant construction would result in a program that is un-sustainable for the remainder of the 5-year program cycle given current funding levels.

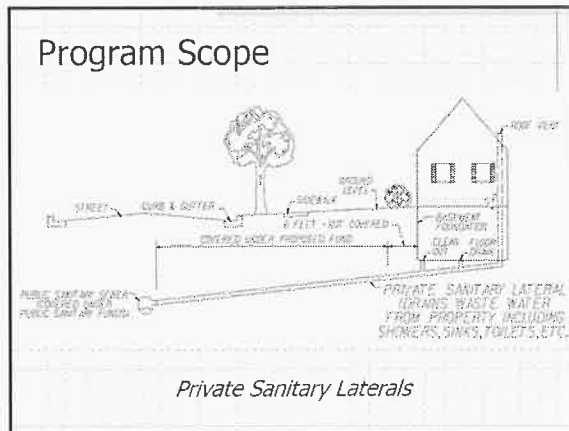


The City of West Allis
Engineering Department

Private Sanitary Fund
(Residential Private Property Sanitary
Inflow/Infiltration (I/I) Reduction Fund)

Purpose

- ◆ Reduce sanitary flows during wet weather
 - West Allis is required to reduce excess flows caused from clear water entering the sanitary sewer system
- ◆ Target leakiest pipes in the system
 - Private sanitary systems account for most of the clear water entering the sanitary system
 - 180 miles of mainline sewer and more than 180 miles of private sewer



Past Experience

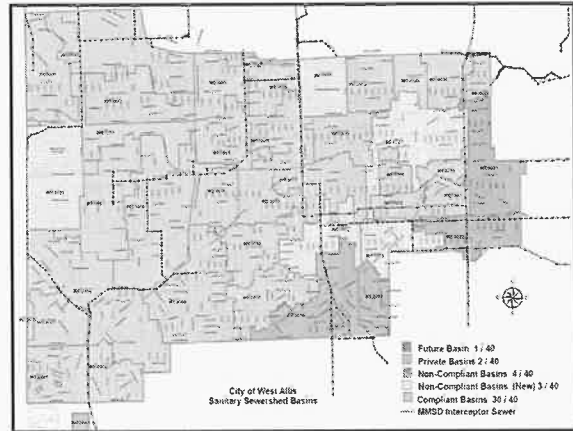
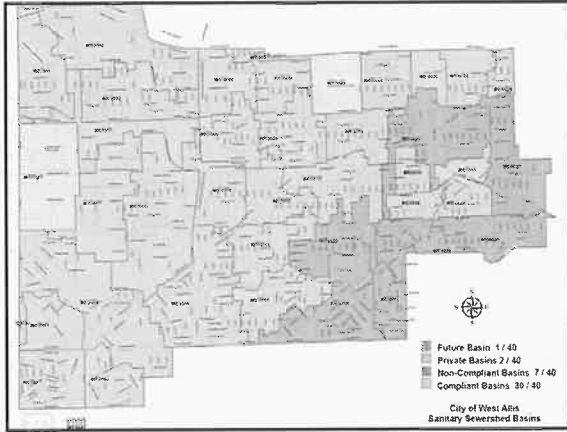
- ◆ West Allis Project to rehabilitate approximately 90 laterals
 - Area had history of basement backups
 - Dramatic reduction in flow after project

Lateral Leakage Test:

- Typical results of dye water flooding on lawns in Milwaukee Area
- Similar results found in tests throughout the U.S.

I/I Reduction Fund

Properties throughout the city have reported sewage flooding in their basements during 2009 and 2010 rain events




Options to handle high flows

1. Increase size of public sewer system → **Costly!**
2. Increase treatment plants or storage → **Costly!**
3. Reduce flows from private property (I.E. → **Most leaky!** leaking laterals)

By rehabbing sanitary laterals we are addressing the problem with the *lowest cost per gallon of water removal method*

Chances of Lateral Failure/Leaking

- Manufacturers claim 75-100 year life span
- Almost 11,000 of the 17,000 residential laterals are over 75 years old
- While age is a helpful indicator, some newer pipes have failures while some older pipe are in good condition
- Inspection is important to determine condition



How Program Will Work

Program Information Distributed

Property owners get program information in water bill, City website and in City newsletter explaining how to handle lateral problems.

Program information forwarded to contractors explaining new program and how to handle lateral problems in West Allis.

How Program Will Work

Rehabilitations by Request

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    graph TD
      A[Property owners bring in their inspection reports / videos] --> B[Engineering evaluates lateral]
      B --> C[Property owner signs agreement to have work done]
      C --> D[Engineering prioritizes & schedules work]
      D --> E[Laterals are rehabilitated on City contract]
      E --> F[Property owner receives Special Assessment]
      A --> D
  
```

Note: Laterals must be leaking and/or failing to be rehabilitated

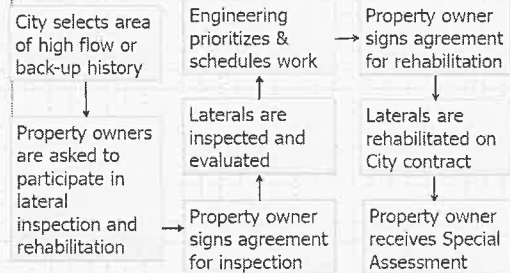
Prioritizing Rehabilitations

Prioritizing laterals for rehabilitation is necessary to keep amount of work done annually on budget.

- If there are over 170 requests for rehabilitations the work may be spread over multiple years
- Engineering staff is trained and certified in pipe condition assessment
- Laterals must be in need of rehabilitation before they are put on a schedule

How Program Will Work

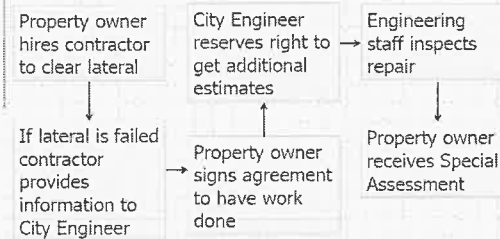
Rehabilitations by Area



Note: Laterals must be leaking and/or failing to be rehabilitated

How Program Will Work

Emergency Repairs



Important Points

- Property owner retains ownership and responsibility to maintain lateral.
- Property owners are responsible for clean up of sewer back-ups caused by blockages or failures in the lateral.
- Work done by this program is voluntary and will only be done with the written consent of the owner.

Program Costs

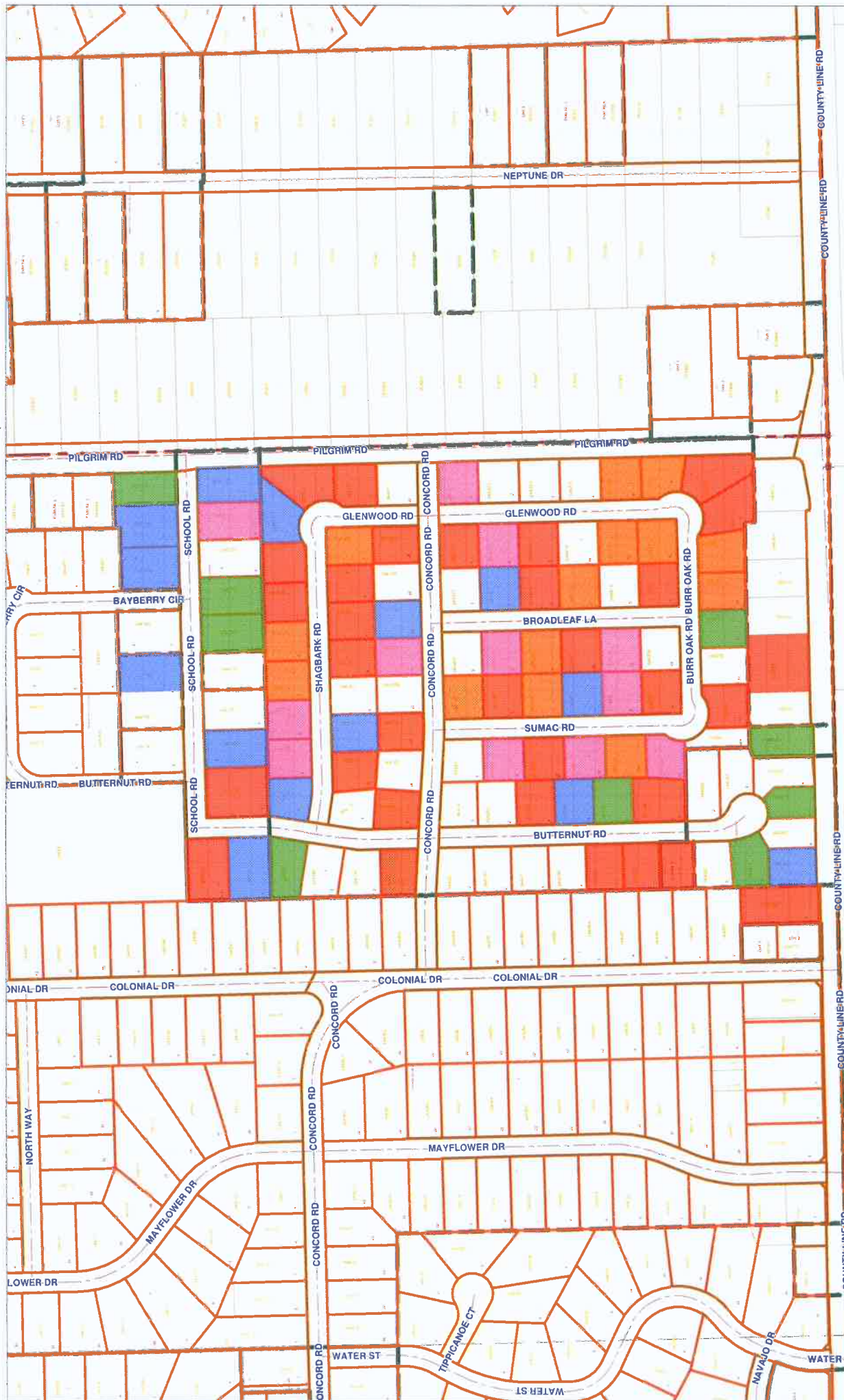
- \$10 quarterly fee added to City's utility bill.
- Special Assessment of \$3,000 for Emergency Repair.
- Special Assessment of \$1,500 for Rehabilitation.

Program Benefits

- ◆ Reduces risk for basement back-ups and sewer overflows to Lake Michigan
- ◆ Works towards City's flow reduction requirements
- ◆ Reduces future costs to expand municipal and MMSD sewers
- ◆ Provides help to rehabilitate aging, leaking sanitary laterals
- ◆ Helps repair failed laterals
- ◆ Improves water quality in the area

Private Sanitary Fund





N

NEPTUNE DR

COUNTY LINE RD

COUNTY LINE RD

PILGRIM RD

PILGRIM RD

PILGRIM RD

SCHOOL RD

SCHOOL RD

SCHOOL RD

GLENWOOD RD

GLENWOOD RD

CONCORD RD

CONCORD RD

CONCORD RD

CONCORD RD

CONCORD RD

SHAGBARK RD

BROADLEAF LA

SUMAC RD

BURR OAK RD

BURR OAK RD

BURR OAK RD

ERRY CIR

BAYBERRY CIR

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CONCORD RD

CONCORD RD

CONCORD RD

CONCORD RD

COLONIAL DR

MAYFLOWER DR

LOWER DR

MAYFLOWER DR

NORTH WAY

WATER ST

WATER ST

WATER ST

TIPICANOE CT

NAVAJO DR

COUNTY LINE RD

COUNTY LINE RD

COUNTY LINE RD

COUNTY LINE RD

COUNTY LINE RD

SANITARY SEWER EXCESS FLOW STUDY

Supt. Zimmerman advised, per the May meeting, committee asked that interior and exterior home inspections of the homes that were missed on Kurt Drive be done. This was accomplished and there was no real "smoking gun" found. What was found was no illegal connections to the sanitary sewer of the homes inspected. All downspouts and sump pumps were found to be discharging either to the ditch or directly to the yard. Of the 21 homes left to inspect, 4 would not allow interior or exterior inspection and one only allowed exterior inspection.

Terry Tavera, Ruckert & Mielke reported 80% of the residents returned responses which 65% allowed exterior and interior inspections. 35% of the basements have not been inspected for illegal systems. Of the 92 interior inspections, two illegal connections were turned over to the Building Inspector. MMSD restrictions will require communities to fix the I/I problems. Replacement costs could run approximately \$2,500 for a small lateral leak and replacing large segments could run from \$4,000-\$6,000 per lateral. The study is complete and it is up to the Village to determine a course of action to combat infiltration and inflow. Free information is available through the WDNR and MMSD.

Supt. Zimmerman reported ten laterals in both studies were rated as being in bad enough condition to warrant significant rehabilitation. Supt. Zimmerman would like to create a "Point of Sale" Ordinance similar to Mequon so as the homes turn over Village wide, some of these problems would be corrected. If MMSD allocates funding in their 2007 budget, Germantown would be considered as one of the communities chosen for a demonstration project since the Village had gone through the expense of funding the I/I study.

Trustee Steitz recommended sending another letter to the homes that did not allow the interior inspection advising them in detail the reason for the inspection, violations and possible fines. It was the consciences of the Committee to allow staff to move forward on the rehabilitation of 10/11 laterals and create an ordinance to allow the Village to repair the lateral and assess repairs back to the homeowner.

MOTION made by Steitz seconded by Sorce to work on a plan for those homes which have been identified as a problem and to bring the plan back to the committee for review and acceptance.

Supt. Zimmerman offered to provide the Committee with options, recommendations and documentation of what other communities were doing.

Liz Zabel, N97 W15737 Burr Oak Drive, indicated that the key was education to the people and stated the 40 properties which did not respond, needed to be inspected.

Supt. Zimmerman responded that all the laterals have been looked at for every home. Of the 92 homes entered for verification of the sump pump connections, only two were found to have the potential to be illegally connected. At the time of inspection they were not connected. They were suspect of Kurt Drive initially, however, of the homes inspected, there were no illegal connections or bypasses found. Supt. Zimmerman indicated all the laterals have been inspected, so there is a benchmark as far as the condition in both areas of the study.

Motion carried unanimously.

Motion made by Vanderheiden, seconded by Sorce to ask the Village Attorney to look at an ordinance requiring lateral inspections prior to home sales.

Trustee Steitz stated he would like the information from Supt. Zimmerman, with his input and recommendation prior to sending it to the Village Attorney for formalization into an ordinance.

Motion withdrawn.

AUTHORIZATION TO SOLICIT “REQUEST FOR PROPOSALS” FOR SEWAGE LIFT STATION NO 1 AND FORCE MAIN EVALUATION AND UPGRADE

Supt. Zimmerman explained the history and detailed analysis of Lift Station No. 1 and the need to evaluate the station and force main for the pumping equipment as well as a site evaluation. He did not believe there was enough land to reconstruct the lift station in its' current configuration and believed the DNR would consider the site a significant environmental corridor. Supt. Zimmerman is looking at a study to possibly move Lift Station No. 1 to an alternative site to accommodate reconstruction. Discussion followed.

MOTION made by Steitz, seconded by Sorce to support the solicitation of proposals from consulting engineering firms to evaluate the capacity and condition of existing lift station and make recommendations for upgrading.

Trustee Zabel indicated a response was forthcoming from Briscoe/Carity with regards to a cost feasibility study to move Lift Station No. 1 to their site on Mequon Road and Country Aire Drive and suggested it may be beneficial to wait to hear of their findings.

Discussion followed on how soon the information was needed and whether the developer should pay for the study.

Motion withdrawn.

MOTION made by Steitz, seconded by Sorce to table the topic for authorization to solicit request for proposals for sewage Lift Station No. 1 and Force Main Evaluation and Upgrade until the November, 2006 Public Works meeting.

Motion carried unanimously.





