Sump Pump Program
Public Informational Meeting

AUSTIN, MN
April 16, 2019
5:30 PM
City Hall – Council Chambers
Meeting Objectives

- What is Infiltration and Inflow?
- Why are we doing this program?
- Discuss program approach and details
- Frequently asked questions
What is I/I?
Inflow and Infiltration
Some Sources of I/I

- Direct
- Indirect

- Roof Drain
- Sump Pump
- Yard Drain
- Foundation Drain
- Catch Basin
- Leaky Lateral
- Leaky Manhole
- Pipe Defects
- Inflow: Manhole cover leakage
- Infiltration: Root penetration
- Infiltration: Leaky service lateral
- Infiltration: Deteriorated manhole
- Infiltration: Faulty lateral connection to sanitary sewer
- Infiltration: Broken or cracked pipe
- Infiltration: Misaligned joint
Austin System Description:
Average Dry Weather (ADW) flow (MGD): 2.6
Average Wet Weather (AWW) flow (MGD): 6.3
Peak Instantaneous Wet Weather (PIWW) flow (MGD): 19.8 760% average
Consequences of Excessive I/I

- Low customer satisfaction
- Costs greater than needed
- Potential health risks
- Property damage
- Regulatory actions
I/I’s Effects on Austin

• Lift Station Upgrades
• Sewer Rate Increases
• Sanitary Sewer Overflows
• Extra Costs for WWTP Upgrades
Why are we doing this program?

- Sump pump programs are typically the MOST cost effective method to reduce I/I in the system.

- Removing I/I from the sanitary sewer:
  - **Saves Money**: Reduces future rate increases
  - **It’s the Neighborly thing to do**: Reduces potential for backups & property damage
Example Flow Removal & Cost
Public Sector vs. Private Sector

Sources of I/I vs. Cost to Remove I/I

Example from Kutzky/Slatterly Pilot I/I Study, Rochester MN 2008
National averages range from 50/50 - 75/25
A few sump pumps can make a big difference

- Typical sump pump 20-100 gpm a piece
- Typical 8” sewer capacity 350 gpm.
- As few as FOUR pumps can take up the pipe capacity and cause a backup in the neighborhood.
Sump Pump Program Approach

• Ordinance Modification
• Public Info
• Public Meetings
• Scheduling
• Inspections
Key Aspects to Ordinance Revision

- Chapter 3 of Austin Code of Ordinances prohibited clear water connections before Amendment.

- Amended Ordinance allows City to verify compliance.

Key Aspects:

- Sump pumps, beaver drains, footing drains, defective laterals, etc are prohibited from discharging to sanitary sewer.

- Rigid discharge piping, no valves or flex hose.

- Sump pits must have pumps.

- City, City’s representative, or private plumber inspects.

- 30 days to inspect, 90 days to correct deficiencies.

- City can issue $100/month surcharge for violations or no inspection.
A successful program benefits the City by • reducing backups, • protecting health, and • controlling costs.
April 2, 2019

To:
Sump Inspection for building at

RE: Sump Pump Inspection Program

The City of Austin prohibits the discharge of clear water into the sanitary sewer system. Clear water from any roof, surface, ground, sump pump, footing tile, swimming pool, seepage collection system ("beaver system") or other natural precipitation is prohibited from discharging into the sanitary sewer.

Due to evidence of non-compliance during recent inspections, the City has adopted an ordinance that requires mandatory sump pump inspections for all buildings with sewer accounts. The mandatory sump pump inspections will verify that sumps, roof drains, and other clear water sources are not connected to the sanitary sewer system. The engineering firm, WHKS & Co., is coordinating this program and will serve as Project Consultant.

Why is the City conducting the sump pump inspections?

- Sump pump programs are typically the MOST cost effective method to reduce clear water from the sanitary sewer collection system.
- Removing clear water from the sanitary sewer
  - Protects your investment in the public infrastructure
  - Reduces the potential for backups and property damage
  - Helps the City increase customer satisfaction
  - Helps to ensure that future residential, commercial and industrial developments can be allowed within the City
- All buildings with sewer accounts will be inspected. A typical inspection is completed in under 15 minutes.

If you are receiving this letter, your inspection will take place during 2019. The Southwestern Central area of Austin — generally south of Oakland Avenue West, west of Main Street South and northeast of Turtle Creek—will be inspected in 2019. In 2018, Southeastern Austin was inspected, and all other areas of Austin will be inspected in the following years. The Southwestern Central area will be separated into approximately five sectors, designated by a color (red, yellow, green, blue and purple), to stagger inspection times throughout the year. You will be contacted by letter at a later time to inform you of your sector color and to invite you to schedule your inspection.

The City will host a public informational meeting on Tuesday, April 16, 2019 at 5:30 pm at Austin City Hall in the Council Chambers to discuss the scheduling of inspections, length of inspection, proper sump pump connection, and other miscellaneous items.

Your anticipated cooperation is greatly appreciated in completing this program. If you have any questions, or would like to review the Ordinance, please contact the WHKS & Co. office toll free at 1-844-630-0878.

Sincerely,

Steven J. Lang P.E. – City Engineer
Scheduling

• All inspections are scheduled, no door-to-door inspections.

• Scheduling is fast and easy

• Schedule through website or telephone

• Residents will receive a letter when it is time for their sector to schedule inspections.
Citywide Sectors
2019 - SWC Inspection Sectors
**SUMP PUMP INSPECTION PROGRAM**

Updated 4/02/2019

Received a Letter? Click Here to Schedule an Inspection

Have a Question? Please call toll free 844-630-0878.

**Why is this important?**

The City of Austin is continuing its mandatory sump pump inspection program. To complete the program the City is divided into six areas: Northeast, Southeast, Northwest (divided into two areas) and Southwest (divided into two areas). In 2019 Southwest Central Austin — generally south of Oakland Avenue West, west of Main Street South and northeast of Turtle Creek — will be inspected. In 2018, Southeastern Austin was inspected, and all other areas of Austin will be inspected in the following years.

Like many cities in Minnesota, Austin faces a challenge with its sanitary sewer collection system. During significant rainfall events the system is overloaded by excess ground water and rain water (clear water). When it rains, flows can jump up to eight times the normal rate. Overloaded sewers lead to basement backups, and in extreme cases, require bypassing flow directly to the duct. This

**NEWS**

A Public Informational Meeting will be held on Tuesday April 16th 5:30 pm at Austin City Hall in the Council Chambers. Meeting will discuss the scheduling of inspections, length of inspections, proper sump pump connections and other miscellaneous items. Information from the meeting will be posted in the Notices section after the meeting.
Scheduling and Info Website

AustinSump.com

Resident Welcome Screen

Schedule Inspection

You have an inspection appointment scheduled for April 21, 8:00 AM

Schedule Inspection
Select a time for an inspection.

Edit Notes
Provide special instructions for inspectors or other information about your property.
You are Logged Out

Yay!

You have logged out. You have an inspection appointment scheduled for 04/21/2015 8:00 AM Thank you for participating in this program.
The Inspection

- Completed in under 15 minutes, many under 5 minutes
- Adult must be present
- Inspector looks at:
  - Sump pumps
  - Beaver drains
  - Roof drains
  - Site grading
- Occupant and inspector signs
- Notice of Violation and instructional diagrams given if needed
Inspector Identification

- All inspections are scheduled
- No door-to-door
- WHKS logos on
  - Badges
  - Clothing
  - Vehicles
Installation Examples: Sump Pumps

- Rigid Pipe to Outside
  PROPER

- Flex Hose to Drain
  IMPROPER
Installation Examples: Sump Pumps

- Rigid Pipe to Outside: PROPER
- Flex Hose to Outside: IMPROPER
Installation Examples: Beaver Drains

– Beaver Drain to Sump Pit
  PROPER

– Beaver Drain to Floor Drain
  IMPROPER
Installation Examples:
Beaver Drain / Tile

– Tile into Floor Drain under Cover
IMPROPER
Inspection Form

A. Initial Inspection
1. Owner and Address:
   a. Owner Name(s):
   b. Address:
   c. Occupants Name (If different):
   d. Owner Address(s) (If different):

2. Date of Initial Inspection:

3. Date of construction and Building Type? Building built in year ______ (Ex. 1956)
   Note: residential, apt., commercial, industrial:

4. History of backups or flooding? Note date, source, and actions taken:

5. Does building have:
   a. ☐ Yes ☐ No Exterior grading sloping towards the building?
   b. ☐ Yes ☐ No Roof drains that go into the ground?
   c. ☐ Yes ☐ No Basement?
   d. ☐ Yes ☐ No Sewage collection (beaver) system?
   e. ☐ Yes ☐ No Sump pit?

6. If building has a roof drain that goes into the ground, which of the following apply?
   a. ☐ It is properly constructed to discharge to open air or storm system.
   b. ☐ It is improperly constructed to discharge into the sanitary sewer system.
   c. ☐ Discharge location not determined.

7. If there is a seepage collection (beaver) system, which of the following apply?
   a. ☐ It is properly constructed to discharge into the sanitary sewer system.
   b. ☐ It is improperly constructed to discharge into the sanitary sewer system.
   c. ☐ Discharge location not determined.

8. If there is a sump pit, which of the following apply?
   a. ☐ Pump is properly plumbed to discharge outside the basement through rigid piping.
   b. ☐ Pump is improperly plumbed to discharge into the sanitary sewer system.
   c. ☐ Pump has the capability of discharging into the sanitary sewer system (ex. flex hose).
   d. ☐ There is a pit with no pump. Plumbing is checked as (a) (b) or (c), if present.
   e. ☐ Discharge location not determined.

9. Other comments (exterior drains, uncapped cleanouts, inactive sump pit, etc):

   ______________________________________________________________

10. Photos taken of interior Sumps and Collection System, and Building Exterior? ☐ Yes ☐ No

11. If 5b, 7b, 8b or 8c was checked, a Violation Notice was given to the Occupant or Owner directing them to correct the violation by (Date) ______________________

   PASS _____  FAIL _____  City Follow-Up _____

B. Subsequent Inspection
1. Date of subsequent inspection: ______________________

2. Inspection conducted by ______________________

3. Does the building now comply with the applicable Ordinance for the City of Austin?
   ☐ Yes ☐ No

I hereby verify that the City Representative has inspected the above-described sump pump and the information set forth above is true and correct to the best of my knowledge.

Occupant/Owner

Date ______________________

City Representative

Licensed Plumbers; sign with license #.

Date ______________________
CITY OF AUSTIN

PROPER SUMP PUMP CONNECTION
(WHEN CITY SUBRAIN / STORM SEWER IS AVAILABLE)

Typical Section
No Scale

WHKS

REV. 5/16/2016

CITY OF AUSTIN

PROPER SUMP PUMP CONNECTION
(WHEN CITY SUBRAIN / STORM SEWER IS NOT AVAILABLE)

Typical Section
No Scale

WHKS

REV. 4/08/2016
## Approximate Inspection Timeline

<table>
<thead>
<tr>
<th>Item</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Information Meeting</td>
<td>Apr 16, 2019</td>
</tr>
<tr>
<td>Red Sector Inspections Begin</td>
<td>May 2019</td>
</tr>
<tr>
<td>Yellow Sector Inspections Begin</td>
<td>May 2019</td>
</tr>
<tr>
<td>Green Sector Inspections Begin</td>
<td>June 2019</td>
</tr>
<tr>
<td>Blue Sector Inspections Begin</td>
<td>July 2019</td>
</tr>
<tr>
<td>Purple Sector Inspections Begin</td>
<td>August 2019</td>
</tr>
<tr>
<td>All Inspections Complete</td>
<td>Nov 2019</td>
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</tbody>
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Next Steps

1. Wait for scheduling letter to arrive.

2. Then contact us by phone or login to website to schedule the appointment.
Questions?
Contact and Project Information

• Contact/ Project information
  – Bryan Kaemingk, WHKS 507-288-3923
  – Scheduling Website: AustinSump.com
  – Call toll-free: (844) 630-0878