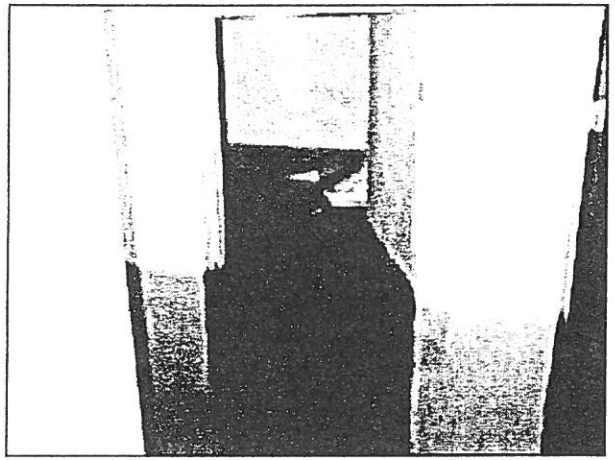
VILLAGE OF WINFIELD

Incorporated 1921

Sanitary Sewage Back-ups



The back-up of sanitary waste into a building can be attributed to a number of circumstances:

- Natural flooding from overflowing rivers, streams or stormwater facilities.
- Relative elevation between the lowest sanitary sewage drain in the building and the point of its connection to the Village's conveyance structure.
- Damage to public sanitary sewer lines by private parties or their contactors.
- Damage to a public sanitary sewer line by public entities or their contactors.
- Loss of power or mechanical failures at public sewerage 'lift stations'.
- Blockages of a public and private sanitary sewer line due to debris (rocks, sticks, lumber, toys, roots, grease etc).
- Settlement or movement of earth below a public sanitary sewer line that causes the line to collapse or separate.

What can private property owners do?

If you do not now have flood coverage for your homeowner's insurance, contact your agent to discover if you can get coverage to protect your assets. Flood insurance is highly recommended. Remember, even if the last storm or flood missed you or you have done some flood proofing, the next flood could be worse. Most homeowner's insurance policies do not cover property for flood damage.

Almost every community in northeastern Illinois with a flood problem participates in the National Flood Insurance Program. Local insurance agents can sell a flood insurance policy under rules and rates set by the Federal government. Any agent can sell a policy and all agents must charge the same rates.

Any house can be covered by a flood insurance policy. Detached garages and accessory buildings are covered under the policy for the lot's main building. Separate coverage can be obtained for the building's structure and for its contents (except for money, valuable papers, and the like). The structure generally includes everything that stays in the house when it is sold, including the furnace, cabinets, built-in appliances, and wall-to-wall carpeting.

There is no coverage for things outside the house, like the driveway and landscaping. Renters can buy contents coverage, even if the owner does not buy structural coverage on the building.

Some people have purchased flood insurance because the bank required it when they got a mortgage or home improvement loan. Usually these policies just cover the building's structure and not the contents. During the kind of flooding that happens in most northeastern Illinois, there is usually more damage to the furniture and contents than there is to the structure.

Several insurance companies have sump pump failure or sewer backup coverage that can be added to a homeowner's insurance policy. Each company has different amounts of coverage, exclusions, deductibles, and arrangements. Most are riders that cost extra. Most exclude damage from surface flooding that would be covered by the National Flood Insurance policy. The cost varies from nothing to up to about $75 for a rider on your homeowner's insurance premium.

Precautions

Flood insurance does not cover contents in a basement or the finished structural parts of a basement, such as paneling or wall to wall carpeting. Flood insurance only covers damage where there is a general condition of surface flooding in the area.

Many insurance policies will only pay to repair the damage incurred. If your damage is severe enough, you may have additional costs to bring your building up to current codes. Flood insurance now covers these cost (up to $15,000) when there is a flood. Check your homeowner's insurance policy to see if it has this coverage for fire, wind, or other hazard.

Being the victim of a flood can be a scary experience if you do not know what to do. Following the guidelines below will make your situation easier to handle and help get your home back to normal.

Before entering a flooded basement:

- Turn off electricity.
- Turn off gas or fuel valves.
- Check outside walls for cave-ins, any structural damage, or other hazards.
- Open your doors and windows to let some fresh air into the basement.

It is important to take pictures or video of the basement for insurance purposes. You should also keep a record of all expenses.

If your basement is flooded, follow these directions to help get your home back to normal.

Pumping:

- Do not use an electric pump powered by your own electric system. Use a gas pump or one that is connected to an outside line.
- If water is pumped out too quickly, the walls may be pushed up. So to prevent further structural damage, remove the water in stages, preferably about 1/3 of water each day.

Cleaning:

- Wearing gloves, remove soaked and contaminated items and place them in garbage bags.
- Once all the water has been pumped out, you should shovel any debris and mud from the floors before they get a chance to dry.
- If the walls can be salvaged, hose them down to remove as much dirt as possible before drying. Both floors and walls may need to be sanitized.

- If you want to help speed up the drying process, you can turn the heat on or use a dehumidifier.

Repairing:

- Some of the structural damage that can occur due to a flooded basement includes: buckled walls, settled floors, and heaved floors.
- An indication that you have buckled walls is horizontal cracking. If it is minor, repairs are not necessary. However, if it is more serious, repairs should be done as soon as possible.
- Vertical cracks indicate settled walls or floors. The cracks can be in small areas or all through the structure. Special equipment is needed for repairs.
- A heaved floor is a floor that has not returned to its original level or is badly cracked. If this is the case, a new floor may be needed.

In all of this, it is important to remain calm. Nothing will get done faster if everyone is in a panic. Remember to take pictures for your insurance claims.

While it is not possible to determine exactly when a flood will occur, there are several things you can do to help ensure that your home is protected against major damages due to flooding.

Flood Protection - some helpful tips:

Raise or flood proof all heating, ventilating and/or air conditioning units. Either elevate all equipment above areas that are prone to flooding or build a concrete floodwall around the units.

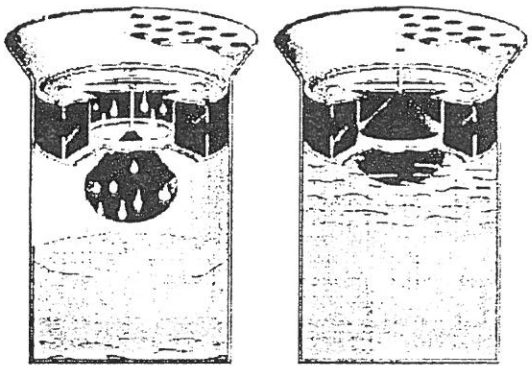
Raise electrical service panels, fuse and circuit boxes, meters, switches and outlets at least one foot above the base flood level. Wiring should also be raised above the flood level. All of these electrical service components can be easily damaged by floods and are expensive to repair or replace.

Raise the washer and dryer. This can be done by placing them on cinder blocks or by building a sturdy platform for them.

Keep all important documents and expensive or irreplaceable items away from areas in your home that are prone to flooding.

Floor Drain Plug

The simplest way to stop sewer backup is to plug the opening where it first occurs. This is at the floor drain, the sanitary sewer system's lowest opening in the house. Commercial plugs are available and can be placed in the floor drain below the grate. Bolts on metal end pieces are tightened causing a rubber gasket to expand and seal the plug in the pipe.



A plug stops water from flowing in either direction. Therefore, if the laundry tub overflows or other spillage occurs, it will stay in the basement unless the plug is removed. Because of this, it may be best to leave the plug out under normal circumstances and put it in place only during heavy rains.

The advantage of the plug is its low cost and ease of installation. A standard floor drain plug can be purchased at most hardware stores for $5-$10.

One variation is a plug with a float. It allows water to drain out of the basement. When the sewer backs up, the float rises and plugs the drain. A float plug permanently installed will not interfere with the drain's normal operation.

Precautions:

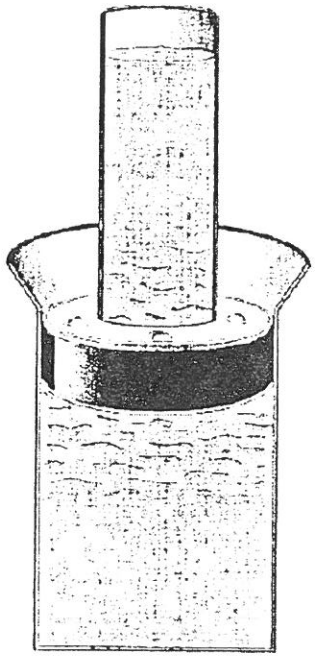
A plug left in the flood drain may contribute to a wet basement if spillage cannot drain out. Float plugs are known to have been jammed open by a small amount of debris.

A floor drain does not stop backup from coming out of the next lower opening, like a laundry tub or basement toilet. Sealing the base of the toilet to the floor will protect you until the water backs up higher than the top of the bowl.

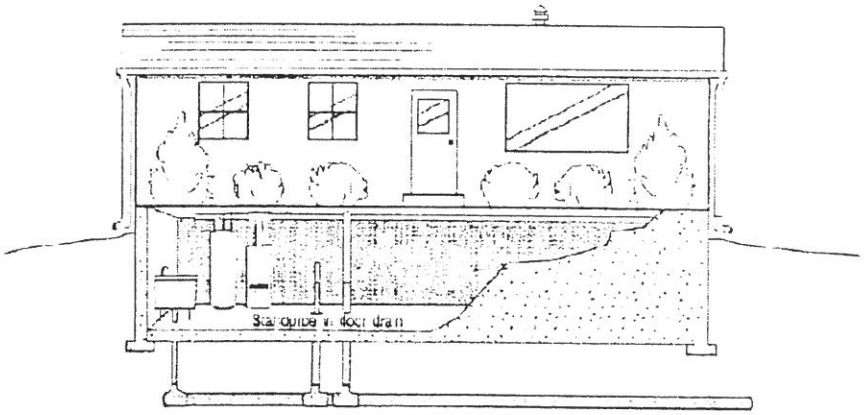
A plug does not tell you if there is a problem in your sewer line. If the plug is not tight enough, pressure can eject it. In older houses, the sewer lines under the basement floor may be clay tile. A buildup of pressure can break them. In new houses, they are cast iron under the floor and less likely to break.

Standpipe

A standpipe is an inexpensive alternative to a floor drain plug. A "donut" with metal end pieces and a rubber gasket in the middle is placed in the floor drain. A length of pipe is placed in the "donut hole." The "donut" can be purchased for about $10. A three-foot length of pipe costs less than $5.



Location of standpipe



When the sewer backs up, the water stays in the pipe. Water pressure can build up to blow a standpipe (if properly installed) out of the floor drain. The system works unless the backup is so deep that it goes over the top of the pipe.

One advantage of the standpipe over the floor drain plug is that the overflow acts as a safety valve. Flooding in the basement equalizes water pressure on the walls of the floor, minimizing the chance of a cracked floor from broken pipes underneath.

Precautions:

A standpipe left in the floor drain may contribute to a wet basement if spillage cannot drain out. A standpipe only protects up to its height, normally three feet. Deeper flooding will flow over the top. (A taller standpipe is not recommended because it can result in too much water pressure on your pipes).

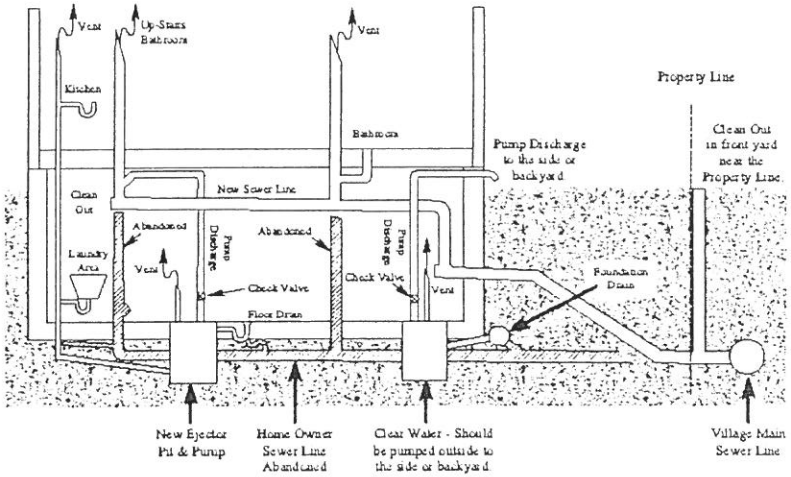
Overhead Sewer

An overhead sewer acts like a standpipe but without the problems. A sump is installed under the basement floor to intercept sewage flowing from the basement fixtures and the basement floor drain. An ejector pump in the sump pushes sewage up above the flood level. From there it can drain by gravity into the sewer service line. Plumbing fixtures on the first floor continue to drain by gravity to the service line.

It is unlikely that the sewers will back up above the ground level. If water does go higher, a check valve in the pipe from the ejector pump keeps it in the pipes. Backed up sewage is enclosed in the sewer pipes so there is no worry about overflowing laundry tubs or basement toilets.

Overhead Sewer - Example Only

There could be variations on installation



Section Thru Basement

Revised 2 04 2003

Precautions:

The ejector pump requires maintenance and electricity to work properly. The basement is disrupted during construction. The contactor may have to run the overhead pipes through one of more basement rooms, although often they can be camouflaged. This work requires a licensed plumber and a building permit.

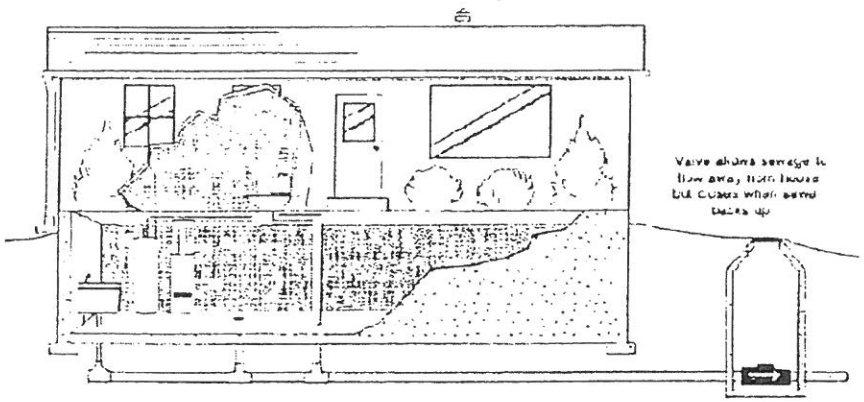
During a power outage, the ejector pump won't work. But this only limits the use of the facilities in the basement that need the pump. The upstairs plumbing still works and the sewer is still prevented from backing up.

Although more dependable than a standpipe, an overhead sewer is typically more expensive. A plumbing contractor must reconstruct the pipes in the basement and install the ejector pump.

Backup Valve

A backup valve stops the water in the sewer pipes. Older versions of the approach were located in the basement and relied on gravity to close the valve. If debris got caught in the flapper, the valve did not close tight. Because of its unreliability, valves were discouraged and even prohibited in some communities. A newer "balanced valve" has corrected these design shortcomings. A system of counterweights keeps it open all the time so debris won't catch and clog it. When the sewer backs up, instead of relying on gravity, floats force the valve closed. It is usually installed in a manhole in the yard so there is less disruption during construction and no concerns over breaking the pipes under the basement floor.

As with overhead sewers, a valve is fully automatic. It can even work when there is surface flooding. The owner can still use the sanitary sewers during flooding as long as there is power to run the ejector pump, which forces wastewater into the sewer line when the valve is closed.



Precautions:

The valve requires maintenance. This work requires a licensed plumber and a building permit.

The cost of this type of backup valve is comparable to the cost of an overhead sewer.

Disclaimer:

This guide is designed to give the reader an overview of things that can be done to protect a property from damage from the type of surface water flooding and sewer backup that faces many residents in the City of Wood River. The information provided is based on careful research and input from experienced professionals. The reader must assume responsibility for adapting this information to fit his/her conditions. This guide is not intended to replace the advice and guidance of an experienced professional who is able to examine the building and assess the needs of the particular situation.

Over-Head Sewer Assistance Grant

The Village of Winfield has a vested interest in the proper operation of the Winfield sanitary system. Understanding that some residential users of the sanitary system have experienced sewerage back-up into their homes, and understanding that an Over-head Sewer system may prevent the reoccurrence of the same, the Village of Winfield will offer an Over-head Sewer Assistance Grant to Winfield Sanitary Sewer users that qualify to install over-head sewer in their home. This assistance will be funded by the Village of Winfield from the Sewer Capital Construction fund for a contribution in the form of a non-repayable grant.

Those users that qualify for the Sewer Assistance Grant will receive a grant in the amount of 50% of the cost of the project, not to exceed $4,000.00, per residential unit. As such, all costs in excess of the grant amount awarded will be the sole responsibility of the participant.

To qualify for the 50/50 Overhead Sewer assistance grant, the users must meet the following qualifications established by the Village of Winfield:

1. Property Owner/Participant must show proof of sewer back-up:
   a.) Physical back-up is present, or photographs of back-up, (and/or)
   b.) Proof submitted through a claim with Insurance Company, (and/or)
   c.) Proof of back-up as identified through a receipt from a cleaning company (i.e. Service Master) (and/or)
   d.) Based on Location and confirmed through meeting with Village Representative, (and)

2. Basement Inspection Performed by Village Plumbing Inspector, or designated representative of the Village of Winfield to determine if the home qualifies for the program. If qualified, the homeowner will receive written notice of qualification (and)

3. Homeowner must also have passed the Village of Winfield Home Inflow and Infiltration Inspection, or must submit to and pass the Inflow and Infiltration Inspection at the time of the Plumbing Inspection. If violations exist, the resident must correct the sources of the inflow and infiltration at their own expense prior to qualifying for this program.

4. Submit <u>three</u> quotes from licensed plumbers/contractors showing the projected cost of the work to be performed.

The Village of Winfield will cover all costs derived through administrative time of the Village Staff and inspections performed by the Village Staff.

After the work is completed by an independent, licensed plumber/contractor in the participant's home, the resident must notify and submit to the Village a detailed invoice of the work prior to scheduling the final inspection. The Village Plumbing Inspector or a designated representative of the Village of Winfield will then perform a final inspection of the Over-head Sewer. The Village of Winfield will not participate in the cost associated with paint, wallpaper, carpet, tile, drywall, etc.

This program is on a first come, first serve basis. At such time the final inspection is scheduled, the funds will be earmarked for disbursement to the participant. The participant then has thirty (30) days to pass final inspection, otherwise the funds will be returned to the grant program and become eligible for use by other participants.

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After the work has passed final inspection, a check will be issued from the Village of Winfield to the participant in the amount of the grant award once the funds have been approved for disbursement by the Village Board at a regularly scheduled board meeting.

The Village President and the Board of Trustees reserve the right to budget more or less for this program each budget year, or to terminate the program.

APPLICATION FOR OVER-HEAD SEWER ASSISTANCE GRANT

Date: _____

Name: _____

Utility Billing Account Number: _____

Address: _____

Phone Number: (____) _____

Business Phone Number: (___) _____

Do you own this home? _____

Is this your permanent residence (more than 9 months of the year)? _____

How many times within the past twelve (12) months have you experienced sanitary back-up from the sanitary system into your home? _____

Where is the point of entry of the sanitary back-up into your home? _____

_____

If known, estimate the volume of sewage that surcharged into your home (i.e., flooded the basement approximately few inches/feet deep)? _____

_____

If known, when the sanitary system back-up occurred in you home, what were the weather conditions at the time? _____

_____

Do you recall the date of the sanitary system back-up in your home? _____

If known, how many times within the past three (3) years have you experienced sanitary back-up from the sanitary system into your home?_____

_____

Where is the point of entry of the sanitary back-up into your home? _____

_____

_____

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The Village of Winfield requires that a licensed plumber perform all work related to the installation of the overhead sewer system in your home.

What is the name of the licensed plumber performing the work in your home?

Name: _____

Phone Number: _____

Address: _____

_____

If applicable, what is the name of the contracting company of the licensed plumber performing the work in your home?

Name: _____

Phone Number: _____

Address: _____

_____

- Attach copy of the Plumber's license

Please attach as much evidence of previous back-up as possible such as receipts from cleaning services, insurance claims, and photographs. If no such evidence exists, please indicate below.

_____

_____

_____

_____

_____

_____