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Providing a Better Environment for South Central DuPage County

DOWNERS GROVE SANITARY DISTRICT

REIMBURSEMENT PROGRAM FOR SANITARY SEWER BACKUPS CAUSED BY PUBLIC SANITARY SEWER BLOCKAGES

The Downers Grove Sanitary District provides a Reimbursement Program for Sanitary Sewer Backups Caused by Public Sanitary Sewer Blockages. The program provides limited financial assistance to residents who experience a sanitary sewer backup as a result of a public sanitary sewer blockage. For purposes of this program, a sanitary sewer backup is defined as the discharge of raw sewage from the District sanitary sewer system through a resident's service line into the resident's building. If you are interested in this program, carefully review the enclosed materials which include the following:

- Program Conditions
- Sanitary Sewer Backup Handbook - This Handbook explains the causes of backups and preventive measures, in addition to information on clean up (page 15) if you decide to do the work yourself.
- List of Contractors

You should also be aware of the following District programs:

- Cost Reimbursement Program for the Installation of Overhead Sewers or Backflow Prevention Devices – This program provides partial reimbursement for any preventive measures you may take to prevent future backups.
- Building Sanitary Service Repair Assistance Program - Blockages or problems of any nature in the homeowner's private service line are the responsibility of the homeowner but may be eligible for repair, rehabilitation or replacement by the District under this program.

Information on these programs is available from the District office.

REVISED MAY 9, 2005

DOWNERS GROVE SANITARY DISTRICT
REIMBURSEMENT PROGRAM
FOR SANITARY SEWER BACKUPS
CAUSED BY PUBLIC SANITARY SEWER BLOCKAGES

PROGRAM CONDITIONS

BACKGROUND

The Downers Grove Sanitary District is responsible for the maintenance and operation of over 230 miles of sanitary sewer lines located in the District service area. The District has an aggressive sanitary sewer system maintenance, rehabilitation and repair program. The program is intended to maintain the structural integrity of the system, minimize public sanitary sewer blockages, and remove infiltration and inflow of storm water into the sanitary sewer system. Components of the program include televising and cleaning of the sanitary sewer, flow monitoring, smoke testing, flood testing, manhole repairs and rehabilitation, sewer lining and sewer replacement projects.

It is important to understand that sanitary sewer backups may occur at any time. The backup may be due to blockages in the homeowner's private sanitary sewer service or the public sanitary sewer, or high flow conditions in the public sanitary sewer. Therefore, homeowners should consider improvements to their homes to prevent sewer backups. A Sanitary Sewer Backup Handbook is available free to District residents by contacting the District office. In addition, the District has implemented a cost sharing program for residents who have experienced sewer backup problems and desire to convert to an overhead sewer system or install backflow prevention devices. Information regarding the cost sharing program is also available from the District office.

District residents who experience a sanitary sewer backup problem at any time should call the District office at 969-0664. District personnel will investigate the backup to determine the causes and appropriate corrective action.

If District personnel determine that the sanitary sewer backup was caused by a public sanitary sewer blockage, the resident may be eligible for reimbursement under the District Reimbursement Program for Sanitary Sewer Backups Caused by Public Sanitary Sewer Blockages as discussed below. For purposes of this program, a sanitary sewer backup is defined as the discharge of raw sewage from the public sanitary sewer through a resident's private sanitary sewer service into the resident's building. Sanitary sewer backups occurring as a result of high flow conditions in the public sanitary sewer are not eligible for reimbursement under this program. Blockages or problems of any nature in the homeowner's private sanitary sewer service are the responsibility of the homeowner and are not eligible for reimbursement under this program.

PROGRAM CONDITIONS

The District will provide reimbursement to residents who have experienced a sanitary sewer backup as a result of a public sanitary sewer blockage.

The District has determined that certain conditions for the reimbursement program are necessary to protect the integrity of such a program and the financial well-being of the District.

A reimbursement program for the costs incurred for cleanup, damages and loss of personal property by residents who experience a sanitary sewer backup as a result of a public sanitary sewer blockage is hereby implemented in accordance with the following conditions:

- 1) The District will reimburse a resident up to \$1,200 for eligible expenses.
- 2) The program applies to all buildings connected to the Downers Grove Sanitary District public sanitary sewer system.
- 3) The program applies to sanitary sewer backups which occur on or after the effective date of the ordinance establishing this program.
- 4) Financial participation of the District is limited to funds budgeted for the program. Funding levels may be changed or eliminated based on the District's annual review of the program.
- 5) Reimbursement shall be made only under the following circumstances:
 - a) The resident has notified the District that a sanitary sewer backup has been experienced within twenty-four hours of the occurrence. The District is able to verify that a sanitary sewer backup occurred at the residence and that the sewer backup was a result of a public sanitary sewer blockage.
 - b) The resident must allow the District and its representatives (including third party claims adjusters or claims administrators) to have access to the residence and the area where the backup occurred; allow photographing, videotaping and inventorying of the area; and cooperate in all respects with District efforts to verify that the sanitary sewer backup occurred and the extent of damages.
 - c) The Agreement and Claim must be submitted to the District within six months of the date of the sanitary sewer backup.
 - d) The resident must have cooperated in all respects with District efforts to relieve the public sanitary sewer blockage.
 - e) The resident must disclose if a claim is being made, or will be made, against any other parties or insurance.
 - f) If the claim is being made against any other parties or insurance, the amount of compensation made, or estimated to be made, must be disclosed to the

District. Only those costs not paid by other parties or insurance are eligible under this program.

- g) The resident, and owner if the building is not owner-occupied, must execute an agreement which includes a clause whereby the resident and owner release and waive any claim of liability against the District from the sanitary sewer backup which is the subject of the reimbursement claim and any prior sanitary sewer backups or any consequence of the resident's participation in the program and agree that the District is claiming no responsibility for the damages as a result of the backup for which a claim is being made.
 - h) The District must find no evidence that the resident claiming damages was in any way responsible for the public sanitary sewer blockage due to any cause, including but not limited to: failure to maintain the private sanitary sewer service which results in debris or extraneous water entering the public sanitary sewer; or disposal of items which cause a blockage of the public sanitary sewer; or vandalism; or other acts which cause a blockage of the public sanitary sewer.
 - i) The District must be able to verify that the sanitary sewer backup or the public sanitary sewer blockage was not caused by any other parties, including contractors, utilities, etc. Sanitary sewer backups occurring as a result of public sanitary sewer blockages caused by any other party are not eligible for reimbursement under this program.
 - j) **Sanitary sewer backups occurring as a result of high flow conditions in the public sanitary sewer are not eligible for reimbursement under this program.**
 - k) **Blockages or problems of any nature in the homeowner's private sanitary sewer service are the responsibility of the homeowner and are not eligible for reimbursement under this program.**
- 6) Reimbursement shall be limited as follows:
- a) The maximum amount shall be \$1,200 per backup occurrence.
 - b) Reimbursement for replacement of personal property shall be based on actual cash value not replacement cost.
 - c) The resident shall obtain a minimum of two proposals for any work to be performed. Reimbursement shall be limited to the amount of the lowest proposal.
 - d) Detailed paid invoices for all work performed and detailed receipts for proof of loss must be provided to the District or its designated representatives.

- e) Reimbursement will only be allowed for actual costs incurred, and not for payment in lieu of repairs or loss.
- 7) The District reserves the right to administer claims or to use a third-party claims adjuster or claims administrator.
- 8) The District reserves the right to deny and adjust claims in the best interests of the District.
- 9) To be eligible under this program, the following steps shall occur.
 - a) The resident has notified the District that a sanitary sewer backup has been experienced within twenty-four hours of the occurrence.
 - b) District employees or designated representatives shall inspect the building to determine eligibility, extent of damages, appropriateness of costs, etc. This inspection may be in addition to any inspection performed during the initial District response to the sanitary sewer backup.
 - c) Within six months of the date of the sanitary sewer backup occurrence, resident submits a completed and signed Agreement and Claim, along with all necessary documentation as required under these program conditions.
 - d) District shall provide the resident with a notice of determination of eligibility and amount of costs eligible for reimbursement.
 - e) District provides reimbursement in the normal course of business.
- 10) A resident shall be eligible for participation more than once, but in no case shall the maximum amount eligible exceed \$1,200 for any one backup occurrence.
- 11) The program will be evaluated annually and the District may change or eliminate the program.
- 12) The program is limited to the actual costs incurred for cleanup, repair of damages and replacement of personal property.
- 13) The General Manager may, in his discretion, provide a waiver of those program conditions listed above which he deems appropriate based on his evaluation of the individual circumstances related to a request for reimbursement.
- 14) The District shall have the sole authority to determine eligibility for participation and amount of costs eligible for reimbursement.

AGREEMENT AND CLAIM FOR
DOWNERS GROVE SANITARY DISTRICT
REIMBURSEMENT PROGRAM FOR SANITARY SEWER BACKUPS
CAUSED BY PUBLIC SANITARY SEWER BLOCKAGES

I/We hereby request participation in the Downers Grove Sanitary District Reimbursement Program for Sanitary Sewer Backups Caused by Public Sanitary Sewer Blockages, hereinafter called "the Program".

I/We certify that the information provided in this Agreement and Claim is true and correct and all evidence provided as proof of cleanup costs, repairs for damages and loss of personal property are genuine.

I/We agree that the amount requested in this Agreement and Claim constitute my/our entire claim against the District.

I/We have received a copy of the Program Conditions attached to and made a part of this Agreement and Claim.

I/We agree to allow the Downers Grove Sanitary District or its representatives to make any and all inspections as detailed in the Program Conditions.

I/We acknowledge that the Downers Grove Sanitary District has no liability for the damages incurred as a result of the sanitary sewer backup.

I/We hereby agree to release and waive any claim, suit or liability and to indemnify and hold harmless the Downers Grove Sanitary District, its trustees, officers, employees, engineers and agents, from and against all liability, damage, loss, claims, demands and actions of any nature whatsoever which arise out of or are connected with, or are claimed to arise out of or be connected with the sanitary sewer backup which is the subject of this Agreement and any previous sanitary sewer backups or the undersigned's participation in this program.

Dated this _____ day of _____, _____.

Printed Name

Signature

Printed Name

Signature

Phone Number

Mailing Address

CLAIM Attached to and Made a Part of Agreement and Claim for Downers Grove Sanitary District Reimbursement Program for Sanitary Sewer Backups Caused by Public Sanitary Sewer Blockages.

CAUTION:

Any statement made in this claim constitutes an admission on your part. If you do not understand this claim report or are concerned by any portion of it, you should consult your private attorney. You should complete this report in full and this report constitutes your entire claim. You are advised that no representations made by you to any employee or representative of the Downers Grove Sanitary District is a part of this report unless in the report and that no representation made to you by any employee or representative of the Downers Grove Sanitary District can in any way waive any of the conditions of the program as to this report or your claim.

TO: DOWNERS GROVE SANITARY DISTRICT

You are hereby notified of the following claim made upon you as a result of a sanitary sewer backup:

1. Name of Claimant(s): _____
2. Address: _____

3. Telephone Number: _____
4. Claimant(s) Interest in the property listed in item 2 above. (Indicate whether you are an owner, tenant, contract purchaser, etc.)

5. Date of Sanitary Sewer Backup: _____
6. Time Sanitary Sewer Backup was Discovered: _____
7. Location of building where sanitary sewer backup occurred:

8. Date and Time You Notified the District of the Sanitary Sewer Backup:

9. Describe the Sanitary Sewer Backup including the location in the building where the backup occurred, area affected by the backup, and what damages occurred.

10. Give name, address and phone number of any witnesses.

11. Describe damages to property. You may provide a brief description here, but detailed invoices and receipts must be attached to this claim.

12. Were there any other damages. _____ No _____ Yes

If yes, describe:

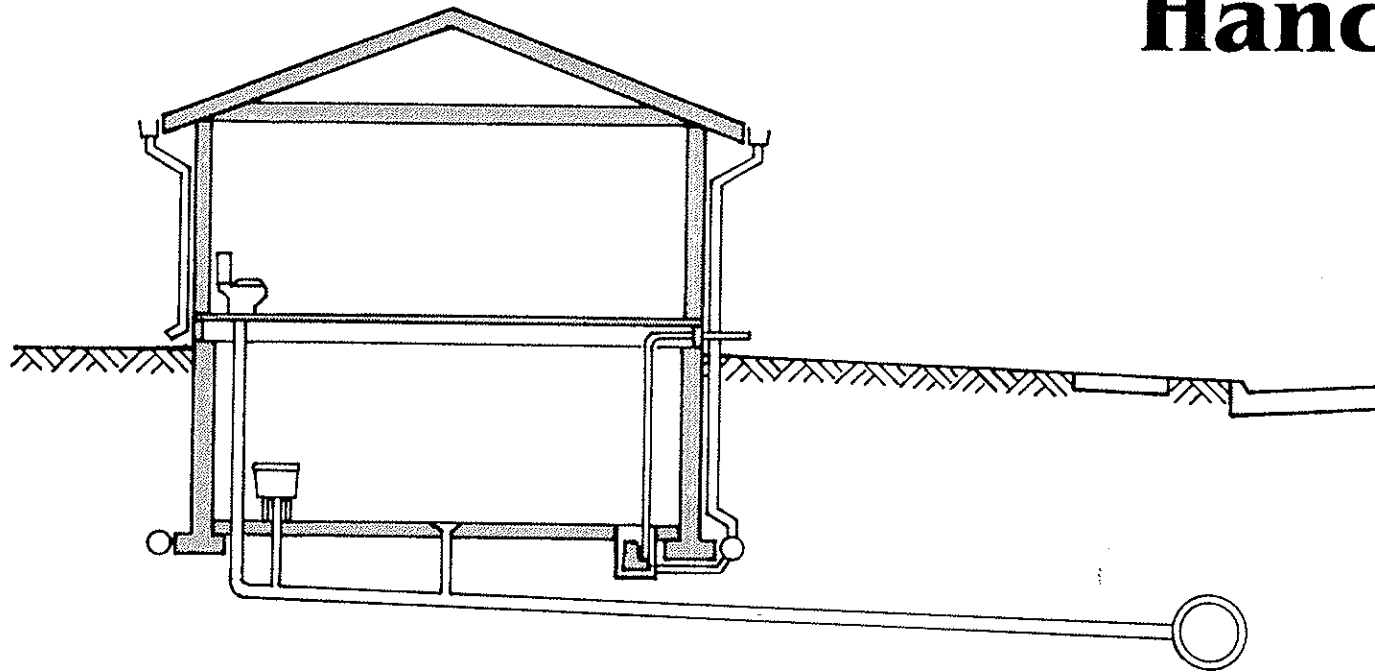
13. Is a claim being made against any other parties or insurance?

_____ No _____ Yes

If yes, provide details including names of other parties or insurance carriers, addresses, phone numbers, and amount of compensation made, or estimated to be made.

14. What is the total amount you are claiming for reimbursement from the Downers Grove Sanitary District. \$ _____

Downers Grove Sanitary District Sanitary Sewer Backup Handbook



**2710 Curtiss Street
Downers Grove, Illinois 60515
969-0664**

DOWNERS GROVE SANITARY DISTRICT WASTEWATER COLLECTION SYSTEM

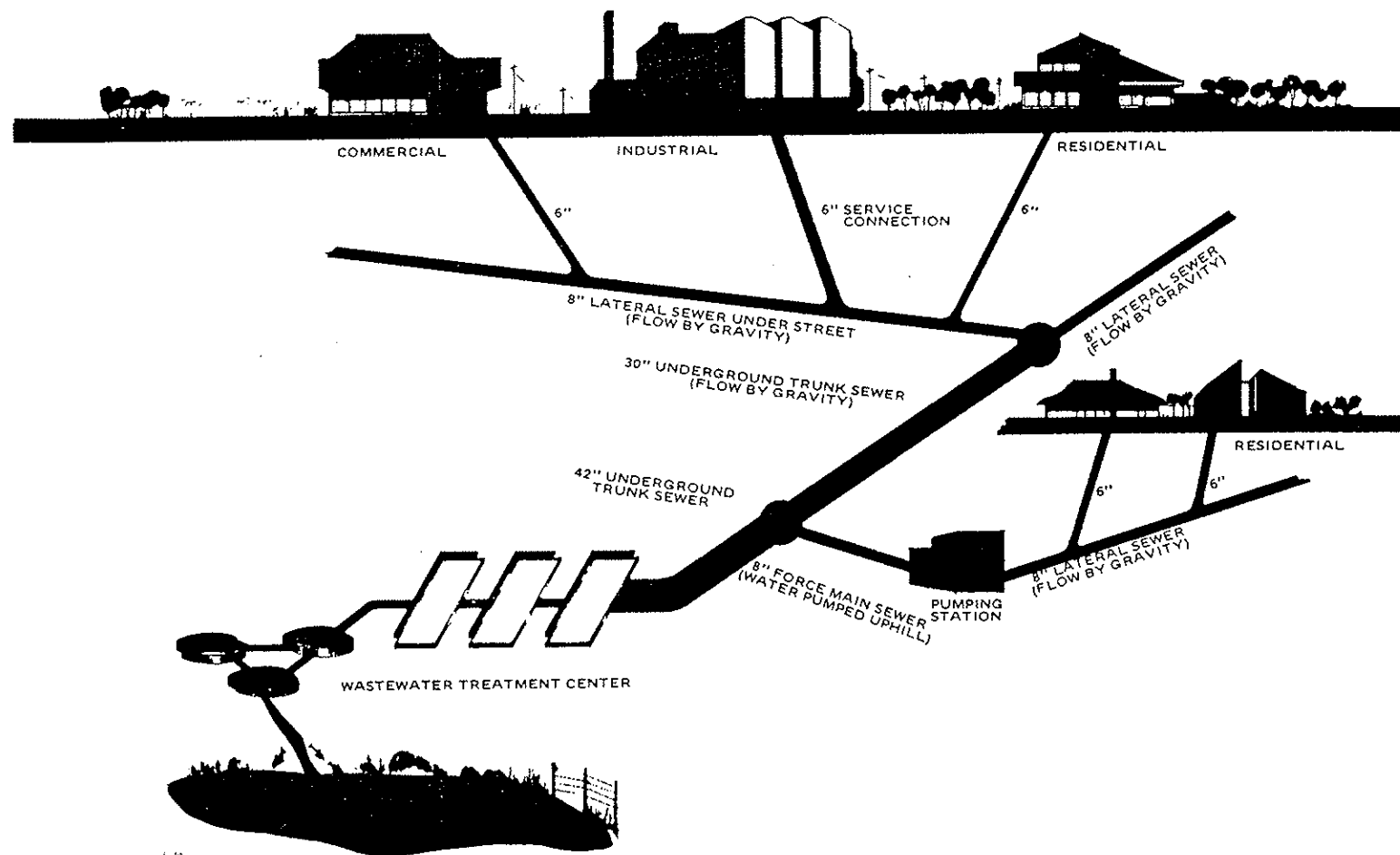


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I. Foreword

This handbook has been prepared by the Downers Grove Sanitary District to explain the causes of sewer backups that occur in the District during severe rainstorms and to describe steps that are available to homeowners to prevent backups and to protect the contents of their house.

Sanitary sewer backups have three main causes: a blockage located in the private sewer lateral (service line) from the house to the public sewer, a blockage in the public sewer main, or an overloading of the public sewer main during rainstorms.

While this handbook addresses backups which occur during rainstorms, the preventive measures and methods of correction will help to prevent backups caused by blockages of the service line and main sewer.

Even if you do not experience sewer backups, we hope that you will study the information since, quite unknowingly, you may be contributing to the problems. Your house may be contributing storm water runoff or ground water to the sanitary sewer system through plumbing connections that were made when the house was constructed. The storm or ground water may overload the sanitary sewer system and cause backups of sanitary sewage in some other resident's basement. You can help the situation by disconnecting

these storm or ground water sources.

You should report a sanitary sewer backup as soon as it occurs and before you call a plumber. The District's telephone number, 969-0664, is manned at all times. District personnel will respond as discussed on page 16 of this handbook.

It is important to realize that backups may occur at any time due to blockages of your service line or the public sewer main, or during extreme rainstorm events. Therefore, you should consider improvements to your house to prevent future sewer backups. Since the improvements that will solve a problem in one situation may not be effective in other situations, the knowledge and skill of an engineer, a plumber and/or a sewer contractor may be needed to find the proper solution to the problem. Therefore, the only specific recommendation that can be made to all residents is: **secure competent help and advice in determining the proper course of action to be taken.**

The purposes of this handbook are to help you understand the real nature of your specific problem, to suggest methods that you may use to resolve the problem, and to explain when competent help is necessary to solve the problem.

II. The Nature of the Backup Problems

The Downers Grove Sanitary District owns and maintains a separate sanitary sewer system that is designed to collect only the sewage from the buildings in the District. If that were actually the case, many of the backup problems would not exist. Unfortunately, during rainstorms, storm water gets into the sanitary sewers which causes the basement backups.

The sanitary sewers are designed to collect the wastewater from the bathrooms, kitchens, etc., and transport it to the District's Wastewater Treatment Center for purification and discharge to the DuPage River. The system includes the District's sanitary sewer mains beneath the streets and the individual building services that extend from each house or building to the main sewer. The sanitary sewers are not designed to collect or transport the large amounts of storm water runoff that results from a rainstorm. Whenever

significant amounts of storm water get into the sanitary sewers, the system's capacity is exceeded and surcharging (overloading) of the system and basement backups occur. Normally, the sanitary sewage enters the basement through the floor drain which is the lowest access point. If the surcharge elevation is much higher than the floor drain or if the drain is plugged, the sewage can enter the basement through a shower drain, toilet, or laundry tub.

The storm water drainage system includes the storm water inlets in the streets, the storm sewer network, and Lacy, St. Joseph and Prentiss Creeks. The storm water drainage system is designed to collect and carry away the storm water runoff from the streets, driveways, roofs, and yards. The storm drainage systems are the responsibility of the local villages, the County, or special drainage districts.

III. Types of Backups and Their Problems

If you experience a backup during a rainstorm, it is probably caused by (A) a faulty private service pipe; or (B) an overloaded local sanitary sewer main in the street.

A. Faulty Private Service Pipe

The service line between your house and the District sanitary sewer may be broken or partially plugged with roots. During dry weather, the service has enough capacity for your wastewater so a problem does not arise, but during a heavy rainstorm, some

storm water may be getting into your service and the extra water may exceed its restricted capacity which would cause the water to back up into your basement. If you experienced a backup but your neighbors with a similar basement and plumbing did not, this situation may be causing your problems.

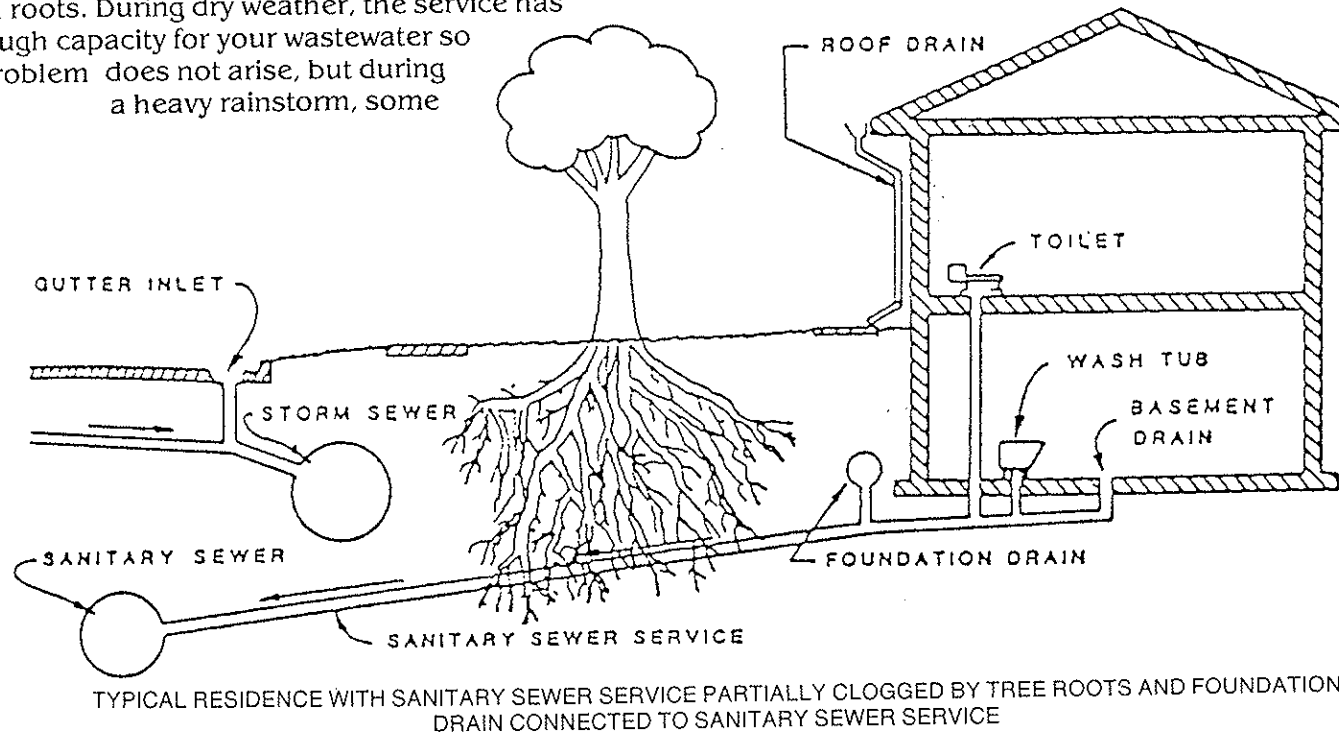


FIGURE 1

Tree roots can become entangled in sewer lines, thus clogging pipes and causing sewer backup.

As the maintenance and repair of an individual building service is the responsibility of the building owner, the correction of a backup problem caused by roots or defective service pipes will be your responsibility. If your problem is caused by root blockage, it can be relatively easy and inexpensive to correct depending on which alternative action you choose. First, the sewer must be cleaned with an electric rodding machine using a root cutter that will thoroughly remove the roots that have grown into the pipe. Following that, the homeowner may elect to do the following:

1. **Periodic rodding** - Having the sewer rodded on a regular schedule to cut out all root growth will often be sufficient to keep them under control and reduce the likelihood of sewer backup. No rules can be given on how often this must be done because it depends on how active the roots are and how thorough a job the contractor is able to do. Some homeowners have found it necessary to have the sewer rodded as often as every six months, and others have found that once every few years is enough.
2. **Use of root remover products** - A number of root remover products are available commercially. Be sure to follow all of the manufacturer's instructions. Although these products may not completely eliminate the growth, they may increase the interval between needed rodding.
3. **Sewer pipe replacement** - The surest method of permanently correcting the problem is to have the sewer pipe dug up and replaced at the location

where the roots are getting in. The new pipe used for replacement has a new type of joint that is tightly sealed to completely eliminate future entrance of roots. The sewer contractor or whoever performs the repair must be bonded with the Downers Grove Sanitary District and a Sewer Permit must be obtained from the District, at no charge. This is not, however, an inexpensive solution.

4. **Any ground water or storm water which enters the sanitary sewer, such as foundation drains, roof downspouts, or sump pumps must be removed from the sanitary sewer.** These types of connections are in violation of District ordinances and contribute significantly to the overloading of the sanitary sewer system.

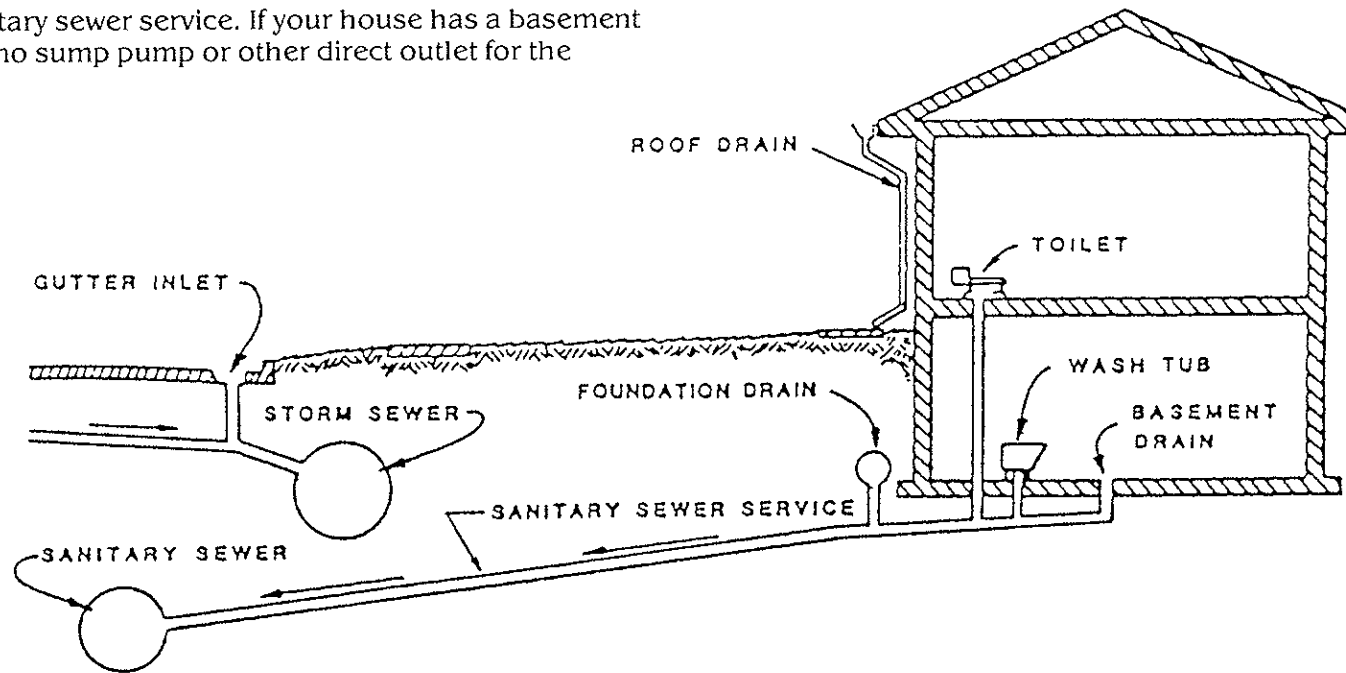
Blockage of house sewers is also occasionally caused by broken or separated pipe. This is usually the result of soil settlement under the pipe or poor installation of the pipe. In these cases, there is little alternative than to dig up the pipe at the damaged location and make repairs.

A professional firm specializing in sewer repair can best advise on the type of blockage in a sewer, the location and the probability that it will recur. Before making any decision on how to proceed, we would strongly advise the homeowner to get more than one opinion (and cost estimate) on work needed to be done.

B. Overloaded Sanitary Sewer Main

The sanitary sewer main in the street may be overloaded during wet weather periods because the sewer system cannot handle the extra storm water that gets into the system. Much of the storm water gets into the system through plumbing connections that were made when the houses were first constructed, particularly the houses that were built prior to 1960. Prior to that time, it was common practice to connect the foundation drain to the sanitary sewer service. If your house has a basement but no sump pump or other direct outlet for the

foundation drain, it is likely that your drains are directly connected to the sanitary sewers. Some houses have direct connections between the sanitary sewer service and the roof downspouts and/or an area drain. Each of these connections will contribute large amounts of storm water to the sanitary sewer system. **These connections are violations of District ordinances and must be disconnected.**



TYPICAL RESIDENCE WITH FOUNDATION DRAIN CONNECTED TO SANITARY SEWER SERVICE

FIGURE 2

If an overloaded sanitary sewer main is the cause of your sewer backup, your neighbors probably experienced similar problems. If so, you can either protect the contents of your basement and let the sewer continue to backup, or you can prevent the backups. If you want to simply protect the contents of your basement from damage, please refer to the tasks, warnings, advantages and disadvantages discussed in a subsequent section of this report. If you want to prevent the backups, several alternative procedures are available.

- 1. Plugs or Standpipes:** Since the basement floor drain is the lowest opening to the sewer in your house, it is the first place of entry for the backup. The floor drain can be closed with a rubber plug or with a standpipe during heavy rainstorms. Some drains are specifically threaded for a screw-in plug or a standpipe. This is the simplest and least expensive way to stop backups through the drain, but it is effective only until the sewage level rises up to the level of the next opening, probably a shower, toilet, or sink. At that level, the sewage will overflow into your basement.

If you use a plug or a standpipe, you must consider and protect against the possible uplift pressure on your basement floor. To be effective, a plug or standpipe confines the sewage to the pipes under the basement. If these pipes are watertight, the sewage won't leak out

so no uplift pressure will develop. If the pipes are not watertight, the sewage will leak out of the pipes and saturate the ground beneath the floor. This sewage will then push up on your floor and if the pressure is large enough, your floor may buckle which would cause more damage than a basement backup. Since it is difficult to determine the condition of the pipes beneath your basement floor, plugs or tall standpipes should be used with caution. A "rule of thumb" which may be used as a guide is that a water level six inches higher than the basement floor level will not exert significant uplift pressure on the floor so, under normal conditions, a six-inch standpipe may reduce minor flooding without damage to the floor.

- 2. Valve:** Since the sewer backup comes through the service line, an obvious solution is to install a valve in that line and to close that valve when flooding is imminent. The valve is normally installed in a manhole that is located outside the house where it is easier to install and maintain. Some valves are manual and others operate automatically such as a "check valve." The manual valves are not effective unless someone is available to close them. The automatic valves sometimes fail to close completely because sewage solids get jammed in the valve. In those cases, the valves may not prevent the backup.

When the valve is tightly closed, the sewage backup into the house is cut off, but the sewage flow from the house to the sewer is also cut off. Thus, the household plumbing cannot be used unless a pumped bypass is provided. Also, all storm water sources such as the foundation drain and roof downspout must be disconnected from the sanitary service, otherwise the storm water will back up into the basement through the floor drain. In addition, this connection is a violation of District ordinances.

Valves installed in sewer lines sometimes become "jammed" with debris and fail to close completely. In this case, the valve may slow down the backflow of sewage, but not stop it completely. For this reason, a valve installed on a sewer line should not be depended on for 100 percent protection, and an access manhole should always be provided for service and repair work. A sanitary sewer permit, at no charge, is required from the District for this type of work.

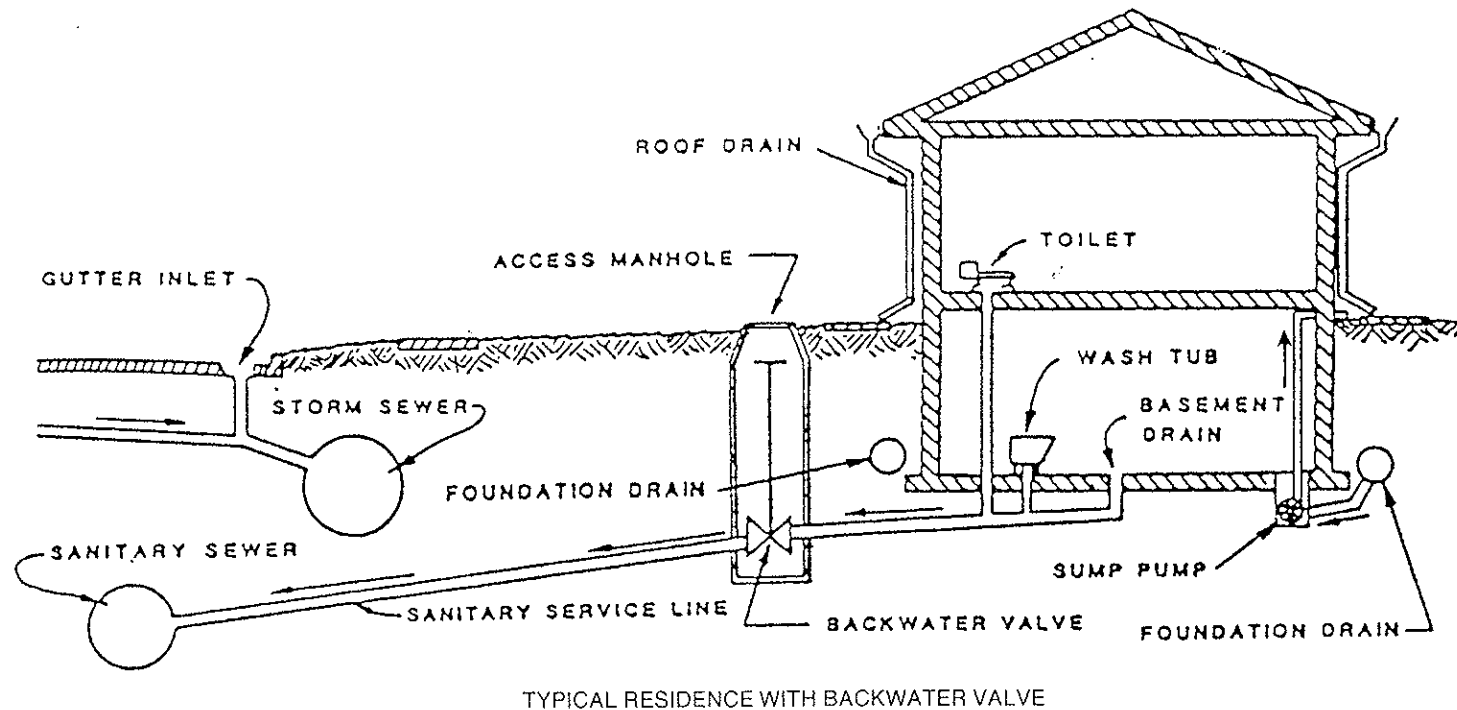


FIGURE 3

- 3. Overhead Sewer:** The term "overhead sewer" means that there are no direct openings to the sanitary sewer in the basement. All of the wastewater that is collected in the basement is discharged into a separate sump pit and pumped into the sanitary service line so the basement drainage is dependent on a pump and a continuous electric power supply. Generally, the plumbing from the fixtures on the main floor is installed just below the basement ceiling (hence, the term "overhead"), and is routed to the outside service line through an opening high up on the basement wall.

Converting your plumbing to an overhead sewer is one of the most expensive ways to prevent basement backups. Nevertheless, it is generally considered to be the best method available.

A sanitary sewer permit, at no charge, is required from the District for this type of work.

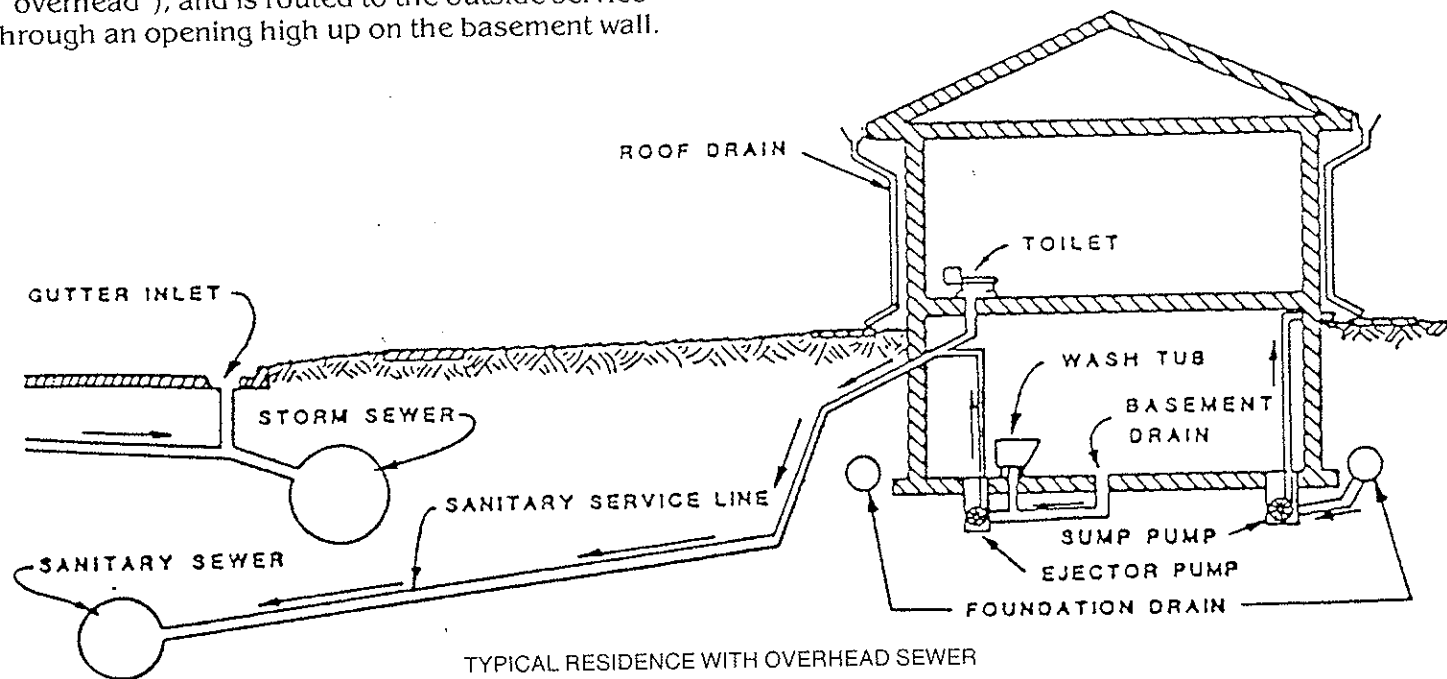


FIGURE 4

IV. Storm Water Flooding/Seepage

Apparent basement backups can be caused by ground water that enters the basement through cracks in the walls or through the basement sump or by storm water runoff flowing overland that enters the house through windows, doorways, or other openings.

Ground water is always present but the depth of the ground water is dependent on the soil type, ground surface elevation, surrounding topography and previous rainfall amounts. During rainstorms, some of the rainfall percolates into the ground which raises the ground water level. Since a basement is essentially a concrete bowl in the ground, the basement may become surrounded by ground water. If there are cracks in the basement walls or leaks between the walls, floor or foundation, the ground

water will enter the basement. Minor leaks can be corrected by the careful application of special hydraulic cements, which must be applied in strict accordance with the manufacturer's recommendations to be effective.

At the base of most houses, there is a pipe that is laid all around the outside of the foundation. The pipe may be perforated or may have open joints so that the ground water can easily enter it. This foundation drain protects the house by draining the ground water away from the basement.

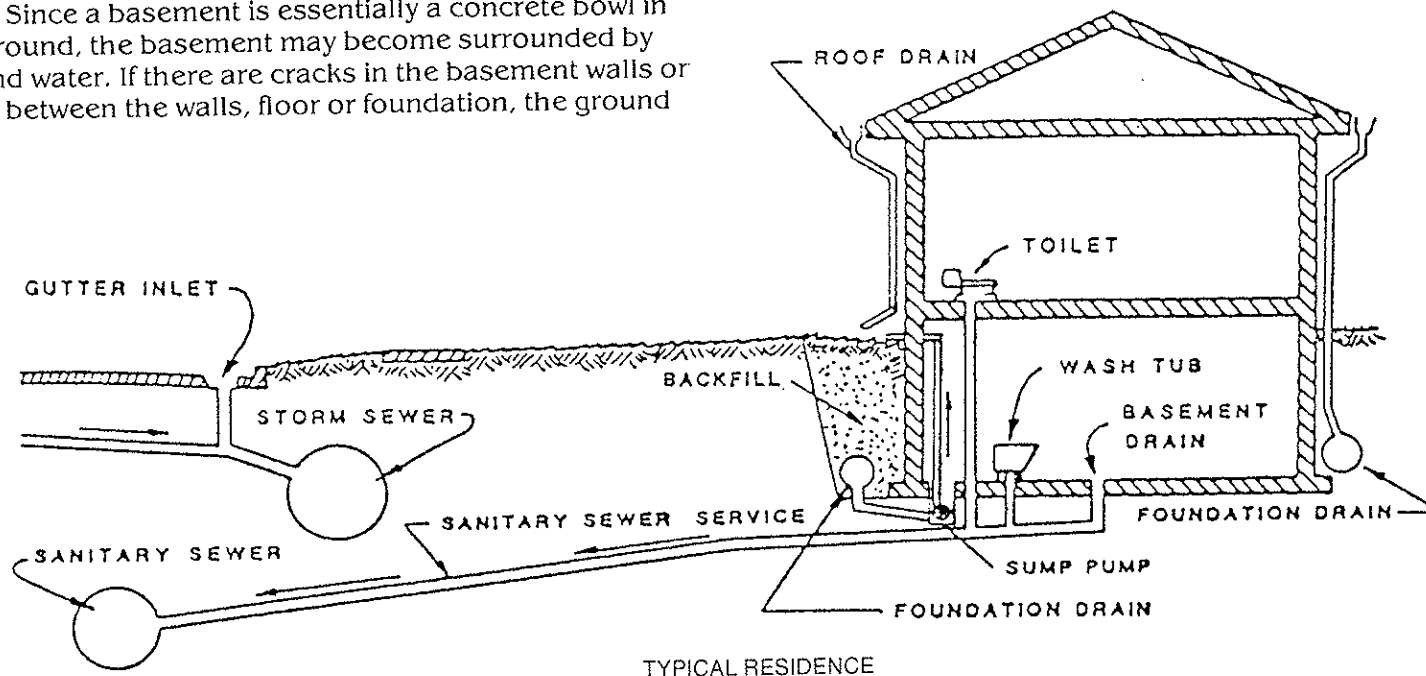


FIGURE 5

In many cases, the foundation drain is directly connected to the sump pump and all of the drainage must be pumped out of the basement.

Any flooding through the basement sump is either caused by: (1) a pump that does not work properly; or (2) by water entering the sump at a rate that exceeds the capacity of the pump. If you rely on a sump pump to keep water out of your basement, you may want to start a routine maintenance program to be sure that the pump will operate when needed. Such a program should follow the pump manufacturer's instructions. It could consist of:

1. Every month, pour some water into the pump to make sure that the pump operates and that it quickly empties the sump.
2. Every six months, check and clean the strainer on the suction side of the pump.

If the pump is working properly, the flooding could be caused by water entering the sump at a rate that exceeds the pump's capacity. The excess water floods the basement floor. The large amounts of water may be coming from the foundation drain, the roof downspouts, or both.

Grading - After construction of a house, the space around the basement is filled with backfill. In some cases, this backfill will settle, creating a low area adjacent to the basement walls. Any storm water runoff that gets into the low area will rapidly percolate down along the basement walls and will enter the foundation drain. This situation can be corrected by filling the low area with soil to create a slope away from the basement walls that will divert storm water runoff away from the basement and foundation drain.

Roof Downspouts - The roof downspouts can have a substantial impact on the flow from a foundation drain. In some cases, as shown on the right side of Figure 5, the roof downspouts are directly connected to the foundation

drains. During an intense rainstorm, this type of downspout can discharge thousands of gallons of rainwater to the sump pit which can exceed the pump's capacity and cause basement flooding. To eliminate this problem, the downspout should be cut off above the ground surface and the drain pipe into the ground should be carefully sealed. An elbow and an extension should be installed on each downspout to direct the rainwater away from the basement. The extension should reach well beyond the old excavation.

If the existing downspout is not fitted with an extension as shown in the left side of Figure 5, the rainwater may collect near the basement wall and percolate directly to the foundation drain. To correct this situation, an extension should be installed on the elbow to direct the rainwater away from the basement walls.

If the house does not have roof gutters and downspouts, the rainwater falls directly off the roof and percolates along the basement wall. To correct this situation, gutters and downspouts with extensions will prove beneficial.

The importance of proper grading and proper discharge of the roof downspouts cannot be over-emphasized and the problems can be alleviated by simple measures performed by the homeowner.

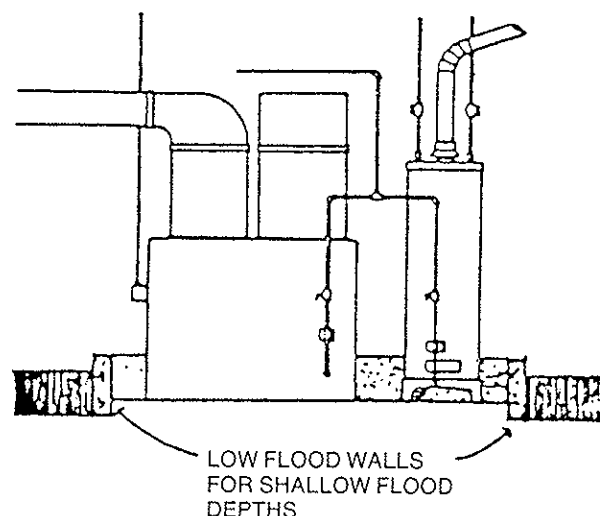
Overland Flow - Storm water flooding can be caused by water runoff that exceeds the capacity of the drainage system. The excess runoff flows overland and enters houses through windows, doors, or other openings. Generally, this type of flooding is more difficult and expensive to prevent than the flooding by ground water that was discussed above.

Basement flooding, caused by storm water runoff or seepage, is not a sanitary sewer backup. Flooding problems should be directed to your local village or other agency responsible for the storm drainage system in your area.

V. How To Minimize Damage From Backups

If it is impossible or prohibitively expensive to prevent a backup in your house, the damages can be minimized by measures aimed at protecting the house and its contents.

There are five main tasks to protect your house to reduce sewer backup damage. (These tasks may also help protect your home from flooding caused by storm water runoff or seepage.)



1. Relocate expensive items that are subject to water damage. Freezers, washers, dryers, furniture, power tools, large appliances and similar items should be permanently moved to higher floors.

2. Protect what cannot be moved. A floodwall or protection closet could be built around valuable, immovable equipment. Such protection walls must withstand all the pressure caused by the flood waters.

Another alternative is to place the equipment on a pedestal above the flood height. Some equipment can be protected by a coating of grease or covering with plastic bags or plastic sheets.

3. Relocate or adjust your utilities. Either move all electric outlets above the flood level or install a control panel where the power can be shut off easily in time of flood. If your furnace, water heater, dryer, and other gas appliances are not all elevated, make sure there is an accessible gas shut-off valve.
4. Seal off the sewer and water systems to prevent health hazards caused by interflows with flood waters. A water heater moved to an attic can act as an emergency storage tank for a gravity-fed potable water supply. Heating and air conditioning ducts should have removable plugs along the bottom to permit water to drain out when the flood recedes.
5. Store things that are very quick to remove or items that won't be damaged; garden tools, metal furniture or cabinets, spare tires, boats, or floatable items (if water is shallow), plastic curtains, etc.

If you rebuild or improve the floodable area, use the following types of materials:

Concrete, concrete block or glazed brick; clay, concrete or ceramic tile; mastic, silicone or polyurethane formed-in-place flooring; terrazzo, rubber, vinyl or vinyl-asbestos floor covering with waterproof adhesives; stone, slate or cast stone (with waterproof mortar); glass or glass block; metal doors and window frames; foam or closed cell type insulation; polyester-epoxy or other waterproof type paint; indoor-outdoor carpeting (be able to remove it so the debris can be hosed out of it).

Do not use the following types of materials because they dissolve and decompose when wet or they absorb and retain too much water:

Wood, chipboard; gypsum products; cork; fabrics, carpeting, felt based floor coverings; linoleum; fiberboard, paperboard, strawboard; batt, blanket, and other types of insulation; wallpaper.

Certain items should not be stored in the floodable area because they would become especially hazardous or create health or pollution problems during a flood:

- Hazardous chemicals: chlorine, fluorine, acids, sulfur products, magnesium, many industrial chemicals.
- Hazardous household products: lye, pesticides, poisons, calcium hypochlorite (swimming pool chlorine), bleach, ammonia, lime detergents.
- Charcoal, coal, coal dust, coke, and hay are subject to spontaneous combustion when wet or moist.
- Gasoline, acetone, benzene.
- Drugs, food (unless in tin cans).
- Storage tanks and buoyant materials can float and cause damage to walls, ceilings, and other contents.

Finally, here is a list of products that are particularly subject to flood damage. They should be removed, if possible, from any flood-prone areas as an extra precaution:

Appliances, clocks and other electric motors; art works, musical instruments; books, magazines, papers; clothing, curtains; televisions, radios, electronic equipment; upholstered furniture, mattresses; cabinets, pool tables, and similar wood furniture that would become useless with only a little warping.

Never enter a flooded basement unless absolutely necessary, and then only with extreme caution. The possibility of electrocution is always present. Always wear rubber boots. When cleaning the basement after water has receded, use caution around electrical outlets and appliances, and disconnect power from electrical equipment as quickly as possible.

VI. Cleaning Up Following A Backup

Shovel out any mud and debris while it is still moist and hose down the walls to remove silt. To get rid of any odor that may accompany a backup, scrub all interior wetted surfaces. Use hot sudsy water followed by double strength sanitizing solution, or use a household disinfectant, following manufacturer's directions. Repeat scrubbing and rinsing if necessary. You may also try sprinkling liberally with baking soda. Odors in the basement may be harder to treat. If the above approaches don't work, sprinkle bleaching powder (chlorine or lime) over the floor. Let it dry then sweep it up. Remember, bleaching powder is caustic and poisonous. Follow all the precautions on the label.

Wooden floors dry very slowly. Assuming your furnace is operational, keep the house at 60-70 degrees F. to hasten drying but don't overheat the house as this could cause cracking or splitting. All loose plaster should be removed because plaster board and drywall can be ruined if immersed for a long time. Removal will also speed drying of the walls and will enable you to inspect the insulation in the exterior walls. Any waterlogged insulation must be replaced.

Mildew may appear if a warm spell follows a flood. Scrub mildewed floors or woodwork with a mild alkali solution such as washing soda or tri-sodium phosphate (four to six

tablespoons to a gallon of water). Badly stained walls will need new paint.

All electric motors that have gotten wet should be disconnected and thoroughly cleaned to get rid of dirt and grit. After cleaning, the motors should be re-oiled and allowed to dry for two weeks. You can shorten the drying time by using a fan or hair dryer.

Washers should be sanitized by pouring a disinfectant such as chlorine, pine oil, or phenolic into the empty washing machine, and then complete a 15-minute cycle at the hot setting. The dryer can be cleaned by wiping the drum with a cloth dipped in a disinfectant solution, rinse with cloth dipped in clear water. Leave washer and dryer doors open, preferably overnight, until all parts are dry.

Clothing, sheets, etc., should be hosed or rinsed with cool water to get as much mud out as possible. Then wash with as much detergent as possible. Bleach or other disinfectant should be used to kill bacteria. After drying, rugs and carpets can be cleaned with a vacuum cleaner and then shampooed.

Gasoline engines need to be thoroughly inspected and cleaned. All electrical parts must be dry. Grit or silt must be removed from the oil, transmission or gas lines.

VII. Summary

Problems which cause the sanitary sewers to occasionally back up are many and they are often interrelated. Many residents of the District may be worried and inconvenienced by the occurrence of a sewer backup in their basement or crawl space. It is our hope that if you have such a problem, you have found some suggestions in this report which may be of help. If you have a question regarding the connections in your home, call our office at 969-0664 during our regular business hours, 8:00 A.M. to 4:30 P.M., Monday through Friday.

In conclusion, please remember that the District's telephone number, 969-0664, is manned 24 hours a day, seven days a week, in the event you must contact the District to report a sanitary sewer backup or other emergency. **Call this number as soon as the backup occurs and before you call a plumber.** District personnel will respond as promptly as possible. If the backup is caused by a blockage located in the public sewer main, the problem will be corrected. If, however, the backup is caused by an overloading of the public sewer main during a rainstorm, the problem cannot be relieved and your backup will not recede until the rainstorm stops and overloading of the sewer main subsides, which may take several hours. If the backup is caused by a blockage in your private service lines, you must take appropriate measures to eliminate the problem.

DOWNERS GROVE SANITARY DISTRICT
REIMBURSEMENT PROGRAM FOR SANITARY SEWER BACKUPS
CAUSED BY PUBLIC SANITARY SEWER BLOCKAGES

LIST OF CONTRACTORS

Brouwer Brothers Steamatic	708/396-1447
Great Lakes Restoration, Inc.	630/685-4500
Servicemaster Disaster Services	800/954-9444

The District is providing this list as a service only. It is not an endorsement or recommendation of the contractors.

You are cautioned to review all of the requirements for reimbursement under the District's program. Prior to contacting a contractor, your attention is specifically directed to the program requirements relating to work to be performed including:

- a) You must obtain two proposals for any work to be performed and reimbursement is limited to the amount of the lowest proposal.
- b) Detailed paid invoices for all work performed are also required. Be sure you understand and the contractor details what services are included and provides a breakdown of all costs.