WAYS TO PREVENT BACKUPS IN YOUR LATERAL AND IN THE CITY MAIN

The property owner can do many things to prevent his lateral from backing up. These very same things can help to prevent backups in the city main as well. If everyone would be careful about how they dispose of certain products, our systems would be a great deal more efficient, cause fewer backups, and cost us all less money.

□**GREASE:** Cooking oil should be poured into a heat-resistant container and disposed of after cooling in the garbage, not poured down the drain. Some people assume that washing grease down the drain with hot water is satisfactory. However, the grease goes down the drain, cools off, and solidifies either in the drain, the property owner's line or in the main sewer. When this happens, the line constricts and eventually clogs.

□**PAPER PRODUCTS:** Paper towels, disposable and cloth diapers, and feminine products cause a great deal of problems in the property owner's lateral as well as in the city main. These products do not deteriorate quickly, as does the bathroom tissue. They become lodged in the portions of the lateral/main, causing a sewer backup. These products should also be disposed of in the garbage.

□**ROOTS:** Shrubs and trees, seeking moisture, will make their way into sewer line cracks and joints. These roots can cause extensive damage. They may start out small, getting into a small crack in the pipe, but as the tree or shrub continues to grow, so does the root. After time, this causes the sewer line to break, which then allows debris to hang up in the line causing a back up. One way to prevent roots from entering your line is to replace your line and tap with new plastic pipe. The other alternative is to be careful about planting greenery around your sewer line. You may also purchase a product containing "copper sulfate" which helps to kill roots when you pour it down your drain. This product should be used with extreme caution. If you have ongoing problems with tree roots in your lateral, you may have to cut them periodically.

□**SEWER ODOR:** Another concern that the property owners have is a sewage odor in their house or building. There are many ways to prevent this from occurring. Under each drain in your plumbing system there is a "P-Trap". There should be water in this fitting, preventing odors or gasses from the sewer to enter through the drain from either the property owner's lateral or the city's main. Periodically check to make sure that unused floor drains, sinks, etc. have water in the "P-Trap." Another way to prevent sewer odor is to ensure that vents, which are located on your roof, are free from bird nests, leaves, etc. When these vents are clear, the sewer odors will escape through these vents.

□**ILLEGAL PLUMBING CONNECTIONS:** Do not connect roof gutter downspouts, French drains, sump pumps and other flood control systems to your sanitary sewer. It is illegal, and debris and silt will clog your line. Consult a professional plumber to correct any illegal connections.

□**NEEDLES:** Unfortunately, some people dispose of hypodermic needles in the sewer system. The presence of these needles in the wastewater collection system presents special and possibly deadly problems for wastewater collection and wastewater treatment employees. **PLEASE DO NOT FLUSH NEEDLES.** The proper method of disposal is to re-cap the needles and put it into a "sharps container". (This could be any rigid plastic container such as a bleach bottle...no milk bottles, please.) When it is full, tape the container securely and call your local pharmacy for advice on the proper disposal methods. **PLEASE DO NOT FLUSH NEEDLES OR THROW THEM IN THE GARBAGE.**

□**INSTALL A BACKWATER PREVENTION VALVE:** A backwater valve can prevent or greatly reduce the possibility of a sewer backup. A backwater valve is a fixture installed into a sewer line, and sometimes into a drain line, in the basement of your building to prevent sewer backflows. A properly installed and maintained backwater valve works on a one-way system. Sewage can go out, but cannot come back in. Property owners are responsible for the installation and maintenance of backwater valves. The cost to install one is dependent upon the type of plumbing in your home and the difficulty of installation. A qualified plumber can assist you in determining your needs. *A backwater valve will not totally prevent a sewer backup. However, a properly maintained backwater valve can significantly reduce the risk of damages caused by a sewer backup.*

(8 1 5) 4 3 3 - 0 2 4 5

REMEMBER TO CALL THE OTTAWA WASTEWATER TREATMENT PLANT FIRST before calling a plumber. We will check the sewer main and inform you of our findings. If the problem is not in the City main, we will advise you to contact a plumber or sewer/drain cleaning service.

FREQUENTLY ASKED QUESTIONS

Q. What is a sewer lateral? A. A sewer lateral or house lateral is the pipeline between the City's sanitary main, usually located in the street and the building. The sewer lateral is owned and maintained by the property owner including any part which may extend into the street or public right of way. More often than not, the cause of a backup in your lateral is from items that the line is not meant to handle, such as kid's toys, underwear, towels, diapers, paper products (other than toilet paper), keys and etc. To avoid flushing these items, remember to keep the toilet lid closed. What you flush may not affect you, but it might cause problems for your neighbors. Another possible cause would be roots in your lateral. The lateral maintenance is the responsibility of the owner of the property from the house to the main.

Q. What is the City's responsibility regarding private sewer laterals? A. The property owner is fully responsible for maintaining adequate sewage flow to and through the sewer lateral, from the property structure to and into the City's sewer main. When failure or stopping of a sewer lateral occurs, City crews will respond only to check the sewer main to verify that the main is open and sewage is flowing. If the sewer main is found to be clear, it is the responsibility of the property owner to call a licensed plumber or drain cleaning service to correct the problem. Verbal assistance and answers to questions can be received by calling the Wastewater Treatment Plant at (815) 433-0245.

Q. If I notice a foreign substance flowing into a storm drain inlet, whom should I call? A. If you notice a foreign substance flowing into a storm drain inlet, please call the Ottawa Wastewater Treatment Plant at (815) 433-0245 to report the location.

Q. What about the mess? A. A sewer backup can lead to disease, destruction of your valuables, damage to your house, and electrical malfunctions. Prompt cleanup and disinfection of affected property can help minimize the inconvenience and damage.

Q. How do I determine if my home or business is at risk for sewer backup? A. Your home or business is at risk if the elevation of your lowest floor, containing plumbing fixtures or floor drains, is lower than the top of a manhole near your property. Overloaded sewers can back up through house sewer lines and flow into basements that aren't protected. Even if your neighborhood has never experienced problems with basement flooding, your home can still be at risk.

Q. What other steps can I take to prevent a sewer backup? A. You can install a ***backwater prevention valve***, a fixture installed into the sewer line that allows sewage to go out, but not to come back in your basement. An automatic backup valve closes as soon as water begins to flow up the private drain from the main sewer. A simple, ***hand-operated gate valve*** is another option. It is installed in the private drain and can prevent back flow if the valve is closed before the main sewer backs up. The disadvantage with this valve is that it must be closed manually and you cannot use your sewer system until the valve is opened again. A ***combination automatic backwater valve and a sewage ejector pump*** may also be installed. This unit operates when the backwater valve closes and plumbing fixtures, etc. build up to a level behind the valve that activates the ejector pump. The pump is able to pump water against the pressure of the sewer backwater. The gates of the combination ejector need to be frequently checked to ensure they are not being blocked by debris. An ***overhead sewer system*** can also be installed. This system is probably the most effective, but also the most expensive. The overhead sewer system diverts sewage from plumbing fixtures on the first and higher floors to a new sewer line run above the basement floor. The line is connected, either in the basement or outside the foundation, to the original house sewer as it leaves the building. The old sewer system is sealed. Any drainage from the basement level is pumped up into the overhead sewer. ***Any of these systems must be installed by a licensed plumbing contractor. A permit is required.***

Plugs can also be installed to prevent sewer backup. Plugs are plastic or metal devices that are fitted into floor drains to prevent water back-up. They are generally inexpensive, easy to install, do not require a permit and can be installed flush with the basement floor. Do not use plugs if you expect flooding to exceed 3-4 inches. Severe flooding may cause ruptured pipes or cracking in the basement floor. Plugs must be removed to restore drainage.

Q. Is the City of Ottawa responsible for damage from sewer backups?

A. Unfortunately, because these blockages in the system are random and unpredictable, the City of Ottawa cannot be responsible for any damage to your property from a blockage. Our staff is available to provide you with any technical assistance as you try to prevent a backup from occurring again.

City of Ottawa w.w.t.p.

COPING WITH BASEMENT FLOODING

A sewer backup creates a stressful and emotional situation for the homeowner/renter. In some cases, it may cause health and safety concerns as well as significant property loss. A proper response to a sewer backup can greatly minimize property damage and diminish the threat of illness.

The City of Ottawa makes every effort to be responsive to a resident's needs and concerns when a sewer backup occurs. The City has a sewer crew whose sole duty is to inspect, clean and maintain sewers on a daily basis. They are available on a 7 day a week, 24 hour a day basis to minimize the possibility of sewer problems. Unfortunately, because a sewer is not a closed system, many things put into the sewer can clog the system. While the City of Ottawa has adopted rules prohibiting the discharge of any substance likely to cause a sewer obstruction, and attempts to educate the public about the problems they cause, there is really no way we can absolutely prevent it from happening.

Many homeowners' insurance policies exclude damage resulting from sewer backups. However, some insurance companies do provide sewer backup coverage. **If you are concerned about the possibility of a sewer backup and want to insure that you are covered, the City of Ottawa urges you to check with your home insurer regarding the availability of sewer backup insurance.**

CONTACT INFORMATION

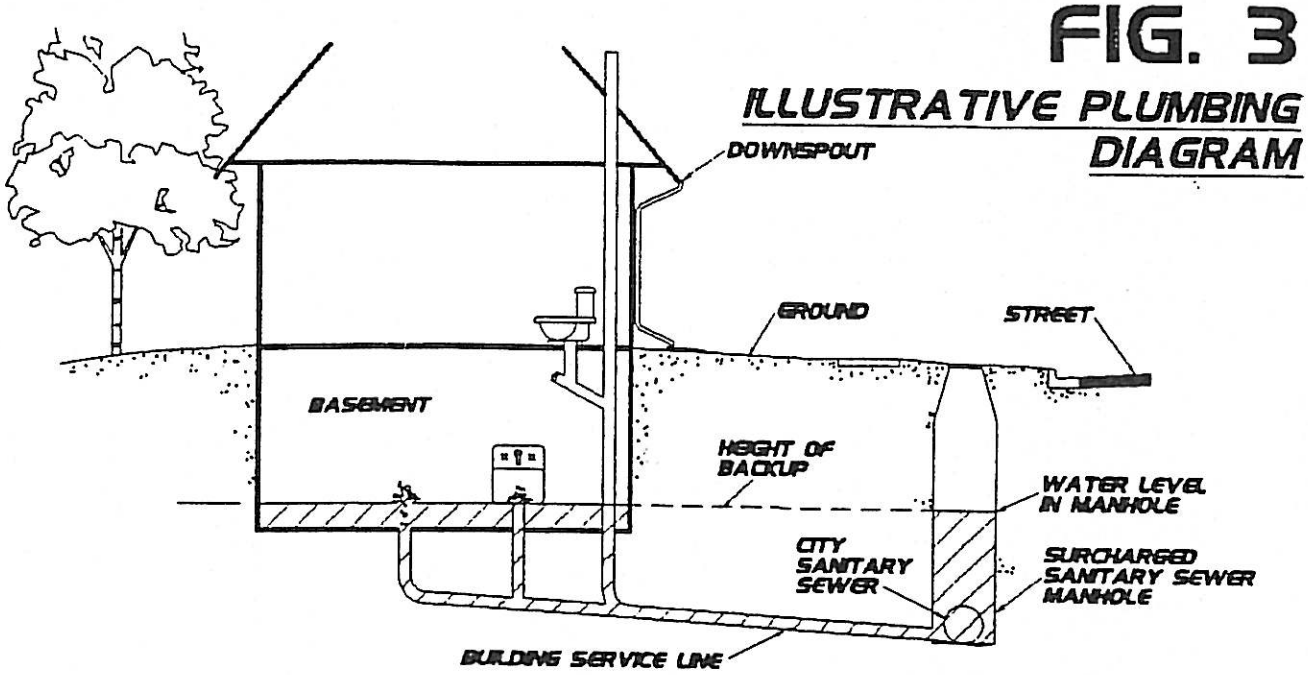
If you experience a sewer problem, please call the Ottawa Wastewater Treatment Plant (815) 433-0245 M-F 7am-3:30pm. (Evenings, Sat.-Sun. and Holidays please call the Ottawa Police Dept. at (815)433-2131).

Please state that you are reporting a sewer emergency. Backed up sewer lines, line breaks, sewage odors and overflowing manholes are considered emergencies. If the problem is in the sewer lateral, the homeowner or business is responsible for correcting the problem. The owner of the property is responsible for maintaining and cleaning the sewer lateral from the building or home to the City's sewer main, including the connection on the sewer main. Locating the lateral is also the responsibility of the property owner.

Protect yourself with Overhead Sewers

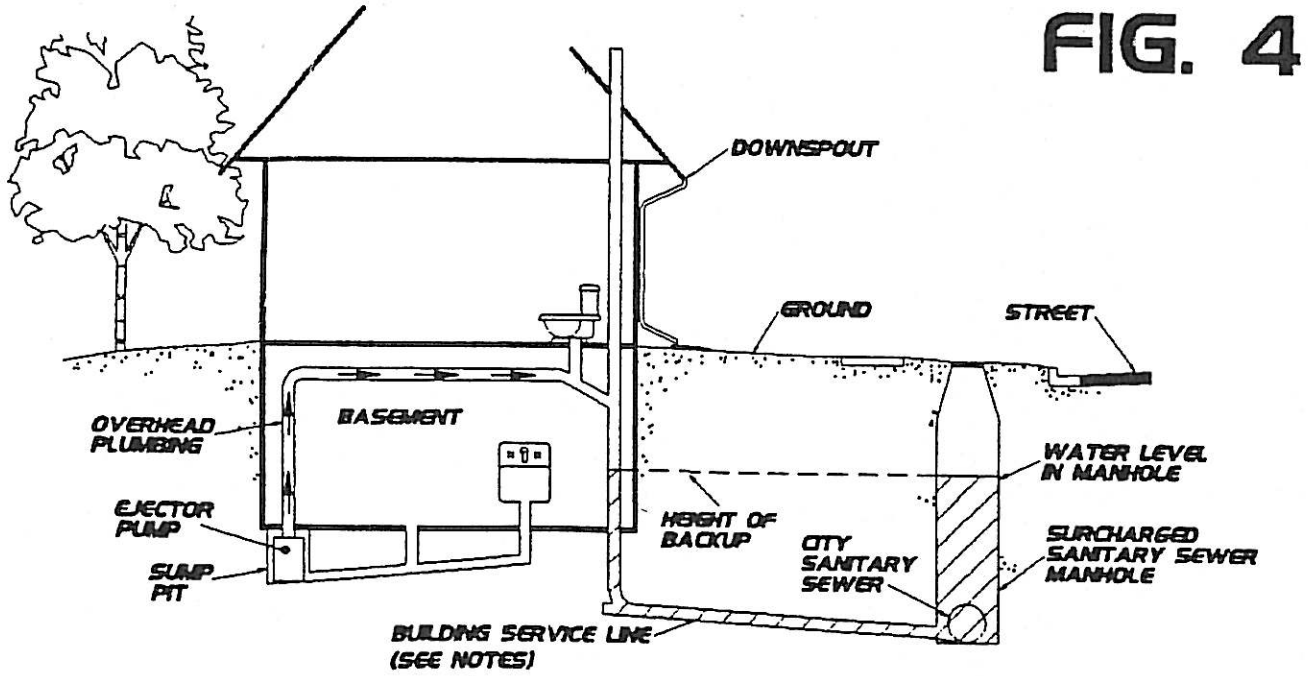
FIG. 3

ILLUSTRATIVE PLUMBING DIAGRAM



WITHOUT BACKFLOW PROTECTION

FIG. 4



WITH OVERHEAD SEWER

NOTES:

1. This is the preferred method and will eliminate all backups.
2. Ejector pumps can be installed either inside or outside of building and can be used to pump either a portion or all the sewage from a building.