



# The Corporation of the Town of Amherstburg

512 SANDWICH STREET SOUTH  
AMHERSTBURG, ONTARIO  
N9V 3R2

[www.amherstburg.ca](http://www.amherstburg.ca)

## SEWER SURCHARGING AND BASEMENT FLOODING INFORMATION

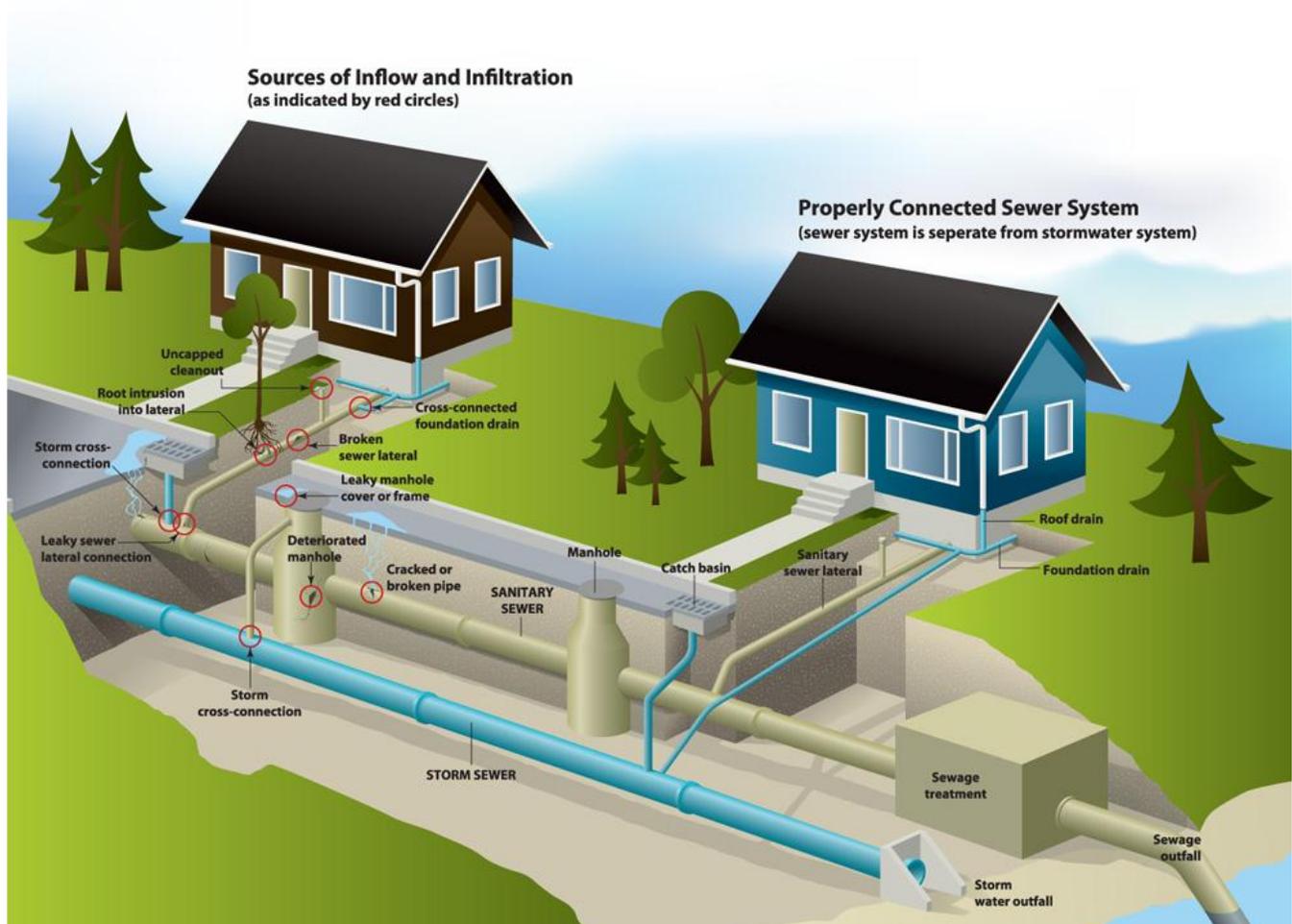
### Surcharged Sewers

Amherstburg has been experiencing unprecedented heavy rainfall events recently. With these rainfall events the sanitary sewer system is surcharging. Sanitary sewer surcharging is a direct result of inflow and infiltration.

Inflow and Infiltration are described as,

- Inflow is rainwater that enters the sanitary sewer through direct sources such as downspouts, foundation drains, cross-connections with storm drains, and other means.
- Infiltration is groundwater that enters the sanitary sewer through cracks or leaky joints in sewer pipes and manholes.

THE DIAGRAM BELOW ILLUSTRATES SOURCES OF INFLOW AND INFILTRATION vs A PROPERLY CONNECTED SEWER SYSTEM



## Town's Separate Sewer Systems

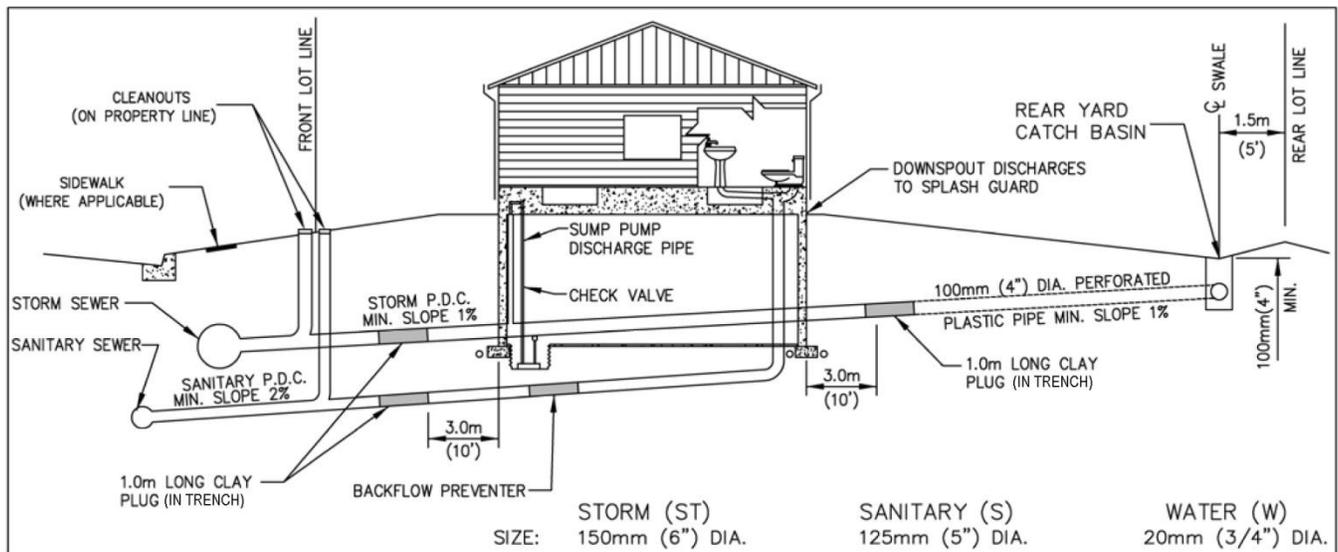
In Amherstburg, sanitary sewage and stormwater are conveyed in separate sewer systems. The Town has been proactively separating stormwater flows from sanitary sewage flows (eliminating combined sewers) and directed them to the appropriate outlets.

- The sanitary sewer system conveys wastewater from fixtures within buildings, such as toilets, showers, sinks, washing machines and floor drains. These flows are directed to one of the Town's sewage treatment plants or one of the Town's sewage lagoon sites.
- The stormwater drainage systems moves rainwater and groundwater from roof drains, foundation drains, lawn drains, and catch basins through a system consisting of underground pipes, ditches, municipal drains and creeks.

Sanitary sewer systems are not designed to handle excess storm water (if they were, the pipes would be much bigger and very costly to construct). Separated systems eliminate the unnecessary treatment of rainwater and groundwater, thus reducing costs. During a rain event, inflow and infiltration takes up valuable sewer capacity and as a result, the sanitary sewer system may become overloaded and cause basement flooding.

Your home's plumbing is connected to the Town's sewer main by a service lateral called a Private Drain Connection (or PDC). Ideally each PDC on your property will have a cleanout. The cleanout is an access port that is used to clear blockages in your PDC. The cleanouts typically are located at/near your street property line or near your home. The portion of the PDC that is on your property is your responsibility to maintain and clean. The trunk sewers and the portion of the PDC from the cleanout to the main are maintained by the Town.

### THE DIAGRAM BELOW ILLUSTRATES THE IDEAL PRIVATE AND PUBLIC SEWER SYSTEM



## How Homeowners Can Reduce Inflow and Infiltration

As a property owner, you are responsible for maintaining, repairing, and/ or replacing the sewer lateral (pipe) from your house to the property line such that no rainwater or groundwater enters the system. Discharging stormwater into the Town's sanitary sewer system is detrimental to the system and your neighbors.

You can reduce Inflow and Infiltration in a number of ways:

- Remove the foundation weeping tile from the sanitary system. If your home has a basement and does not have a sump pump chances are the weeping tile is connected directly to the sanitary system. A sump pump can be installed to disconnect the weeping tile drainage system from the sanitary and direct the ground water to the storm sewer or overland away from the house.
- Disconnect downspouts and redirect your downspouts so that rain soaks into your yard or garden. Even though the downspouts may be connected to a separate storm sewer system if the downspout piping is damaged below grade rain water may be directly entering and overwhelming the foundation weeping tiles. Redirect the downspouts as far away from the foundation walls as possible.

- Ensure the grading around your home is properly sloped away from the house. Pooling water near the foundation walls will result in to excess water being collected by the foundation weeping tiles.
- Report missing or defective cleanout caps located on the Town's right-of-way to the Town for replacement. Replace missing or defective private cleanout caps on your property.
- Have your property's sewer pipe inspected. Replace any known broken, leaky or problem sections. Maintaining and repairing the pipe is the homeowner's responsibility and can reduce inflow and infiltration and prevent sewer backups into your home.
- Avoid planting trees and shrubs over sewer pipes as roots can damage sewer pipes.

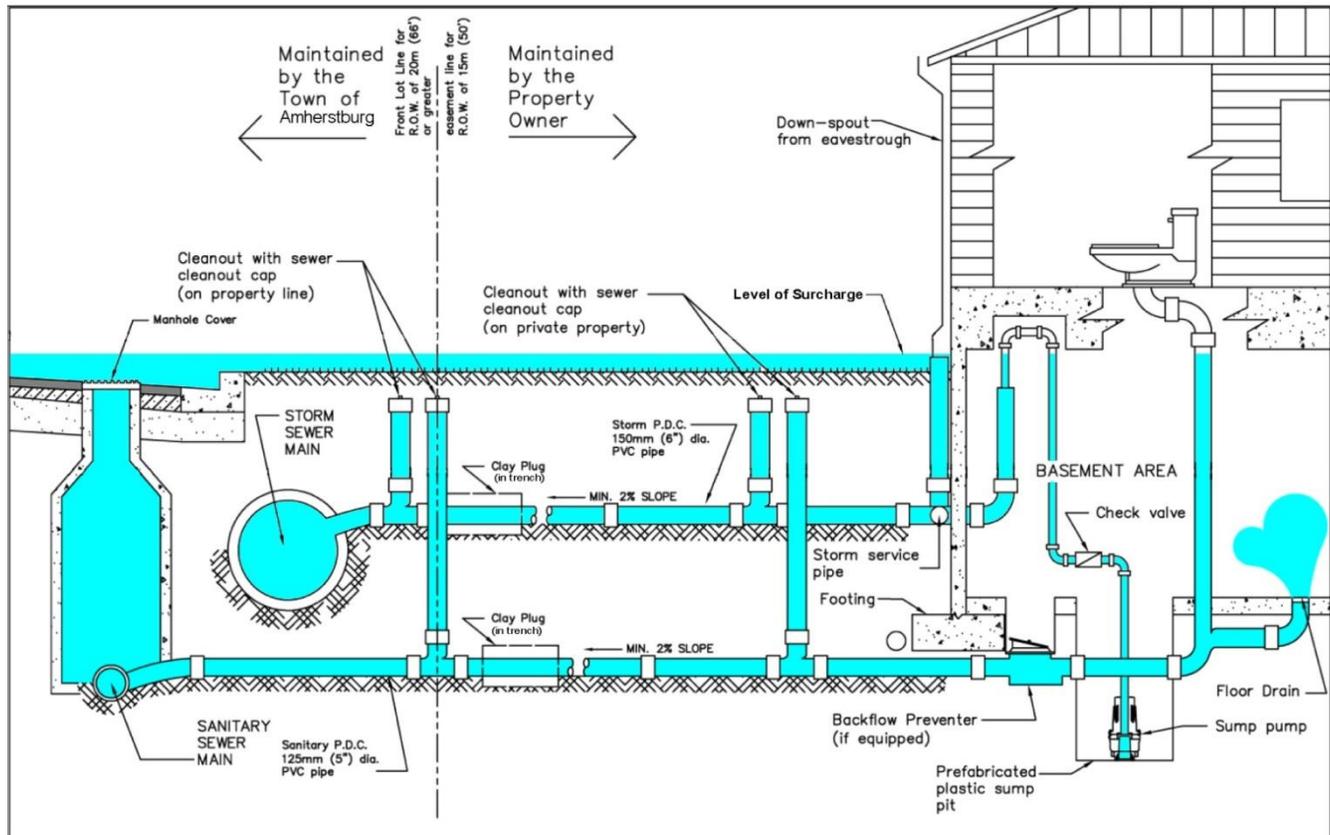
### **Basement Protection from Surcharged Sewers**

A mainline backwater valve can be placed directly into the sanitary sewer pipe at the foot of your basement wall or into the sewer pipe in the yard. The device is designed to close when the sanitary sewer begins to surcharge.

Backwater Valve Notes,

- Water use in the house must cease when the valve is in the closed position. Wastewater flow from the home will have nowhere to go but back through the floor drain.
- Ensure the backwater valve is installed at the proper location, if placed in the wrong position the valve could be bypassed and provide no protection. If your home's weeping tiles are connected to the sanitary system a sump pump must be installed in conjunction with a backwater valve.
- Routine maintenance and inspection is a must, the slightest amount of debris caught in the backwater valve may prevent proper closure of the valve.

**THE DIAGRAM BELOW ILLUSTRATES A SURCHARGED SEWER SYSTEM**



## **My Basement is Flooded**

Flooded basements can present danger if water levels are above electrical outlets or baseboard heaters. Contact an electrical contractor if unsure about the hazards.

Document the damage by taking photos and video, if possible. Contact your insurance agent.

For information on recommended clean up procedures, visit the following Canada Mortgage and Housing website:

[http://www.cmhc-schl.gc.ca/en/co/maho/em/em\\_001.cfm](http://www.cmhc-schl.gc.ca/en/co/maho/em/em_001.cfm)

To assist the Town in determining areas of flooding concern, please fill out the Residential Home Flood Data Sheet and return to the Town. The Residential Home Flood Data Sheet is attached below.

[Residential Home Flood Data Sheet](#)

## **Additional Information**

The above information is a brief overview of some of the possible causes and solutions for sewer backups. For additional information, please visit the following websites:

- Review the “Handbook for Reducing Basement Flooding” published by the Institute for Catastrophic Loss Reduction (ICLR) [http://www.iclr.org/images/Basement\\_Flood\\_Handbook\\_-\\_ICLR\\_-\\_2009.pdf](http://www.iclr.org/images/Basement_Flood_Handbook_-_ICLR_-_2009.pdf)
- View the video provided by the Insurance Bureau of Canada to learn how a backwater valve can help reduce basement flooding [How to Reduce the Risk of Basement Flooding](#)

## **Contact Information**

For questions regarding flooding issues you have experienced, please contact:

**The Town of Amherstburg**  
**Engineering & Public Works Department**  
**(519) 736-3664**  
Or  
**Building Department**  
**(519) 736-5408**