

Why isn't the City fixing my drainage problem?

Drainage standards have changed over the years. On private property, renovating to meet current drainage standards is the responsibility of the homeowner, similar to bringing a home's electrical and plumbing systems up-to-date. Where large-scale neighbourhood flooding problems exist, the City has undertaken multi-million dollar projects to reduce the severity of basement floodings.

In many circumstances, only improvements completed on private property will reduce the chance of flooding. These types of improvements must be undertaken privately by the homeowner.

How much is this going to cost?

Each situation will be different. You should contact a licensed plumber to assess the potential cause of flooding and provide a cost estimate. While repairs on private property are the responsibility of the homeowner, the City of London offers a grant to qualifying homeowners to improve home drainage systems. Please refer to the City's *Basement Flooding Grant Program* pamphlet for more details.

For more information, or to obtain a copy of the *Basement Flooding Grant Program* pamphlet:

- Phone 519 661-2500 ext. 5489;
- Visit City Hall, 9th Floor, 300 Dufferin Avenue, London; or
- View our website, www.london.ca, and enter "Basement Flooding Grant Program" into the Search field.

Environmental & Engineering
Services Department



Protect Your Basement



Basement Flooding Guide

to help homeowners identify causes of basement flooding and improve drainage conditions.

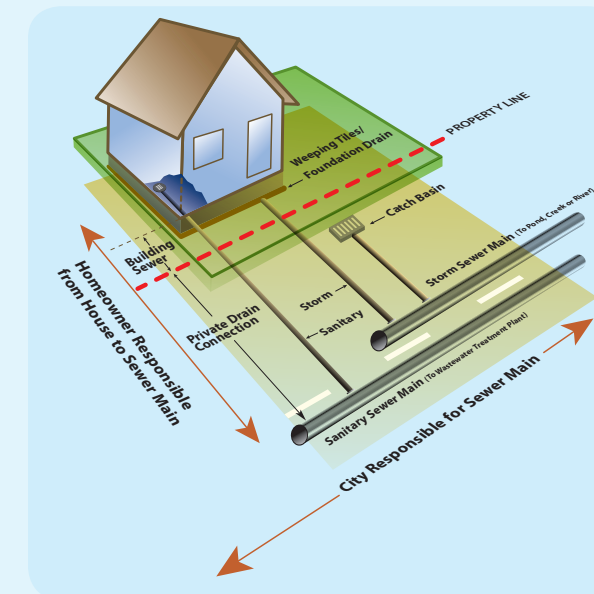
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Protect your home and possessions by understanding what causes basement flooding.

Basement flooding is a serious problem that affects residents in many municipalities, including the city of London. Basement floodings generally occur during snow melts and heavy rainfall and can cause serious damage and inconvenience. There are two systems involved in basement flooding:

1. Overloaded home drainage systems
2. Overloaded City sewer systems



Working together – Home drainage and City sewer systems

No municipal drainage system can guarantee every house complete protection against basement floods. Working together, we can help prevent flooding and reduce costly upgrades to City systems.

City sewer systems:

Sanitary (wastewater) sewer – The sanitary sewer receives wastewater from toilets, bathtubs, sinks, and laundry machines through your home pipes. The sanitary sewer is located under the street and is connected to the nearest sewage treatment plant.

Storm (rainwater) sewer – The storm sewer is located under the street and carries surface water from lawns and streets, and groundwater from weeping tiles and foundation drains, through pipes to local streams.

Home drainage system:

Footings tiles/weeping tiles/foundation drains – Weeping tiles are pipes with drainage holes located underground around the basement foundation to prevent groundwater from entering the basement. Weeping tiles should be connected to the sump pit, however, in older homes they may be connected to the sanitary sewer or storm sewer.

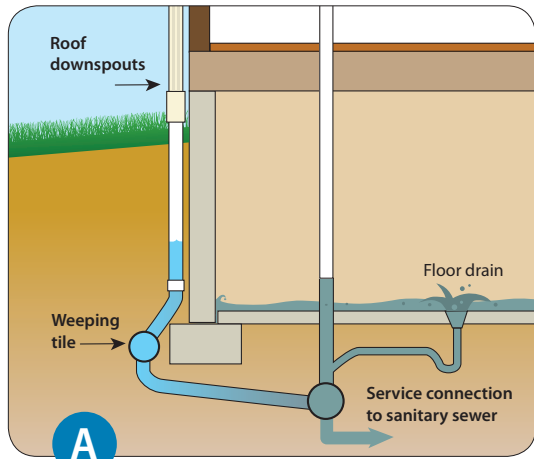
Downspouts – Typically, downspouts carry rainwater from your roof directly onto the ground surface. In older homes, downspouts may be connected to your weeping tiles or directly to the storm sewer.

Sump pit/pump – A sump pit is dug into your basement floor and collects natural groundwater from the weeping tiles. The sump pump moves the water from the sump pit to the ground surface or to the storm sewer.

Full-Port type Backwater Valve – A backwater valve is a device that prevents sewage from backing up into your basement from the City's sanitary sewer. The backwater valve automatically closes if sewage backs up from the sanitary sewer. Regular cleaning of the backwater valve is the responsibility of the homeowner.

What is causing my flooding?

There are a variety of causes of basement flooding. The following cases describe a number of common flooding situations that can occur in London homes.



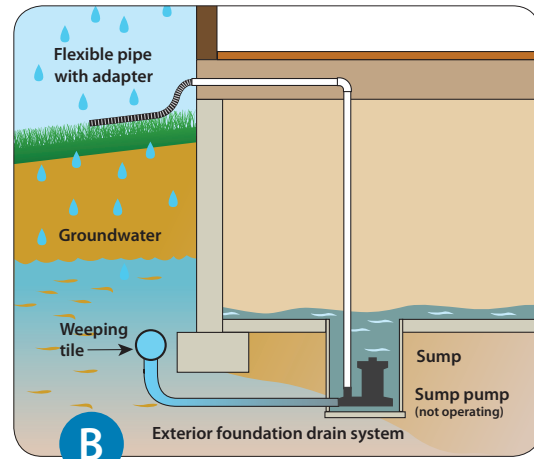
Weeping Tiles and/or Downspouts Connected to the Sanitary Sewer

During heavy rainfall, the water entering the downspouts may cause the weeping tiles to overflow. If your weeping tiles are connected to the sanitary pipes, this may cause rainwater or sewage to back up into your home.

Solution

Disconnect weeping tiles and downspouts from the sanitary sewer system

Rainwater should not be entering the sanitary (wastewater) sewer system. Have a qualified plumber disconnect your weeping tiles and downspouts from the sanitary sewer system. Install a sump pump and backwater valve to send the rainwater to the ground surface or to the storm (rainwater) sewer system.



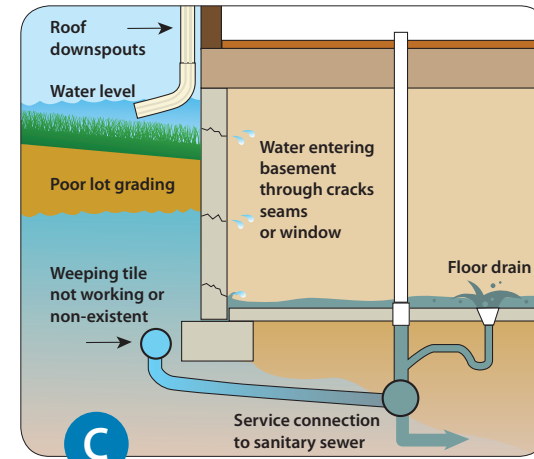
Malfunctioning Sump Pump

If your home is equipped with a sump pump, it may have malfunctioned – causing your basement to flood.

Solution

Replace your sump pump

Ensure that your sump pump is properly maintained. If your sump pump has malfunctioned in the past, consider contacting a qualified plumber and having it replaced.



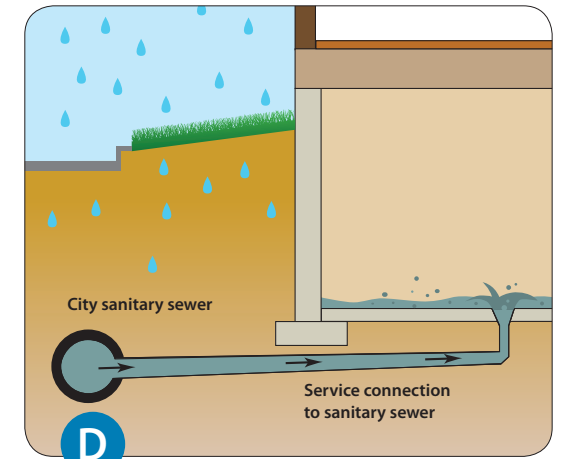
Surface Water Causing Basement Flooding

Basement flooding can occur when there is water ponding around your foundation walls and/or your weeping tiles are not working or are not existent.

Solution

Smart landscaping

Check that the ground around your house is sloping away from your foundation wall. This reduces the possibility of water entering through cracks in your foundation or overloading the weeping tiles. Direct your downspouts where water can be easily absorbed, such as your lawn or flower bed.



City Sanitary Sewer Pipe Full

If the City's sanitary sewer pipe is full due to large amounts of rainwater from various sources – such as private weeping tiles or from neighbour's homes – then sewage can back up into the basement.

Solution

Flood-proofing devices

Homes prone to flooding should have sump pumps and backwater valves to prevent rainwater or sewage from backing up into the basement. Talk to a qualified plumber about the best way to flood-proof your basement before any device is installed. Each installation is different and some devices require a plumbing permit. Be sure to get at least three estimates before hiring a plumber.

Check your local Yellow Pages or Better Business Bureau for a list of suppliers and contractors. Hardware, home improvement, plumbing outlets and suppliers offer information and equipment for do-it-yourself installations.