

Low Pressure Sewer (LPS) System

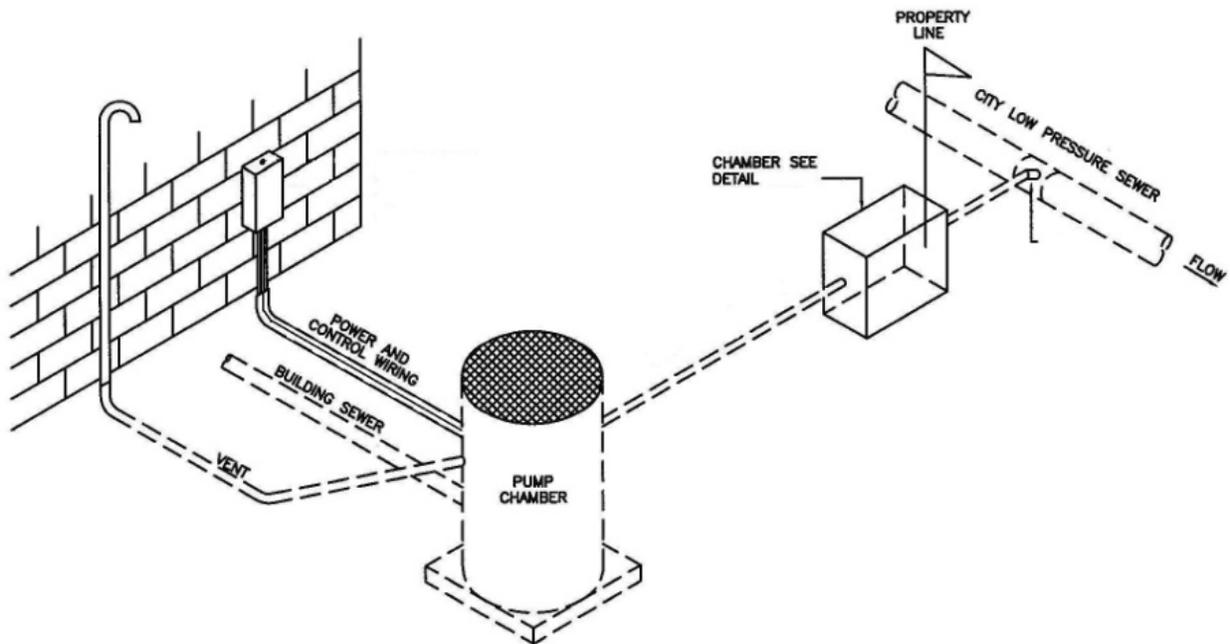
Low Pressure Sewer (LPS) systems are built in areas that cannot be serviced by the City's gravity sanitary sewer system and the area is too small to build a community pump station at a reasonable cost. The largest LPS system is in the Bridgeview neighbourhood, but there are a few other areas in the City with LPS systems as well. A LPS system will also replace the existing vacuum sewer system in the South Westminster neighbourhood when the area redevelops.

What is a LPS System?

Each property in an area with a LPS system has a pump chamber. Wastewater from the home or building enters this chamber under gravity and is then pumped to a City sanitary low pressure sewer forcemain in the road. The forcemain carries the wastewater under pressure to a City gravity sanitary sewer.

Property owners own the pump system on their property, and typically also own the pipe between the pump system and the City's forcemain. Property owners are responsible to operate, maintain and repair their system.

The sketch below shows a typical LPS system on private property.



The LPS system is made up of four (4) key parts:

1. A pump chamber (Photo 1) with one or two grinder pumps, which is located on the property. Wastewater from the home or building enters this chamber and is then pumped out through the service connection to the City's forcemain in the road.

2. A valve chamber (Photo 2), which is located on the property. This chamber contains a shut-off valve to close off the service connection if it needs to be repaired, as well as a back-flow check valve to prevent wastewater in the City's forcemain from entering the LPS system.
3. A shut-off valve at the connection point between the service connection and the City's forcemain. This valve remains open unless it needs to be closed to repair the service connection or pump on the property.
4. A control panel for the pump (Photo 3). This panel is usually installed on the building or on a nearby pole.

Do not park or drive on the pump chamber and valve chamber lids as they are not strong enough to support vehicles.

Please make sure that you properly dispose of any wastewater that is pumped from the chamber during maintenance periods.

If you have a LPS system on your property, refer to the Operation and Maintenance manual you received when your LPS system was installed for more information.



Photo 1: Pump Chamber



Photo 2: Valve Chamber



Photo 3: Control Panel

Other LPS system configurations include:

- A pump chamber on each property pumps wastewater to the City's gravity sanitary sewer in the road.
- A pump chamber on each property pumps wastewater to an inspection chamber at the property line. Wastewater then flows through a gravity service connection to the City's gravity sanitary sewer in the road.

What should I do to make sure that my LPS system keeps working?

1. Hire a certified plumber or contractor to look at your LPS system once a year. The plumber / contractor should clean (flush with water, similar to pressure washing) the service connection, check the pump and control panel to make sure all of the parts are working, remove any material that may be stuck in the pump chamber, check that the shut off and backwater valves are working properly, and replace any defective parts.
2. Do not put materials that could clog or block your LPS system down the drain or in the toilet. Learn more about [your maintenance responsibilities](#).

What should I do if there is an alarm signal on the control panel?

If the red light on top of the control panel (Photo 3) is lit or flashing, please do the following:

1. Stop using plumbing fixtures (sinks, faucets, toilets, etc.) in your home or business immediately until the problem is fixed.
2. Read your Operation and Maintenance manual to determine the type / status of alarm.
3. Contact a certified plumber or contractor, who is knowledgeable of pumps, confined space entry, plumbing and electrical issues. Have them assess the situation.

4. If plumber/contractor identifies that the issue within the City's low pressure sewer (as shown in the sketch above), call the City of Surrey Operations Department – Sanitary Sewer Operations (604-591-4152).

Also, during an electrical power outage when the LPS system is not working, do not use your plumbing facilities (sinks, toilets, baths, showers) until power is restored and your pump system is operating properly.

Where can I find more information on my LPS system?

Read the Operation and Maintenance manual you received when your LPS system was installed. The manual includes:

- Pump make and model details
- Control panel and alarm information
- Alarm warning description and how to respond
- Warranty information and servicing procedures
- List of products and materials that should not be sent to the sanitary sewer system and pump chamber

Additional information may also be provided on a sticker located on the inside face of the control panel door.