## WATER MAIN FLUSHING

There are about 207 kilometres of water mains in Salmon Arm. Regular flushing is an important component of a comprehensive water management program. The City of Salmon Arm flushes water mains annually to prevent bacterial re-growth and stagnation in low circulation areas of the distribution system. Flushing the mains using water under high pressure cleans out these areas, along with the rest of the system. Flushing is generally done between March and October.

## **Uni-Directional flushing**

The City of Salmon Arm Utilities Division uses "uni-directional" flushing. This means the valves in the pipe network are closed in sequence, drawing water from previously flushed pipes through the pipe that is to be cleaned. This ensures that all piping is refreshed and that minor sediment within the pipe is removed. In addition to removing more sediment and using less water than conventional flushing, unidirectional flushing tests and exercises the water system valves and hydrants.

## Process

Water mains are cleaned by forcing water through them at a high speed and discharging it through hydrants into sewers. This water flow scours sediment from inside the mains. This flushing operation continues until the discharge water at the hydrant runs clear. Water flushed from hydrants is dechlorinated and discharged to flush storm drains and sanitary sewers. It is not practical to re-use this water for irrigation, filling residential swimming pools or other purposes.

All storage reservoirs are also drained, scrubbed and disinfected at least every five years.