

SEWER SERVICES



CWW's sewer services: extensive*:

- Lining Services
- Sewer Flushing & Cleaning
- Large Sewers and Outfalls
- Sewer Investigation
- CCTV Video Inspection
- Sewer Chemical Grouting
- Plumbing and Drain Services
- Hydroexcavation & Water Main Services

*Please visit our website www.cwwcanada.com for additional details.

CCTV INSPECTION

Captured in Real Time

CWW's CCTV trucks are fully equipped with Pan & Tilt (P&T) video camera equipment used for mainline sewer inspection and are also equipped with computer hardware/software for data acquisition. CWW's on-site operators can inspect and evaluate the condition of a pipe via on board flat screen monitors while the images are being televised in real time according to the evaluation standards specified by our customers. Defects and general observations are indicated on the video, and a digitally-formatted inspection report is generated and subsequently reviewed by CWW technicians at CWW headquarters.

The Trail of the Unmanned Probe

CWW is also proud to be among the few Canadian companies offering Lateral and Mainline Probing (LAMP*). LAMP is an essential tool used for the identification of compromising sewer pipe infiltration and inflow, the accumulation of solids, root infiltration, pipe defects, and the structural condition of lateral services and mainline sewers. Self-propelled, LAMP provides a one-pass P&T inspection of a mainline sewer pipe with diameters of 6" and 24", with simultaneous inspection of the adjacent lateral services up to 80'. Equipped with two high resolution cameras, the LAMP picture-in-picture feature allows CWW operators to monitor the P&T inspection of the mainline pipe and launch a camera from the mainline to inspect the adjacent lateral service. LAMP is also used to verify the quality of rehabilitation processes such as lateral and mainline relining and spot repair. CWW's LAMP system can be mounted in a truck or retrofitted to most existing truck mounted CCTV systems.

All at Once

With LAMP technology, CWW crews can commence mainline sewer inspection from one manhole and inspect the entire mainline while simultaneously inspecting all of the laterals from the main pipe. LAMP also provides for the location of sewer laterals. While there is an option to LAMP (gaining access to the lateral from inside the house), the many inconveniences experienced by the homeowner far outweigh the benefits. LAMP eliminates any potential inconvenience and the prohibitive associated timelines.

*For complete features and benefits of P&T Lateral Inspection Cameras and Lateral/Mainline Self-Propelled Camera Launcher (LAMP) please visit our website: www.cwwcanada.com under "Sewer Services – Sewer Investigation": CCTV Inspection and Locating



FLUSHING AND CLEANING

Absolutely Formidable

CWW's state-of-the-art service equipment is powerful, broad, and second to none. Many of CWW's vehicles can pump and flush simultaneously; and CWW's combo trucks are custom designed to CWW specs – built to carry a vast supply of water and configured to deploy the water more efficiently to reduce the time required for replenishment and disposal. Lauded by industry experts and customers, CWW's Vactor trucks are equipped with 3850cfm blowers (vacuums), contain 18" Hg. 1,500 Gallon capacity fresh water tanks, 12 cubic yard capacity debris tanks, 152mm diameter liquid decant valves, 270 degree rotation booms with 2.44m extensions, and sport 400,000 BTU hot water heaters for reliable all-weather operation. Further, CWW carries a wide range of equipment including an extensive range of nozzles, hoses, and reamers to clean sewers, remove grease and debris, and eliminate extraneous protruding objects; and where necessary, a robotic cutter will be used to remove hard debris and (or) protrusions.

CHEMICAL GROUTING

All Clear. All Cured.

Chemical grouting is used to seal leaks, and to arrest infiltration and exfiltration in sewer pipes and systems. Most leaks are found in pipe joints, manholes, service connections, and within the first few feet of service laterals. The most economical means of repairing these types of leaks is with chemical grout. A two-part gel is forced into cracks and openings, and prior to its application CWW can adjust the cure time from eight seconds to over an hour. The hardened product is continuous, irreversible, waterproof, and non-porous. Should roots be determined to be the compromising factor, an additive can be introduced to the gel to prevent any

further root growth. Chemical grouting serves to strengthen and stabilize the soil outside and around sewer pipes and manholes, and is also effective in combating erosion and the encroachment of hazardous waste.

SEWER BYPASS PUMPING

(Dewatering, Temporary Flow Diversion, Flow Bypass)

'Round, 'Round, Get Around...

CWW provides Bypass Pumping to contractors in heavy construction – specifically for projects that involve replacement and repair through excavation. Prior to removing the old sewers or undertaking local spot repair excavation (replacing a collapsed section of pipe), first the sewer must first be bypassed and all flow diverted. Determining the requirements based on contract specifications and through verifying site conditions, as appropriate CWW also takes advantage of pumping industry experts to identify the most effective pumping solution suited to a particular condition. In order to gain City approval for a given bypass configuration, CWW provides a detailed plan for review and approval. When it comes to equipment CWW stocks, supplies, and installs inflatable plugs for all pipe diameters including the supply and installation of top-of-the-line Godwin Critically Silent 6" pumps. Owning all of the required bypass hoses and fittings gives CWW the ability to supply and install the entire system. Further, CWW monitors the bypass, checks for leaks, refuels the pumps – more often than not 24/7. With the experience and know-how gained through its many CIPP lining contracts, CWW is familiar with, and adept at all steps and stages of bypass pumping. From pipes with diameters from 3" to 72" CWW's done them all...and size isn't a factor. In addition, as necessary, CWW provides bypass services for building drains and lateral sewers as may be requested by our customers.