

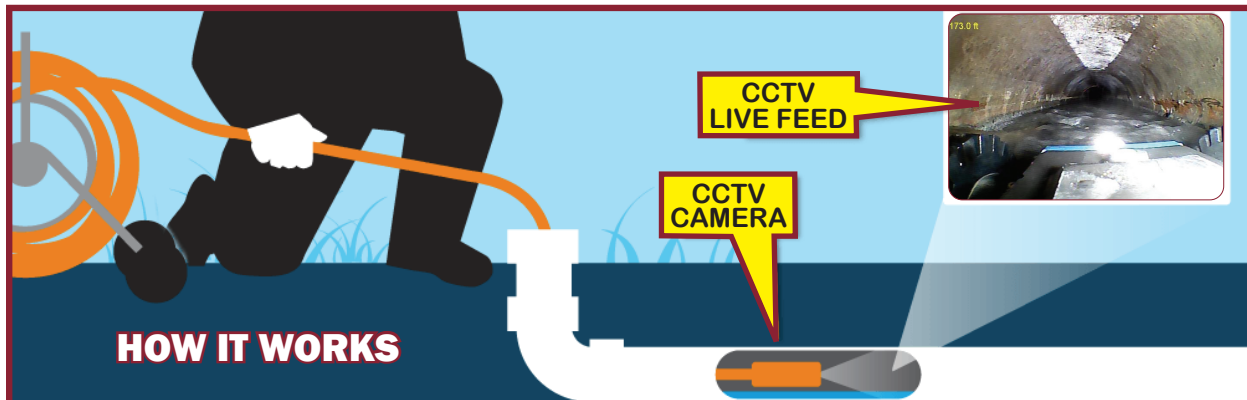


## Closed Circuit Television (CCTV) Inspection

CCTV inspection is performed with a remotely operated camera mounted on a robotic device (crawler) that drives inside pipes or is a push camera that is manually pushed through the pipes. CCTV inspection provides engineers and clients with a very detailed understanding of the buried infrastructure and serves as a primary aid to rehabilitation in most sanitary sewer evaluation surveys (SSES) programs. It is very effective in assessing conditions underground by locating structural and O&M related defects such as broken pipes and obstructions like roots, debris, or grease.

Mattern & Craig has implemented CCTV Investigation equipment and capabilities so that we may further refine our analyses and recommendations through detailed in-situ measurements and observations of underground utilities. Our equipment includes ASSET DMS data collection software that is PACP/LACP/MACP certified by NASSCO for pipeline survey data collection, reporting, and analysis. Built-in data verification and validation assures accurate and complete data entry saving time and money. In addition, the software includes PipePro and TeamViewer packages for maximum use and flexibility. Other camera features include:

- Pan & tilt zoom camera
- PC/portable all-in-one control unit
- Rubber and carbide wheels
- Auxiliary light heads
- Forward and rear-facing cameras with bright LED lights



Our CCTV cameras are capable of measurements within a pipe with diameter of 4" to 60" up to 1,000 LF in a single run. Detailed NASSCO certified inspection reports and videos are delivered. From the initial evaluation and recording of inside the pipeline, to a thorough review of the footage and identification of any issues discovered during the survey, we provide end to end CCTV sewer inspection services.

