

Sigma is Your Single Source for Sewer Infrastructure Condition Assessment Services

Improperly installed or maintained sewers can become widespread and expensive problems. And with the aging of the unseen infrastructure, leakage, reduced capacity, and compromised structural integrity threaten productivity and the environment.

CHART A CORRECTIVE COURSE

Sigma's sewer infrastructure assessments provide a basis for formulating a strategic plan for prioritizing maintenance and rehabilitation needs as well as forecasting costs. The assessment and planning effort can improve the performance of the systems, reduce environmental liabilities and avoid catastrophic cost and disruption. Sigma's sewer and infrastructure assessment capabilities are extensive:

- ▶ Televised inspections
- ▶ Dye tracing/smoke testing
- ▶ Mapping
- ▶ Flow monitoring
- ▶ Hydraulic modeling
- ▶ Civil 3-D/CADD
- ▶ Metadata outputs for GIS
- ▶ Civil design of utility infrastructure
- ▶ Engineering alternative analysis
- ▶ Budget and costing
- ▶ Management and maintenance plans
- ▶ Post-construction telemonitoring/inspection

TELEVISED SEWER INSPECTIONS

Sigma conducts televised sewer inspections using a high-resolution digital camera system to acquire detailed information on pipeline integrity, flow and conditions, and to identify lateral connection locations. Sewer assessment reports can be completed in accordance with the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP) or other client-specific needs.



Sigma's sewer camera

Sigma's technicians witness the conditions of the pipe in real-time, eliminating any assumptions or guesswork as to sewer conditions.

RELATED SERVICES

Sigma can complete additional assessment services:

- ▶ Perform pre-purchase infrastructure due diligence
- ▶ Complete manhole condition inspections through at-grade observations or confined-space entry
- ▶ Evaluate existing infrastructure systems, including Brownfield redevelopment projects
- ▶ Observe open boreholes or wells with the camera
- ▶ View remote/inaccessible locations, such as tanks, vaults, or confined spaces
- ▶ Conduct illicit sewer connection evaluations
- ▶ Identify sludge or residuals in sewer/process piping systems

Camera System Capabilities:

- Televiser 2" to 12" diameter pipes
- Able to pass through multiple 90-degree pipe bends
- LED-equipped lens provides optimal video clarity and self-leveling images
- Radio transmitter assembly provides camera location at ground surface
- Digital recording and playback with audio

CONTACT SIGMA TODAY FOR YOUR SEWER TELEVISIONING NEEDS

Robert Peschel, PE
(414) 643-4150
RPeschel@thesigmagroup.com

Joshua Neudorfer
(414) 643-4132
JNeudorfer@thesigmagroup.com

THE  **SIGMA**
Single Source. Sound Solutions. **GROUP**

www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
(414) 643-4200