

GRAVITY SEWER Line and FORCE MAIN DEFECT ANALYSIS

Defect Analysis

- Identify and document gravity sewer, force main and manhole defects in accordance with the CCTV Inspections procedures using PACP and MACP nomenclature and defect identification procedures
- Input data into the defect inventory database;
- Use Esri's ArcGIS, incorporated with probability of failure and consequence of failure support tools, to assess and catalog linear assets and develop rehabilitation recommendations based on multiple criteria, which may include;
 - Nature and severity of the gravity and force main defects
 - Pipe diameter and material
 - Criticality of a failure leading to SSOs or backups
 - Probability of failure leading to SSOs or backups
 - Consequence of Failure
 - Customer complaints
 - Effect on Customers
 - Proximity to critical roads and sensitive water sources and environmental areas,
 - Critical customers (e.g. hospitals, nursing homes)
 - Overall public health & safety
- Incorporate engineering and business factors, as well as fiscal budget considerations, in developing rehabilitation recommendations.