Abstract

India has announced a project of making 100 smart cities. For making a smart city one needs to consider many parameters such as smart water, smart electricity, smart transportation etc. There will be a need of smart underground infrastructure which includes underground water pipelines, communication cables, gas pipelines, electric flow, etc. As most of the cities in India have adopted underground drainage system, it is very important that this system should work in proper manner to keep the city clean, safe and healthy. If they fail to maintain the drainage system the pure water may get contaminated with drainage water and can spread infectious diseases. So different kind of work has been done to detect, maintain and manage these underground systems. Also Leaks and bursts are an unavoidable aspect of water distribution systems management, and can account for significant water loss within a distribution network if left undetected for long periods. This paper presents the implementation and design functions for monitoring and managing underground drainage system with different approaches. It also gives description about Waterwise system and detection method to detect leakage defects in sewer pipeline. Also some part of condition rating model for underground Infrastructure
Sustainable Water Mains and Intelligent system for underground pipeline assessment, rehabilitation and management are explained.

References

2. http://www.thomasathomas.com/Metal_detectors_work.htm
http://www.researchgate.net/publication/228963212_DEVELOPMENT_OF_AN_INTELLIGENT_SYSTEM_FOR_UNDERGROUNDPIPELINE_ASSESSMENT_REHABILITATION_AND_MAN
AGEMENT

Index Terms

Computer Science

Information Sciences

Keywords

GPS, RFID Metal Detector, Sensor, WaterWise.