

Assessment of Underground Water Utility Renovation in Uttam Nagar Area, Pune A Review

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ABSTRACT: Water pipeline fails due to various reasons. As per consideration most of the pipeline fail due to pipe aging problems but one more important factor for failing is over stressing due to increasing in demand of water. According to observations pipe can fail due increase water pressure which results to rise in maintenance cost. This paper based on renewal of water pipeline by considering risk factor and cost factor. Renewal planning is complicated by the many factors that must be considered when choosing which pipelines to replace, and when. This paper introduces the principles of pipeline renewal and focuses on two of the key factors that are at the foundation of any renewal program; data collection and condition assessment. Understanding and effective implementation of these two steps will greatly assist the efficient and sustainable planning of pipeline renovation. The decision support systems used by many overseas utilities are also introduced and briefly discussed.

Key Words: Risk profiles, PARAMS Theory, Pipeline Renewal planning, Data collection.

I. INTRODUCTION

Uttamnagar area comes under Haweli Taluka and located West side of Pune city on NDA Road. Before some months there was gram panchayat raj but now working authority comes under Pune Municipal Corporation. This is great cheng towards the development of Uttan nagar area better transportation facility to go anywhere in pune and large space to grow people due to surrounding industrial area affecting migration of people towards Uttam Nagar.

Failures of water pipeline is not only have a great impact on people routine life but also cause significant wastage of water which is an essential and valuable resource to human beings. As a result, deterrent maintenance for water pipeline, particularly in urban networks, which having great importance

for a sustainable society. To achieving effective replacement of water pipeline failure prediction aims to proactively find those most likely to fail or damage pipes. It is important and has been attracting more attention from both academic and industrial, especially for the civil engineering field. Sufficient quantity of clean water, distributed through a complex and growing network of water pipes, is essential for people daily life. In fact, the large-scale urban water pipe networks are in fast growth to meet the increasing demand arising from the fast developing urban areas failure prediction.

1.1 OBJECTIVES

The main objective of this work is to evaluate the effectiveness of conventional as well as fabrication method for construction:

- Assessing current and future risk levels of a particular pipe and groups of pipes compare the present scenario with past and future scenario for pipeline project by analysis.
- To suggest and discuss various parameter regarding pipeline assessment.

II.LITERATURE SURVEY

[1] **Management of Underground Utility by using RS & GIS techniques : A Review**

By: Ganesh Ragade, et.al

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This paper presents overview of underground utility and their accession by using geo-technology to mapping, monitoring, modelling, measuring, and

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