

MUNICIPAL FORUM ON TRENCHLESS TECHNOLOGY – BOSTON, MA 2017

Wednesday, 05/24/2017

Boston Water and Sewer Commission, 980 Harrison Avenue, Boston, MA 02119

Host: Irene McSweeney, BWSC

8:30 A.M. – 3:30 P.M

AGENDA

8:30 Coffee and reception

8:30 MINI-EXHIBITION OPENS

9:00 – 9:10 WELCOME AND INTRODUCTIONS

TECHNICAL PRESENTATIONS

9:10 – 9:50 #1 Recent Advances in Trenchless Technology, Direct Pipe Method Design and Construction Applications... Jon L. Robison, GeoEngineers

9:50 – 10:30 #2 Condition Assessment Techniques for Water and Sewer Pressure Mains... John Matthews, Louisiana Tech

10:30 - 10:40 Break

10:40 – 11:20 #3 Water Main Internal Assessment, Acoustic Leak Detection... Pete Luciani, National Water Main Cleaning Co

11:20 – 12:00 #4 CIPP Resin Technology Continues to Expand ... Bill Moore, AOC, LLC

12:00 – 12:30 LUNCH

12:30 – 1:10 #5 Sealing the Collection System: With a Focus on Main-to-Lateral Rehabilitation... Rick Gage, LMK Technologies

1:10 – 1:50 #6 The Main Interceptor Project – Innovative Large Diameter Trenchless Pipeline Rehabilitation... Jonnas Jacques, Kleinfelder

1:50 – 2:00 Break

2:00 – 2:40 #7 Pipe Bursting - A Diverse, Practical, and Proven Alternative to Open Cut Excavation for the Trenchless Replacement of Aging Water, Sewer and Gas Mains ... Matt Timberlake, Ted Berry Company Inc

2:40 – 3:20 #8 CIPP for Structural Lining of Potable Water Pipes... Ron Glive, AquaPipe (Sanexen Water Inc)

“MUNICIPAL PARTICIPANTS ONLY” SESSION

3:20 – ? Discussion and information sharing

4:00 pm MINI-EXHIBITION CLOSES

4:00 pm Adjourn

Technical Presentations

Title: #1 Recent Advances in Trenchless Technology, Direct Pipe Method Design and Construction Applications

Presenter: Jon L. Robison, GeoEngineers

Duration: 40 min

Abstract: Within the last decade, Direct Pipe has proven its usefulness as a new method to install steel pipeline in a continuous, curved sections. Combining aspects of microtunneling and horizontal directional drilling (HDD) technologies, Direct Pipe can be used to install steel pipe at shallow depths and through geologic conditions incompatible with the HDD method. Additionally, Direct Pipe allows for pre-launch fabrication and testing of the entire pipe string, and for launch and reception pits to be located at or near the ground surface, reducing shoring and dewatering expenses associated with conventional straight-line microtunneling. This presentation will share key aspects of geotechnical and geometric feasibility, and steel pipe design along with Direct Pipe installation construction experiences.

Title: #2 Condition Assessment Techniques for Water and Sewer Pressure Mains

Presenter: John Matthews, Louisiana Tech

Duration: 40 min

Abstract: This presentation will provide an overview of the available techniques for performing condition assessment on water mains and sewer force mains. The overview will include technology descriptions, advantages, and limitations and will include a case study of a recent project in Howard County, MD.

Title: #3 Water Main Internal Assessment, Acoustic Leak Detection

Presenter: Pete Luciani, National Water Main Cleaning Co.

Duration: 40 min

Abstract: This presentation will show how “live view” and real time water main inspections can be an invaluable tool in the utility’s water distribution asset management. The presenter will use case studies to demonstrate how deficiencies in water mains were visually discovered while exercising CCTV inspection. The deficiencies included operators not fully opening valves, valve failures, large pipe joint separations and tuberculation that encompassed up to 85% of the pipe diameter, dramatically impacting critical emergency flow in fire suppression and daily peak flow demands. These blockages and defects create a tremendous amount of stress on the pipes and are a huge safety concern to the general public. The ability to inspect water mains visually provides the owner real time data for asset management in an effort to prevent water main failures and estimate a remaining useful life for every asset

Title: #4 CIPP Resin Technology Continues to Expand

Presenter: Bill Moore, AOC, LLC

Duration: 40 min

Abstract: The first CIPP installation in 1971 used a general purpose Orthophthalic polyester resin. More than 40 years later, tests on that original liner still show outstanding properties retention and confirm excellent product performance. Decades later, resin manufacturers and CIPP installers have adapted their respective products to changing requirements. The resins used in CIPP applications continue to improve and the portfolio of products has expanded to allow installers to tackle even more challenging applications. Resin producers continue their research and development efforts to meet the growing needs of CIPP installers around the world.

Title: #5 Sealing the Collection System: With a Focus on Main-to-Lateral Rehabilitation ... Rick Gage, LMK

Presenter: Rick Gage, LMK Technologies

Duration: 40 min

Abstract: Cities who are trying to reduce costs associated with excessive I&I and/or root intrusion are finding that rehabilitating manholes and lining city owned sewer pipe does not always produce the results they desire because the failing laterals remain an unmitigated source of clear water inflow. The focus of the lunch and learn session is on proper techniques and materials to renew lateral services using CIPP technology with special emphasis on restoring the connection of the lateral to the mainline sewer in accordance with the ASTM F25p61.

#6 The Main Interceptor Project – Innovative Large Diameter Trenchless Pipeline Rehabilitation

Presenter: Jonnas Jacques, Kleinfelder

Duration: 40 min

Abstract: This presentation will focus on the design and construction of the Main Interceptor Project in Springfield, MA where 60-66 inch pipes were rehabilitated via trenchless methods. A concept was identified to re-use a parallel, abandoned brick interceptor as a conveyance conduit for gravity flow bypass (in lieu of bypass pumping). Due to the complexities of the rehabilitation design, technical expertise and innovative re-engineering were required to complete this unique project.

Title: #7 Pipe Bursting - A Diverse, Practical, and Proven Alternative to Open Cut Excavation for the Trenchless Replacement of Aging Water, Sewer and Gas Mains

Presenter: Matt Timberlake, Ted Berry Company Inc

Duration: 40 min

Abstract: A diverse, practical, and proven alternative to open cut excavation The presentation will focus on the practical applications of pipe bursting and through case studies assist the attendee in evaluation of feasibility, planning, and design. The presentation will discuss real world scenarios, successes, and challenges associated with the execution of projects throughout New England.

Title: #8 CIPP for Structural Lining of Potable Water Pipes

Presenter: Ron Glive, AquaPipe (Sanexen Water Inc.)

Duration: 40 min

Abstract: After three Million feet installed in North America, CIPP for Water Main is a well-established technology. The presentation will review the benefits of structural lining with CIPP and present interesting properties of these liners and some case studies.

***** Mini-Exhibition *****