

Design of Steel and Plastic Pipelines Installed Using a Directional Drill



PRESENTED BY: **CENTRE FOR ADVANCEMENT OF TRENCHLESS TECHNOLOGIES (CATT)**

April 4, 2012

8:00AM - 3:00PM

**BREAKFAST, LUNCH AND
REFRESHMENTS INCLUDED**

MISSISSAUGA GRAND
35 BRUNEL ROAD
(BRUNEL & HURONTARIO ST.)
MISSISSAUGA, ON L4Z 3E8
PH (905) 501-0043
WWW.MISSISSAUGAGRAND.COM

WORKSHOP OVERVIEW

If you have been or are going to be involved with the design, construction and or inspection of a horizontal directional drilling (HDD) project you will want to attend this one day workshop that covers the HDD pipeline design process from planning, drilled path design, product pipe load verification (operational and installation loads), bore construction planning, risk analysis and evaluation, and equipment/tooling selection. ASTM F1962, the Plastic Pipe Institute and PRCI pipe design methods will also be discussed. HDD design and quality assurance and quality control tools such as **BoreAid™** and the new **"PPI Boreaid™"** will be used throughout the workshop to demonstrate how to complete a successful HDD project.

WORKSHOP OBJECTIVE

To provide contractors, engineers, inspectors and others working in the trenchless industry with information on the design, construction and inspection of successful HDD projects.

SPEAKERS

Dr. Mark Knight, PhD, PEng; Associate Professor University of Waterloo. HDD researcher, consultant and co-developer of BOREAID and PPI-BORE AID

Dr. Alireza Bayat PhD, PEng; University of Alberta Dept. of Civil and Environmental Engineering HDD researcher, consultant and co-developer of BOREAID and PPI-BORE AID

Karl Lawrence, PhD, PEng Golders Associates, HDD researcher, consultant and co-developer of BOREAID and PPI-BORE AID.

SCHEDULE

8:00 | REGISTRATION AND BREAKFAST

8:30 | INTRODUCTION - COURSE OBJECTIVES / HDD PROCESS AND APPLICATION

9:00 | SITE INVESTIGATION - SURFACE SURVEY / GEOTECHNICAL CONSIDERATIONS / OBSTACLES / WORKSPACE REQUIREMENTS

9:30 | DRILLED PATH DESIGN - PLASTIC PIPE (ASTMF-1962) / STEEL PIPE (PRCI)

10:00 | NETWORKING / REFRESHMENT BREAK

10:15 | PLASTIC PIPE SPECIFICATION - INSTALLATION LOADS AND DEFLECTIONS / OPERATION LOADS AND DEFLECTIONS

11:00 | STEEL PIPE SPECIFICATION - INSTALLATION LOADS AND DEFLECTIONS/OPERATIONAL LOADS AND DEFLECTIONS

12:00 | LUNCH BREAK

13:00 | BORE CONSTRUCTION AND DRILL FLUIDS

14:00 | RISK EVALUATION AND QA/QC

WHO SHOULD ATTEND THE WORKSHOP? Pipeline, utility owners, consulting engineers, superintendents, contractors, inspectors and other technical individuals with the responsibility of designing or inspecting a HDD project.

WHAT IS INCLUDED?

- Course Material, Breakfast, Lunch, Refreshments, and 0.7 CEU's

UNIVERSITY OF
WATERLOO

Registration Form Design of Steel and Plastic Pipelines Installed Using a Directional Drill

APRIL 4, 2012

UPCOMING EVENTS

TRS/UIR 2012
06-5/6- 2012

TRENCHLESS TECHNOLOGIES 101
06-04-2012

ASSET MANAGEMENT – STRATEGIES
FOR SUSTAINABLE URBAN WATER
AND WASTEWATER NETWORKS
06-07- 2012

EARLY BIRD REGISTRATION

REGULAR REGISTRATION

ON-SITE REGISTRATION

THE CENTRE FOR ADVANCEMENT OF TRENCHLESS TECHNOLOGIES

(CATT) was established in 1994 to help municipalities address their buried infrastructure challenges with specific reference to trenchless technologies. CATT is a grouping of university, municipal, industrial, business and government agencies committed to the advancement of knowledge, materials, methods and equipment used in trenchless technologies. CATT's goal is to serve its members and the public by addressing the critical issues facing underground infrastructure installation, assessment, repair, renewal and management.

NAME _____

TITLE _____

COMPANY _____

ADDRESS _____

CITY _____

PROVINCE _____

POSTAL CODE _____

PHONE _____

FAX _____

EMAIL _____

RECEIVED BY: **WEDNESDAY FEBRUARY 29, 2012**

\$450/CATT MEMBER \$500/NON-MEMBER

RECEIVED BETWEEN: **MARCH 1 – MARCH 31**

\$500/CATT MEMBER \$550/NON-MEMBER

RECEIVED AFTER: **APRIL 1, 2012**

\$550/CATT MEMBER \$600/NON-MEMBER

Tax (HST 13%) \$ _____ Total \$ _____

METHOD OF PAYMENT - PLEASE PICK ONE

INVOICE COMPANY

CREDIT CARD (MasterCard, VISA, American Express)

CARD #:

EXPIRY:

NAME ON CARD:

CHEQUE (Payable to "University of Waterloo, ATTN: CATT")

COMPLETED REGISTRATION FORMS CAN BE MAILED AND FAXED

to Alice Seviore at the CATT office:

MAIL: CENTRE FOR ADVANCEMENT OF TRENCHLESS TECHNOLOGIES
Department of Civil and Environmental Engineering
University of Waterloo, Waterloo, ON N2L 3G1
ph 519 888 4770 f 519 746 6556 e maseviore@uwaterloo.ca

Note: to prevent fraud, please **never send credit card information via email.**

Refund Policy: please visit our website www.catt.ca for our details on our refund policy.

PLATINUM MEMBERS



GOLD MEMBERS

