



**NASTT's CIPP Good Practices Course Agenda**  
**September 25, 2024                      Fredericton, NB**

- 8:00 AM            Opening Remarks – Introduction
- 8:30 AM            Module 1 - History, Framework Overview & Product Classification
- Some History
  - CIPP Framework
  - CIPP Components
  - Practical Classifications of CIPP
    - Product
    - Intended Service
- 9:30 AM            Module 2a - Application Range & Building CIPP Programs
- Gravity vs Pressure Systems
  - Host Pipe Overview & Practical Impact on Technical Envelope
  - Typical Structural Failure Modes of Host Pipes
  - Rigid & Flexible Pipe Design - Where does CIPP fit in?
- 10:00 AM           Break
- 10:10 AM           Module 2b - Application Range & Building CIPP Programs
- Types of Problems That CIPP Can Solve
  - PACP to Rehab
    - Building CIPP Rehab Programs
- 10:30 AM           Module 3 - CIPP Testing
- CIPP Framework
  - Testing Objectives
  - Type Testing
    - Liner Properties for Liner Design
    - Liner Compatibility with Waste Stream
  - Construction Phase Testing
  - Environmental & Implementation Safety Testing
- 12:00 PM           Lunch Break
- 1:00 PM            Module 4 - Design Considerations for Gravity Pipelines
- Matching CIPP Design to Pipeline Problems
  - Design Evolution: ASTM F1216 to ASCE MOP 145
  - ASTM F1216 Appendix X1 & Other Design Methods
  - Non-Circular Liner Design
    - Evolution of WRc Design to ASCE MOP 145
  - Special Design Issues
    - Functional Design Features
    - Axial Design Issues including Seismic Design

- 2:15 PM      Module 5a/b - Implementation & Verification of CIPP Projects  
                 - Materials & Process Selection  
                 - Environmental & Safety Aspects of Implementation
- 3:00 PM      Break
- 3:15 PM      Module 5c - Implementation & Verification of CIPP Projects  
                 - Construction Phase  
                        - Pre-installation  
                 - Installation & Process Monitoring  
                        - Troubleshooting Typical CIPP Problems
- 4:15 PM      Module 5d - Implementation & Verification of CIPP Projects  
                 - Inspection & Verification  
                        - Inspection Tools  
                 - Quality Assurance & Quality Control Check Lists  
                 - Verification
- 4:45 PM      Q&A Period and Closing Remarks
- 5:00 PM      Course Adjourns

#### NASTT's CIPP Good Practices Course Speaker Information

Chris Macey - Chris Macey has worked in the trenchless industry as a consultant, mentor, educator and leader for over 40 years. He has developed large, sustainable programs for condition assessment and rehabilitation that have facilitated the widespread deployment of trenchless technologies across North America and globally. He has worked on numerous complex assessment and trenchless rehabilitation projects over his career including both shallow ground tunneling and extensive use of a diverse array of lining techniques. Chris has worked at AECOM since 1978 providing extensive design, engineering and quality assurance support to many CIPP and other trenchless contractors in both Canada and the USA for gravity and pressure pipe applications.

Kevin Bainbridge - Kevin is a Civil Engineering Technologist and has worked in the municipal sewer and water industry for the past 22 years. Kevin is currently the Infrastructure Management Practice Leader for Robinson Consultants Inc., where he has directed or project managed numerous trenchless technology projects including the use of various rehabilitation and condition assessment technologies, including CIPP, GRP, Spray on Liners, RFTC, leak detection, carbon fiber and slip lining. He has authored and co-authored over 40 papers on various aspects of Infrastructure Management and Trenchless Technologies and is a co-author of NASTT's Introduction to Trenchless Rehabilitation book.

#### **REGISTRATION INFORMATION:**

Registration can be made by faxing or mailing the registration form, or on-line at [www.acwwa.ca](http://www.acwwa.ca). For further information, please contact ACWWA Section office at 902-434-6002.

#### **COURSE LOCATION & TIME:**

Fredericton Convention Centre  
670 Queen Street Fredericton, NB

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Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City, Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

**Fee for ACWWA/WEF or NASTT Members & Employees of UTILITY Members**

Course: \$400.00 + \$60.00 HST (15%) = \$460.00

**Fee for Non – Members**

Course: \$450.00 + \$67.50 HST (15%) = \$517.50

Fees include coffee breaks

**Invoices will be sent to the address listed above.**

PO number to be included on the invoice \_\_\_\_\_

**Payment can be made by Visa, Master Card or cheque.**

Card Holder's Name \_\_\_\_\_

Credit Card Number \_\_\_\_\_ Expiry \_\_\_\_\_ CVV \_\_\_\_\_

Signature \_\_\_\_\_

Email address for credit card receipt \_\_\_\_\_

<p>Cheques should be made payable to <b>ACWWA</b> PO Box 28141 Dartmouth, NS B2W 6E2 Phone 902-434-6002 Fax 902-435-7796</p>
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