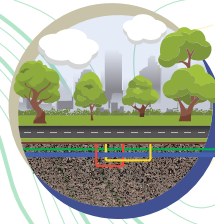




APRIL 14-18 | PROVIDENCE, RI

NO-DIG SHOW

2024



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Conference Preview

NASTT 2024 NO-DIG SHOW | APRIL 14-18 | PROVIDENCE, RI



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Room rates start at \$195+tax per night. See deadline for each hotel to receive the discount (*block may sell out before this date so reserve early*). All of our host hotels are in the heart of downtown Providence and within walking distance to the conference. Book your room today by visiting nastt.org/no-dig-show/hotel-information/.

- **Omni Providence**
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- **Courtyard by Marriott Providence Downtown**



If you have any issues booking a room, please contact Michelle Hill at mhill@nastt.org

NASTT does not use an outside vendor to solicit hotel booking. The link on the conference website is the only official room block link. Only emails from nastt.org and Jessie Clevenger of NASTT are official No-Dig Show communications regarding hotels.



BOOTH
601

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NASTT Awards Program

The NASTT awards program recognizes the commendable achievements and remarkable accomplishments of the individuals and companies associated with the trenchless technology industry.

NASTT Hall of Fame

This award honors NASTT members who have made outstanding accomplishments and exceptional contributions to the advancement of the North American trenchless industry and NASTT.



The Hall of Fame awards will be presented at the Casino Royale event on Tuesday, April 16.

NASTT Chair Award For Distinguished Service

This award acknowledges individuals who have selflessly given of their time and talents to enhance the Society and the industry. The person selected for the Chair Award is the decision of the NASTT Chair.



The NASTT Chair Award for Distinguished Service will be presented at the Casino Royale event on Tuesday, April 16.

Ralston Award For Young Trenchless Achievement

This award applauds savvy NASTT members under 36 who have demonstrated excellence early in their career by making valuable contributions to the trenchless technology industry, achieving noteworthy professional success, and actively participating in NASTT or its regional or student chapters. With their talent and ability, these impressive people are the future of trenchless.



The Ralston Award for Young Trenchless Achievement will be presented at the Opening Breakfast on Monday, April 15.

NASTT Volunteer Award

The Volunteer Award recognizes members who exemplify the mission, vision and core values of NASTT and make an impact in the trenchless industry through their dedication, leadership and volunteer contributions to NASTT during the past year. Recipients are chosen at the discretion of the NASTT Staff.



The NASTT Volunteer Award will be presented at the Opening Breakfast on Monday, April 15.

Abbott Innovative Products & Services Award

This award celebrates companies with a state-of-the-art product or service making a significant impact in advancing the trenchless industry in the areas of rehabilitation or new installation. All applicants will discuss their product at the Innovative Products Forum at the No-Dig Show.



The Abbott Innovative Products & Services Awards will be presented during the Exhibit Hall Ribbon Cutting Ceremony on Monday, April 15.



04.13.24

SATURDAY Schedule

■ **NASTT Board Meeting**

9:00 AM – 3:00 PM Room 557

■ **NASTT Technical Program Committee Meeting & Reception**

3:30 PM – 6:30 PM Room 555AB (Meeting)
Rotunda (Reception)

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SUNDAY Schedule

04.14.24

- **Attendee & Exhibitor Registration**
7:00 AM – 5:00 PM Exhibit Hall Prefunction
- **Introduction to Trenchless Technology – New Installations**
8:00 AM – 12:00 PMRoom 552AB
- **Introduction to Trenchless Technology – Rehabilitation**
8:00 AM – 12:00 PMRoom 551AB
- **Municipal Sewer Grouting Good Practices**
8:00 AM – 12:00 PM Room Ballroom D
- **Pipe Bursting Center of Excellence Meeting**
12:00 PM – 12:30 PMRoom 555AB
- **NASTT Chapter Chair and Vice Chair Meeting**
12:00 PM – 1:00 PM Room 553B
- **Annual General Meeting**
(Current NASTT Membership Required)
1:00 PM – 2:00 PMRoom 555AB
- **NASTT Chapter Meetings**
2:00 PM – 6:30 PM
See Website for Details and Room Assignments
- **Student Orientation Meeting**
4:00 PM – 5:00 PMRoom 555AB
- **Young Professionals/Student/Municipal Scholarship Social**
(Private Event)
5:00 PM – 7:00 PM Rotunda
- **NASTT Past Chair Dinner**
(Invitation Only Event)
7:00 PM – 10:00 PMOffsite



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MONDAY Schedule

04.15.24

- **Attendee & Exhibitor Registration**
7:00 AM – 5:00 PM Exhibit Hall Prefunction
- **Speaker Ready Room**
7:00 AM – 5:00 PM Room 557
- **Opening Breakfast**
7:30 AM – 9:30 AM Ballroom ACE
- **Technical Paper Sessions (Tracks 1-6)**
10:00 AM – 11:55 AM 551AB, 552AB, 555AB,
556AB, Ballroom B, Ballroom D
- **Exhibit Hall Ribbon Cutting Ceremony & Abbott Innovative
Products & Services Award**
12:00 PM – 12:10 PM Exhibit Hall Prefunction
- **Exhibit Hall Open**
12:10 PM – 3:30 PM Exhibit Hall A-D
- **Technical Paper Sessions (Tracks 1-6)**
3:30 PM – 4:55 PM 551AB, 552AB, 555AB,
556AB, Ballroom B, Ballroom D
- **NASTT Annual Educational Fund Auction**
5:00 PM – 6:30 PM Ballroom ACE



MONDAY Morning

TRACK ■ ROOM	TRACK 1 ■ 556	TRACK 2 ■ 555	TRACK 3 ■ Ballroom B
TRACK TITLE	Microtunneling	HDD	Innovative Products
TRACK LEADER	DAVE SACKETT	PAUL BEARDEN	MATTHEW IZZARD
10:00 - 10:25	<p>■ MM-T1-01</p> <p>Tunneling on the Shores of Lake Erie: Microtunneling Challenges and Considerations through Soft Ground</p>	<p>■ MM-T2-01</p> <p>Design and Construction of World Record 7,650-ft FPVCP HDD in Florida</p>	<p>MM-T3-01-04</p> <p>Innovative Products Forum</p>
10:30-10:55	<p>■ MM-T1-02</p> <p>Design and Construction of Six Microtunnels for GLWA 14 Mile Loop</p>	<p>■ MM-T2-02</p> <p>New Subaqueous Trenchless Outfall in Long Island, New York - Overcoming Various Challenges to Completion</p>	
11:00-11:25	<p>■ MM-T1-03</p> <p>Forcemain Twinning Made Possible by Microtunnelling</p>	<p>■ MM-T2-03</p> <p>Understanding the Importance of HDD Radii</p>	
11:30-11:55	<p>■ MM-T1-04</p> <p>Going the Distance: Microtunnel Keeps Golfers Swinging</p>	<p>■ MM-T2-04</p> <p>Mitigating Instances of Pressurized Groundwater During HDD Construction</p>	

MONDAY Afternoon

TRACK ■ ROOM	TRACK 1 ■ 556	TRACK 2 ■ 555	TRACK 3 ■ Ballroom B
TRACK TITLE	Large Diameter Tunneling	Pipe Jacking	Projects of the Year
TRACK LEADER	DON DEL NERO	SAM BRANCHEAU	MIKE KEZDI
3:30-3:55	<p>■ MA-T1-01:</p> <p>A Tale of Many Tunnels: Challenges Urban Areas Creating a Network of Microtunnels to Connect a Large Diameter CSO Pawtucket Tunnel</p>	<p>■ MA-T2-01</p> <p>Trenchless Shore Approaches: The Role of Pipe Jacking and Direct Pipe for Pipeline and Export Cable Landfalls</p>	<p>MA-T3-01-03</p> <p>Projects of the Year Forum</p>
4:00-4:25	<p>■ MA-T1-02</p> <p>Tunneling for Clean Solutions for Omaha</p>	<p>■ MA-T2-02</p> <p>Implementing Multiple Trenchless Methods In Place of Open-Cut in Downtown Cleveland on the Shoreline Consolidation Sewer Project</p>	
4:30-4:55	<p>■ MA-T1-03</p> <p>Stormwater Tunnel Extension</p>	<p>■ MA-T2-03</p> <p>Trenchless Replacement of Aging Sewer Trunk Main in Sonoma, California</p>	

TRACK 4 ■ Ballroom D	TRACK 5 ■ 552	TRACK 6 ■ 551
Pipe Ramming & Pipe Jacking	CIPP	Water Main Rehabilitation
ANIL DEAN	AMBER WAGNER	GEORGE RAGULA
<p>■ MM-T4-01</p> <p>Getting Hammered at 8,500 Ft.</p>	<p>■ MM-T5-01</p> <p>Detailed Parameter Sensitivity Analysis and Practical Ramifications for Assessment and Design using the ASCE MOP 145- Design of Close-fit Liners for Gravity Sewers</p>	<p>■ MM-T6-01</p> <p>Repair of 78-in. and 102-in. PCCP Aqueducts by Sliplining Using Centrifugally Cast, Fiberglass-Reinforced, Polymer Mortar Pipe (CCFRPMP)</p>
<p>■ MM-T4-02</p> <p>Pipe Hammering Underneath a Class 1 Railroad for New Drainage</p>	<p>■ MM-T5-02</p> <p>The CIPP Quality Assurance Paradox</p>	<p>■ MM-T6-02</p> <p>Case Study of a New AWWA Class IV Lining System for PCCP</p>
<p>■ MM-T4-03</p> <p>AMICI Engineering Contractors Dual Conductor Barrels Help Facilitate Potential Record-Breaking HDD Project</p>	<p>■ MM-T5-03</p> <p>Big Liners in Small Spaces: Rehabilitation of a 120-Year-Old, 54-in. Brick Interceptor in Lawrence, Massachusetts</p>	<p>■ MM-T6-03</p> <p>Emergency Interconnection Rehabilitation at the Sakonnet River</p>
<p>■ MM-T4-04</p> <p>Reducing Flood Risk Through North America's Largest Microtunnelling Installation- The NWIC Upper Plateau Separation Project</p>	<p>■ MM-T5-04</p> <p>Cured-In-Place Pipe (CIPP): A Proven Systems Technology</p>	<p>■ MM-T6-04</p> <p>St. Paul Regional Water Services: Developing a Self-Performing Pipe Bursting Program</p>

TRACK 4 ■ Ballroom D	TRACK 5 ■ 552	TRACK 6 ■ 551
Emerging Technologies	I/I	Project Planning & Delivery
DAVE KOZMAN	CATHY MORLEY	GUS O'LEARY
<p>■ MA-T4-01</p> <p>How One Texas Municipality Implemented a New In-line Inspection Technology to Inspect a Critical Raw Water Line</p>	<p>■ MA-T5-01</p> <p>High-Build Epoxy Rehabilitates Critical 100-Year-Old Structure in Downtown Boston</p>	<p>■ MA-T6-01</p> <p>It Didn't Include Quantities - Advantages and Disadvantages of Indefinite Deliverable/ Indefinite Quantity (IDIQ) Contracts for Trenchless Sewer Rehabilitation</p>
<p>■ MA-T4-02</p> <p>Introduction to Manufactured In-Place Composite Pipe (MICP)</p>	<p>■ MA-T5-02</p> <p>Implementation of a Multi-Year I&I Source Reduction Improvements Program in Allentown, Pennsylvania</p>	<p>■ MA-T6-02</p> <p>Laguna County Sanitary District Asbestos Abatement UV CIPP Rehabilitation Through Protected Environments in Santa Maria, California</p>
<p>■ MA-T4-03</p> <p>How to Select New and Emerging Technologies for Real Time Pressure Pipeline Condition Monitoring</p>	<p>■ MA-T5-03</p> <p>SIPP: Minimizes Disruption Repairing Pinhole Leaks in Distribution Water Main Pipes</p>	<p>■ MA-T6-03</p> <p>Free Swimming Electromagnetic Assessment of Raw Water Pipeline Provides Critical Baseline Data</p>

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TUESDAY Schedule

04.16.24

- **Attendee & Exhibitor Registration**
7:30 AM – 5:00 PM Exhibit Hall Prefunction
- **Speaker Ready Room**
7:00 AM – 5:00 PM Room 557
- **Morning Wake Up Station**
7:00 AM – 8:00 AM 5th Floor Prefunction
- **Technical Paper Sessions (Tracks 1-6)**
8:00 AM – 10:55 AM 551AB, 552AB, 555AB,
556AB, Ballroom B, Ballroom D
- **Exhibit Hall Open**
10:55 AM – 3:30 PM Exhibit Hall A-D
- **Technical Paper Sessions (Tracks 1-6)**
3:30 PM – 5:25 PM 551AB, 552AB, 555AB,
556AB, Ballroom B, Ballroom D
- **Casino Royale (ticketed event)**
6:00 PM – 10:00 PM Ballroom ACE



TUESDAY Morning

TRACK ■ ROOM	TRACK 1 ■ 556	TRACK 2 ■ 555	TRACK 3 ■ Ballroom B
TRACK TITLE	Geotechnical Issues	HDD	Emerging Technologies
TRACK LEADER	DENNIS DOHERTY	KATE WALLIN & MARY NEHER	DAVID HAUG
8:00-8:25	<p>■ TM-T1-01</p> <p>Outside the Box Geotechnical Data Collection Approaches for Trenchless Crossings</p>	<p>■ TM-T2-01</p> <p>Drilling in Paradise: The Race to Replace Aging Pipelines along Florida's Oldest Causeway</p>	<p>■ TM-T3-01</p> <p>Emergency Trenchless Rehabilitation of the East Don River Trunk Sewer and the Highland Creek Interceptor</p>
8:30-8:55	<p>■ TM-T1-02</p> <p>Trenchless Replacement of Aging Force Main in the Russian River Gorge</p>	<p>■ TM-T2-02</p> <p>Drilling Down to Eliminate Overflows</p>	<p>■ TM-T3-02</p> <p>The Use of a Geo Pilot Bore to Confirm HDD Feasibility</p>
9:00-9:25	<p>■ TM-T1-03</p> <p>A Novel Approach to Geotechnical Data Collection and Development of Civil 3D Subsurface Model for Large Scale Trenchless Shore Approaches</p>	<p>■ TM-T2-03</p> <p>Pulling HDPE and RJ-DIP in One HDD Installation</p>	<p>■ TM-T3-03</p> <p>Concept for Jet-based Thermal Spallation Boring for Trenchless Tunneling in Challenging Hard Rock Geologies</p>
9:30-9:55	<p>■ TM-T1-04</p> <p>Ensuring Global Stability Around Large Diameter Structures In Conjunction With Sliplining & CIPP Rehabilitation</p>	<p>■ TM-T2-04</p> <p>Perkins Avenue: A Community Benefits Long-Term from HDD</p>	<p>■ TM-T3-04</p> <p>The Pittsburgh Water and Sewer Authority (PWSA) Large Diameter Sewer Rehabilitation with Geopolymer Lining System (GLS) Mortar</p>
10:00-10:25	<p>■ TM-T1-05</p> <p>The Execution of GBRs on Trenchless Projects - Are They Working?</p>	<p>■ TM-T2-05</p> <p>Design-Build Coordination and Management Plan for the Bay Park Conveyance Project Delivery with Dual Trenchless Construction Methods in New York</p>	<p>■ TM-T3-05</p> <p>Direct Steerable Pipe Thrusting for Land-to-Water Installations in an Emerging Renewable Energy Market</p>
10:30-10:55	<p>■ TM-T1-06</p> <p>Hydraulic Fracture Analysis: Evaluating the Applicability of the Delft Equation Under Undrained Conditions</p>	<p>■ TM-T2-06</p> <p>Differing Site Conditions Claims: Contractor's Right to Rely on Soils Data</p>	<p>■ TM-T3-06</p> <p>Trenchless Solutions for Small-diameter Pipeline Installations</p>

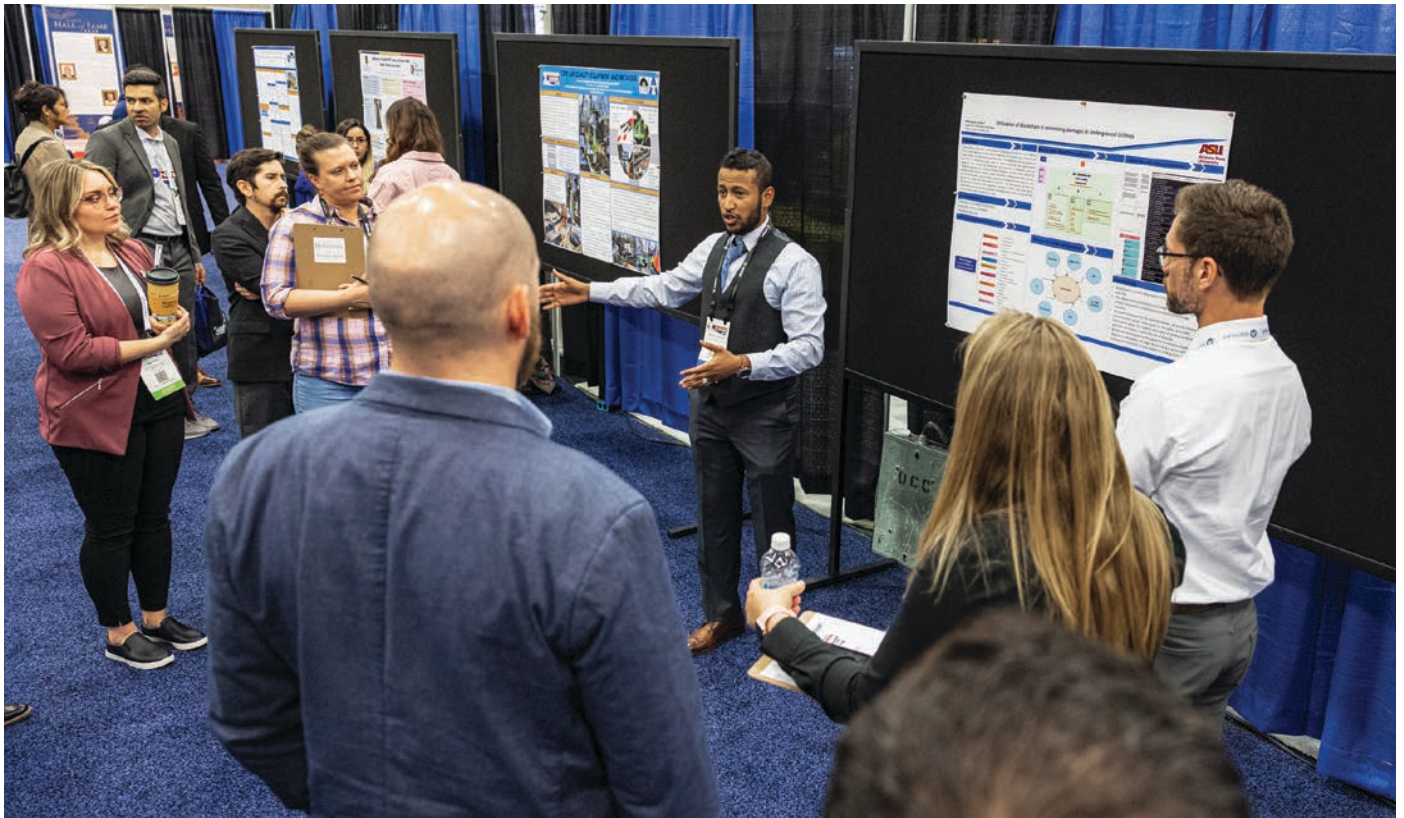
TRACK 4 ■ Ballroom D	TRACK 5 ■ 552	TRACK 6 ■ 551
Renewables	Condition Assessment	Wastewater Pipeline Rehabilitation
GABE GARCIA	MARK WADE	GEORGE KURZ
<p style="text-align: center;">■ TM-T4-01</p> <p>South Fork Wind: Bringing Offshore Energy to Shore</p>	<p style="text-align: center;">■ TM-T5-01</p> <p>Force Main Condition Assessment: A Treatise from an Owner, Consultant and Industry Point of View</p>	<p style="text-align: center;">■ TM-T6-01</p> <p>MID Segment 5 Rehabilitation: Innovative Debris Removal, Spray Lining and Sliplining of a Large Diameter Sewer Without Interrupting Service</p>
<p style="text-align: center;">■ TM-T4-02</p> <p>TBA</p>	<p style="text-align: center;">■ TM-T5-02</p> <p>How to Effectively Perform a Pipeline Health Check for Sewer Force Mains</p>	<p style="text-align: center;">■ TM-T6-02</p> <p>First Aqueduct Treated Water Tunnels Rehabilitation for Domestic Water with GeoSpray Geopolymer for San Diego County Water Authority (SDCWA)</p>
<p style="text-align: center;">■ TM-T4-03</p> <p>ASTM F1962-HDD Standard Guide for Placing Polyethylene Pipe-Recent Additions and Status</p>	<p style="text-align: center;">■ TM-T5-03</p> <p>Visual Inspection & CFRP Strengthening of CIP Liner - The West Trunk Sewer Pipe in Mississauga, Ontario</p>	<p style="text-align: center;">■ TM-T6-03</p> <p>Rehabilitating a 48-in. Brick Sewer Under a Mass Transit Right-of-Way</p>
<p style="text-align: center;">■ TM-T4-04</p> <p>Best Practices for Safe, Efficient Shore Approach Design and Construction</p>	<p style="text-align: center;">■ TM-T5-04</p> <p>Three Case Studies Covering All Aspects of Pressure Pipe Condition Assessment</p>	<p style="text-align: center;">■ TM-T6-04</p> <p>Choose Wisely: Trusting Permanent Shotcrete Lining to Preserve a Northeast Ohio Culvert</p>
<p style="text-align: center;">■ TM-T4-05</p> <p>Sioux Falls Replaces Nearly a Mile of Large Diameter Ductile Iron Pipe via Pipe Bursting</p>	<p style="text-align: center;">■ TM-T5-05</p> <p>Determining Maintenance Strategies for Large Diameter Water Pipelines using RCM</p>	<p style="text-align: center;">■ TM-T6-05</p> <p>Designing World's Largest Composite Pipe for Sliplining</p>
<p style="text-align: center;">■ TM-T4-06</p> <p>Old, leaky and Hard to Access - Rehabilitating a 100-Year-Old Water Transmission Main</p>	<p style="text-align: center;">■ TM-T5-06</p> <p>Inspection of a 50-Year-Old Outfall Forcemain to San Pablo Bay</p>	<p style="text-align: center;">■ TM-T6-06</p> <p>The Lining Selection Tools between Cured-in-Place Pipe (CIPP) and Spray-in-Place Pipe (SIPP) Lining Methods</p>

TUESDAY Afternoon

TRACK ■ ROOM	TRACK 1 ■ 556	TRACK 2 ■ 555	TRACK 3 ■ Ballroom B
TRACK TITLE	Microtunneling	HDD	Pilot Tube Methods
TRACK LEADER	NORMAN CHAN	KYLE WILLIAMS	MICHAEL FLANAGAN
3:30-3:55	<p>■ TA-T1-01</p> <p>Trenchless Design Challenges and Real World Application in Aurora, Colorado</p>	<p>■ TA-T2-01</p> <p>Challenges and Lessons Learned of Horizontal Directional Drills in South Florida</p>	<p>TA-T3-01-02</p> <p>Northeast Trenchless Outlook Forum</p>
4:00-4:25	<p>■ TA-T1-02</p> <p>Alternative Delivery and Trenchless Methods used to Install 60,000LF of Pipe on the Bay Park Forcemain Project</p>	<p>■ TA-T2-02</p> <p>16-in. HDD Gas Pipeline Crossing of the Sacramento River in Rio Vista, California</p>	
4:30-4:55	<p>■ TA-T1-03</p> <p>Microtunnel Specifications - Balanced Specifications and Lessons Learned</p>	<p>■ TA-T2-03</p> <p>Double Trouble: A Tale of Twin Water Main HDD Installations with Two Pipe Types While Drilling in Tight Places</p>	<p>■ TA-T3-03</p> <p>Navigating a 30-in. Hammer through 8-in. River Rock: A Utah Historic Winter Case Study</p>
5:00-5:25	<p>■ TA-T1-04</p> <p>Microtunneling for Electric Cables in Providence: A Case Study</p>	<p>■ TA-T2-04</p> <p>Determination of Geotechnical Parameters for Design of Horizontal Directional Drilling</p>	<p>■ TA-T3-04</p> <p>Sanitary Sewer Projects Converted to Pilot Tube Method of Guided Boring</p>



TRACK 4 ■ Ballroom D	TRACK 5 ■ 552	TRACK 6 ■ 551
Inspection	CIPP	Sliplining
STEPHEN WELLING	ANDREW COSTA	STEPHANIE NIX
<p>■ TA-T4-01</p> <p>The Perils of Surcharging Interceptors: Unintended Consequences of In-line Storage</p>	<p>■ TA-T5-01</p> <p>Factors Controlling the Ability of Polymer Liners to Prevent Pipeline Leakage Under Differential Ground Movements</p>	<p>■ TA-T6-01</p> <p>LS 23 Force Main Upgrades by HDD & Slipline</p>
<p>■ TA-T4-02</p> <p>Characterization of Critical Concrete Pipes Using Circumferential Waves</p>	<p>■ TA-T5-02</p> <p>Emergency Force Main Repair Using Pressure CIPP</p>	<p>■ TA-T6-02</p> <p>Advancements in Trenchless Technology: San Diego First Aqueduct Treated Water Tunnels Rehabilitation Project</p>
<p>■ TA-T4-03</p> <p>Multi-Sensor Inspection: Assessing the Condition of Large Diameter Pipes With 3D LIDAR Modeling</p>	<p>■ TA-T5-03</p> <p>A Twin Makes It Better! Rehabilitation of the McVean Trunk Sewer System, Regional Municipality of Peel</p>	<p>■ TA-T6-03</p> <p>Rehabilitation of the Confluence of Two Large Diameter Interceptors in Macomb County, Michigan</p>
<p>■ TA-T4-04</p> <p>How to Effectively Perform a Pipeline Health Check for Large Diameter Gravity Sewers</p>	<p>■ TA-T5-04</p> <p>Halifax Water Akerley Forcemain Lining</p>	<p>■ TA-T6-04</p> <p>Design Method of Pipeline in Shield Tunnel Crossing Fault</p>





APRIL 14-18 | PROVIDENCE, RI

NO-DIG SHOW

2024

NASTT Educational Fund Auction

APRIL 15

5:00-6:30 PM

NASTT'S 23rd Annual Educational Fund Auction & Reception in the Ballroom!

The Annual Educational Fund Auction helps raise money for important causes. Due to your generosity, NASTT is able to provide targeted trenchless training and courses to the industry, publish resource manuals and sponsor university students' attendance to the NASTT No-Dig Show, as well as award scholarships. *Text NASTT24 to 243725 to start bidding or make a donation!*

50/50 Raffle and \$5,000 Cash Prize Drawing

Win some cash for yourself and help our Educational Fund! Buy your 50/50 Raffle tickets through the auction website. The winner will be drawn during the Auction on April 15 and you **MUST** be present to win! The winner splits the cash pot with the fund.



The \$5,000 cash prize drawing, sponsored by Vermeer, is back! All Full-Conference attendees will automatically be entered to win and anyone can buy additional tickets through the auction website. The winner will be drawn during the Auction on April 15 and you **MUST** be present to win!

For more information visit nastt.org/no-dig-show/auction/

Exciting Auction Items

Bid all day via your mobile device on great items like electronics, wine, spirits, industry items and more!

And join us in the Ballroom on Monday evening for food, drinks and networking!

Bidding is open to anyone in North America and items will be shipped to winners.

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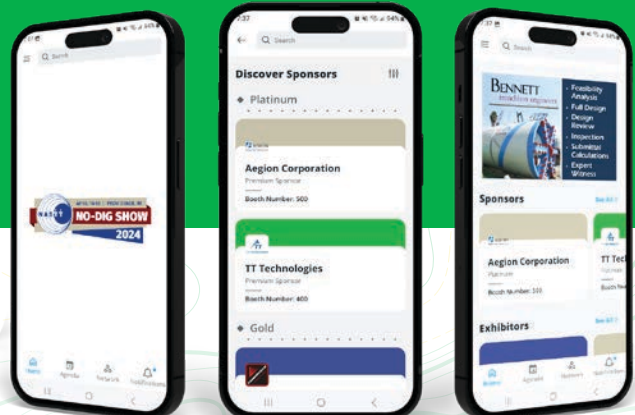


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WEDNESDAY Schedule

04.17.24

- **Attendee & Exhibitor Registration**
7:30 AM – 12:00 PM Exhibit Hall Prefunction
- **Morning Wake Up Station**
7:00 AM – 8:00 AM 5th Floor Prefunction
- **Technical Paper Sessions (Tracks 1-6)**
8:00 AM – 9:55 AM 551AB, 552AB, 555AB,
556AB, Ballroom B, Ballroom D
- **Exhibit Hall Open**
9:00 AM – 1:00 PM Exhibit Hall A-D
- **Closing Luncheon**
12:00 PM – 1:00 PM Exhibit Hall A-D
- **NASTT Good Practices Courses Day 1**
1:30 PM – 5:30 PM 550A, 550B, 551AB and 552AB



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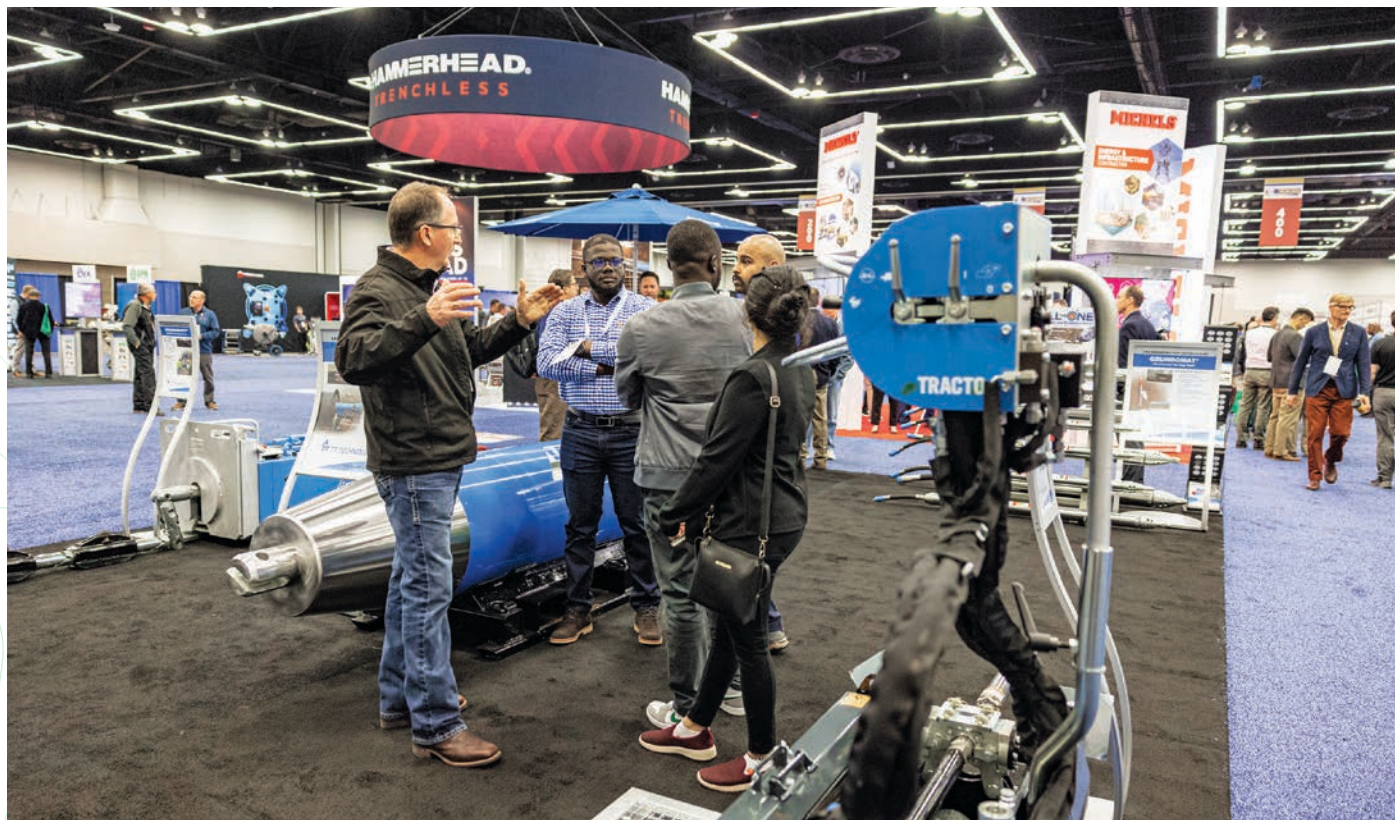
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WEDNESDAY Morning

TRACK ■ ROOM	TRACK 1 ■ 556	TRACK 2 ■ 555	TRACK 3 ■ Ballroom B
TRACK TITLE	Project Planning & Delivery	HDD	Safety
TRACK LEADER	KERBY PRIMM	KIM HANSON	MO NAJAFI & EHSAN RAJAEI
8:00-8:25	<p>■ WM-T1-01</p> <p>The Considerable Cost of the Burrowing Beetle</p>	<p>■ WM-T2-01</p> <p>HDD Construction of a Large Diameter Pipeline Under the Oakland Inner Harbor and Though Soft Clays</p>	<p>WM-T3-01-02</p> <p>Renewables in 2024 Forum</p>
8:30-8:55	<p>■ WM-T1-02</p> <p>Pullback Lift Considerations for Horizontal Directional Drills</p>	<p>■ WM-T2-02</p> <p>Golden Ears Forcemain River Crossing Project: Lessons Learned from HDD and Pipe Ramming Crossings</p>	
9:00-9:25	<p>■ WM-T1-03</p> <p>Dickenson Road</p>	<p>■ WM-T2-03</p> <p>Highlights of the High Life - Miami Beach's Horizontal Directional Drill Case Study</p>	<p>■ WM-T3-03</p> <p>Seismic Design of HDPE Pipe</p>
9:30-9:55	<p>■ WM-T1-04</p> <p>Options to help Owners Manage Budgets in Volatile Markets</p>	<p>■ WM-T2-04</p> <p>Completing a Short but Challenging HDD River Crossing to Install a 30-in. HDPE Bundle in Mixed Subsurface Conditions</p>	<p>■ WM-T3-04</p> <p>Unique Considerations for Cable System's Landfall HDD Planning and Design</p>



TRACK 4 ■ Ballroom D	TRACK 5 ■ 552	TRACK 6 ■ 551
Gas	Trenchless Research	Asset Management
JIM MURPHY	RICHARD THOMASSON	CHAD ANDREWS
<p>■ WM-T4-01</p> <p>Innovations and Advancements in Liners for Positive Pressure Applications</p>	<p>■ WM-T5-01</p> <p>Styrene Emission Evaluation: An Innovative Controlled Test Setup</p>	<p>■ WM-T6-01</p> <p>A City's Ongoing Rehabilitation Program of Aging Sewer Infrastructure</p>
<p>■ WM-T4-02</p> <p>Never Give Up: Completing a Challenging 2,000 ft HDD Beneath I-495/3 That Was a Decade in the Making</p>	<p>■ WM-T5-02</p> <p>The Proper Order of Operations for CIPP Rehabilitation of a Collection System</p>	<p>■ WM-T6-02</p> <p>18.6km Electromagnetic Inspection for the City of Winnipeg</p>
<p>■ WM-T4-03</p> <p>Critical Aspects and Construction Challenges for the use of Direct Steerable Pipe Thursting (DSPT)</p>	<p>■ WM-T5-03</p> <p>Sewer UV CIPP Rehabilitation on the River</p>	<p>■ WM-T6-03</p> <p>Geopolymer or not Geopolymer? That is the Question of the Day from the Boston Water and Sewer Commission (BWSC)</p>
<p>■ WM-T4-04</p> <p>Comparative Analysis of Load-Deflection Behavior and Crack Sizes in Repaired Pipe Specimens</p>	<p>■ WM-T5-04</p> <p>An Investigation of Methods and Equipment Used to Measure Volatile Organic Compound Emissions during Cured-in-Place Pipe (CIPP) Rehabilitation</p>	<p>■ WM-T6-04</p> <p>Difficult Watermain Pipe Bursting Project Along Shoreline Roadway in Connecticut</p>



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■ **NASTT Good Practices Courses Day 2**

8:00 AM– 12:00 PM 550A, 550B, 551AB and 552AB

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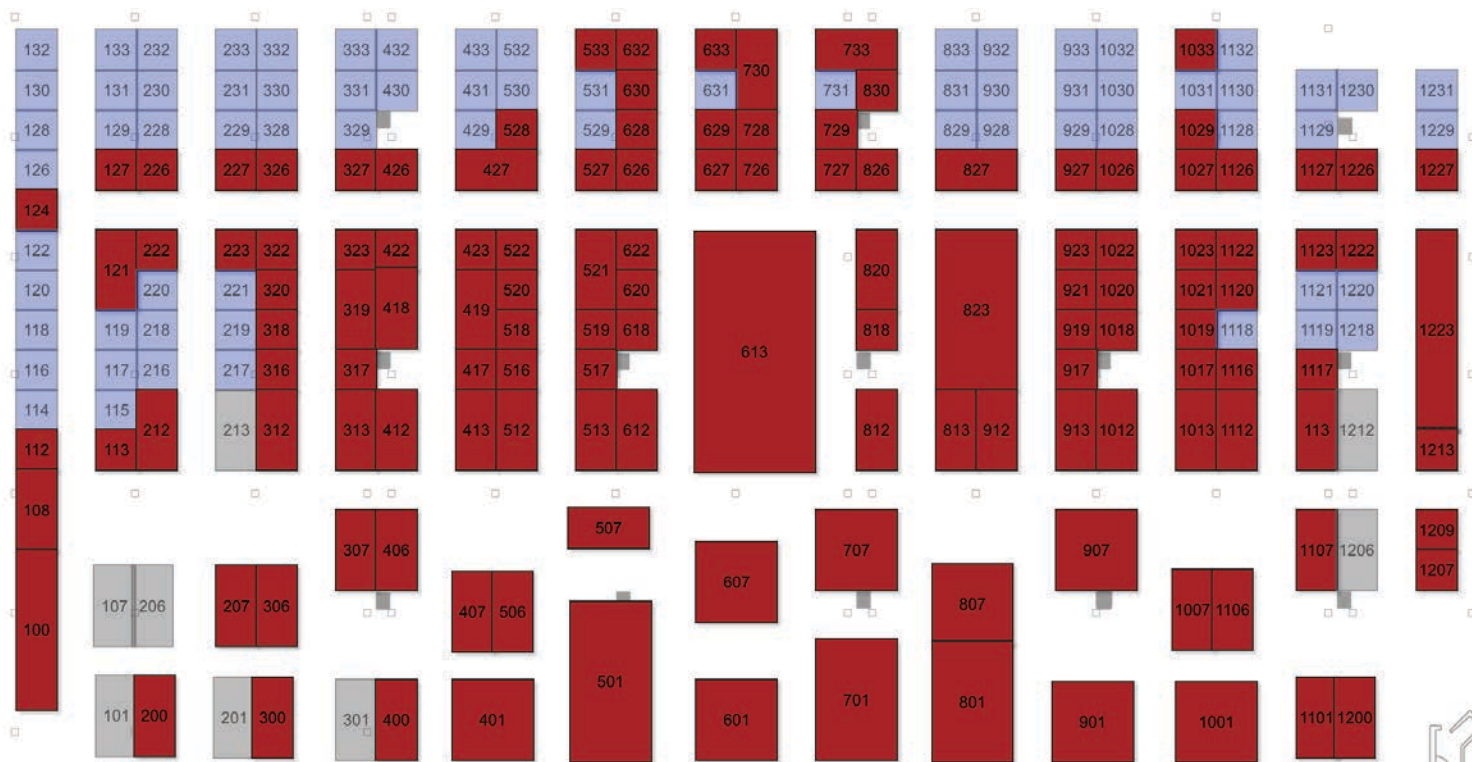
EXHIBITORS

Company	Booth	Company	Booth	Company	Booth
Acoustical Control, LLC	517	Geonex Oy	707	PPG	1018
AECOM	727	GeoTree Solutions	521	Precision Trenchless LLC	533
Aegion	801	HammerHead Trenchless	901	Prime Resins	620
AGRU America, Inc.	1126	Hebei Solidkey Petroleum Machinery Co., LTD.	317	Primus Line Inc.	807
Akkerman	300	Herrenknecht Tunnelling Systems USA, Inc	407	Progressive Pipeline Management	729
Allied Centrifuge Technologies Industrial Dynamics	222	Hobas Pipe USA, Inc.	307	PSILab, Inc.	1023
Allied Trenchless	401	Holly Pipe Corp	518	Puris Corp	413
Anyue Trenchless Materials	1127	HTS Pipe Consultants	527	Rain for Rent	1022
AOC Resins	513	Huxtred Trenchless	1027	RapidView IBAK North America	501
Aprotek USA, Inc.	830	Hydra-Flex, Inc.	1227	Reline America, Inc.	1001
ARIES Industries	823	Imerys	820	Rockpecker Limited	113
Avanti International	923	Innovations Amplified	427	Ruby-Collins, Inc.	731
Ballard Marine Construction, LLC	1116	Inrock Drilling	1026	SAERTEX MultiCom	921
Benjamin Media Inc	730	Interplastic Corporation	912	Sauereisen, Inc.	326
Bond Civil & Utility Construction, Inc.	313	IPEX USA LLC	406	Savy & Sons	633
Bothar Inc.	108	J. Fletcher Creamer & Son, Inc.	223	Sealing Systems Inc	826
Brawo Systems	1123	Jacobs	412	SEKISUI SPR Americas, LLC	612
Brierley Associates Corporation	1021	Kobus Inc	907	Sentinel Solutions LLC	100
Brownline U.S.A.	1012	Kondex Corporation	121	Sherwin-Williams	607
Can-Ex Technologies	319	KSW Industrial	1029	Source One Environmental	1209
Carboline Global	628	Logan Clay Products	322	Sprayroq	422
Carylon Corporation	419	Logiball Inc.	622	Structural Technologies	812
CCI & Associates Inc	506	MADERO Engineers & Constructors LLC	127	Sunbelt Rentals	1013
Channeline International Fiber Glass Manufacturing LLC	200	Madewell Products Corporation	927	Super Products	400
CJGeo Contractors	1020	Master Builders Solutions	423	Terracon	516
COLE Publishing Inc.	124	Mears Group Inc.	913	The Haartz Corporation	226
Coppola Services, Inc.	629	Metaflo Technologies Inc.	227	The Plastics Pipe Institute	613
Core & Main	507	Michael Byrne Manufacturing	112	The Tunneling Company	1117
CUES, Inc.	1213	Michels Trenchless, Inc.	601	Thompson Pipe Group	522
Danby PVC Lining	528	Midwest Mole, Inc.	1019	Transwest Truck Trailer RV	1223
Delve Underground	618	Miller Pipeline	626	Trenchless Rental Solutions	316
DLVEWS, Inc.	323	Mi-Tech Services, Inc.	632	Trenchless Technology Center (TTC)	728
Doetsch Environmental Services	627	Mott MacDonald, LLC	318	Trinity Products	726
DSI Tunneling LLC	1007	Northwest Pipe Company	1106	TRY TEK Machine Works, Inc.	1207
Eartec Co.	917	NuFlow Technologies	813	TT Technologies	701
Earth View LLC	113	Numa Hammers & Bits	1222	Underground Magnetics Inc.	1107
Elgin Separation Solutions	417	OBIC Products	630	United Felts/MaxLiner	306
Emagineered Solutions	418	Olson Construction Law, P.C.	1017	United Underground Precast & Infrastructure, LLC	1033
Environmental Noise Control	919	Omega Liner Company, Inc	827	Vector Magnetics	1226
ENZ Nozzles	327	On Point HDD	733	Vermeer Corporation	1101
Epoxytec LLC	320	PICA Corp.	1120	Vortex Companies	207
Faction Fusion	818	Picote Solutions	1122	Warren Environmental	512
FER-PAL/ALTRA	1112	Pioneer One	520	Westlake Pipe & Fittings	212
FyfeFRP, LLC	519	Pipe Trekker	426	WSP	1200
				Xylem	312

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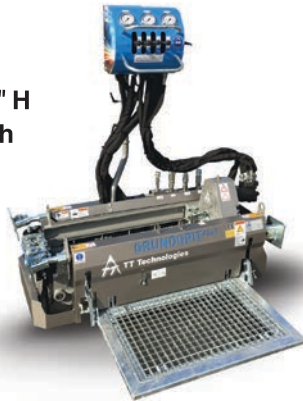
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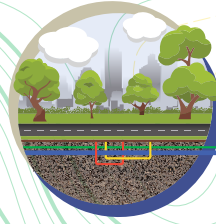
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