



Trenchless Technology Center *Newsletter*

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TTC Welcomes Irene McSweeney Woodfall to the Industry Advisory Board

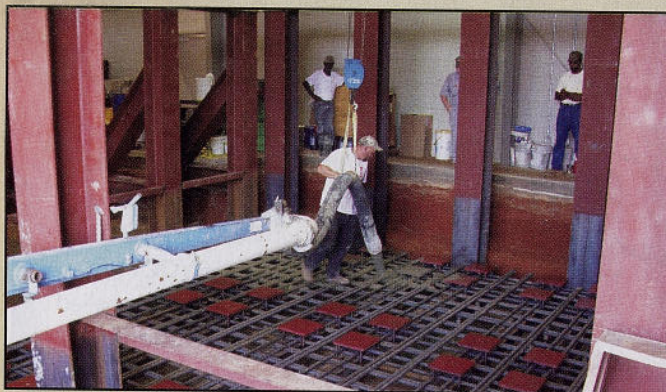
The TTC is very pleased to welcome Irene McSweeney Woodfall as a public works member of the TTC Industry Advisory Board. Irene is the director of construction of the Boston Water and Sewer Commission and has a longstanding involvement in trenchless technology applications within the water and sewer sectors. She has

served on the Board of the North American Society for Trenchless Technology and this summer was on the organizing committee for the American Society of Civil Engineers Pipeline Division conference held in Boston. Irene joins 10 other public works members from across the country (see sidebar for details) that provide guid-

ance to the TTC as to the user needs for technology development and problem issues that need attention. The public works members provide an excellent balance to the board, which also currently includes nine industry members, eight consultant members, five association members and two media members.

National Trenchless Research Building Completed in June

Work on the research building itself was completed in June but as soon as the building contractor moved out, work began on the large soil structure interaction facility to be built within the high bay research space in the building. The soil box design was expanded prior to construction so that it will be a total of 11 ft high and 20 ft x 20 ft in plan dimensions; 3 ft of the total depth will be below floor elevation and a 3-ft thick strong floor construction will both surround and underlay the soil box providing a tremendous flexibility in terms of applying loading horizontally and vertically to the soil and structures within it. Trenchless installation and replacement techniques will be simulated by a 550,000-lb servo-controlled actuator with a 5-ft stroke that will be mounted horizontally adjacent to the soil box. A future newsletter will provide a more complete description of the new facility.



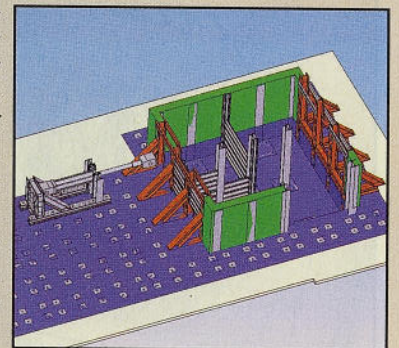
Pouring the 3-ft thick strong floor beneath the soil box.

Since the building dedication is planned for early November, work on the soil box and strong floor is proceeding at a rapid pace. TTC faculty member Dr. Mike Baumert, assisted by Dr. Luke Lee, has taken the major



The National Trenchless Technology Research Facility.

responsibility for the detailed soil box and strong floor design and construction. Because of the special issues surrounding the 320,000-lb anchor points that are distributed on a 2- to 3-ft spacing across the floor, much of the preparation work has been carried out by a team of TTC students supervised by Baumert. It is planned to use the soil testing facility for controlled studies of full scale soil-structure interaction for pipes up to several feet in diameter, studies of forces and ground movement during pipe bursting and pipe jacking, studies of HDD borehole stability and installation parameters, as well as utility locating and pipe characterization technologies. The distributed anchor points beneath the soil box will allow a total vertical load of up to 2.5 million lbs to be applied to the soil allowing the simulation of high force biaxial loading conditions.



Overall layout of the soil structure interaction

"Listening" Sessions on Asset Management

The Buried Asset Management Institute (BAMI) has undertaken a project for the U.S. Environmental Protection Agency (EPA) on the management of buried utility assets. One aspect of this project involves gathering feedback from municipalities on issues relating to the implementation of buried asset management (listening sessions). Because the TTC arranges municipal forum programs across the United States, the TTC was asked to use its municipal forum program to collect data for the BAMI project. Eight of the municipal forums held in the first half of 2007 were used to collect the data on asset management practices and needs. Discussion sessions and/or questionnaires were distributed at the forums between February and June 2007 (see municipal forum description for locations of spring forums). A total of 156 responses to the questionnaire were received.

The questionnaire responses and discussion sessions indicated that there is general acceptance of the benefits of asset management at the engineering and operations level in municipalities. There was more skepticism about the level of understanding of this topic and the willingness of upper management and city councils/mayors to properly fund and implement such approaches. Guidance was also received regarding the creation of a national Center of Excellence for Asset Management. Full information concerning the results of the study will be included in the BAMI report to the EPA, which is planned to be completed later this year.

2007 Spring Municipal Forum Season Summary

The TTC Municipal Trenchless Technology Users Forum continues to expand its reach. Two new forum locations were added this spring in Boston and in Miami. Each forum is hosted by a local municipality or agency and is attended by municipal participants from surrounding communities. The morning sessions involve a variety of industry presentations and the afternoon closed sessions allow peer-to-peer exchange of experiences and expertise among the municipal participants. The accompanying table provides the summary of the spring forum programs.

FORUM:	LOCATION:	DATE:	HOST:	TOTAL ATTENDED:	PRESENTATIONS GIVEN:
NORTHWEST	Olympia, Wash.	02/28/07	Zheng Lu	43	4
COLORADO	Littleton, Colo.	03/01/07	James Redmond	51	6
BOSTON	Boston	03/14/07	Irene Woodfall	48	5
MINNESOTA	Minneapolis	04/12/07	Richard Profaizer	3	15
NEW YORK	Hoboken, N.J.	05/15/07	Fred Pocci	62	5
OHIO	Columbus, Ohio	05/17/07	James Gross	37	5
CALIFORNIA	Los Angeles	06/05/07	Keith Hanks	41	5
TEXAS	Dallas	06/11/07	Cesar Baptista	47	5
FLORIDA	Miami	06/14/07	Victor Cuervo	48	5
TOTALS				408	45

2007 Fall Municipal Forum Season

Fewer forums than normal are planned for the fall 2007 because of the special preparations being made for the dedication of the National Trenchless Technology Research Facility in November. All the forums currently being planned are scheduled for October. So far, the following four forums have been confirmed:

FORUM:	LOCATION:	DATE:
COLORADO	Aurora, Colo.,	10/01/07
NORTHWEST	Longview, Wash.	10/04/07
LOUISIANA	Alexandria, La.	10/24/07
TEXAS	Houston	10/25/07

If you would like further information about the forum program either as a presenter, municipal attendee or prospective municipal host, please contact the TTC.

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