



NORTHWEST NEWS

North American Society for Trenchless Technology Northwest Chapter Alberta, Washington

May 2006

CHAIR

Kim Staheli Louch, P.E.
Principal
Bennett-Staheli Engineers, WA

VICE CHAIR

Albert Kwan, M.Sc., P.Eng., PMP
Senior Engineer,
City of Edmonton, AB

SECRETARY

Glenn Duyvestyn
Bennett-Staheli Engineers, WA

TREASURER

Neil Kucharski, P. Eng.
Manager, Municipal & Environmental
The Focus Corporation Ltd., AB

DIRECTORS

Bill Boyes
Service Center Supervisor
City of Calgary, AB

Jack Burnam
Carollo Engineers, WA

CHAPTER DIRECTOR

Ken Chua, M.S.C.E., P.Eng.
Program Manager
City of Edmonton, AB

PAST CHAIR

Dave Krywiak, P.Eng.
Senior Project Manager
Stantec Consulting Ltd., AB

2006 Annual General Meeting

Date: March 28, 2006 Time: 2:00 pm to 3:30 pm

Place: Belle Meade D Room, Gaylord Opryland Resort & Convention Center,
Nashville, Tennessee, USA

In Attendance: See attached sheet.

Next AGM Meeting: April 2007 in San Diego, California

1.0 Call to Order (D. Krywiak)

- Chair, Kim Staheli had to attend an emergency event and Past-Chair, D. Krywiak led introductions of Northwest Chapter members in attendance.

2.0 Approval of the Meeting Minutes of the Annual General Meeting held April 26, 2005 in Orlando (D. Krywiak)

- Meeting minutes from the AGM meeting in New Orleans on March 23, 2004 were approved. (Motion by Jack Burnam & seconded by Duane Strayer)

3.0 Executive Committee Report (D. Krywiak)

- CHAIR'S REPORT (D. KRYWIAK AND K. CHUA)**
 - The revised Northwest Chapter bylaws have been submitted to NASTT Headquarters, and Headquarters has approved the revised bylaws. The revised bylaws have had the reference to the B.C. region removed to reflect the formation of the B.C. Chapter. The revised bylaws have also been approved by the members of Northwest Chapter.
 - NASTT Headquarters has reorganized the NASTT web site. In addition, Jack Burnam has been appointed as an executive officer on the board of NASTT.
 - The Chapter has issued two newsletters in 2005. The next newsletter will be issued in May 2006.
- REGIONAL ACTIVITIES (D. KRYWIAK, B. BOYES AND J. BURNAM)**
 - Alberta:
 - Six technical luncheons were held in Edmonton for the year 2005. The technical luncheons for 2005/2006 will have one more event in April 2006.

- The Annual Alberta Symposium was held in Calgary on November 16, 2005. The symposium featured Mr. Mark Bruce, Chair of NASTT as the key note speaker. There were 128 participants including 16 exhibitors and 4 sponsors. The technical luncheon program in Calgary has conducted one meeting in 2006 with more luncheon meetings planned for the rest of the year.
- Washington State:
 - The Rehab Road Show was successfully conducted on September 19 and 20, 2005 in Seattle (Bellevue), WA. The event was staged at the Doubletree Hotel Bellevue. There were about 27 exhibitors for this Rehab Road Show. The purpose of the event is to bring quality trenchless education to the region.

iii. TREASURER'S REPORT (KEN CHUA)

- Neil could not attend the AGM.
- The opening balance of the chapter account for 2005 was \$33,333.46 while the closing balance was \$35,311.78.
- The current account balance is about \$36,219, excluding the money in the Calgary section.
- Lee Dupras is the treasurer for the regional group in Calgary. Their closing balance for 2005 was \$12,256.01, including the profit from the symposium in the fall.
- The overall closing balance for the Chapter is \$47,567.79 for the year 2005.

4.0 Bylaw Amendment to Northwest Chapter (D. Krywiak)

- The revised bylaws were submitted to Headquarters with the reference to the B.C. region deleted, reflecting the formation of BCTT as a separate chapter in NASTT. Headquarters approved the revised bylaws in January 2006.
- A full vote from all members in the Northwest Chapter was initiated in early March 2006. 16 members have expressed their support for the revised bylaws with no objections. Therefore, the revised bylaws have been passed.
- The revised bylaws have mainly omitted the reference to the B.C. region and reduced the number of directors to 6 (3 from Alberta and 3 from Washington State).
- Dave indicated that additional amendments to the bylaws could be incorporated in order to capture the dynamics in the chapter. One alternative is to propose additional directors (3 or 4) from each center of activity, such as Edmonton, Calgary, Seattle or Portland. However, more consultation is required in order to propose any further amendments.

5.0 Election of Board of Directors (D. Krywiak)

- There are three directors in the Alberta region, Bill Boyes, Neil Kucharski and Albert Kwan. Both Neil and Albert have another year left in their term. The term for Bill is

up this year. Bill has indicated that he will stand for election to another term.

- There are three directors in the Washington region, Kim Staheli, Glenn Duyvestyn and Jack Burnam. Glenn has another year left in his term while both Kim and Jack are up this year. Both Kim and Jack have been nominated as directors for another term.
- The following was the result of the election:
 - WA: Kim Staheli (2008), Jack Burnam (2008), Glenn Duyvestyn (2007)
 - Alta: Neil Kucharski (2007), Albert Kwan (2007), Bill Boyes (2008)
- D. Krywiak proposed to have the current Chair, Kim Staheli, remain as Chair during the period of transition and Albert Kwan will move to Vice Chair with Glenn Duyvestyn as the Secretary. Neil Kucharski will remain as the Treasurer. As a result, Dave Krywiak will remain the Past-Chair.

6.0 Future Activities (D. Krywiak)

- The Edmonton region continues to have technical luncheons at the University of Alberta faculty club. In addition, the Alberta Trenchless symposium will be held in Edmonton in November 2006. Jason Lueke is the Chair for the symposium organizing committee. The keynote speaker will be Joanne Hughes, current Chair of NASTT. The "Alberta Trenchless Project of the Year" will be initiated during this symposium. All agreed that the idea of a "Trenchless Project of the Year" is good. One suggestion is to have Chairs from other Chapters to review the submissions. A training module will also be conducted following the symposium. The short course on Laterals has been proposed.
- Calgary region will continue with the luncheon program with one more in spring 2006. More luncheons will be planned for the fall of 2006 as well.
- Washington region is still planning for the HDD short course this year. Kim has completed the thesis on her PhD program and will graduate this year. With the PhD out of the way, Kim can devote more time to bring in the HDD short course.

7.0 Other Business (Open)

- Albert Kwan brought along the promotional items including golf shirts, vests and pens. These items can be used as gifts for speakers during luncheon program and/or symposium. Some of the promotional items have been distributed to the different activity centers such as Calgary and Washington State. These items are on sale to Chapter members at \$20 each for golf shirts and vests and \$5 for the pen. The prices for non-members are double to cover the true cost.
- Lee inquired about whether the State of Oregon is part of the Northwest Chapter or not. The State of Oregon is

currently not part of the Northwest Chapter. J. Burnam will make some initial inquiries on this possibility.

- Motion by Jack Burnam & seconded by Wing Chan.

Prepared by: Albert Kwan



8.0 Motion to Adjourn (Open)

- The meeting was adjourned at 3:30 pm.

Attendance List:

| Name | Region | e-mail |
|----------------|--------------|--|
| Albert Kwan | Edmonton, AB | albert.kwan@edmonton.ca |
| Bill Boyes | Calgary, AB | bill.boyes@calgary.ca |
| Lee Dupras | Calgary, AB | ldupras@calgary.ca |
| Dave Krywiak | Edmonton, AB | dkrywiak@stantec.com |
| Duane Strayer | Calgary, AB | strayerd@ae.ca |
| Jack Burnam | Seattle, WA | jburnam@carollo.com |
| Ken Chua | Edmonton, AB | ken.chua@edmonton.ca |
| Wing Chan | Calgary, AB | wchan@hammerheadmole.com |
| John Van Andel | Edmonton, AB | John.vanandel@uma.aecom.com |
| Siri Fernando | Edmonton, AB | Siri.fernando@edmonton.ca |
| Allan Strachan | Edmonton, AB | strachan@strathcona.ab.ca |
| Kurt Sawatzky | Edmonton, AB | Kurt.sawatzky@edmonton.ca |
| Allan Miller | Edmonton, AB | millera@ae.ca |
| Dan Willems | Edmonton, AB | dwillems@st-albert.net |
| Chad Eaton | Edmonton, AB | chad@ivisinc.com |
| Dolores Eaton | Edmonton, AB | Dolores@ivisinc.com |

STUDENT CHAPTERS IN NORTHWEST CHAPTER

| | | |
|---------------------|--|--|
| |  UNIVERSITY OF ALBERTA |  UNIVERSITY OF CALGARY |
| Professor-in-Charge | Dr. Mohamed Al-Hussein malhussein@ualberta.ca | Dr. Janaka Ruwanpura janaka@ucalgary.ca |
| Student Organizer | Hussein Al-Battaineh hussien@ualberta.ca | Mamdouh Nasr |

LOCAL GROUP NEWS

ALBERTA



The Edmonton Region has conducted another four successful Technical Luncheons in 2006. The Luncheons were conducted monthly from January to April 2006. These Luncheons have been well attended averaging around 30 participants for each event. Planning for the 2006 Alberta Trenchless Technology Symposium has started. The 2006 Alberta Trenchless Technology Symposium will be staged in Edmonton in November 2006. The training module on service laterals may also be conducted in conjunction with the Symposium. Please fill out the questionnaire at the end of this newsletter to help gauge the interest level in holding this proposed training module.

After the successful 2005 Alberta Trenchless Technology Seminar, the Calgary Region has conducted several Technical Luncheons in early 2006. Three Luncheons were conducted and the events were well attended. More Technical Luncheons will be conducted in fall 2006.

WASHINGTON



The Northwest Chapter Board is also working on getting the HDD Good Practices Seminar to the region in the year 2006. Washington State NASTT members are encouraged to support the local organizing committee and participate in future events. This event will be sure to generate interest on trenchless technology in general, and HDD in particular.

NORTHWEST TRENCHLESS PROJECTS

TRENCHLESS TECHNOLOGY PROVIDES A UNIQUE AND UNLIKELY SOLUTION TO STORM WATER ISSUES AT SEA-TAC INTERNATIONAL AIRPORT

**Bob York and Albert Shen, Port of Seattle; Kimberli Staheli, Bennett/Staheli Engineers; Keith Parker, RW Back
(No Dig 2006 Paper A-2-02)**

The Port of Seattle was faced with having to provide additional treatment to their storm water run-off. Their existing drainage basin SDE4 is nearly 200 acres and is nearly entirely impervious. The Port was faced with adding a large detention/treatment facility for Basin SDE4 in a very tight location adjacent to a major arterial and one of the main vehicle entrances into the terminal. This new facility had to be installed over 20 feet deep and was estimated to cost \$15 to \$20 million. Operations costs would be high, since maintenance access to the treatment components would have been problematic. Pumping to another treatment location posed many of the same tight site constraints along the numerous utility conflicts at the airport site, as well as reliability issues. However, by using trenchless technology and constructing a 54-inch tunnel, the Port was able to extend the pipeline, allowing construction of the detention/treatment facility in a much more favorable location with good access and minimal site constraints. In addition, tunneling allowed installation of the pipeline at a sufficient depth to avoid conflicts with existing utilities. The construction cost of the tunnel and the detention/treatment facility was estimated to be less than \$10 million, a \$5 to \$10 million saving.

This paper details the design approach that lead to the use trenchless technology and provides a case history of the tunnel construction that included two drives of 54-inch pipe, 588 and 1182 feet in length, jacked through glacial till soils.

PROJECT MANAGEMENT BEST PRACTICES FOR TRENCHLESS CONSTRUCTION

**Janaka Ruwanpura, University of Calgary; Samuel T. Ariaratnam, Arizona State University
(No Dig 2006 Paper A-4-04)**

Trenchless construction methods have several advantages over conventional open cut construction

techniques including: reduced construction time; less impact on residential and business traffic; minimal excavation; lower environmental impact; increased worker safety; and year round construction. This paper explains these specific project management issues related to trenchless compared to conventional utility construction with regard to planning and scheduling, risk and uncertainties, productivity and performance, and constructability. The project success pivots on the skills and experience of the project manager, as well as the skill set of the project team. Moreover, the project manager plays a vital role in the integration of the project during execution while meeting the technical and operational challenges. The paper discusses the framework for developing a Best Practices Project Management Model through the use of both industry interviews and examinations of case studies to illustrate that trenchless construction may not only be productive, but also used to the project manager's advantage to achieve a higher quality product and achieve better results. Recommendations for increasing project success are suggested.

STUDIES OF INTERFACE FRICTION BETWEEN JACKING PIPE MATERIALS AND FRICTIONAL SOILS AND THE IMPACT ON JACKING FORCES

**Kimberli Staheli, Bennett/Staheli Engineers; David Frost, Georgia Tech Savannah; Mehmet Iscimen, Georgia Institute of Technology
(No Dig 2006 Paper D-2-02)**

A series of studies have been conducted at Georgia Institute of Technology to study the interface frictional behavior between a variety of jacking pipe materials and frictional soils. The pipe materials which included Polycrystalline, Hobas, Vitrified Clay, Permalok, and Concrete (both dry-packerhead and wet cast) were characterized to define the surface roughness. Each pipe material was then sheared against a variety of granular soils to determine the mechanism of shearing at the interface. The results of the laboratory analysis are currently being compared to the field performance of these pipe materials under similar soil conditions and the magnitude of the jacking forces in the field.

2006 No-DIG SHOW

The 2006 No-Dig Show was successfully held in the fabulous Gaylord Opryland hotel in Nashville, USA during March 26 to 31, 2006. The 2006 No-Dig show attracted over 1,000 participants and upward of 125 exhibitors.

If you attended the 2006 No-Dig Conference and Exhibition, then you participated in a record setting event which was extremely well-received based on attendee responses. Since 2001, No-Dig has continued to grow in size and the quality of the total experience, we believe, is unparalleled in the industry today. We hope your experience with the accommodations, technical papers, exhibition and entertainment met your expectations.

At this year's No-Dig, NASTT applauded the winners of the 15th Anniversary Industry Achievement Awards at the Gala Awards Dinner, Tuesday, March 28. These awards recognize achievement among North American companies, municipalities and educational institutions that have made significant contributions to the trenchless industry over the past 15 years. NASTT also presented the Chairman's Award for Outstanding Lifetime Service to Tom Iseley.

We are looking forward to 2007 when No-Dig will be in beautiful San Diego, April 15-20. The Town & Country Resort combines both a conference center and hotel so you will want to get your reservations in early as this destination resort will fill up fast. We expect yet another record setting program committed to providing extraordinary technical instruction and education coupled with an exhibition that showcases the most current trenchless products, services and equipment available.

ABSTRACTS REQUEST FOR 2007 NO-DIG SHOW

NASTT is now accepting abstracts for the 2007 No-Dig Conference & Exhibition in San Diego, April 16-18. Abstracts from the following subject areas are of interest to the No-Dig program committee:

- Trenchless Research, Case Studies & Engineering Practice
- Education & Training
- Special Topics
- Underground Damage Prevention
- International Projects - Special Focus on Asia
- Spotlight on San Diego

Please submit one page abstracts, not more than 300 words, by **June 1, 2006**. Be sure to include the primary contact's name, complete mailing address, phone, fax and e-mail.

Questions? Please contact:

John Hemphill, NASTT
1655 N. Fort Myer Drive, Suite 700, Arlington, VA 22209
E-mail: jhemphill@nastt.org
Phone: 703-351-5252, Fax: 703-739-6672

Dr. Samuel T. Ariaratnam
2007 Program Chair

E-mail: ariaratnam@asu.edu
Phone: 480-965-7399

UPCOMING EVENTS

June 13-15, 2006 - Trenchless Technology, the leader in trenchless education for 15 years, is bringing the "Rehab Road Show" to Vancouver, B.C., Canada in association with NASTT BC Chapter. For more details, please visit: <http://www.rehabroadshow.com>

October 29 to November 2, 2006 - In 2006 the trenchless world meets in Brisbane, Australia for the 24th International No-Dig Conference and Exhibition. No Dig Down Under 2006 will prove to be the international event of 2006 which will feature a global perspective of the future direction of trenchless technology. For more information, please visit: www.nodig06.im.com.au

November 15, 2006 - 2006 Alberta Trenchless Symposium will be staged in Edmonton, Alberta, Canada. This event will be staged in association with the CSCE Northern Alberta Section and TAC. For more information please contact Jason Lueke at ph: 780-451-7666 or e-mail: luekej@ae.ca

April 16-18, 2007 - The NASTT 2007 No-Dig Show will be held from April 16 to 18, 2007 at San Diego, California, USA. The 2007 No-Dig Show will be in the Town and Country Resort. For further information, please visit www.nastt.org/nodig.html or contact 2006 No-Dig program chairman Sam Ariaratnam at ph: 480-965-7399 or e-mail: ariaratnam@asu.edu

**NASTT 15th ANNIVERSARY
INDUSTRY ACHIEVEMENT AWARDS
NORTHWEST CHAPTER RECIPIENTS**

Canadian Municipalities - Large



City of Edmonton (represented by Kurt Sawatzky)

Consultants – Large



Stantec (represented by Dave Krywiak)

Consultants - Small



Associated Engineering (represented by Allan Miller)
Bennett/Staheli Engineers (represented by Kim Staheli)

Trenchless Support Materials & Equipment



Hammerhead (represented by Wing Chan)

Suppliers & Contractors - CIPP



Insituform (George Bontus)

Consultant & Owner



Ken Chua & Dave Krywiak

North American Society for Trenchless Technology Northwest Chapter 2006 Trenchless Project of the Year – Alberta

The North American Society for Trenchless Technology (NASTT) – Northwest Chapter is accepting applications for the first annual 2006 Trenchless Project of the Year – Alberta. Projects submitted for consideration as project of the year must be located within Alberta, utilize at least one form of trenchless technology, and be a recent project (i.e. commenced, in progress, or completed in 2006). Projects may only be submitted for consideration as project of the year once; the same project may not be submitted in subsequent years. Applicants are not required to be members of NASTT.

To apply, access the Award Application Form at the NASTT – Northwest Chapter website at <http://www.nastt-nw.com/>. The form is in Adobe PDF format. If you don't have Adobe Reader, you can download a free copy of the software from the Adobe website at <http://www.adobe.com/products/acrobat/readstep2.html>.

Please follow these instructions to complete the form:

1) *Applicant Information:*

Enter the name, company, and contact information for the primary applicant in the appropriate fields on the form.

2) *Co-Applicant Information:*

Enter the names, companies, and contact information for up to two co-applicants in the appropriate fields on the form (i.e. typically a variation of consultant, client, and contractor for the award application).

3) *General Project Information:*

Enter the project name, location, nature of the project (select the most applicable type from the drop-down menu provided in this field), approximate project value, and information on the trenchless technology(ies) involved.

4) *Detailed Project Information:*

Provide a detailed description of the project, up to 1,000 words in length, that

validates the project as a candidate for project of the year. This information will form the basis of award selection by the independent review panel.

5) *Figures and Pictures:*

To attach figures or pictures to the application, click on the fields provided in this section. A pop-up window will appear to allow you to locate and select the file you wish to append to the application. Pictures and figures should be in .jpg or .tif format and should not be greater than 750 kb in size (each).

6) *Printing and Submitting the Form:*

Once the application form is complete, print yourself a copy of the form by selecting the "Print Form" button located on the bottom-right of the second page. You cannot save a copy of the form, so please print a copy of the application prior to submitting the application. Then select the "Submit by Email" button, located next to the "Print Form" button, to submit the application. An email will be set to you following submission to confirm the receipt of your application. If you do not receive a confirmation email within 2 days of submitting your application, please contact Dan Willems at dwillems@st-albert.net or (780) 459-1661.

Following the application deadline, an independent review panel, made up of industry professionals from out-of-province, will review the submissions and make an award selection in September 2006. The successful applicant will be notified of the award in early October and will be required to provide a five-minute slideshow presentation describing the highlights of the project at the 2006 Alberta Trenchless Symposium in Edmonton on November 15, 2006. The award will be officially presented at the Symposium.

If you have any questions, please contact Dan Willems at dwillems@st-albert.net or (780) 459-1661.

A SURVEY ON SERVICE LATERAL SHORT COURSE

| | |
|----------------|--|
| short course | This 1-day short course will focus on the various design and rehabilitation considerations for service lateral. This course has been offered in 2006 No-Dig Show. |
| Course Content | <ul style="list-style-type: none"> • I/I into municipal system and Inspection Techniques • Inflow Removal and Rehabilitation Techniques • Financial and Legal Issues on Service Lateral Rehabilitation |
| Proposed Date | November 16, 2006 |
| Instructors | <ul style="list-style-type: none"> • Dr. Ray Sterling, Louisiana Tech University • Ms. Jadranka Simicevic, Louisiana Tech University |
| Cost | About \$300 to \$500 per person |

SURVEY QUESTIONNAIRE

Please fill out the following questionnaire in order to aid our planning for the short course. Please direct your response to:

Mr. Albert Kwan

Phone: (780) 496-6852

Fax: (780) 496-6865

e-mail: albert.kwan@edmonton.ca

1. Would you or your company/organization be interested in attending this short course on Service Lateral?

YES

NO

2. How many people will be attending from your company/organization?

1

2 to 3

4 to 5

6 to 8

9 to 10

Other (specify): _____

3. Other comments:

Thanks for your response!!!

NASTT NW Chapter WEB Site

The NASTT Northwest Chapter Web site has been on-line since January 2004. The Web address is www.nastt-nw.com. Please log on to check for the latest news. Lists of companies in trenchless industry are also provided. Trenchless contractors, manufacturers and service providers are welcomed to add your name onto the list.

This is your newsletter. We are looking for articles, events, suggestions and ideas for the next issue. If you would like to receive the NORTHWEST NEWS, contact the editor. Letters to the editor are welcome.

NORTHWEST NEWS is published two times a year by the Northwest Chapter of NASTT.

NASTT Northwest Chapter WEB Site: www.nastt-nw.com

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