



Minutes of the 2014 TAC Annual General Meeting

Monday, October 27, 2014 – 17:30 PDT

Sheraton Wall Centre Hotel, Vancouver, BC

Members of the TAC Board of Directors in attendance:

Rick Staples (RS), Past President; Derek Zoldy (DZ), Secretary; Erik Eberhardt (EE), Vice President West; Steve Skelhorn (SS), Vice President East; André Rancourt (AR), Director, Quebec and Maritimes; Heinrich Heinz (HH), Director, Alberta and Prairies; Bruce Downing (BD), Director, BC Region; Nichole Boulton (NB), Director, Young Members; Garry Stevenson (GS), Director, Scholarships; Boro Lukajic (BL), Director, Government Liaison & Bylaws

Absent Directors:

Rick Lovat (RL), President; Vince Carbonara (VC), Treasurer; Craig Bournes (CB), Director, Communications; Laura McNally (LM), Director, Contractor Relations;

1. Welcome and Introductions

Rick Staples opened the meeting at 17:31 welcoming all members and guests. The members of the head table were introduced and included RS, SS, GS, EE, DZ and NB. RS noted that he had been asked by the President to chair the AGM as RL is travelling.

2. Acceptance of the Minutes from the 2013 AGM – November 15, 2013

Motion: Moved by Josh Campbell (seconded by Heinrich Heinz) that the minutes of the 2013 AGM be approved. **Carried**

3. 2014 Membership Report and Targets for 2015

SS presented the 2014 membership report and noted that growth has been excellent over the past year with paid membership currently standing at 353, up from 260 members at the 2013 AGM. Broken down by category there are 287 individual, 38 corporate, 22 students and 6 retired members. SS reported that the Board's goal for 2015 is 300 individual, 45 corporate, 50 student and 6 retired members. TAC will continue to support the TAC Young Members Group to help drive the desired increase in student membership and new graduate members.

The benefits of membership will remain the same as they were in 2014 and will include 6 issues of *T&TNA*, TAC conference and workshop registration at preferred member prices, member-only access to TAC documents, local chapter events, TAC e-newsletters and chapter e-news mailings. Corporate membership includes the above benefits for one individual plus logo recognition on the TAC website, at the AGM, and in *T&TNA*, and an extra subscription to *T&TNA*.

Membership fees in 2015 will also remain the same as they were in 2014: regular members - \$75, corporate members - \$500, student members - \$15, and retired members - \$25.

4. Treasurer's Annual Financial Report (see Appendix A, p8)

DZ presented the financial report .

4.1. Financial Statements

DZ reported that TAC had assets of \$457,033 as of December 31, 2013 (unaudited). The current forecast for the end of 2014 is an accumulated surplus of \$463,933. In this current low interest rate environment, the return on investments is low.

Charts illustrating 2012, 2013 and 2014 revenues and expenses were presented. 2013 (unaudited) income of \$92,249 is less than the 2012 income of \$148,366, primarily as 2013 was a non-conference year. 2014 revenues to the end of September are \$29,065.

2013 (unaudited) expenses of \$143,371 are higher than 2012 expenses of \$125,062 primarily due to the advocacy video and other special projects.

Brian Garrod asked if having an accumulated surplus approaching \$500K is okay for a small not-for-profit. DZ indicated that he did not see any problems with that amount and that the auditor has not indicated that he believes it to be a problem.

Gary, asked about the 2014 conference financials? DZ noted that it is looking good and will certainly help the 2014 bottom line.

4.2. Auditors Results - 2012 & 2013

DZ reported that the 2012 audit has been completed and, in the auditor's opinion, the Association's 2012 financial statements are presented fairly in accordance with generally accepted accounting principles. His opinion has one "qualification", that due to the wide sources of revenues for the Association he cannot audit the completeness that all intended revenues are received by the Association. The auditor notes that this is a common opinion for not for profit organizations

DZ reported that the 2013 audit has not yet been completed, but that at this point in time the auditor has not uncovered any unusual or significant differences than what had been identified in 2012. The 2013 audit should be completed in early December, 2014.

4.3. Appointment of Auditor for 2014 Financials

DZ reported that Bob Adams has been the TAC auditor for many years and has done a good job for the Association.

Motion: Moved by Derek Zoldy (seconded by Gary Kramer) that Bob Adam be appointed as TAC's financial auditor for fiscal 2014.

Carried

5. Regional Reports

5.1. East (Ontario & Quebec)

SS provided an overview of Ontario and Quebec projects.

In Ontario, tunnelling for the Spadina Subway is essentially complete and the TTC is moving ahead with the stations and track work. This project involved four EPB TBMs and also saw some innovative construction techniques including SEM and compensation grouting to pass below some sensitive structures.

Tunnelling on the Billy Bishop Airport Link has recently been completed making way for easier access to the Billy Bishop Airport. The Project saw the first use of interlocking stacked drifts as a primary support in Canada.

In York Region, the South East Collector project consisted of twinning the existing trunk sewer from York Region to Durham in order to provide future capacity for expansion. Four EPB TBMs

were used on this project.

Other Ontario projects currently under construction include:

- RR#25, Halton Region
- Hanlan Feedermain, Contract 1 and Contract 3
- Eglinton Scarborough Crosstown Light Rail project – construction has commenced, with tunnelling underway on the western contract and tunnelling due to start in the New Year on the eastern portion.
- Ottawa Light Rail Project – construction underway

There is also a very active microtunnelling market in Ontario with projects from Kingston to Guelph with many other large microtunnel projects to hit the streets soon.

Upcoming Ontario projects include the following:

- Twinning of the West Trunk Sewer, Contract#2, City of Mississauga, Region of Peel - project is scheduled to tender this year
- Upper Centennial Parkway, City of Hamilton - design is complete and project should be out to tender in third to fourth quarter of this year
- City of Toronto – twinning of the Coxwell Sewer and combined lakeshore storage tunnels
- Ashbridges Bay Outfall – Will involve a variety of tunnelling methods including microtunnelling as well as a significant marine portion of work.

Upcoming National events taking place in Ontario include the following:

- 2015 TAC Workshop and AGM: Kingston, Ontario – scheduled for October, 2015. Focus on innovations on tunnelling and looking to the future
- 2016 TAC National Conference: Ottawa, Ontario – scheduled for October, 2016. Theme to be determined.

In Quebec, the Romaine-3 Hydro-electrical complex (395 MW) includes four drill and blast work contracts: the river diversion tunnel, the powerhouse, the spillway-intake dams and the pressure tunnel. The diversion tunnel is now complete and in operation, excavations for the surface powerhouse, the spillway and the intake are ongoing and almost completed, and the pressure tunnel is a D-shaped excavation and the work is just beginning with the starting portal excavation advanced of 20 m.

A new utility tunnel associated with hospital operations at McGill University's downtown Montreal campus is currently underway using the drill and blast method. Careful planning and execution is required to minimize disruption to the University operations that house sensitive medical and research equipment as well as patients.

In Montreal, a 4 km hard rock (limestone) TBM tunnel involves the excavation of a 3.0 m diameter water main tunnel to connect to the existing Rosemont. A Robbins main beam TBM is being used for the job and the tunnel is planned for completion early next year with the project due on line in 2016.

The Quebec market is still looking strong in tunnelling with the following projects on the horizon:

- Metro extension – Blue Line (Agence Metropolitaine de Transport, AMT) adding five new stations to the line towards the east to reach Anjou

- City of Montreal Lavigne retention pool – 3 tunnels of 2 m diameter to be excavated for a total length of 2.1 km to manage storm water
- Ministry of Transport of Quebec Melocheville Tunnel – Road tunnel maintenance project
- Hydro-Canyon project – 800 m long pressure tunnel near Quebec City, 4.8 m wide D-shaped D/B tunnel section, Axor Group, ±10MW

5.2. *West (Alberta, Prairies & British Columbia)*

EE reported on activity in the west. Alberta tunnellers have been active during this past year, thanks to a booming economy and an ever growing population in Calgary and Edmonton.

The City of Calgary is studying the feasibility of a 5 km long, 10 m diameter flood bypass tunnel from the Glenmore Reservoir to the Bow River. The tunnel would mitigate the impact of future floods like the one in June 2013. The city is also investigating several 2-3 m diameter sewer and water tunnels up to 1.8 km long, which are part of the Nose Creek sanitary upgrades and relocations associated with the upcoming construction of the Southwest Ring Road. The trenchless crossing of the Bow River has been tendered and involves 200 m long twin tunnels anticipated to be constructed using slurry microtunnelling.

In Edmonton, the \$1.8 Billion, 13 km long LRT Valley Line is proceeding as a P3 project, and will include construction of twin 400 m long tunnels on the north side of the North Saskatchewan River. Five teams responded to the City's RFQ released in April, 2014 and three have been shortlisted to submit a bid to design, build, operate, maintain and partially finance the project. The shortlisted teams are TransEd Partners (incl. Bechtel, EllisDon, and Bombardier), Moving YEG (incl. ACS Infrastructure, Hochtief, and Stantec) and River City Transit (incl. SNC-Lavalin, Kiewit, and Alstom). Final proposals are expected in the fall of 2015 with the successful team selected by the end of 2015. Major construction is expected to begin in 2016.

In B.C., the tunnelling industry is active with a number of planned, ongoing and completed projects in Greater Vancouver and other regions of the province.

Metro Vancouver's Seymour-Capilano Twin Tunnels Completion Project is nearing completion. These 7.1 km long, 3.8 m diameter twin tunnels have been constructed through a joint venture of Aecon, JF Shea and Frontier Kemper, who were awarded a contract in April 2009 to complete the tunnels. Both tunnels were complete by November 2010 and the 2 shaft excavations (by raise bore) were completed in April 2011. Final shotcrete lining and steel liner installation is 100% complete as of August, 2014.

Tunnelling on Metro Vancouver's Port Mann Water Supply Tunnel Project is currently in progress. The project consists of two slurry wall shafts, each approximately 60 m deep and located on either side of the Fraser River, connected with a 1 km long, 3.5 m diameter tunnel. Excavation of the tunnel is being carried out using a CAT EPB TBM; construction is being undertaken by the McNally-Aecon Joint Venture.

Preliminary design is currently underway on Metro Vancouver's proposed Second Narrows Water Supply Tunnel Project. The 1.1 km long, 5.7 m diameter tunnel would connect the suburbs of North Vancouver and Burnaby. The tunnel will be driven through variable soils and bedrock beneath Burrard Inlet. Construction is planned to commence in 2017.

The Annacis Main No. 5 Water Tunnel is a proposed water supply tunnel beneath the Fraser River connecting the Greater Vancouver suburbs of New Westminster and Surrey. Conceptual design is currently underway for the project. Construction is planned to commence in 2018.

The Evergreen Line Rapid Transit Project will be an 11 km extension to Greater Vancouver's rapid transit system. The project includes a 2 km long, 10 m diameter bored tunnel. The design-build-finance contract was awarded to EGRT Construction and the tunneling work is being conducted by SNC-SELI Joint Venture. The tunnel is being excavated with a CAT EPB TBM and is expected to be completed in early 2015.

B.C. is also currently experiencing an increase in activity in hydroelectric project development.

- AltaGas has completed their 195 MW Forrest Kerr Hydro Project in northern B.C. The project included over 5000 m of access, tailrace and power tunnels. Tunnel construction was carried out by Procon. The project is now in service.
- AltaGas is also constructing the 66 MW McLymont Creek Hydro Project downstream of Forrest Kerr. This project includes an intake, surface powerhouse and a 2.7 km long power tunnel. Tunnel excavation commenced in Q2 2013, with tunnel excavation being carried out by Procon Mining and Tunnelling. The project is scheduled for completion in mid-2015.
- The principal contract for BC Hydro's \$1B John Hart Generating Station Replacement Project, located near Campbell River on Vancouver Island, was awarded earlier this year to inPower BC (SNC-Lavalin). The project includes a 2.1 km long tunnel, underground powerhouse, and associated shafts and access tunnels. Underground construction is scheduled to start in fall 2014.
- Innergex Renewable Energy is constructing the Upper Lillooet Hydroelectric Project, 70 km northwest of Pemberton. The project includes two facilities: Upper Lillooet and Boulder Creek. The 81.4 MW Upper Lillooet HEF includes a 2500 m power tunnel being constructed by drill and blast by CRTEBC (S.E.N.C.) of Quebec. Work began in August, with overall completion scheduled for mid-2016. The 25.2 MW Boulder Creek HEF includes a 2900 m long drill and blast tunnel, also being constructed by CRTEBC. Tunnelling began in June, with completion also intended for mid-2016.
- Innergex is also constructing the Big Silver HEP, located approximately 40km north of Harrison Hot Springs. This includes an 1800 m long, 5.5 x 6 m tunnel scheduled to begin in late 2014 with the equipment and crews from Boulder Creek mobilizing during their winter shut down period.

The BC Chapter is highly active, organizing monthly talks at Steamworks Pub in downtown Vancouver. These have been highly successful in engaging locally-based TAC members and attracting new members. Turnouts are typically 40+.

Last November, 2013, the BC Chapter organized the 2013 TAC Rock Tunnelling Workshop and TAC Awards Banquet in Vancouver. The workshop included lectures by several international practitioners, including Dr. Nick Barton (the Q-system of rock mass classification), Jens Classen (mechanical excavation techniques) and Gordon Revey (drill and blast excavation). The workshop attracted more than 120 attendees.

The BC Chapter is also hosting the bi-annual 2014 TAC Conference, with the theme "Tunnelling in a Resource Driven World". This event also includes a meeting of the ITA Nordic Forum. At the time of reporting, the conference had more than 180+ delegates, 24 exhibitors and 15 company

sponsors. The technical program included 50+ plenary and technical presentations.

6. Bylaws and Articles of Continuance

GS outlined the changes to TAC's governing legislation under the new *Canada Not for Profit Corporations Act*. In 2013, TAC members voted on new bylaws and submitted them to the government. They wrote back that the voting powers of the member classes were not defined and need to be amended.

6.1. Proposed amendment to Bylaw 2:01

GS reviewed the wording of section 2:01 as approved in 2013, then went over the change that would add "Each corporate, individual and student member shall be entitled to one vote on all matters raised for voting. Honourary members shall not be entitled to vote." to the section

Motion: Moved by Derek Zoldy (seconded by Brian Garrod) that the proposed change to Section 2:01 of the TAC bylaws be approved. **Carried**

7. Elections - Proposed Slate for TAC Board of Directors

RS reviewed the relevant section of the bylaws regarding TAC Directors – three year terms, officers are elected by the members and the other director positions are appointed by the officers. Under Bylaw 5.01, the Nominating Committee (NC) is chaired by the Past President - GS and BL were appointed by the Board to serve with RS.

The Director terms ending December 31, 2014 are the President and the VP East. In addition, as EE is being recommended by the NC to serve as TAC President for 2015-2017, the VP West position needs to be filled. The NC proposes that Erik Eberhardt serve as TAC President, Steve Skelhorn as TAC Vice President East and Bruce Downing as Vice President West. Continuing Directors will include Rick Lovat as Past President, Derek Zoldy as Secretary and Vince Carbonara as Treasurer.

The individuals nominated by the Board for the other Director positions include: Walter Trisi, Director, Ontario Region; Serge Moalli, Director, British Columbia Region; Rick Staples, Past President; Lara Reggin, Director; and Seamus Tynan. Continuing Directors will be: André Rancourt, Director Quebec Region; Heinrich Heinz, Director Alberta & Prairies; Boro Lukajic, Director; Craig Bourne, Director and Nichole Boulton, Director

Motion: Moved by Boro Lukajic (seconded by Josh Campbell) that the 2015 TAC Board of Directors slate as recommended by the Nominating Committee be approved. **Carried**

RS thanked the departing Board members – Garry Stevenson, Brian Garrod and Laura McNally.

8. Young Members Report

NB reported on TAC's Young Member (YM) and Student Member initiatives. Total "Young Members" (including students) is currently 33, of which 22 are student members. The student target remains at 50 for 2015, and growth is expected arising out of the success of the 2014 Annual Conference.

For 2015 TAC will continue to encourage young members/students to become involved through the following initiatives:

- Classroom visits/presentations
- 2014 Visits to UBC/SFU graduate student class, and career days
- Field trip planning, and
- Networking events.

NB noted that Jennifer Day from Queen's University has agreed to assist in the East.

NB reported that TAC is active in the ITA Young Members Group and that she holds the position of Secretary for the Steering Board. The nations that currently serve on the Steering Board include Canada, the United Kingdom, Denmark, Norway and Australia. Other ITA countries with YM groups include Greece, Colombia, the USA, and South Korea. Member Nations working on creating YM groups include Brazil and Hungary. The first ITA Young Members Group AGM will be held in Croatia 2015 at the WTC.

9. ITA Update - Nordic Forum

EE reported on the ITA's Nordic Forum initiative and Canada's involvement. The ITA Nordic Forum represents an informal group of member countries: Canada, Denmark, Finland, Iceland, Norway, Russia, and Sweden. These countries meet twice per year to share their common experiences: complex ground conditions involving hard rock and glacial soils, and challenging logistics involving extreme climates and remote locations. This has contributed to a level of tunnelling expertise that is extensive, spanning large infrastructure projects in major cities as well as those involving energy and natural resource development projects in remote, northern locations.

The ITA Nordic Forum previously met at the 2014 World Tunnelling Congress in Iguassu Falls, Brazil, May 9-15. The meeting was hosted by Denmark and was attended by several representatives from five member countries. Canada was represented by Erik Eberhardt and Rick Lovat. The meeting included a discussion of ITA initiatives and news from Nordic Forum countries. At this meeting, Canada assumed responsibilities for chairing the next two Nordic Forum meetings.

The first of these two meetings was the hosting of the Nordic Forum at Vancouver TAC 2014. The day included an afternoon workshop for TAC members with presentations on tunnelling projects across northern Canada and Europe for infrastructure, energy and resource development benefits. Canada will then chair the next Nordic Forum at WTC 2015.

10. Motions from the Floor

There were no motions.

11. Other Business

Gary Kramer suggested that there is no need to limit the length of annual conference papers as they are only published electronically so there is no extra cost for longer papers. Erik Eberhardt, TAC 2014 Vancouver Conference Technical Chair, suggested that a page limit be retained as if it were to be removed then we could conceivably receive 30-40 page reports from authors, which is not the intention of the conference – the chairs are always able to approve higher page counts on an as-requested basis.

12. Next Meeting

The next TAC AGM will occur in conjunction with the 2015 TAC Workshop in Kingston, Ontario (day and time t.b.d.).

Motion: Moved by Lara Reggin (Serge Moalli) that the meeting be adjourned.

Carried

The meeting ended at 18:25 PDT.

Appendix A

Current Assets

Fiscal	2012 AUDITED	2013 UNAUDITED	2014 UNAUDITED
Current Assets			
Cash and Short term investments	486,353	479,027	463,933
Accounts receivables	44,891	-	-
Total Assets	531,244	479,027	463,933

Cash Assets is in a healthy position.

Current short term investments include

- 100K Guarantee Investment yielding 1.3% return
- 200K Security GIC Plus yielding minimum 0.2% return to a max 2.25%
- Above to both mature in April 2015

2014 Cash balance has a balancing plug of 12,541 due to timing

Liabilities and Accumulated Surplus

Fiscal	2012 AUDITED	2013 UNAUDITED	Sep 2014 YTD UNAUDITED
Liability & Accumulated Surplus			
Accounts Payable and Accrued Liabilities	22,791	21,696	-
Unearned and Deferred Revenue	-	-	-
Total Liabilities	22,791	21,696	
Accumulated Surplus	508,453	457,330	463,933
Total Liabilities and Accumulated Surplus	531,244	479,027	

Accounts payable for 2013 may be adjusted. It is within +/- 5,000 and aligns with normal year levels. 2014 year end balance is expected to follow suit.

Revenue

Fiscal	2012 AUDITED	2013 UNAUDITED	Sept 2014 YTD UNAUDITED
Revenue			
Conference /Workshop Revenue	84,888	63,970	2,058
Membership Fee and Product Sales	60,814	24,980	26,821
Interest	2,664	1,749	30
Chapter Event Income		1,550	156
Total Revenue	148,366	92,249	29,065

Revenues reflect a decrease from prior years

- *Conference and workshops down from prior years*
- *Membership fees on a decline from prior years*
- *Interest down – With the bank migration cash was temporarily held in account versus investment*

Expenses

Fiscal	2012 AUDITED	2013 UNAUDITED	Sept 2014 YTD UNAUDITED
Expenses			
Conference Travel and Meetings	50,189	72,820	4,862
Professional Fees	55,850	31,947	10,320
Scholarships and Awards	9,322	12,023	1,274
Telecommunication and Internet	4,680	7,755	2,424
Dues and Membership	2,543	1,628	
Office and General	1,363	4,426	1,081
Bank fees	1,115	2,915	810
Advocacy Video Project		9,858	
Chapter Events			471
Other			1,221
Total Expenses	125,062	143,371	22,462

Expenses reflect an increasing trend

- *Advocacy Video Project accounts for most of the increase*
- *Workshop and other TAC expenses account for the rest*

Accumulated Surplus End of Period

Fiscal	2012 AUDITED	2013 UNAUDITED	Sep 2014 YTD UNAUDITED
Excess of Revenue Over Expenses	23,304	(51,122)	6,602
Accumulated Surplus Beginning of Year	485,149	508,453	457,331
Accumulated Surplus End of Period	508,453	457,331	463,933

Reminder: 2013 and 2014 figures are unaudited and subject to change

Audit Update

- *The auditor's opinion is the Association's 2012 financial statements are presented fairly in accordance with generally accepted accounting principles.*
- *His opinion has one "qualification", that due to the wide sources of revenues for the Association, he cannot audit the completeness that all intended revenues are received by the Association.*
- *This is a common opinion for not for profit organizations*
- *Auditor comments for 2013 is that ongoing audit work has not covered any unusual or significant differences than what has been identified in 2012.*
- *Commitment to circulate Audit Results by early December 2014.*