

8:00 A.M. to 10:00 A.M. EST, Monday, June 5th, 2023
Auberge Saint-Antoine, Quebec City QC

Present:

Sam Mitra, Chair	Armtec	Bruce Matheson	Frontier
Jason Johnston	Armtec	Kamran Derayeh	AMD
Liz Bouchard	Armtec	Marcia Stinson	AMD
Scott MacRae	Armtec	Lucas Cooper	AMD
Roger Leger	Armtec	Byron Nelson	Leland
Jason Sherwood	Atlantic	Dave Watson	Leland
Terry Dunn	Atlantic	Derek Niezen	Ironside
Paul Proctor	Atlantic	Terry Skipper	Ironside
Greg Wilkinson	Atlantic	Todd Gray	ACI
Pat Mayne	Atlantic	Mike Mounts	Valgroup
Gerald Dube	Atlantic	Francois du-Mesnil	Tubao
Sebastien Gauthier	Atlantic	Ray Wilcock	CSPI

1. AISI Antitrust Guidelines - Ray

Ray presented the AISI Antitrust Guidelines that are in effect for all CSPI meetings.

2. Welcome and Opening Remarks – Sam

Sam opened the meeting and welcomed all members. Attendance was taken and is recorded above.

3. Review Minutes from November 15th, 2022, and Approve

Minutes were reviewed and accepted. A motion for approval was made by **Kamran Derayeh**, second by **Terry Dunn** and was carried unanimously.

4. Brainstorming Session

a) Overview of municipal approvals, market wins, etc.

Municipalities / Cities presented to over the last 4 years with standard changes:

Vancouver BC	Interested in Buried Bridges, Underpasses
Calgary AB	Culverts & storm sewers
Edmonton AB	Culverts
Saskatoon SK	Culverts
Regina SK	Culverts
Winnipeg MB	Presented in 2023 – continue discussion
Thunder Bay ON	Culverts

Hamilton ON	Culverts
Windsor ON	Storm sewers
Sarnia ON	Culverts & storm sewers
St. Catharines ON	Culverts
London ON	Presented twice – no change yet
Reg of Waterloo ON	Presented twice – no change yet
Kingston ON	Presented – no change yet
Fredericton NB	Presented twice – no change yet
Halifax NS	Presented, tried the Mayor – no change yet
St. John's NL	Presented twice – no change yet

Webinars attendance: 52 Municipalities
38 Consultants

A few project wins despite not being in standards:

Springdale NL	Aluminized spiral rib storm sewer
Montreal QC	Polymer Laminated CSP SWM
Kitchener ON	Aluminized spiral rib storm sewer
Edmonton AB	Galvanized CSP SWM
Richmond BC	Polymer Laminated CSP SWM

Questions for the Brainstorming Session:

- b) How do we grow the CSP market?
- c) What diameters are most competitive?
- d) Once identified, what markets should we target?

Discussion:

- Develop an App or web based (gated) software – plug in requirements for SWM and receive an output recommending coatings, durability, carbon footprint, size, thickness, length, etc., explore the possibility of giving preliminary drawings. Develop the software.
- The current market is plastic for small diameter and concrete for larger diameter. We need a different game plan for each.
- Focus on SWM – convert the CD to an APP or web-based software and improve.
- We need to make people feel more comfortable with using CSP for SWM retention/detention.
- Durability is the main issue along with watertight joints.
- Separate conveyance versus detention, however, continue to educate and promote to cities by categorizing. Ensure cities allow CSP SWM detention systems on private properties / developments in their region.
- Promote CSP for Value engineering SWM detention systems
- Make it simple for specifiers.
- Educate members with webinars, tools, case studies, app, etc.
- Tubao- large diameters to private projects. Fear of the unknown, lower costs and price* are the keys. Fire defense tanks – regulated by cities in France. Storage guidelines are required with official calculations per table. Working on an APP for 2 years. Steel is the best solution. Advantages include small carbon footprint (big part of the process in France), recyclability, and durability. These are keys to showing customers the advantages versus concrete.

- APP or web based (gated) software is the starting point for engagement to point specifiers in the direction of steel.
- Promote to Engineering Associations, Consultants, Home Builders / Developers, with technical presentations. Step outside the box.
- 75 years durability – should we have a guarantee of say 30 years?
- Creating resources on the website for training all users
- Forestry market – promote steel versus plastic using combustion advantages
- Water tightness – AMD to support
- See what software for designing SWM systems is used by Contech and NCSPA

Outcome/Action items:

Subcommittee from TAC to:

- gather information and look at putting the software from the CD on the website (if it makes sense – somebody pointed out that the language might not be used anymore, and the calculations/standards might have changed)
- survey consultants as to needs – what do they look for in a retention / detention system software
- determine type of APP or web-based gated software and contents

5. Strategic Plan Overview

a) Market focus – DOT, key municipalities & consultants

No discussion.

b) Educate colleges and university students

No discussion

c) Review top 10 reasons – why steel?

Top 10 reviewed.

5. Key Performance Indicators (KPI)

a) DOT update

2023 presentation covers storm sewers, buried bridges, CSA G401, new profiles, NZF3000 bolts, coatings and durability, and sustainability (carbon footprint) present and future.

NL

Plan for meeting in Fall

PEI

Recommendations accepted for section 1338 – Corrugated Metal Structures. Includes polymer coated plate, NZF3000 bolts and edits on reference standards and installation.

NB Plan for meeting in Fall

NS Plan for meeting in Fall

QC Plan for meeting in Fall

ON Presented to 8 Highway & Bridge staff on March 7th in Thunder Bay.
Will hit other regions in the summer & fall.

MB Presented to 3 Highway & Bridge staff on March 9th in Winnipeg.

SK Presented to 11 Highway & Bridge staff on February 28th in Saskatoon.

AB Presented to 6 Highway & Bridge staff on March 15th in Edmonton.

BCMOT Presented to 26 Highway & Bridge staff on April 4th in Kamloops.

NWT, YK, NU To be reviewed in 2023.

DOT Table

Owner	Gal. CSP	AL2 CSP	PL CSP	Gal. SP	TP SP	HDPE	RCP	Certification	Value Eng.
NL	No	Yes	Yes	Yes	Yes	<600mm	Yes	Yes	Yes
PEI	No	Yes	No	YES	YES	Yes	Yes	Submitted	No
NS	No	Yes	No	Yes	Yes	Yes	Yes	Submitted	Yes
NB	No	Yes	No	Yes	No	Yes	Yes	Submitted	Yes
QC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes – CSP	Yes
ON	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MB	Yes	No	No	Yes	No	?	Yes	No	Yes
SK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
AB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NT									
YT									

NU									
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b) Municipality & Consultant Update

City Update

2023 presentation covers CSPI, spiral rib storm sewers, buried bridges, CSA G401, new profiles, polymer coatings and durability – 100 years, and sustainability (carbon footprint) present and future.

City of Regina Visited site at Parliament & Lewvan Drive on February 26th, twin 125 x 25 mm polymer laminated CSP. Will provide pictures to the city to continue to pursue the opening of storm sewer standards.

City of Saskatoon Permanently discontinued product submissions and evaluations. Products will continue to be evaluated on an as-needed, project-specific, or exception basis. During tendering, this review may be based on product equivalency recommendations brought forward by contractors and suppliers. Thus, wide open for submissions on every storm sewer, culvert or buried bridge project.

Presentations

<u>Date</u>	<u>City</u>	<u>Attendance</u>	<u>Update</u>
Mar 8 th	Thunder Bay	3	Open to spiral rib for storm sewers.
Mar 9 th	Winnipeg	6	Well received – will look at standards.
Mar 14 th	Calgary	12	SRP is in their storm sewer standards.
Mar 15 th	Edmonton	6	Well received – will look at standards.

Source & Stream Conference March 22nd – 23rd – Attended as an exhibitor. Valuable feedback with potential lunch & learns with:

- Town of Whitby ON
- Town of Pickering ON
- Town of Oshawa ON
- East Zorra Township ON

Consultant Update

January

Associated Engineering Edmonton AB – inquired about coating selection in very high chloride levels (brackish water). Polymer laminated was recommended for this site.

FNX-INNOV Engineering Montreal QC – inquired about relining a 4.3 M diameter, 80 M length in St. Bruno QC. Supplied information on alternatives covering invert only to full peripheral. Supplied both QC member contact information.

February

Dillon Consulting – provided information for a project they are working on, calling for a DCSP open bottom near Calgary AB.

April

National Capital Commission reached out for information on height of cover. Supplied information and project will result in an opportunity for members.

Municipalities Table

Municipality	Gal. CSP	AL2 CSP	PL CSP	HDPE/ PVC	RCP	Value Eng.
Vancouver Storm Sewer Culverts	No No	No No	No No	? ?	Yes Yes	
Langley	Follow Van					
Victoria						
Edmonton Storm Sewer Culverts	No Yes	No No	No No	PVC PVC	Yes Yes	
Calgary Storm Sewer* Culverts	Yes Yes	Yes No	Yes No	PVC & PE App. Req.	Yes No	
Saskatoon						
Regina Storm Sewer Culverts	No Yes	No Yes	No Yes	PVC<450mm HDPE	? Yes	
Winnipeg	Pending	No	No	PVC<900mm	Yes	
Thunder Bay Storm Sewer Culverts	No No	No Yes	No No	PVC<375mm HDP<900mm	Yes No	
Sudbury						
Toronto Storm Sewer Culvert	No	No	No	PVC	Yes	
Hamilton Storm Sewer Culvert	No Yes	No Yes	No Yes	PVC HDPE	Yes Yes	
London	No	No	No	Yes	Yes	
Windsor Storm Sewer Culverts	Yes No	Yes No	Yes No	Yes PVC & PE	Yes Yes	
Reg. Waterloo Storm Sewer Culverts	No No	No No	No No	PVC Yes<600mm	Yes Yes	

St. Catharines Storm Sewer Culverts	No Yes	No Yes	No Yes	Yes Yes	Yes Yes	
Kingston	No	No	No	PVC	Yes	
Ottawa						
Oshawa						
Montreal						
Sherbrooke						
Quebec City						
Trois- Rivieres						
Saguenay						
Fredericton Storm Sewer Culverts	No No	No No	No No	Yes No	Yes Yes	
Moncton						
Halifax Storm Sewer Culverts	No No	No No	No No	Yes HDPE/PE	Yes Yes	
St. Johns	No	No	No	Yes	Yes	

* Mains only, requires approval from Water Resources on a case-by-case basis

c) Number of Students/Institutions presented in last 12 months

<u>Date</u>	<u>University / College</u>	<u># of Students</u>
Nov 23 rd 2022	OGRA Storm Sewer Course, Tor ON	27
Jan 25 th	York University, Toronto ON	62
Jan 30 th	University of Northern BC	25
Feb 1 st	Western University, London ON	35
Feb 8 th	McGill University, Montreal QC	25
Feb 9 th	Toronto Metropolitan University, ON	100
Feb 13 th	Niagara College, ON	30
Feb 27 th	University Regina (water resources) SK	10
Feb 27 th	University Regina (hydraulics) SK	25
Mar 7 th	Lakehead University, T Bay ON	30
Mar 10 th	University of Saskatchewan, Saskatoon SK	50
Mar 21 st	University of Guelph, Guelph ON	20
Apr 3 rd	Okanagan College Kelowna BC	20

13 Guest Lectures 459 Students

7. SWAT Team Initiative – Storm Sewer Market

- Objective: Develop a strategy to penetrate municipal storm sewer market.
- 17 Members on the Team
- 5 Meetings held in the last 12 months

Last Meeting – May 23rd

- Visited BC in April. Plan to visit eastern provinces in the fall, Quebec and Ontario, this summer. Members will be notified and attend if available.
- Promote the Handbook and downloading capabilities.
- Please send Ray any provincial associations calling for speakers / papers.
- Set up webinars for Quebec in French for later this year (SRP, Carbon Footprint). Work with Tony Tekly (Armtec) and Sebastien Gauthier (AIL).
- Update polymer laminated sites in Canada – Seeing is Believing Map

8. Discussion / New Business / Old Business

No discussion

9. Strategic Plan Adjustments

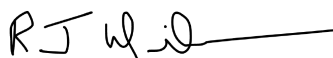
TAC committee to address SWM.

10. Adjourn & Next Meeting

The meeting was adjourned at **10:00 am** with a motion from **Roger Leger**, second by **Terry Dunn** and was carried unanimously. The next meeting will be held on November 14th, 2023, in the Waterloo Region at a place and time TBD.



Sam Mitra
Chair



Ray Wilcock
Executive Director