

1:00 P.M. Tuesday March 16<sup>th</sup>, 2021 – WEBEX

**Committee Members Attending:**

|                      |          |                    |                  |
|----------------------|----------|--------------------|------------------|
| Terry Dunn (Chair)   | Atlantic | Dave Watson        | Leland           |
| Kevin Williams (abs) | Atlantic | Jim Evans          | Cleveland Cliffs |
| Jason Sherwood       | Atlantic | Ian Berry          | Warner           |
| Randy McDonald       | Atlantic | Mike Mounts (abs)  | Valfilm          |
| Phil Carroll         | Atlantic | Lynn Riley         | Valfilm          |
| Scott MacRae         | Armtec   | Todd Gray (abs)    | ACI              |
| Heba Ahmed           | Armtec   | Derek Niezen (abs) | Ironside         |
| Bruce Matheson (abs) | Frontier | Mike Hook          | MarMac           |
| Mike Williamson      | Hubb-Cap | Mike McGough       | NCSPA            |
| Kamran Derayah       | AMD      | Diana Brooks       | NCSPA            |
| Byron Nelson         | Leland   | Ray Wilcock        | CSPI             |

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**1. Welcome and Opening Remarks**

Terry opened the meeting at 1:00 p.m. and welcomed everyone. Attendance was taken and is recorded above.

**2. Review Minutes from November 24<sup>th</sup>, 2020 and Approve**

Minutes were reviewed and a motion for approval was made by **Kamran Derayah**, second by **Jason Sherwood**.

**3. Outstanding Items to Complete**

**a) Rehabilitation white paper – technical bulletin discussion?**

- Posted the journal to the website with a link to the white paper
- <https://cdnsiencepub.com/doi/10.1139/cjce-2019-0580>
- April 8<sup>th</sup> webinar on rehab paper hosted by OGRA open to all
- E-Blast will be sent out this week announcing same
- Review T.B.'s (6 & 7) to determine if updates are required

**b) MTO – Structural Plate Standards Advancement – next steps**

- Sub-committee - (Dennis Park, Scott MacRae & Ray)
- Set up WEBEX meeting with MTO to discuss

- NL – confirmation of polymer for both CSP & SPCS & NZF3000 bolts for standards (will show up in addendums on contracts until standards are published)

**c) Galvalume – updates completed & posted - any more discussion?**

No discussion – Kamran suggested to remove from next meeting's agenda

**d) Bay of Fundy & Cabot Trail polymer coated sites – on hold**

No update. Leave previous comments for future meetings.

Dates to be determined once travel restrictions ease.

Site visit to cover:

- Abrasion 4 or tidal waters, ice conditions?
- Water velocity, chemistries, grade of pipe, fish passage design?
- Inlet control to protect sediment from entering pipe. Characterize the upstream water feeding the pipe, sediment load.
- Find out more information and root causes of the abrasion.
- Bay of Fundy (AIL), Cabot Trail (Armtec)
- Pictures are important to determine bedload / velocity
- Port Hardy site to visit – similar abrasion issues. Future visit for site inspection next time in B.C.

**e) Bridge inspection guidelines – TB to be produced**

**Action: Use AT document to produce Buried Bridge Inspection Guidelines for posting.**

**f) CSA G401 update**

Last meeting held on March 9<sup>th</sup>. We still have 19 open items to resolve before taking the update to the broader community. Target date is April 16<sup>th</sup>.

**4. Long Term Items**

**a) ASTM A742 update**

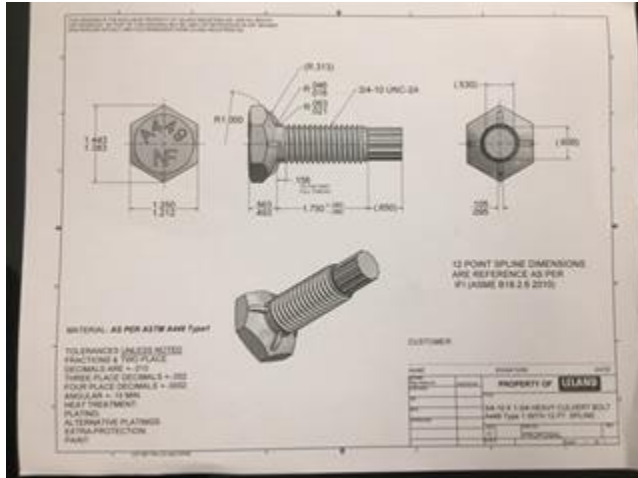
- 1) Lighter polymer laminate update – (Mike)

Two pronged approach – laboratory testing of steel gauge thickness and polymer film – 6 months of full scope testing. First testing was performed with 1.3mm (450mm and 600mm diameters). Will include CSP & SRP. Targeting small diameter pipes.

### **b) Thermopolymer plate in brackish/salt water in three sites on hold**

There are three sites requiring a review (1 in BC, QC & NS) in 2021. Site visits to be determined in the future.

### **c) Bolt & Nut Research update (Byron)**



Last Meeting Discussion:

- Byron – coatings complete.
- Tools will be available later this month.
- One person will be able to perform the task.
- Special attachment that contains the socket for an impact gun.
- Conference call to come once Leland is ready.

### **d) Green Handbook update – on hold till G401 complete**

Scott mentioned that Stephen MacKinnon is interested. He suggested to include Dave Penny, a consultant for hydraulics, etc. To be discussed at a future date.

### **e) Priority Projects as voted by the board**

#### **1) EPD comparison – calculator update**

Calculator completed and posted to the website – calculator's section. E-Blast announcement will go this week.

#### **2) Tracking of EPD inputs / outputs for 2022 (Manufacturers)**

Tracking spreadsheets were sent to all manufacturers. Date for next EPD is 2023.

### **3) CSA quote update**

Contacted CSA to make changes to committee and firm up quote – still waiting for feedback. Will follow up.

## **5. Ongoing Items**

### **a) ASTM – (Kevin / Mike / Ray)**

- Spring meetings will be conducted using WEBEX – dates TBD
- New section properties for 1.3mm have been approved
- Attend E60 (resiliency)

### **b) NCSPA update (Mike)**

- Tech note on non-rerolled ends on large diameter pipe
- Research – aluminized and polymer site visits (10 years old plus) – refresh the data based upon new inspections. Many sites are soft water with low resistivity.

### **c) TAC update / Spring meetings (Ray)**

|          |                                           |
|----------|-------------------------------------------|
| Apr 20th | Climate Change Integrated Committee       |
| Apr 21st | Environmental Legislation Committee       |
| Apr 23rd | Climate Change Council                    |
| Apr 29th | Structures Committee                      |
| May 10th | Road Safety Committee                     |
| May 11th | Small Municipalities Integrated Committee |

### **d) TRB update (Mike)**

- Gone through a transition – committees combined into one (culverts & bridges)
- State-run driven
- Virtual this year

### **e) CSA G401 update (Ray)**

Covered above in outstanding items to complete.

### **f) AREMA (Mike)**

- Pretty quiet – rewrite of hydraulics

**g) AISI News (all)**

Nothing to report.

**6. Discussion / New Business**

a) TB on fish baffles – initial discussions

Held initial discussion with Julien Cassie who initiated the idea. Will put together a draft and run it by Julien, Scott & Phil for input.

- Types vary across the country
- Prepare a document that contains the variables one has to look at
- Owner has to hire the consultant
- Include a few examples, one from BC, Ontario and East that one could use
- Steel's variability that can accommodate the varied expectations
- Demand fluctuates from open bottom to closed depending on the province / location
- Phil suggested diagrams / photos of:
  - CSP steel baffles that are welded into the invert
  - SPCSP steel baffles that are bolted into the invert
  - Bed load retainers for CSP's in either steel or cip concrete – these are normally pretty tall – like 2 or 3 feet tall.
- FAQ's - How to place stone in the invert? – this is a common question. Another fun question is – can we make the pipe invert / baffle joint watertight?
- Some reference guidelines on where they're used – DFO, FP Innovations etc.
- Phil - collected a bunch of drawings, focus on what they look at and install it, stay away from biodiversity of fish

b) Installing geomembrane over structures / pipes - discussion

- NCSPA has agreed to work with us on this.
- NCSPA Tech Note 210 attached to minutes. Used for heavy salt use, does not drain.
- Terry to circle back with Nick. Publish a tech bulletin on installing geomembranes over structures. Would help all members.

c) Sizing of culverts – impact of climate change (address in Handbook)

- Future topic of the Handbook

d) Manning's n equivalent to Spiral Rib versus CSP

- This will depend upon inlet versus outlet control. Refer consultants to HB.

e) MarMac – looking at coupling two pipes with non-rerolled ends

- Working with NCSPA, Pacific Corrugated
- Tests revealed a joint with 8 – 10 PSI which could be a game changer
- Eliminating a rerolled end eliminates material coating, manufacturing issues, etc.
- Manufacturers can contact Ray or go direct to participate with MarMac

## **7. Adjourn & Next Meeting at the call of the chair**

The meeting was adjourned at **2:30pm** motioned by **Byron Nelson** and second by **Jason Sherwood**. Next meeting scheduled for June 15<sup>th</sup> or earlier at the call of the chair.

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Terry Dunn  
Chair

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Ray Wilcock  
Executive Director