

# MTO/ORBA STRUCTURES TECHNICAL SUBCOMMITTEE MEETING NOTES

**Date:** September 8, 2023  
**Time:** 10:00 am to 1:00 pm  
**Location:** Microsoft Teams

<b>ATTENDEE</b>	<b>ORGANIZATION</b>	<b>ATTENDEE</b>	<b>ORGANIZATION</b>
Alfredo Maggio	Graham Bros. Construction Ltd.	Kevin English (co- chair)	MTO, Contract Management Office
Doubra Ambaiowei	ORBA	James Combe	MTO, Structures Office
Walid Abou-Hamde	ORBA	Andrew DeSira	MTO, Structures Office
Justin Chen	Morrison Hershfield	Aicha Ghezal	MTO, Engineering Materials Office
Luigi Chiodo	Alliance Verdi Civil Inc.	Jeffrey Giroux	MTO, Construction West
Steve D'Orazio	Clearwater Structures Inc.	Walter Kenedi	MTO, Structures Office
Denton Hall	Dufferin Construction Company	Rebecca Li	MTO, Contract Management Office
Jesse Hopkins	Powell Contracting Ltd.	Joel Magnan	MTO, Engineering Materials Office
Bart Kanters	Concrete Ontario	Bo Ni	MTO, Engineering Materials Office
Matt Mayer	GIP Inc.	Tony Sangiuliano	MTO, Structures Office
Kyle McCutcheon	McLEAN Taylor Construction	Kenneth Shannon	MTO, Highway Design Office
Richard Mulder	Decast	Andrew Turnbull	MTO, Structural
Mark Podhorski	Bot Construction Limited		
Chris Ryell	The Miller Group – Miller Paving Limited		
Tim Smith	Cement Association of Canada		
Jon Vallieres	Looby Construction Limited		
Andrew Weltz	BAUER Foundations Canada Inc.		

**INTRODUCTION / ANNOUNCEMENTS**

- Justin Chen has joined the subcommittee.
- Kyle McCutcheon has joined the subcommittee.
- Aicha Ghezal has joined the subcommittee.
- Andrew DeSira and Tony Sangiuliano are participating as guests today.

OPEN ITEMS	ACTION BY
<p>May 23-1</p>	<p><b>STATE OF PRACTICE FOR TRENCHLESS CONSTRUCTION SURVEY</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• MTO’s trenchless working group developed a questionnaire early this year with the purpose of updating and improving trenchless technology practices.</li> </ul> <p><i>Discussion:</i></p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• This survey was circulated previously, but no responses were received from contractors. An extension for the survey response time is being provided to seek input. It was requested that this subcommittee distribute the questionnaire to members who are familiar with trenchless work for MTO contracts.</li> <li>• Action: MTO sent the questionnaire hyperlink during the meeting. ORBA will distribute the questionnaire to membership.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• MTO thanked ORBA members who responded to the survey.</li> </ul> <p><b>Action – Item closed.</b></p>

OPEN ITEMS	ACTION BY
<p><b>May 23-2</b>    <b>OPSS 904 UPDATE</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>The following items are consolidated into one OPSS 904 item (May 23-2): Nov 19-2, Nov 19-3, Nov 19-4, Nov 19-5, Nov 19-6</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• OPSS 930 references OPSS 904 so there has been interpretation on site that form and pump concrete requires internal vibration. ORBA to provide examples. (Nov 19-2)</li> <li>• ORBA will provide bonding agent proprietary product information to MTO for review. (Nov 19-3)</li> <li>• MTO will review cold weather concrete requirements. (Nov 19-4)</li> <li>• MTO will review sandblasting and power washing requirements for new concrete. (Nov 19-5)</li> <li>• MTO will review fog misting systems requirements. (Nov 19-6)</li> <li>• ORBA asked if the OPSS 904 draft will be ready for review prior to the next meeting in September.</li> <li>• MTO is currently targeting November publication and TCP is now the forum for document review, but MTO will provide a copy of the draft when it is available.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• MTO is experiencing delays and is now anticipating April 2024 publication of the updated specification. Consultation will occur prior to publication.</li> </ul> <p><b>Action – ORBA will send any new OPSS 904 comments if they come up.</b></p>	<p><b>ORBA</b></p>

OPEN ITEMS	ACTION BY
<p><b>May 23-3</b>    <b>FOUNDATION INFORMATION REPORTS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>ORBA would like MTO to provide the FIDR in contract documents.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA requested to include the recommendations section of the FIR with tender documents. Some other DOTs provide the description of the soils as well as the recommendations.</li> <li>• MTO will review what subsoil investigation information is provided with tender documents.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• <i>Inclusion of FIDR's in Contracts Sept 8 2023</i> PowerPoint slides (attached).</li> <li>• MTO current state of practice is not to include the FIDR in Design Bid Build contracts. In Design Build contracts it is included with a letter of reliance. The information is available in the GEOCRESS system, but it is not included in the contract documents.</li> <li>• MTO's jurisdiction scan shows that most jurisdictions are also not supplying the FIDR. There are owner risks to supplying the FIDR and it is not produced to be a contract document.</li> <li>• ORBA noted safety concerns of not being provided information, such as base heave.</li> <li>• MTO has additional mechanisms in place to communicate safety information in a contract without supplying a FIDR.</li> </ul> <p><b>Action</b> – <i>MTO and ORBA will continue to discuss inclusion of FIDR information.</i></p>	<p><b>MTO / ORBA</b></p>

OPEN ITEMS	ACTION BY
<p><b>May 23-4</b>    <b>TESTING GU AND GUL CEMENT TO LS METHODS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>ORBA asks when all LS test methods will permit GUL cement instead of GU cement.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA noted LS-423 has verbal acceptance to test with GUL cement. There are other LS test methods that still require GU cement, but it is not available for the tests.</li> <li>• MTO is still investigating the other test methods. Studies are still in progress, but some information was published about the correlation between the two types. Prism testing takes a long time to complete and is ongoing.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA asked for an update on testing and stated many suppliers do not have GU cement anymore for testing.</li> <li>• Published test results suggest that using GUL cement for performing AMB testing will have the same result as when using GU cement. The variation between results when comparing using either cement is smaller than the normal variation in the AMB test. There are ongoing concrete prism tests with the same comparative methodology between using GU or GUL cement, which take a year to complete. MTO will complete testing and publish the results before updating lab standards. Results are expected by the end of 2023 and updates to test methods will come after if the data supports those updates.</li> <li>• MTO has looked for GU supply and it can still be obtained in enough quantity for a lab so testing can still be done according to the test method.</li> </ul> <p><b>Action</b> – <i>MTO will provide an update on test results when they are available.</i></p>	<p><b>MTO</b></p>

OPEN ITEMS	ACTION BY
<p><b>Nov 22-4 WATERPROOFING MEMBRANE BUBBLING</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• Pin holes are being observed in the hot membrane, compromising the integrity of the waterproofing. MTO is taking a different approach between regions and is asking contractors to place the hot membrane in two lifts (same total thickness) versus one lift.</li> <li>• Will MTO be revising OPSS 914?</li> </ul> <p><i>Discussion:</i></p> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• There has been a quality issue with waterproofing membrane this year (2022) on some contracts, but not all of them. Some contractors have been successfully mitigating the bubbling issue. Best practices are encouraged to mitigate the issue.</li> <li>• MTO will be reviewing OPSS 914 this winter with the intent that 2024 contracts will have consistent requirements and will be administered consistently. Work has been ongoing with suppliers, but more testing and research is required on the materials side. The intent is a version of the specification where it may be decided up front whether to add reinforcement to the waterproofing membrane or not. The issue for MTO is that these contracts were already tendered and ongoing, so an NSSP was put together after the fact to try and assist administration of currently tendered contracts.</li> <li>• ORBA is aware of the MTO position that bubbling/voids in the waterproofing membrane is a rejection criterion but is not sure how that is clear in OPSS 914. MTO is aware and will be working on this on a couple of fronts.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• There has not been any new waterproofing experience yet to evaluate and investigations are ongoing. There may be a progress update when waterproofing operations begin again this construction season.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• Discussion took place in the Sept 23-3 item.</li> </ul> <p><b>Action – None.</b></p>	

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<p><b>Nov 22-5 BRIDGE BARRIERS – MASH</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• MTO providing notice that barrier requirements are changing in MASH, especially with TL-4 demands increasing. Several current structural barrier standards will likely become deficient and will be updated in the future.</li> </ul> <p><i>Discussion:</i></p> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• MTO presentation on bridge barrier and MASH crash test standards. <i>Bridge Barriers – MASH+ PowerPoint</i></li> <li>• There are both height and load changes which impact typical MTO bridge barrier standards. Changes are expected to be needed to the TL-3, TL-4 and potentially the TL-5, but there may be different reasons for changes to the different standard drawings.</li> <li>• USA DOT’s seem to prefer the single slope, so barriers may change to single slope from the safety shape.</li> <li>• ORBA can change forms to meet 1070mm for TL-5 barrier but wants to know that the change from 1050mm to 1070mm will be consistently applied by MTO first.</li> <li>• MTO notes this is currently an FYI that changes will be coming in the future, but it is a larger undertaking and progress will be slow.</li> <li>• ORBA asks about mitigation of salt scaling at the base of concrete barrier by applying sealers. MTO has been opposed to sealers in the past, but there are different de-icing chemicals being used now and the issue seems to be getting worse.</li> <li>• Salt scaling is not a new issue for MTO, but it has been discussed more recently. Work is ongoing between Concrete and Structures Offices and trying to find the right balance for the specification update. Changes aren’t anticipated to be in any contracts until 2024.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA notes that salt scaling is still an issue and asks if MTO is investigating options to make a better barrier, e.g., new materials, sealers, etc. It was suggested that de-icing chemicals applied to the road are the problem, not the barrier materials.</li> <li>• MTO notes that many factors impact the durability of barriers, and many are being investigated. MTO does not intend to use sealers.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• The agenda title is a misnomer because the topic changed. MTO does not have an update on MASH barriers.</li> <li>• Updates to barriers are anticipated to be posted to TCP in Fall 2024 and will likely not be in any construction contracts until 2025.</li> <li>• MTO will provide an update when the work has advanced.</li> </ul> <p><b>Action – Item closed.</b></p>	<p>MTO</p>

OPEN ITEMS	ACTION BY
<p><b>Nov 22-6</b> <b>READY MIXED CONCRETE INDUSTRY AVERAGE ENVIRONMENTAL PRODUCT DECLARATIONS (EPDs)</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>Concrete Ontario presentation on Environmental Product Declarations</b></li> </ul> <p><i>Discussion:</i></p> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• Concrete Ontario presented on Environmental Product Declarations.</li> <li>• The Federal government is mandating reductions in CO<sub>2</sub> in its contracts and the concrete industry has been working on ways to reduce concrete CO<sub>2</sub> content.</li> <li>• The purpose of the EPDs is transparency/accountability when it comes to carbon. The newly published document uses regional averages so Ontario has its own EPD now and it will be updated every 5 years. The CO<sub>2</sub> for diesel fuel for driving to the job site is not included, but everything else from material extraction to batching is included.</li> <li>• The CO<sub>2</sub> value is impacted by the time of year, so that is another issue for average values. However, the EPD does provide a baseline average. The EPDs are not intended to prescriptively set carbon limits, they are only informational and provide an order of magnitude for changes in the mix designs on the average carbon content of mixes.</li> <li>• It is stressed that the concrete needed should be specified and the EPD is a method of quantifying the rough carbon impact of the work, carbon values should not be specified for the concrete mix.</li> <li>• The MTO is aware of EPDs, but they are not currently included in specifications.</li> <li>• MTO is meeting with Concrete Ontario on Nov 24<sup>th</sup>.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA asked how new federal funding requirements impact MTO contracts and if EPDs will be required for concrete.</li> <li>• MTO will follow up if funding from federal government includes EPDs.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• The federal treasury board requirement is for any federal project receiving \$10M or more in funding requires an EPD requirement.</li> <li>• ORBA will provide a link to the federal site.</li> </ul> <p><b>Action</b> – ORBA provided a link to the federal site (<a href="https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=32742">https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=32742</a>). Item closed.</p>	



OPEN ITEMS	ACTION BY
<p><b>May 19-4 OPSS 903 – UPDATE – A REVIEW OF CAISSON CONCRETE REQUIREMENTS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>Proposal for a meeting to discuss workability issues with placing concrete for caissons.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2019</i></p> <ul style="list-style-type: none"> <li>• ORBA suggested organizing a meeting to discuss workability issues with pouring concrete for caissons. Caissons may go deep into the ground where no vibration of concrete is possible. Caissons may have congested reinforcement so larger sized aggregate can get hung up which can pull the reinforcing cage down significantly.</li> <li>• Meeting should include representatives from MTO Bridge Office, MERO Concrete Section and Foundations. Several members from the ORBA committee expressed interest in attending.</li> <li>• ORBA to organize meeting.</li> </ul> <p><i>November 2019</i></p> <ul style="list-style-type: none"> <li>• Representatives of MTO and ORBA met on November 18, 2019, to discuss caisson issues; Andrew Weltz provided a brief summary of the meeting. The group plans to meet again in the new year. MTO is planning to address some of the more straight forward concerns by developing a Nssp for short term use and work on updating OPSS 903 in the longer term.</li> <li>• ORBA will send MTO the minutes from that meeting.</li> <li>• Combined this item with May 19-4 and updated item name.</li> </ul> <p><i>June 2020</i></p> <ul style="list-style-type: none"> <li>• A meeting was held on May 6<sup>th</sup>. OPSS 903 is being split into two different specifications, drilled and driven piles.</li> </ul> <p><i>November 2020</i></p> <ul style="list-style-type: none"> <li>• An ORBA member noted that recently no further action has been taken to further this item since in-person meetings are on hold.</li> <li>• ORBA will reach back out to MTO and restart the work on this item.</li> <li>• ORBA also wanted to note that they have not lost interest in this.</li> </ul> <p><i>May 2021</i></p> <ul style="list-style-type: none"> <li>• <i>Andrew Weltz gave an overview of the work being completed. Generally, the work is considered to be a modernization of the specification. Previously, OPSS 903 focused on driven piles rather than caissons. The new specifications will be split into Driven Piles and Caissons.</i></li> <li>• <i>Conversations to date have been very productive, with engagement of Consultants, ORBA and other agencies.</i></li> <li>• <i>For Caissons, the following issues have been the focus of the updates:</i></li> </ul>	

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<ul style="list-style-type: none"> <li>○ <i>The ratio of concrete aggregate size and rebar spacing. The root cause of this issue was a design philosophy. The solution is to establish a designer guide for rebar spacing in the cage.</i> <ul style="list-style-type: none"> <li>▪ <i>Traditionally, you use a higher slump mix so that the concrete can make it through the cage, but the dense cage stops the aggregate from passing through and leads to quality issues. Designer guide will provide a minimum spacing.</i></li> </ul> </li> <li>○ <i>Improve the requirements and guidance for use of Tremie concrete.</i></li> <li>○ <i>Tony is bringing in a testing regime for caissons which involves sophisticated testing to gain a better understanding of what the load bearing capacity will be prior to loading.</i></li> </ul> <ul style="list-style-type: none"> <li>• The group will be focusing on the driven pile specification shortly.</li> <li>• MTO asked how they plan to ensure the quality of the Tremie Concrete. A.W noted that Cross Hole Sonic Logging will be used to verify the overall quality of the concrete. The holes will be installed by the contractor, and testing will be completed by an independent testing lab.</li> <li>• MTO asked how they plan to provide the notes to the designer regarding the spacing of rebar in the spiral. A.W noted that the specification will have a Notes to Designer section where it will state the rebar spacing requirements (i.e. Rebar Spacing = 5*Max Agg. Size)</li> <li>• Working group will continue the development of the specification and report back to the group with progress.</li> </ul> <p><i>November 2021</i></p> <ul style="list-style-type: none"> <li>• A NSSP was created to put into contracts. It will likely be another year before projects use the specification and lessons learned can be prepared.</li> <li>• Item left on the agenda and will be addressed once another working group meeting occurs or there is more information from new projects.</li> </ul> <p><i>May 2022</i></p> <ul style="list-style-type: none"> <li>• Draft caisson specification issued as an NSSP.</li> <li>• Another meeting is scheduled for June for the working group to review the pile driving specification.</li> </ul> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• The specification has been worked on for about three years now.</li> <li>• ORBA members missed one meeting last year and were surprised to find the specification was finalized. Meetings have resumed and expect the specification won't be ready for the new year. Understand</li> </ul>	

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	<p>that in the meantime the NSSP is being issued with contracts, but ORBA considers this problematic because it hasn't been fully reviewed by the working group but does expect that MTO will not be willing to use the previously published specification now that the draft NSSP has been issued in contracts.</p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• The caisson NSSP has been used on several contracts now. It is a challenging specification with a number of changes, but it is now on par with other jurisdictions.</li> <li>• Driven piles specification draft is currently under review.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• MTO is collating comments to update the specification and the completed draft will be distributed for review.</li> <li>• The draft of OPSS 903 will be posted to TCP for comment before publication.</li> </ul> <p><b>Action – Item remains open.</b></p>
<p><b>June 20-2 (Nov 19-1)</b></p>	<p><b>CONCRETE AGGREGATES – SP 110S17 AND OPSS 1002</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>Updates to OPSS 1002.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>November 2019</i></p> <ul style="list-style-type: none"> <li>• MTO met with OSSGA (Ontario Stone, Sand and Gravel Association) on June 24, 2019, to discuss the changes to the specification and industry concerns.</li> <li>• MTO has made some changes in response to the OSSGA concerns but the changes would not affect contracts already tendered. MTO is open to consider change proposals on active contracts on a case by case basis.</li> <li>• ORBA reiterated concerns with the requirements for separate stockpiles for each contract from one supplier. This can be problematic as a large number of stockpiles requiring a lot of space would be necessary.</li> <li>• ORBA noted there are concrete aggregate suppliers who will not supply aggregate for MTO concrete as a result of the new requirements. The main issue is the risk taken on by the aggregate supplier if samples are taken from the concrete plant where they are out of the supplier's control. Suppliers are also concerned that financial penalties are too harsh.</li> <li>• ORBA will provide follow up comments on this item.</li> </ul> <p><i>June 2020</i></p> <ul style="list-style-type: none"> <li>• OSSGA sent a letter to the Minister. There are several aggregate suppliers that will not supply to MTO projects for concrete supply. The</li> </ul>

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<p>reasoning is due to the potential penalties, which can be up to 5% of the contractors tendered price. ORBA indicated this exceeds the margins of what some suppliers are making and therefore the risk is not worth it.</p> <ul style="list-style-type: none"> <li>• MTO will be responding to OSSGA’s letter.</li> <li>• Item to remain open.</li> </ul> <p><i>November 2020</i></p> <ul style="list-style-type: none"> <li>• MTO noted that they responded to the OSSGA’s letter.</li> <li>• ORBA noted that OSSGA’s has a response ready to be sent back to MTO.</li> <li>• Item closed unless more discussion is required following response to OSSGA.</li> </ul> <p><i>May 2021</i></p> <ul style="list-style-type: none"> <li>• MTO recently heard from OSSGA, and similar concerns were raised.</li> <li>• MTO is working on a new framework for how to deal with gradation where there is a non-conformance.</li> <li>• MTO wants to look at providing a prescriptive requirement for dealing with non-conformances by providing a sliding scale.</li> <li>• MTO is in the process of checking the sliding scale in various situations to ensure a proper outcome.</li> <li>• CO noted that there are three critical issues: gradation, sample location, and size of penalty.</li> <li>• CO noted that smaller aggregate suppliers for concrete will not except the penalty. For concrete, this is a supply chain issue.</li> <li>• MTO again noted that sampling must be at the concrete facility and not at the suppliers.</li> <li>• MTO plans to circulate the new framework with the sliding point scale shortly.</li> </ul> <p><i>November 2021</i></p> <ul style="list-style-type: none"> <li>• ORBA has made its position known: concerns with the location of aggregate testing, cost associated with penalties, the addition of gradation to penalties, that remove and replace was in the specification but was not applied so adding penalties now is a significant concern. There are issues with getting suppliers to provide aggregates for MTO contracts only.</li> <li>• MTO shared proposals with OSSGA to address the issues brought up. It is important for MTO to sample the latest point in the supply chain to check material is in conformance, this has been communicated to OSSGA. Positive feedback was received on the sliding scale payment adjustment and it is the same as what is in all other MTO aggregate specifications. The sliding scale adjustment is to replace the remove and replace provision, it is not an addition. Payment adjustments were applied to real examples that were determined to be reasonable. The</li> </ul>	

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<p>only benefit to MTO with this change is application consistency.</p> <ul style="list-style-type: none"> <li>ORBA stresses this is a general supply chain change and it is making a dramatic change to the aggregate supply industry. This does not apply to municipal or industrial/commercial contracts, only MTO. This is a political/financial issue and there are suppliers that don't want to do MTO contracts anymore at a time when demand is high. Technical comments will be provided again when the specification is published in the portal.</li> <li>MTO will report back on the response from the portal.</li> </ul> <p><i>May 2022</i></p> <ul style="list-style-type: none"> <li>OSSGA met recently to review the changes made to the specification. The general view is that the changes will not encourage more engagement from aggregate producers and does not address industry concerns.</li> <li>MTO plans to get this specification consulted on soon and it is in the queue, but there is currently a backlog of specifications under review.</li> </ul> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>Both specifications have been consulted on through TCP. A decision has been posted and the specifications will be published to CPS shortly.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>ORBA stated that the specification was not sent to ORBA for comment before it was published. Also, that discussions were going on alongside OSSGA and that there is an issue with the 60% requirement for fine aggregates. The fine aggregates requirement will be challenging for industry and will result in supply issues. Members continue to express concerns with specific regions on specifications.</li> <li>MTO pre-consulted on the specification and posted it to TCP for comment. The TCP decision was also posted before publication. Comments were received about insoluble residue, but that requirement has been in place since 2016 for riding surface concrete so it already covers the majority of concrete placed. The change being discussed is for concrete base and MTO's safety concern about extended periods that base may be exposed to traffic.</li> <li>ORBA does not believe that base courses are exposed long enough to have reduced friction concerns.</li> <li>MTO has experienced issues with new concrete surfaces having dramatic reductions in friction properties over short time periods; this led to the insoluble residue requirement in surface courses and the requirement has worked well. Any exposed concrete, based on internal review (phasing requirements, etc.) will implement this requirement.</li> <li>ORBA notes another challenge is how to administer sublots as a result of testing.</li> </ul>	

OPEN ITEMS	ACTION BY
<ul style="list-style-type: none"> <li>• MTO will need specific wording for the testing question to take it back to the technical team for review of exactly how specification language is applied.</li> <li>• ORBA will provide specific questions about materials acceptance testing for MTO review. MTO will review those concerns.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA wanted to revisit the requirement for 60% insoluble residue value for all Portland cement base and pavements. Not all pits can supply the higher quality aggregate and the requirement applies to composite pavements and temporary repairs. Is there any data for skid resistance that it's deteriorating so fast that this needs to be a requirement?</li> <li>• MTO's primary concern is safety but it is not the only concern. When the IR requirement was introduced, it was in response to recent contracts that experienced fast polishing or had rapid decreases in roughness. The change was effective and pavements meeting the requirement are performing well; pavements not meeting the requirement are experiencing problems.</li> <li>• MTO evaluates the IR requirement for temporary driving surfaces on a case-by-case basis and considers many factors. The approach is similar for upper base courses of asphalt requiring premium aggregates. MTO is not willing to expose itself to additional risk with potential for low-friction road surfaces.</li> <li>• ORBA's question about materials acceptance testing is, if a subplot fails, what happens to the subplot next to it within the lot?</li> </ul> <p><b>Action</b> – MTO will review ORBA's materials acceptance test question and provide a response to ORBA and OSSGA.</p> <ul style="list-style-type: none"> <li>• <b>Note –Post meeting:</b> MTO response is that Insoluble Residue (IR) testing is a physical property requirement, not a gradation requirement, so there are no sublots as part of physical property testing in SSP110S17 / OPSS 1002. The physical property requirement is a single test for the lot. If the IR test fails, the material would be rejectable. As always, the contractor can elect to go to Referee and/or follow the protocol in SP199S66.</li> </ul>	<p><b>MTO</b></p>
<p><b>Nov 20-3 SSP 721S09, SSP 107S06: CLARIFICATIONS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>Changes to requirements for steel beam guide rail systems and acceptable energy attenuator systems.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2021</i></p> <ul style="list-style-type: none"> <li>• Ashley de Souza provided a general update on the conversations had</li> </ul>	

OPEN ITEMS	ACTION BY
<p>at the separate meeting arranged to discuss Highway Safety Systems.</p> <ul style="list-style-type: none"> <li>• There was a focus on 0\$ change order requests for use of different systems.</li> <li>• MTO will work on ways of notifying designers on these changes.</li> <li>• One specific issue that was disused was the application for maintenance contracts. Current maintenance contracts require like for like replacement, which is difficult and often easier to replace the system with the current standard.</li> <li>• MTO will work on how to better incorporate these new items into maintenance contracts where the standard is to replace like for like even when the system is outdated.</li> </ul> <p><i>November 2021</i></p> <ul style="list-style-type: none"> <li>• Highway safety systems damaged in maintenance contracts are replaced like-for-like. ORBA would like a like-for-like or equivalent option so there are more options for replacement or repair of systems.</li> <li>• ORBA will look at information/support that can be provided to address this.</li> <li>• MTO will look at updating language in maintenance contracts for attenuators.</li> </ul> <p><i>May 2022</i></p> <ul style="list-style-type: none"> <li>• MAIN4001 language has been updated to replace attenuators with a current system and if a legacy system wants to be used then that case will need approval. This only applies to the new specification so it will become active as new AMCs are released.</li> <li>• ORBA asks if there is an information campaign that could be done to inform CA's about the product matrices that exist within the OPSS for traffic barriers / attenuators.</li> <li>• ORBA and MTO will work on an information campaign for AMC CA's.</li> </ul> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• Members are not in attendance; this item is marked as a work in progress.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA noted that there is older equipment on the highway in terms of installation date as well as by crash testing standard requirement. End terminals aren't repaired and are replaced with newer systems instead, however energy attenuators and guide rail don't have this same requirement.</li> <li>• ORBA also noted that permanent energy attenuators have a service life, so they should be evaluated. End terminals, high tension cable and attenuators don't appear to have a policy like guiderail for evaluation.</li> <li>• Specific request notes will be prepared for review by the MTO specialist.</li> </ul>	

OPEN ITEMS	ACTION BY
<p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• There is a formal review of cable systems and guide rail in advance of major capital contracts. ORBA asked what MTO’s stance is on review of SBEATs and crash cushions under OPSS 723.</li> <li>• This has been brought to MTO’s attention and the manual is not as robust as it is for steel beam and cable guide rail. The Highway Design Office is committed to a 3-year review period, so the manual is not expected to be updated for these items until 2026. A memorandum may be issued in the interim if detailed guidance is developed prior to the 2026 RDM update.</li> </ul> <p><b>Action – Item closed.</b></p>	



OPEN ITEMS	ACTION BY
<p><b>Nov 19-7</b>    <b>OPSS 1301: CLAUSE 1301.07.05 TESTING</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>OPSS.MUNI 1301.07.05 does not match the CONC0006 amendment to OPSS.PROV 1350. ORBA would like the MUNI and the PROV to match. The particular section is:</b></li> </ul> <p style="padding-left: 40px;"><b>“Cement supplier laboratory that participated successfully in the Cement and Concrete Reference Laboratory’s (CCRL) Laboratory Inspection Program (LIP) and CCRL’s Proficiency Sample Program (PSP) for Portland Cement and Portland limestone cement (PLC). The CCRL Inspection Report shall be provided to the Owner upon request. The test report shall be accompanied by a letter from the Technical Services Representative of the cement supplier certifying that the Portland and Portland-limestone Cement types, blended Hydraulic cement types and SCMs conform to the physical and chemical requirements of CAN/CSA A3000.”</b></p> <p><i>Discussion:</i></p> <p><i>November 2021</i></p> <ul style="list-style-type: none"> <li>• <i>ORBA would like to work with MTO on proposing language updates for the MUNI specification update similar to the CON0006 updates.</i></li> <li>• <i>MTO will work with ORBA on proposed language, but MTO is just one member of the OPS specialty committee and can’t decide whether the language is accepted.</i></li> </ul> <p><i>May 2022</i></p> <ul style="list-style-type: none"> <li>• <i>ORBA submitted proposed language to the MTO for review.</i></li> <li>• <i>MTO received the proposed language and will be responding shortly.</i></li> </ul> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• <i>MTO has just started work on OPSS 1301 and will consider comments during the review.</i></li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• <i>CONC0006 modifies OPSS 1350 and that Nssp is published.</i></li> <li>• <i>OPSS 1301 update is ongoing and will be posed to TCP for comment prior to publication.</i></li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• <i>ORBA would like an update on the status of the clause change about CCRL lab information.</i></li> <li>• <i>The specification is on schedule and is expected to be published in November 2023.</i></li> </ul> <p><b>Action – Item closed.</b></p>	

OPEN ITEMS	ACTION BY
<p>Nov 19-8</p>	<p><b>LINEAR SHRINAGE PERFORMANCE REQUIREMENTS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• The concrete industry is receiving complaints that shrinkage reducing admixtures were not approved for use on Design-Build contracts that now contain a linear shrinkage performance requirement with a penalty clause.</li> </ul> <p><i>Discussion:</i></p> <p><i>November 2021</i></p> <ul style="list-style-type: none"> <li>• MTO provided a letter to Concrete Ontario about these issues.</li> <li>• Suppliers do not want to supply ORBA members because the MTO is prescriptively limiting materials which can be used on MTO contracts and there is a remove and replace penalty clause associated with performance.</li> <li>• ORBA will provide a response to the MTO letter, MTO will review and provide additional information.</li> </ul> <p><i>May 2022</i></p> <ul style="list-style-type: none"> <li>• MTO to provide a response.</li> </ul> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• No additional letters have been sent, MTO and ORBA agree to disagree.</li> <li>• ORBA has issues with 19mm aggregate being required for form and pump in the soffit for some deeper fills. The mix is more difficult to pump, and there are small spaces with 25mm chipping around reinforcing bars. There is also different interpretation across contracts on how to address this issue.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• MTO does not have any plans to change the depth requirement.</li> <li>• ORBA notes that there is an inconsistency between regions and contracts on that item, there was at least one bid enquiry last year about this where the response provided was to not change mix designs from 13mm to 19mm aggregate regardless of the patch thickness.</li> <li>• ORBA will continue to consult with members and will pass on any possible solutions for MTO consideration.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• There are additional admixture categories and suppliers on the DSM list now so work on the item is progressing. Further updates are not expected short term.</li> </ul> <p><b>Action – Item closed.</b></p>

OPEN ITEMS	ACTION BY
<p><b>Nov 19-9 FORM AND FILL GROOVE PAYMENT</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>ORBA experiences inconsistencies with payment for form and fill grooves. Sometimes a separate item is made, sometimes it includes the lengths along the edges of the expansion joints. Clarity in payment items is requested.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>November 2021</i></p> <ul style="list-style-type: none"> <li>• The specific form and fill groove item was selected as an example, but ORBA notes it is common of a broader practice, especially with structures, and the concern is the catch-all language for items if they're not included elsewhere. Inconsistency is the biggest problem, e.g. form and fill groove might be paid under its own item, in the joint, or with the waterproofing, or some combination of those. An example is given where 4 of 6 lines were paid under the form and fill groove item, the other 2 were not.</li> <li>• ORBA will provide specifics on where there is item payment confusion for the next meeting.</li> </ul> <p><i>May 2022</i></p> <ul style="list-style-type: none"> <li>• ORBA will provide some specific examples of payment language where work that doesn't have an item is grouped into a different 'appropriate' item. ORBA notes this is common throughout the structural standards and should be viewed as needing a global change.</li> </ul> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• ORBA will provide some specific examples of payment language where work that doesn't have an item is grouped into a different 'appropriate' item.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• MTO is currently updating OPSS 914. Any examples ORBA provides about the waterproofing and form and fill groove items are appreciated. The specification will also be posed to TCP for comment.</li> <li>• ORBA will provide details of examples.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA was asking for consistency between contracts across regions and believes the payment verbiage in the OPSS 914 draft has been improved. ORBA noted that there is still a broader issue of catch-all items in specifications where payment items are rolled into other payment items.</li> </ul> <p><b>Action – Item closed.</b></p>	

OPEN ITEMS	ACTION BY
<p><b>May 22-5 CONCRETE PAVEMENT 7-YEAR WARRANTY NSSP (DB AND DBB), NSSP BITU0010 AND NSSP BITU0011 – STATUS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>Comments on specifications were sent to MTO before the switch to the Technical Consultation Portal. ORBA would like replies to those comments.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2022</i></p> <ul style="list-style-type: none"> <li>• ORBA is waiting on some replies to comments.</li> <li>• MTO asks if ORBA can please re-send the comments.</li> </ul> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• ORBA provided comments, MTO replied and ORBA provided a second set of comments. The reply being waited on is for the second comments.</li> <li>• MTO will follow up.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• MTO reviewed and provided a response, but ORBA was confused by the response. There have been multiple comments and responses to comments. ORBA was asking about the second set of comments that were sent to MTO in 2021, not the 2022 consultation.</li> <li>• ORBA will re-send the 2<sup>nd</sup> comments and MTO will review them and respond.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• MTO did not recall receiving the comments. The comments submitted prior to posting to TCP will be looked for and reviewed.</li> </ul> <p><b>Action – Comments will be reviewed and responded to.</b></p>	<p><b>MTO</b></p>

OPEN ITEMS	ACTION BY
<p><b>May 22-6 RESISTANCE WELDING REINFORCING STEEL</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>Does MTO have comments on resistance welding of reinforcing steel in precast partial depth concrete deck panels.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2022</i></p> <ul style="list-style-type: none"> <li>• Resistance welding has been proposed in contracts for precast members, specifically deck panels. ORBA asks if MTO has any comments.</li> <li>• MTO is currently reviewing resistance welding for precast concrete partial depth deck panels. Currently, welding is not permitted in OPSS 905, so a proposal needs to be submitted for each contract.</li> </ul> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• ORBA asks if MTO can clarify what resistance welding is. They don't believe resistance welding of reinforcing steel is welding because it is not adding material.</li> <li>• MTO to review and provide a response.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• MTO is reviewing use of resistance welding in partial depth deck panels. There is a new provision for it in the Structural Standard Drawing posted to TCP earlier this year. The comments are still under review.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA noted the biggest issue was having to submit a proposal for every job instead of having a standard one for resistance welding. Every time there is a partial depth deck panel, a submission is required.</li> <li>• MTO's updated standard drawing was in the TCP process at the last meeting. The drawing has since been published. There is still a requirement for a submission, but it is not a change proposal. The update was sent directly to DECAST Ltd. during the consultation period for comment.</li> </ul> <p><b>Action – Item closed.</b></p>	

NEW ITEMS		ACTION BY
Nov 22-1	<p><b>SAFETY TALK</b></p> <p>Description:</p> <ul style="list-style-type: none"> <li>• It was agreed at the May 2022 meeting that this would be a recurring item to promote safety culture. MTO and ORBA are both free to propose their own safety talk items.</li> <li>• ORBA and MTO will alternate who is responsible for the safety talk at each meeting.</li> </ul> <p>Discussion:</p> <ul style="list-style-type: none"> <li>• This meeting the safety talk was led by MTO.</li> <li>• MTO highlights airborne hazards. Outdoor work can experience airborne hazards including mists, fumes, vapours, and dusts. Some of these hazards may also be respiratory sensitizers. Airborne concrete and wood dust are known carcinogens and are bound to be on site; it would be prudent to assume all fine particulate is also carcinogenic and take precautions. Respiratory PPE should be used when the hazard can't be isolated, or the product can't be substituted.</li> </ul> <p><b>Action – N/A.</b></p>	<b>ALL</b>

NEW ITEMS		ACTION BY
Nov 22-3	<p><b>MEETING NOTES PUBLICATION</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>The MTO has committed to making stakeholder engagements public. This commitment is the result of a 2016-2017 audit recommendation regarding stakeholder engagements.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• From this point, moving forward, all meeting notes will be published on the Technical Consultation Portal (TCP). The notes are not for consultation, there will be an additional tab added for meeting notes.</li> <li>• Notes will not be posted on the TCP until they have been reviewed and endorsed by the subcommittee.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• No comments were received on the draft notes for the November 2022 meeting.</li> <li>• There is a new section on the TCP for committees and the meeting notes are now being published there. The November 2022 meeting was the first published notes for this subcommittee.</li> <li>• Item closed.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• Additional comments were submitted to MTO by ORBA after the review deadline and the notes were published on the TCP. MTO has made changes to the meeting notes, and they have been re-posted with the changes highlighted.</li> <li>• ORBA requests a change to the review timeline. MTO and ORBA agreed to a 3-week review period for the meeting notes before publication.</li> </ul> <p><b>Action – MTO and ORBA commit to a 3-week review period for draft meeting notes. Item closed.</b></p>	<p><b>MTO/ ORBA</b></p>

NEW ITEMS		ACTION BY
Sept 23-1	<p><b>MTO DEWATERING REQUIREMENTS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• MTO is updating construction standards related to dewatering and temporary flow management systems. The task force’s proposed changes are presented to ORBA for feedback in advance of posting the revisions to the TCP.</li> </ul> <p><i>Discussion:</i></p> <ul style="list-style-type: none"> <li>• MTO is revising the dewatering standards with the objectives of clarity, consistency, standardization, and to ensure no redundancy. Contractors and dewatering specialists should have the appropriate information to be able to develop an appropriate scheme to meet the contract.</li> <li>• <i>Dewatering Committee – ORBA Presentation – September 8, 2023</i>, PowerPoint (attached) is presented by MTO.</li> </ul> <p><b>Action – Item closed.</b></p>	



NEW ITEMS		ACTION BY
Nov 20-4	<p><b>GUIDE RAIL MEASUREMENTS IN CONTRACTS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>Original proposed item description is missing.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2021</i></p> <ul style="list-style-type: none"> <li>• Bid items to be based on standard length rail requirements.</li> <li>• MTO to confirm with our staff on how these changes are being completed.</li> </ul> <p><i>November 2021</i></p> <ul style="list-style-type: none"> <li>• Guiderail panels come in set lengths of 3.81m. The length is not being accounted for in contracts properly for payment; the panel quantity doesn't match the need length quantity and CA's are requiring justification for every PQP adjustment.</li> <li>• MTO will look at new language for a special provision and the CDED manual for actual panel length and field adjustments.</li> <li>• ORBA would like adjustments to TCB payment as well, they also come in set lengths.</li> <li>• MTO will review TCB options as well, but the changes made to TCB make this more difficult because there are lots of barrier options the contractor may use now, and they are not the same lengths.</li> </ul> <p><i>May 2022</i></p> <ul style="list-style-type: none"> <li>• MTO has updated the CDED to provide language about standard length of panels and to determine the number of panels required by calculated length of need and then rounding to the nearest multiple.</li> <li>• ORBA will monitor how the changes affect new construction contracts and will report findings at a future meeting.</li> </ul> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• Members are not in attendance. No updates are noted.</li> </ul> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• The roadside design manual has been updated. The publication has not been released yet.</li> <li>• Item closed.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA requested to re-open the item because the Road Design Manual hadn't been published yet, even if it has been updated. Feedback from the MTO technical member was also requested on guide rail and barrier measurement quantities.</li> <li>• MTO has published the Road Design Manual to the Technical Publications website.</li> <li>• MTO published updated CDED information with respect to guide rail payment in January 2023 in response to this item. It clearly states that guide rail panels come in 3.81m lengths and that tender items should be in multiples of that and then rounded to the closest metre.</li> </ul> <p><b>Action – Item closed.</b></p>	

NEW ITEMS		ACTION BY
Sept 23-2	<p><b>CONCRETE SPALLING ISSUES AND ACCEPTANCE SPECIFICATIONS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• ORBA’s position is that there is no contractual requirement to resist chemical attacks nor is there any specific durability specification pertaining to salt or any other chemical. ORBA believes it is unreasonable for MTO to suggest that it is the contractor’s and supplier’s responsibility to make sure the concrete mix design is durable to a chemical that is not specifically identified.</li> <li>• <i>OPSS 1350.04.01.01 "The concrete mix shall be designed to provide adequate strength and durability for the intended use and to meet the requirements as specified in the Contract Documents."</i></li> <li>• 904.08.01 also refers OPSS 1350, “Acceptance shall be according to OPSS 1350 and this specification...”</li> </ul> <p><i>Discussion:</i></p> <ul style="list-style-type: none"> <li>• ORBA noted the issue seems to be particular to concrete barrier, sidewalk, and curb, and would like to mitigate the issue (sealers) until MTO determines the specific cause. ORBA noted the following concerns: <ul style="list-style-type: none"> <li>○ The barrier seems to only spall on the traffic face so de-icing chemicals are suspected.</li> <li>○ The sole purpose of the barrier is to prevent errant vehicles from leaving the highway and MTO shouldn’t refer to OPSS 904 and OPSS 1350 to extend the purpose of barrier to resist de-icing chemical attack.</li> <li>○ MTO contracts do not specify what chemical will be applied and how it will react with the concrete. Concretes exposed to severe chemical attack are typically epoxy coated.</li> <li>○ Concrete has passed RCP and AVS tests and many examples were built in staged construction so at least half the barrier has had sufficient time to cure.</li> </ul> </li> <li>• MTO commented that a purpose of concrete is to be durable in its environment, RCP and AVS are specified for durability, proper curing is an important factor, and sealers may not be an effective solution based on data to date.</li> <li>• The specific failure mechanism needs to be determined first before any further discussion can occur.</li> </ul> <p><b>Action – MTO will continue to research.</b></p>	<p><b>MTO</b></p>

NEW ITEMS		ACTION BY
Sept 23-3	<p><b>OPSS 914 RESPONSE TO TCP COMMENTS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>Areas of disagreements to be discussed.</b></li> </ul> <p><i>Discussion:</i></p> <ul style="list-style-type: none"> <li>• ORBA asked if it will be a unified 2-layer system on future contracts.</li> <li>• It is a requirement of the July 2023 specification that is going on contracts advertised after specification implementation.</li> <li>• ORBA asked for clarification about TCP comment number 3 “Also concern about the no rain or moisture on the deck for 72 hours prior to the start of the waterproofing but is that realistic given the shortened time frame to get work completed.” The response was that this has always been a requirement. ORBA believes this was about air curing. Is the moisture requirement to air cure for 72 hours, or no precipitation for 72 hours?</li> <li>• MTO will have to take this back for review.</li> <li>• ORBA believes the requirement to empty the kettle and start with a clean one each time is wasteful. The owner may take QA samples at any time to determine if there is burned material or if it has exceeded the acceptable limits.</li> <li>• MTO understands that this requirement can lead to waste, however it is known that a strong indicator of poor waterproof performance is exceeding the time and temperature requirements. MTO is currently experiencing significant issues with waterproofing and is not currently willing to take additional risk of excessively heated waterproofing material.</li> <li>• ORBA noted that the double layer application method on older contracts that do not use the July 2023 specification requiring it are taking twice as long to apply the waterproofing as anticipated. How will contractors be compensated for that?</li> <li>• MTO cannot discuss payment today at the structures technical subcommittee.</li> </ul> <p><b>Action</b> – MTO will review the no exposure to precipitation or water for at least 72 hours clause.</p>	MTO

<b>INFORMATION SHARED FOR THIS MEETING</b>		
<b>Document Title</b>	<b>Shared By</b>	<b>Format</b>
Dewatering Committee – ORBA Presentation – September 8, 2023	MTO	PowerPoint
Inclusion of FIDR's in ContractsSept82023	MTO	PowerPoint

<b>NEXT MEETING</b>
<ul style="list-style-type: none"> <li>• Friday, November 24, 2023 – ORBA to host</li> </ul>