

# Meeting Notes

## MTO-OAPC Hot Mix Asphalt Subcommittee

<b>Date</b>	April 24, 2025
<b>Time</b>	10:00 am to 1:00 pm
<b>Meeting Hosted By</b>	Ontario Ministry of Transportation (MTO)
<b>Location</b>	Microsoft Teams

### Attendance:

<b>Attendee</b>	<b>Organization</b>
Fernando Magisano	Canadian Asphalt Industries Inc.
Donn Bernal	Ontario Asphalt Pavement Council (OAPC)
Mark Latyn	Capital Paving Ltd.
Selena Lavorato	GIP Inc.
Kevin Martin	Fermar Paving Ltd.
Trevor Moore	Colas Canada Inc.
Amma Agbedor	Asphalt Institute (AI)
Sina Varamini	Crumb Rubber Manufacturers
Ronald Abdul	CRH Canada
Kourtney Adamson	Yellowline Asphalt Products Ltd. (Guest)
Joel Magnan	MTO, Engineering Materials Office (EMO)
Jenn Meleschuk	MTO, Construction Management Office (CMO)
Gelu Vasiliu	MTO, EMO
Stephen Lee	MTO, EMO
Warren Lee	MTO, EMO
Imran Bashir	MTO, EMO
Sonja Dambremont	MTO, Construction Northeast

### Introduction / Announcements:

- Doubra Ambaiowei has left the committee and is no longer with OAPC.
- Donn Bernal has joined the committee as the Technical Advisor, Asphalt Industry for OAPC and the OAPC coordinator for this subcommittee.
- Loan Le has left the committee.
- Heather Bell is the acting Head of Quality Assurance Central, but will continue as the MTO coordinator for this subcommittee.
- Kourtney Adamson attended as a guest.

- MTO delivered a safety talk on equipment blind spots.

## Open Items

### 2019-12-8, Mix Performance Testing

#### Description:

- MTO to develop specification for Mix Performance Testing (MPT) that can be included on any project.
- OAPC wondering if MTO has preferred method for Balanced Mix Designs (BMD).
- MTO is conducting ongoing MPT lab correlations.

#### Discussion:

- MTO presented results of the MPT and ISS (Interlayer Shear Strength) correlation.
- MTO aims to conduct two rounds of the MPT correlation per year; however, in 2024 only one round was conducted. MTO is targeting two rounds in 2025.
- OAPC raised concerns about the exclusion of labs for the statistical analysis and sought methodologies behind exclusion decisions.
- MTO confirmed that some labs were excluded from the IFIT correlations only. The labs excluded were both contractor and QA/referee labs. Exclusions were for not following the test procedures and instructions. MTO has communicated with the individual labs regarding their exclusion from the IFIT correlation analysis.
- MTO emphasized the use of a two-step procedure: procedural compliance and statistical outlier detection. In the future, validation tools will be developed (e.g., Python scripts) for validating data across different lab software.
- OAPC noted a wide spread of Flexibility Index (FI) values, high standard deviation, and inconsistent Coefficient of Variation (COV). It was discussed that testing inconsistencies might stem from poor sample preparation or mix design.
- MTO stated data is being collected for information purposes and correlations are conducted to move towards balanced mix design.
- MTO noted that the Disk-shaped Compact Tension (DCT) test had a low COV and no labs were excluded.
- OAPC observed a drop-off in lab participation at higher passes (20,000+) for Hamburg Wheel Tracking (HWT) test.
- MTO mentioned that this variation may be attributed to sample preparation, conditioning, and variation in the mix gradation.
- OAPC stated that Ontario's binders, especially those meeting the extended BBR that have softer properties, may be more sensitive in the HWT, and further research is needed to determine the influence of binder grades and additives.
- MTO responded that the HWT sensitivity assertion has not been validated.
- OAPC noted large variability in past HWT gyrations data.
- MTO responded that this was due to labs not managing compaction temperatures well, and guidance has since been provided to standardize the compaction procedure.
- MTO stated that from 2026, CCIL will begin the process of certification of laboratories conducting MPT testing. Specifically, for IFIT, DCT, HWT, and ISS.

#### Action Items:

- MTO to share the technical reasoning for the exclusion of labs from the IFIT correlation 2024 Round 1.

### **2022-03-10, Environmental Product Declarations (EPD's) for Asphalt in Ontario**

#### Description:

- As part of the net zero emissions goal, OAPC is seeking to understand MTO's perspectives on EPD's for Ontario asphalt mixes and forging a collaborative approach to make it work.

#### Discussion:

- OAPC reported that a National Research Council (NRC) research project is ongoing to gather baseline data and finalize targets.
- OAPC reported that consultant WAP held a webinar on March 26 by Leanna Miller.
- OAPC stated that mix groupings have been finalized and facilities are being gathered for broad participation.
- OAPC reported a beta version of the EPD is out for member review with aim to complete this by the end of 2025.
- OAPC asked if there is any objective or mandate from MTO's management.
- MTO responded that there is no current directive mandating EPD use.
- OAPC pointed out that EPD would be a good input for MTO's Green Pave System.

#### Action Items:

- No Action.

### **2022-05-13, SMA Applications – SMA Grit Specification Revisions**

#### Description:

- OAPC suggests MTO can look at revising the specification due to the lack of grit sand sources available.
- OAPC indicated that there is variability in how Contract Administration (CA) firms accept gritting material on MTO contracts.

#### Discussion:

- MTO shared the 2024 Round 1 Stone Mastic Asphalt (SMA) grit correlation results.
- MTO stated that the sample size was 500 g for 2024 round 1 and increased to 1000 g for 2025 round 1.
- MTO stated that the initial purpose of this correlation was to examine the variability in AC content and gradation to aid in the selection of new specification acceptance limits.
- In this correlation, AC content was around 0.9%, with labs' results ranging from 0.7% to 1.1%.
- MTO is considering expanding the acceptance limits for SMA grit AC content based on these correlation results from the existing 0.8 to 1.0%.
- OAPC raised concerns about how unacceptable SMA grit will be handled.

- MTO stated the SMA grit specification is being updated to clarify acceptance requirements, payment adjustments for both gradation and AC content and provide alternate repair methods and referee testing in case gradation or AC content do not meet requirements.
- MTO is targeting two rounds of the SMA Grit correlation per year.

Action Items:

- No Action.

## **2022-09-12, Smoothness Specification – Future Changes**

Description:

- MTO reviewing the current smoothness specification and the list of exemptions for existing pavements. Specifically, MTO would like to modify section 8.01.02:
- *“The first adjacent lane consisting of one or more lifts of hot mix asphalt that shall match to an existing surface that is not being resurfaced as part of this Work.”*
- MTO noted that currently projects have excluded entire lanes from smoothness measurements due to the tie-in exemption.

Discussion:

- Smoothness specification revisions are still under internal review.
- MTO moved to close this item as more time is required for an extended internal review process.

Action Items:

- Close Item.

## **2022-12-13, Additional OAPC 2025 Research Program Outline**

Description:

- OAPC initiated a study in collaboration with Carleton University. The expected timeline to complete the study is 3 years.
- The study objective is to quantify the Green House Gas (GHG) emissions at asphalt plants. This study supports the move to net zero emissions.
- OAPC is also conducting an Ontario-Mix Asphalt Program (O-MAP) study on MPT.

Discussion:

- OAPC shared the O-MAP MPT executive summary for round 3.
- MTO stated the round 3 results were positive and BMD is achievable. The mix performance improved by adjusting gradation and AC content through the BMD process. The SP12.5 FC2 (PG70-28) mix met or exceeded the MTO's MPT preliminary threshold values.
- MTO emphasized that gradation and specimen preparation were critical to passing the tests.
- MTO encouraged by the O-MAP results, is considering moving to a BMD trial with a similar mix and updating the MPT specification to integrate BMD acceptance and QA MPT testing for information.

- OAPC offered to provide O-MAP study background data to MTO.
- MTO will further review the documents already sent and reach out if more information is required.

Action Items:

- No Action.

**2023-06-1, HMA Optimization**

Description:

- Warm Mix Asphalt (WMA) coupled with higher Reclaimed Asphalt Pavement (RAP) combinations to reduce environmental impacts.
- OAPC wants to promote using recycled material.

Discussion:

- OAPC reported that an update on the York Region pave-in is expected soon. The contract has been awarded and the high RAP mix is being designed.
- OAPC stated that the pave-in will most likely focus on plant production of high RAP mixes during the day as opposed to the paving operation, as paving will be night work. However, a video of the lay down operation will be shared.
- OAPC highlighted that the high RAP trial pavement section will be instrumented by NRC and a video will be shared of the instrumentation installation prior to paving.

Action Items:

- OAPC to invite MTO to attend pave-in.

**2023-09-1, Balanced Mix Design**

Description:

- OAPC wants to understand MTO's process on BMD.

Discussion:

- OAPC provided an update that the Federal Highway Administration (FHWA) trailer is not able to come to Ontario since it is pre-booked for the next two years and there are restrictions on bringing it across the border.
- OAPC is considering collaborating with Asphalt Institute (AI) to offer an advanced Balanced Mix Design program in Ontario that includes performance testing, sample preparation, data analysis, and data quality if they can partner with a lab that is appropriately equipped.
- MTO stated that the new CCIL MPT certification is planned for 2026, independent of this potential training.
- MTO is aiming to draft a new NSSP for BMD, encouraged by results of the O-MAP study, that will include requirements for the labs conducting the BMD and MPT to participate in MTO's correlations with good standing and possible certification by CCIL or other jurisdictions.
- OAPC asked if MTO's CETI labs could be used for a training facility for the AI program.

- MTO stated it is currently committed to CCIL inspector training and the MTO labs will be undergoing upgrades over the next two years, making it unfeasible to host new training.
- MTO suggested OAPC approach an Ontario lab that is fully equipped to perform IFIT, DCT, and HWT.

Action Items:

- OAPC to work with the Canadian Asphalt Institute engineer to organize Ontario BMD/MPT training.

**2023-09-3, OPSS 313 – Revisiting Quality Evaluation**

Description:

- How can OAPC increase or strive for better quality in asphalt pavement?

Discussion:

- OAPC stated they are looking for an action plan to revisit the compaction parameter for an increased payment factor as it relates to pavement performance.
- MTO stated that a response to OAPC's letter is being prepared. It requires presenting a strong technical and business case and justification that can be supported at all levels where endorsement is required.

Action Items:

- MTO to provide an official response to the OAPC letter.

**2023-12-1, CTAA 2025 & MTO's Collaboration**

Description:

- OAPC requested MTO to collaborate for the Canadian Technical Asphalt Association (CTAA) 2025 conference since the conference is coming to Ontario. OAPC feels that MTO should be attending given their leadership role.
- OAPC requested MTO to showcase their facility during CTAA 2025.

Discussion:

- OAPC stated that the MTO submitted a large number of abstracts, and many were approved by CTAA.
- OAPC requested financial support at the partner level for the CTAA conference from MTO.
- MTO stated that financial support requests must go to MTO's executive committee and are not handled at this committee level.
- OAPC plans to hold a one-hour workshop and a MTO CETI lab tour for around 75 people, possibly split into two groups as previously done for the ATS workshop.
- MTO suggested the two groups could be split again so the labs won't be overcrowded.
- MTO staff are expected to attend since they are involved in presenting papers or helping with the workshop. Formal approvals for attendance will be sought closer to the event date.

- MTO stated that future CETI lab construction upgrades work could pose a minor risk to the tour, but it is expected to be manageable.

#### Action Items:

- OAPC to request financial support from MTO-ORBA executive committee.

### **2024-03-1, Revisit AC Index Publications**

#### Description:

- OAPC asked why the AC Index was not published with updated values over the winter.

#### Discussion:

- MTO mentioned that the methodology for the AC price index was shared with OAPC on December 6, 2024, but has not yet received a response from OAPC and is awaiting feedback.
- MTO is in the process of conducting a jurisdiction scan and survey on AC price indices for Ontario Municipalities to ensure MTO has a full understanding of the impacts of any changes. This work was delayed due to the writ period, but it is ongoing.
- MTO will revisit its process for AC price index adjustment based on the results of this survey.
- MTO suggested removing this item and will update OAPC once this work is complete.
- OAPC stated that they are waiting for the decision on whether the ministry could publish the off-season AC price index.

#### Action Items:

- Item Closed.

### **2024-09-2, PGAC Sampling Requirements**

#### Description:

- OAPC inquired if it is possible to change the Ontario Provincial Standard Specification (OPSS) 1101 requirement to have a sampling spigot and whether in-line samples should be acceptable.

#### Discussion:

- MTO raised concerns about PGAC samples not representing the actual material used in the mix when tanks are emptied and refilled without re-sampling.
- MTO proposed to increase sampling frequency and to review tank capacity and sampling practices.
- OAPC proposed in-line auto-samplers as they are preferred due to safety and consistency for more representative samples, and requested that in-line sampling be allowed in MTO specifications.
- MTO stated that any specification changes must go through MTO's internal and external consultation process before updates can be made.

- MTO requested OAPC provide some data regarding the distribution of plants that have in-line sampling vs tank sampling.

Action Items:

- OAPC to provide distribution of plants with in-line vs tank sampling.
- MTO to review PGAC sampling frequency and in-line sampling option.

**2024-12-2, Revisit Cross Slope Specification**

Description:

- OAPC has concerns with the implementation and enforcement of the cross-slope specification.

Discussion:

- OAPC stated that their members have difficulty meeting this specification.
- OAPC noticed an amended cross slope SSP is currently posted on TCP for consultation with updated acceptance limits for lots and sublots, improved wording in the CAIS and updated cross slope forms.
- MTO reminded OAPC that the Highway Design Office is the custodian for this specification.
- MTO is looking at different measurement methods/technologies and which technology is practical for measurements during construction. Newer technologies such as 3D scanning and Automatic Road Analyzer (ARAN) have very high sampling rates versus traditional methods (e.g., straight edge), therefore, measurement values will be different.
- MTO is looking at these different technologies and conducting data analysis at various reliability levels to determine their effect on measurement values.

Action Items:

- OAPC to provide comments on TCP for the new specification.

**2024-12-3 New MTO Protocols for DSM Application and Renewals**

Description:

- OAPC has concerns with the letter some PGAC suppliers received regarding a new Designated Sources of Materials (DSM) protocol.

Discussion:

- MTO reported that an initial miscommunication occurred regarding suppliers' notifications, but now all PGAC suppliers have received their reapproval letters.
- MTO is analyzing submitted data and working with suppliers on PG grade reapprovals. Emulsion suppliers are next in line for review and will also receive reapproval letters.
- MTO stated that DSM communications are proprietary between MTO and individual suppliers, and MTO recommended closing the DSM topic as it's not directly related to the subcommittee's broader discussions.



#### Action Items:

- Item Closed.

## **New Items**

### **2024-04-1 LS-605 Relative Density and Absorption of Fine Aggregate – for SMA Aggregates**

#### Description:

- OAPC has concerns that labs are not following LS-605 when testing fine aggregates with a lot of chip, especially for SMA mixtures.
- OAPC has concerns that some QA/Referee labs are not aware of this provision or are not taking this into account when doing the testing.

#### Discussion:

- An alternative method is available for accurate results in LS-605, involving aggregate size separation for the 2.36 mm sieve and detailed procedures outlined in Clause 6.2.6 of LS-605. If the material slumps before the saturated surface dry condition is reached, a three-fraction separation (retained on 4.75 mm, 2.36mm to 4.75mm, and passing 2.36mm) is necessary instead of the usual two.
- There is a lack of awareness regarding proper protocols and methods among lab technicians. This situation poses a problem for testing and is a concern for contractors, and guidance is needed.
- OAPC believes that some QA and referee labs may be unaware of this method, leading to incorrect absorption and density results, which in turn affect mix designs and project quality.
- Contractors expect lab technicians to be competent; a lack of familiarity undermines confidence. Incorrect testing can affect key properties like VMA and absorption, leading to failures. Labs usually realize too late (after seeing bad slumps) that they did not follow the proper protocol.
- OAPC suggested a bulletin be issued to all labs to increase awareness of LS-605 Section 6.2.6 requirements.
- OAPC contemplated the possibility of introducing correlation tests with coarse material to confirm lab competency, similar to hot mix proficiency programs, in which to clarify when the paper method must be used — possibly set a trigger value based on the percentage retained on the 2.36 mm sieve (suggested >40%).

#### Action Items:

- MTO will take back these concerns to the Soils & Aggregates Section and will look into various options to develop awareness in the labs or if any clarifications in the LS method are necessary.

## **2024-04-2 Restriction on US Bidders**

### Description:

- In response to US tariffs that were initiated on March 3, 2025, procurement restrictions on US bidding came into effect for the Province of Ontario Public Service on March 4, 2025.

### Discussion:

- On March 4th, a Procurement Restriction Policy that defines and restricts United States businesses from accessing public sector procurements in Ontario became effective. As part of each procurement process, Bidders, Service Providers, and Proponents will be provided with a declaration form to confirm their eligibility to bid under the policy. Additional policy background information is available at: [Procurement Restriction Policy](#).
- Note: It was clarified that this policy applies to OPS issued contracts, e.g. contract between MTO and Prime Contractor, but does not apply to arrangements made between the contractor and their subcontractors.

### Action Items:

- No Action.

## **Roundtable Discussion**

- Propose to postpone May's meeting to June, as this meeting was pushed back to late April due to the writ period.
- MTO to provide alternative dates to OAPC.

## **Information Shared for this Meeting**

### **Documents Share by MTO**

1. MPT Correlations Date for Sharing with ORBA Cumulative 2024 (March 4, 2025) (PDF)
2. 2024 R1 SMA Grit Summary for OAPC (March 4, 2025) (PDF)
3. EquipmentBlindSpots (PDF)
4. Managing\_Blind\_Spots\_ToolboxTalk (PDF)

### **Documents Shared by OAPC**

1. O-MAP R3 Executive Summary Report\_Jan 25 (PDF)
2. 2024 FAS Slido Poll-Results (PDF)

## **Next Meeting**

- 2025 Meeting Dates (10 am to 1 pm):
  - June 23 – MTO to host.
  - September 18 – OAPC to host.
  - December 11 – MTO to host.
- Meeting Adjourned 1:00 pm