

MTO-OAPC HOT MIX ASPHALT SUBCOMMITTEE MEETING NOTES

Date: May 23, 2024
Time: 10:00am to 1:00 pm
Location: 95 Arrow Road (CETI) & Microsoft Teams

| ATTENDEE | ORG. | ATTENDEE | ORG. |
|-------------------------------|----------------------------------|------------------------------|-------------|
| Doubra Ambaiowei (DA) | OAPC/ORBA | Joel Magnan (JM) | MTO |
| Fernando Magisano (FM) | Canadian Asphalt Industries Inc. | Seyed Tabib (ST) | MTO |
| Mark Latyn (ML) | Capital Paving | Gelu Vasiliu (GV) | MTO |
| Selena Lavorato (SL) | GIP Inc. | Gizelle Cotton (GC) | MTO |
| Kevin Martin (KM) | Fermar Paving Ltd. | Sonja Dambremont (SD) | MTO |
| Trevor Moore (TM) | COLAS Construction | Dariusz Wodala (DW) | MTO |
| Amma Agbedor (AA) | Asphalt Institute | Imran Bashir (IB) | MTO |
| Sina Varamini (SV) | CRM of Americas | Stephen Lee (SL) | MTO |
| Selena Lovarato (SL) | GIP Inc. | Warren Lee (WL) | MTO |
| Steven Crombie | ORBA | Loan Le (LL) | MTO |
| REGRET | ORG. | REGRET | ORG. |
| Walid Abou-Hamde (WAH) | ORBA | | |
| Vincent Gangaram (VG) | Dufferin Construction | | |
| Steve Manolis (SM) | GIP Materials Engineering | | |

| INTRODUCTION / ANNOUNCEMENTS | |
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| <ul style="list-style-type: none"> • Welcome to CETI – emergency procedure briefing • No changes to subcommittee membership for either OAPC or MTO • OAPC delivered a safety talk on the top 7 safety concerns for roadway construction (noise, heavy equipment, weather, visibility, etc.) | |

| OPEN ITEMS | | ACTION BY |
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| Dec-19-8 | MIX PERFORMANCE TESTING <i>Description:</i> <ul style="list-style-type: none"> • MTO to develop specification for MPT that can be included on any project. | |

| OPEN ITEMS | ACTION BY |
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| <ul style="list-style-type: none"> • OAPC wondering if MTO has preferred method for balanced mix designs. • OAPC enquiring about IDEAL CT. Is it a consideration for Ontario? • MTO is conducting ongoing MPT Lab Correlations <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • MTO shared the ISS correlation results (titled “Item Dec-19-8_ISS Correlations Data for Sharing with OAPC Cumulative May 15 2024”) for round 2 in 2023 – 7 labs participated. MTO noted COV has decreased. • OAPC stated that lab prepared samples had a lower COV. MTO noted this is why it has moved to field coring on actual construction contracts to better simulate real world conditions. • OAPC inquired about application rate verification. MTO is using the LS method which includes the use of the data provided by the distributor truck computer. • OAPC inquired about the low strength and inconsistency between strength and application rate. MTO suggested that NCHRP recommends increasing tack coat application rates to increase shear strength. • OAPC asked what MTO Pavements believes the interlayer strength should be for design purposes so that the constructable shear strength can be brought to this design value. MTO considers 100% friction. For now, MTO is considering recommendation from NCHRP (279 kPa). MTO emphasized the importance of quality tack coat and reminded that Asphalt Institute stated that lack of bond between asphalt layers can result in the loss of up to 100% of the asphalt pavement. In addition, increased consideration for tack coat was suggested by the TTI/KPMG report provided to OAPC in 2018. • No updates on Hamburg, DCT, or SCB. MTO shared that CCIL will be conducting certification of laboratories and technicians conducting Hamburg, DCT, IFIT, and ISS testing starting in 2026. Contractor lab certification will be optional. Laboratories conducting this testing for information must be certified. In the future laboratories conducting BMD will also need to be certified (for both MPT and Type A). <p>ACTION – No Action.</p> | |

| OPEN ITEMS | ACTION BY |
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| <p>May-22-10 ENVIRONMENTAL PRODUCT DECLARATIONS (EPD’S) FOR ASPHALT IN ONTARIO – MTO’S POSITION?</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> As part of the net zero emissions goal, OAPC is seeking to understand MTO perspectives on EPD’s for Ontario Asphalt Mixes and forging a collaborative approach to make it work. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> OAPC understands that in British Columbia, COLAS, and NAPA partnered to start collecting EPD data. NRC and NAPA are working together to collect this information. Sustainability consultants have provided revised quotes for gathering this data. Asphalt Institute is also working on this initiative. OAPC inquired if MTO is aware of low carbon pooled fund for preparation of EPDs. TAC is approved to start collecting funds to determine best practices for procurement, construction, materials management and testing etc. for agencies to choose the low carbon options. OAPC inquired if MTO has any low carbon concrete projects. MTO replied that most concrete pavement projects are delivered through AFP, so the decision to propose such materials is left to the consultant-designer partnership. MTO indicated that the directive is that a project with a better sustainability score may be considered even if it comes with marginally (up to 10%) higher price. MTO indicated that once OAPC prepares its EPDs a meeting with both industries will be necessary to determine a scoring system. OAPC asked again to bring this to the climate change office to make sure the direction is clear. <p>ACTION – MTO to consult with climate change office.</p> | |
| <p>May-22-13 SMA Applications – Grit Sand Specification Revisions</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> OAPC suggests MTO can look at revising specification due to lack of grit sand sources available. OAPC indicated that there is variability in how CA firms accept gritting material on MTO contracts. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> MTO provided the proposed gradation requirements to OSSGA. MTO is reviewing the referee policy and remediation process with Regional Quality Assurance. OAPC is in the process of gathering the information about the friction testing and data on past contracts. <p>ACTION – OAPC will determine the contract numbers, specific dates, and locations where friction testing was conducted on SMA in the past.</p> | <p>OAPC</p> |

| OPEN ITEMS | | ACTION BY |
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| Sept-22-12 | <p>Smoothness specification – future changes <i>Description:</i></p> <ul style="list-style-type: none"> • MTO reviewing the current smoothness specification and the list of exemptions for existing pavements. Specifically, MTO would like to modify section 8.01.02 paragraph f: <ul style="list-style-type: none"> ○ <i>“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.”</i> • MTO noted that currently projects have excluded entire lanes from smoothness measurements due to the tie-in exemption. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • MTO is finalizing the specification. There are still more steps for internal consultation. The specification will be published on TCP once it is ready. • OAPC asked if it is possible to have a background or explanation behind the changes when it is published on TCP. MTO explained that the changes should be self-explanatory. Premise for these changes were limiting the amount of smoothness repairs and to remove the adjacent lane exemption for smoothness measurement. The concern was that multiple lane kilometers were exempt from smoothness requirements on new projects due to the adjacent lane exemption. <p>ACTION – MTO will continue following the consultation process.</p> | MTO |
| Dec-22-13 | <p>ADDITIONAL OAPC 2024 RESEARCH PROGRAM OUTLINE <i>Description:</i></p> <ul style="list-style-type: none"> • OAPC initiated a new Study in collaboration with Carleton University. The expected timeline to complete Study is 3 years. • The study objective is to quantify the GHG emissions at asphalt plants. This study supports the move to net zero emissions. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • OAPC focus remains on integrating more RAP to reduce GHGs and implement BMD to reduce cracking and rutting. <p>ACTION – No Action.</p> | |

| OPEN ITEMS | ACTION BY |
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| <p>June-23-1 HMA OPTIMIZATION <i>Description:</i></p> <ul style="list-style-type: none"> • WMA coupled with higher RAP combinations to reduce environmental impacts. • OAPC wants to promote using recycled material. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • OAPC discussed their 2025 Pave-In program. The target is to have the project in July. OAPC is currently looking for an agency partner (municipal or provincial). The day will also consist of visiting the plants to explain the production procedure. The project will tie in high RAP mixes and some balanced mix design principles. • MTO asked if the project will be base or surface course. OAPC indicated this is dependant on the agency. MTO indicated that surface course must be DSM aggregate due to friction course. OAPC indicated that the location also needs to be close to the suppliers willing to participate in the project. • OAPC indicated that in their opinion anything over 25% RAP is considered high RAP. • MTO indicated that there are multiple factors to consider including RAP pile management, rejuvenator compatibility, age and consistency of RAP, effective binder content of RAP, etc. MTO also asked what thresholds will be used for BMD since they are not yet established in Ontario. MTO states that high RAP introduction needs to follow a gradual approach in conjunction of RAC and mix performance testing. MTO is incorporation RAP in various ways including granular, shouldering, cold plant recycled mix, and HMA in binder courses up to 40%. In addition MTO is exploring the use of Ontario RAP in surface treatment, micro surfacing, and cold patch. International suppliers have approached MTO with cold patch materials with RAP from Korea. <p>ACTION – No action.</p> | |
| <p>Sept-23-1 BALANCED MIX DESIGN <i>Description:</i></p> <ul style="list-style-type: none"> • OAPC wants to understand ministry's process on BMD. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • OAPC has inquired about the FHWA trailer. OAPC needs to seek approval for this still as well, but it is under consideration. • OAPC is aiming for some training and presentations next year. <p>ACTION – OAPC to assess the feasibility of bringing the FHWA trailer to Ontario and organize OAPC technician BMD training.</p> | <p>OAPC</p> |

| OPEN ITEMS | ACTION BY |
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| <p>Sept-23-2 PH-CC-866: BINDER REPLACEMENT ADJUSTMENTS <i>Description:</i></p> <ul style="list-style-type: none"> OAPC stated that the PH-CC-866 indicates +0.2% in AC Content and a Binder Replacement of -5.0%. The negative may be a mistake. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> OAPC indicated that not allowing a positive binder replacement penalizes contractors because they cannot do the JMF adjustment. MTO responded that a positive adjustment will allow more RAP past the specified upper limits into the mix, particularly at a magnitude of 5% binder replacement. <p>ACTION – OAPC to provide a specific example that this created a problem at the contract level.</p> | <p>OAPC</p> |
| <p>Sept-23-3 OPSS 313 – REVISITING QUALITY EVALUATION <i>Description:</i></p> <ul style="list-style-type: none"> How can OAPC increase or strive for better quality in asphalt pavement? <p><i>Discussion:</i></p> <ul style="list-style-type: none"> OAPC shared the letter titled “ORBA-OAPC Proposed Changes to ERS Calculations in OPSS-PROV 313” MTO will review. <p>ACTION – MTO will review the letter.</p> | <p>MTO</p> |
| <p>2023-12-1 CTAA 2025 & MTO’S COLLABORATION <i>Description:</i></p> <ul style="list-style-type: none"> OAPC requested MTO to collaborate for CTAA 2025 since the conference is coming to Ontario. OAPC feels that MTO should not be declining given their leadership role. OAPC requested MTO to showcase their facility during CTAA 2025. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> Selena from OAPC will be working to make CTAA 2025 a success. <p>ACTION - OAPC will bring the CTAA 2025 MTO participation and CETI tour inquiry to MTO-ORBA Executive Committee.</p> | <p>OAPC</p> |
| <p>2024-03-1 REVISITING AC INDEX PUBLICATIONS <i>Description:</i></p> <ul style="list-style-type: none"> OAPC asked why AC Index was not published over the winter. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> MTO is working on providing information on to what goes into the index. OAPC asked if it is better to go to the executive committee with this item. MTO indicated that they will respond at the next meeting. <p>ACTION – MTO to provide what goes in to determining the index, who submits data, etc.</p> <p>ACTION – OAPC will determine if a separate meeting is necessary to explain to MTO the impacts on non-MTO tenders.</p> | <p>MTO/OAPC</p> |

| OPEN ITEMS | | ACTION BY |
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| 2024-03-3 | <p>OAPC'S PROPOSED PAVE-IN FOR HIGH-RAP MIX TRIALS IN 2025</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> OAPC updates on the 2024 research program <p><i>Discussion:</i></p> <ul style="list-style-type: none"> This item was discussed in HMA optimization (item June-23-1). <p>ACTION – No Action.</p> | |

| NEW ITEMS | | ACTION BY |
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| | NONE | |

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| | <p>ROUND TABLE</p> <ul style="list-style-type: none"> No roundtable items | |
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| INFORMATION SHARED FOR THIS MEETING | | |
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| Document Title | Shared By | Format |
| Item Dec-19-8_ISS Correlations Data for Sharing with OAPC Cumulative May 15 2024 | MTO | Text, graphs and tables in slide format (pdf) |
| ORBA-OAPC_Proposed Changes to ERS Calculations in OPSS-PROV 313 | OAPC | Letter (text, graphs) |

| NEXT MEETING |
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| <ul style="list-style-type: none"> 2024 Meeting Dates: <ul style="list-style-type: none"> March 28 (OAPC Host) May 23 (MTO Host) September 19 (OAPC Host) December 5 (MTO Host) <p>All meeting scheduled from 10 am - 1 pm</p> <p>Meeting adjourned: 12:50 pm</p> |