March 11, 2026
Meeting – HMA Tech Team

Location: Teams Meeting / In-Person @ Hill Farms Madison, Rm. S152

Date: 03-11-2026

Time: 9:00AM – 12:00PM

Attendance

- Casey Wierzchowski
- Albert Kilger
- Derek Frederixon
- Deb Schwerman
- Andrew Hanz
- Jhuma Saha
- Cheng Thao
- Myungook Kang (MK)
- Jeff Anderson
- Matt Andreini
- Taylor Christianson
- Bryce Cibulka
- Craig Konkle
- David Hose
- Michelle Gehrke
- Chad Hayes
- Jon Wixom
- Justin Hoffman
- Peter Kemp
- Dan Kopacz
- Jon Schave
- Scott Syron
- Travis Kurey
- Matthew Woolhiser
- Cayley Young
- Zach Lemke

Agenda Items

1. Research Updates
    i. WHRP
        - 24-01 High Traffic Mixes
            - Final documents are in and will be shared soon.
        - 25-01 Reflective Cracking
            - Sample collection is ongoing.
        - 26-04 Hamburg for Fine Mixes

    - Evaluating whether fine-graded mixtures that fail Hamburg tests are actually rutting in the field.
  - AI for BMD
    - A new proposal is being scored to use AI to narrow down which volumetrics would perform best in BMD.

ii. NRRA
  - Validation of loose mix aging procedures for cracking resistance evaluation in BMD.
  - Recently completed standardization of SIP calculations for Hamburg Wheel Tracking Test.

iii. CAPRI
  - Studies for reheating and aging.
  - Validation of short and long term over aging procedures.
    - Could influence our procedures eventually.
  - Examining specimen fabrication variabilities of BMD.

2. Review of Previous Action Items
  - (See notes below under Previous Action Items section)
3. SMA for Small Quantities
  - Dan K.: For small quantities (i.e.: 500 tons), a full test strip is not feasible. The Mixture Use Table in the project plans will explicitly define how the material is to be accepted. For density, these projects will likely be accepted with coring.
    - Scott S.: We had a project where I offered to skip the density test strip and just go into production coring. The contractor, however, was not comfortable with the risk of 1 core representing 1,500LF for acceptance. So, we ended up doing the test strip for a 2000-ton job.
  - Jon W.: Is there anything about localizing [unacceptable] cores such as 50 feet each way if something is wrong [more than 3% low].
    - Dan K.: This goes back to the discussion on dispute resolution.
    - Albert K & Dan K.: We've talked about this a little but do not yet have a formal procedure. Since you do not find the failure until after the core is taken from the job and tested in the lab, it is generally difficult to go back out to core at 50-foot increments to isolate the failing area. One option is to use uncorrelated gauges that are being used on the job for process control to constrain the area.
    - **Action Item:** Coring dispute resolution and determining extents of unacceptable material will be further discussed in the Density Subcommittee to formalize procedures.
4. SMA Designs with Different Mineral Filler Sources

i. 2 Mix Designs, 1 Test Strip
   - Albert K.: The proposed solution is for the contractor to submit two distinct mix designs differing only by the mineral filler source. This allows the department to track performance without penalizing the contractor with a mandatory new test strip.
     - Derek F.: If you're just switching fly ash sources this isn't a problem, but if you're switching from fly ash to lime then you will want another test strip. There are volumetric differences such as we typically use 4-6% fly ash while we use more like 10% for lime.
       - Casey W.: This should only apply to situations where the constituent quantities aren't changing, just the source of the material.
       - Dan K.: I think as long as the contractor takes care of the testing themselves, I don't think that change will affect things volumetrically. The contractor will still have to make sure they are meeting the 4.5% air voids target. As long as they do that, I don't think the new volumetric test strip would be needed.
         - Derek F.: We are more concerned about the nuclear gauge offsets changing and would want a density test strip.

5. AWP CMM
   - A supplementary CMM has been developed alongside the new AWP specs to strip out legacy QMP material.
   - **Action Item:** Department will share watermarked drafts with industry to contractors can review and provide input on the evolution of the new CMM.
6. Update on Progress of Density Subcommittee
   - Current AWP drafts do not include uncorrelated nuclear gauges, but the subcommittee recognizes they are still necessary where test strips or coring aren't feasible.
   - Albert K. & Dan K.: The PWL mainline program is not changing. Mainline PWL will continue to use cores or correlated gauges. Uncorrelated gauges are only being discussed for department-accepted materials (such as untrafficked shoulders).
   - To prevent a "Wild West" scenario among regional designers, BTS is developing specific criteria based on tonnage thresholds, lane length, and traffic that will explicitly elevate acceptance testing from uncorrelated gauges up to cores or correlated gauges.

- **Action Item:** Create a dispute resolution program for department acceptance density.

7. New / Updated Worksheets
   - Albert K. demonstrated several new Excel worksheets.

   i. Dept. Acceptance Density Incentive Calculator
   - A new worksheet that calculates incentives/disincentives for department-accepted material. It will be updated soon to handle individual failing tests, not just sublot averages.

   ii. CoreDry Weight Record Worksheet
   - Developed to track weights, temperatures, and drying cycles to ensure repeated CoreDry drying isn't damaging the samples.
     - Scott S. and Taylor C. provided input on who should fill this out. It was agreed that project staff/witnesses will be responsible, and the HMA IA must be notified prior to a CoreDry being used.

   iii. PWL Production Worksheet v4.0
   - Separates AC, Gsb, Gse, and VMA calculations into distinct tabs.
   - Gsb values auto-populate to save time.
   - Handles VMA pay adjustment directly.
   - Additional protections to prevent users from accidentally pasting data into hidden sublot cells.
   - Dan K. raised concerns that auto-populating Gsb might lead to oversight.
     - Albert K. noted that is relies on users entering the correct Gsb when it changes, which must be communicated clearly via daily records.

8. Profiling of Non-Disincentive Pavement (MK)
   - MK indicated that several recent projects failed to conduct required pavement profiling on non-disincentive pavements. Contractors must ensure the IRI bid item is active and profiling is included in the QC plan, as it is still mandatory to identify and correct localized roughness.

9. Website for Meeting Minutes

   i. https://wisconsindot.gov/Pages/doing-bus/contractors/tech-teams/materials.aspx

10. Upcoming Meetings

    i. Tech Team – June 10

    ii. BMD Subcommittee – TBD

    iii. Density Subcommittee – TBD

    iv. Upcoming Training

        i. The BTS Material Quality Assurance 2026 Updates training will be pre-recorded, with live Q&A sessions scheduled for March 30 and April 9. The link will be provided in the meeting minutes.

            1. Link to Training: https://wisconsindot.gov/pages/doing-

bus/contractors/cntrctr-trng/default.aspx

Previous Action Items

- 04-29-2025 Spec SubC
  - Department will draft a shadow SMA PWL SPV.
    - Work is still being done to draft the SMA PWL SPV.
- 05-20-2025
  - Department will shadow SMA projects to determine if number of Gmb replicates can be reduced.
    - In progress. Analysis will be available later this year.
  - Department will look to equip regions with core dryers.
- 05-30-2025 Spec SubC
  - Department will collect information on SMA joints for future PWL LJD implementation.
    - Dan K.: We could temporarily proceed with PWL for mainline without joint requirements while the limits are still being analyzed.
- 12-16-2025 Spec SubC
  - Department will clarify in the 2027 MOTP that SMA split samples should not be recombined due to the larger sample sizes (essentially requires 2 individual samples to be pulled from the truck).
  - Department may create an IA checklist for CoreLok (related to bag sizes).
  - Department will update the 2027 MOTP to address bag size requirements with consideration to any industry feedback.
    - Dan K.: Both the contractor and department must consistently use the same size bag to ensure that the bag is not the cause of differences.
  - Department will update the AWP spec and STSP for SMA Test Strips to have the department test both volumetric samples (instead of randomly choosing one).
  - Discuss thermometer requirements at Tech Team (M339).