

## HMA and PCC Independent Assurance (IA) Guidelines

### During COVID-19 Pandemic

1. Independent Assurance Sampling and Testing for Concrete and Soils
  - Continue operating at the job site, maintain social distance during IA sampling and testing until told otherwise.
2. Independent Assurance Sampling and Testing for Hot Mix Asphalt (Plant)
  - Suspend all HMA IA's performed at the Plant until further notice.

### **Concrete**

1. Precast Consultant Inspection Companies service will continue operating as usual, until told otherwise.
2. New Mix Designs Requiring Trial Batch Testing (Ready Mix Producers Only)
  - a. Suspend all Trial Batch Testing Requirements for Ready Mixed Producers until further notice.
  - b. Allow for temporary approval with the following language:  
MassDOT has temporarily suspended all ready-mixed concrete trial batch testing requirements on new mix designs until further notice. As a result, the following cement concrete mix designs shall be granted "Provisional" approval, contingent on acceptance testing performed at the job site, in lieu of trial batch testing requirements. Conforming acceptance test results shall be granted "full" approval for the duration of the annual approval cycle, and will expire on **April 1, 2021**. "Provisional" approval of the following mix designs shall be rescinded if acceptance test results are not in conformance with the specifications requirements. Any changes will require new mix design submittals.
3. Cement Concrete Verification Sampling and Testing Program of Constituent Materials of Cement Concrete performed by Research and Materials (RMS)
  - a. Cancel all remaining "Phase I" Verification Sampling and Testing requirements that were to be performed by RMS staff (Was scheduled to take place from January 1 through June 30).
  - b. Begin "Phase II" Verification Sampling and Testing as scheduled (Tentatively scheduled to begin June 1 through December 1).
4. All other Verification Sampling and Testing Programs performed by RMS
  - a. Cancel all remaining Verification Sampling and Testing requirements that were to be performed by MassDOT staff
  - b. Resume Verification Sampling and Testing tentatively beginning in June 1 through December 1.
5. All District inspectors will no longer perform any inspection and testing at the concrete producer's plant prior to concrete shipment until further notice. Concrete producers shall email copies of the batch tickets to the District Materials Engineer for each truck load delivered. Concrete testing at the project (slump, air and temperature) and cylinder breaks will be used for acceptance.

### **Hot Mix Asphalt (HMA)**

1. **Plant and Lab Prequalification** - For those plants that have not been inspected by RMS in 2020.
  - a. RMS will send each HMA plant and lab the 2020 checklist used by RMS.

- b. The Contractor's QC Manager will perform their own internal audit of the plant and lab.
  - c. The Contractor will email a completed checklist and all Quality System documents to RMS.
  - d. RMS will perform a phone interview to go over the results of the audit. RMS will then notify NETTCP to provide an interim lab qualification.
  - e. Once regular operations resume the RMS QA Unit will verify plant and labs for conformance with MassDOT specs and requirements.
2. **Mix Design Verification** – District verification of HMA mix designs will be suspended until further notice.
- a. The Contractor will submit their mix designs with all required information on the HMA Mix Design Workbook.
  - b. Contractor will deliver aggregate to the District lab to determine consensus properties. *The District may also request cans of binder if they are able to perform mix verification in their lab.*
  - c. The District will complete the verification portion of the mix design workbook using District aggregate results and the Contractors volumetric results.
  - d. If a mix requires performance testing (i.e. hamburgs, SCBs, or beams) the Contractor will fabricate the samples, complete the fabrication checklists, and deliver the samples to RMS for testing. *The District will not be required to witness sample fabrication.*
  - e. Mix design submissions that meet MassDOT requirements will be approved (the approval letter will note that the mix design was not verified by the District) and the mixture approval is dependent on mix testing during production.
3. **Production HMA Testing** – Acceptance testing performed by MassDOT during HMA paving production and placement will continue as follows:
- a. HMA pavement cores will continue to be cut by Contractor QC on the job site and submitted to the District inspector for testing at the District lab.
  - b. HMA loose mix testing will be modified as such:
    - i. Loose mix sampled by District inspector at the HMA plant will be discontinued until further notice.
    - ii. The day before paving the Contractor will notify the DME with the anticipated quantity of mix to be produced. The DME will determine the random numbers for Acceptance sampling.
    - iii. During production Contractor QC will perform the following extra duties:
      - 1. Contractor to sample loose mix based on the District's random numbers and fill two sample boxes marked with the required sample information. The Contractor will note: "MassDOT sample" on the truck ticket along with mix temperature.
      - 2. Collect a can of binder from the in-line sample at the usual sampling frequency of one can per 12,000 tons of superpave mix.
      - 3. Collect all plant production slips and PG binder bill of ladings for that day's production.
      - 4. Contractor QC will then deliver the boxed sample(s), production slips and BOLs, and a copy of all QC results to the District lab.
        - a. If the District lab is unable to accept delivery the Contractor will store the boxed samples and documentation at their facility. Once testing can resume, the District lab will obtain the samples, prioritize, and test them accordingly.

- iv. District lab will reheat boxed samples in *their lab* and perform testing as they normally would at the HMA plant. Lab testing will be performed at:
  - 1. District 1 – in the District lab.
  - 2. District 2 – in the District lab.
  - 3. District 3 – in RMS HMA lab or District 2 lab.
  - 4. District 4 – in the District lab.
  - 5. District 5 – in the District lab.
  - 6. District 6 – in RMS HMA lab or Districts 4 or 5 lab. *ATC should not be allowed to perform HMA testing for District 6 since they perform HMA QC testing.*
- v. **Control Strip** Acceptance testing of the loose mix may be waived by the District in order to not disrupt other testing by the District lab. The District will only be required to test one sample of loose mix from the control strip. Contractor QC will still be required to perform all control strip testing. Control strip cores and IRI will continue per Section 450.
- vi. **Ride Quality** Contractors certified ride data will be used whenever it is possible until further notice.