## MICHIGAN DEPARTMENT OF TRANSPORTATION

## SPECIAL PROVISION FOR REDUCED TESTING FOR NON-CRITICAL CONCRETE PLACEMENTS

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**a. Description.** The Contractor must administer QC and the Department will administer QA procedures that will be used for acceptance of and payment for all Portland cement concrete (PCC) for the project. Except as explicitly modified by this special provision, all materials, test methods, and PCC mixture requirements of the standard specifications and the contract apply. Non-critical concrete placements as specified in this special provision or otherwise approved by the Engineer are eligible for reduced testing. All other QC and QA requirements for the project apply.

## b. Terminology.

- **Non-critical Concrete Placements.** Concrete meeting the reduced testing requirements below, that is incorporated into a non-structural element such as a sign post foundation, fence post foundation, signal controller foundation, electrical service pedestals, electrical racks, encased conduits, and isolated sidewalk panels, or similar items as approved by the Engineer.
- **Quality Control (QC).** All activities administered by the Contractor to monitor, assess, and adjust production and placement processes to ensure the final product will meet the specified levels of quality, including, but not limited to, training, materials selection, construction, sampling, testing, project oversight and documentation.
- **c.** Reduced Concrete Testing Requirements. Ensure all of the following criteria are met for use of reduced concrete testing:
  - 1. The concrete must be a non-critical placement as defined above.
  - 2. Ensure a concrete QC plan is submitted for approval and followed for all other concrete work on the project per the contract. This applies even if the total concrete quantity on the project is less than 100 cubic yards.
  - 3. No more than 100 cubic yards of non-critical concrete placements will be permitted for the project. Quantities greater than this value must follow the standard specifications.
  - 4. No more than five cubic yards of non-critical quantity concrete will be incorporated into any individual work element (pedestal foundation, single fence post foundation, etc.) per day unless approved otherwise by the Engineer.
  - 5. No more than 20 cubic yards of non-critical quantity concrete will be allowed on the project per day unless approved otherwise by the Engineer.
    - 6. The Engineer has received written certification from the Contractor that the ready-

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mixed concrete producer/supplier has a current QC plan in place for their facility for all concrete, which is available for review by the Engineer, upon request.

- 7. The Engineer is given advanced notification of each concrete placement and is provided sufficient opportunity to witness concrete placement.
- 8. Any modifications or adjustments to the JMF for non-critical concrete prior to concrete placement, which are necessary to ensure compliance, must be made by a certified concrete technician (Michigan Level II).
- 9. The JMF represents a standard MDOT Grade of Concrete. Ensure the JMF is approved prior to placement.
- 10. Reduced testing for non-critical concrete placements will not be considered for any items of work associated with concrete pavements, driveways and driveway ramps, anchorage foundations, structures, and/or any other element that will be subjected to live loading.
  - 11. Strain pole foundations are not eligible for reduced testing.
- **d. Quality Control Testing.** Contractor QC testing of fresh concrete is not required for placements meeting the requirements for reduced concrete testing above. Compressive strength sampling and testing is not required for non-critical concrete placements as defined in this special provision.
- **e. Acceptance, Sampling and Testing.** Prior to concrete discharge into forms, the Engineer will confirm by visual inspection and/or verification testing (and note in the Inspector's Daily Report) that the concrete represents the required physical quality properties. At any time during concrete placement, the Engineer may sample and conduct verification testing for temperature, slump, and air content of the fresh concrete. Do not resume concrete placement until verification tests validate that the concrete meets specifications. Do not add additional water to the concrete mixer after commencement of discharge.

The Engineer may perform QA testing of any nature on any non-critical quantity concrete at their discretion. If test results do not meet specification requirements, the use of reduced testing for non-critical concrete placements may be eliminated on the project and standard concrete QC and QA will apply per the contract.

**f. Measurement and Payment.** All costs associated with this work will be included in the item of work associated with the non-critical placement of concrete.