CONSTRUCTION PROCEDURES HANDBOOK

SECTION VI	SUBSECTION F-12	DATE
CONSTRUCTION OPERATIONS	CONCRETE SITE TESTING BY CONSTRUCTION PERSONNEL	03/07/2023

Whenever Regional Materials personnel are unable to conduct the on-site testing of concrete, Construction personnel will be responsible for some of the testing. All personnel conducting the on-site concrete testing must have successfully completed the ACI Certification "Concrete Field-Testing Technician Grade 1" or the NJDOT "In-house Concrete Certification" course.

The RE's office will notify the Regional Materials Office by telephone, e-mail, or FAX no later than 2:00 PM with the list of concrete orders through the entire next State business day. This list will include time, location, concrete supplier and plant, quantity of concrete, class of concrete, type of concrete additives being used (water reducers, retarders, etc.), if additional cylinders are needed (3 & 7 day tests), item no. and description, and any other project specific information.

The Materials team leader will rank the concrete pours in his area in order of priority and decide which pours Materials will cover.

The Materials team leader will notify the RE's office by 3:00 PM which concrete pours Construction will be responsible for the next day, the lot numbers assigned and if there is going to be a NJDOT concrete plant inspector.

If Materials personnel are responsible for on-site testing, Construction needs to take no further action.

If Construction personnel are responsible for on-site testing, the RE will adhere to part I, assignment procedure, of Materials Procedure <u>MP 1-08</u>. Personnel performing the tests will adhere to parts II, III, IV and VII of the same procedure.

By 8:00 AM the day after the pour, the RE's office will notify the Materials Team Leader of pours covered (lot #'s), number of cylinders made, exact location of the cylinders to be picked up and either e-mail or FAX the LB-201 to the Materials Team Leader.

NOTE: COMMUNICATION BETWEEN THE RE'S OFFICE AND THE MATERIALS TEAM LEADER IS EXTREMELY IMPORTANT TO COORDINATE OPTIMUM INSPECTION AND TESTING OF CONCRETE POURS.

SPECIAL NOTE ON CONCRETE POURS UNDER 21 CUBIC YARDS:

The RE has the right to waive strength testing (cylinders) for lots consisting of fewer than three truckloads or batches, or containing 21 cubic yards or less. This does not mean that small pours should never be tested. REs should use judgment in exercising the right to waive testing. If the RE decides to waive the concrete field testing, the Engineer/Technician should have the concrete testing equipment and applicable information available, if the need arises during the concrete pour. Following are guidelines for when small pours should be covered:

If there are on-going small pours on the project, some of those pours must be covered. Construction should cover one or two per week if every day there is a 10 cubic yard pour.

If the item is a pay adjustment item, it should be covered regardless of the size of the pour. This often becomes an issue with parapets and diaphragms. If there have been problems with failing material on the project or from a certain supplier, the RE should advise the RME of the problem and consider covering all pours.

If the inspector suspects a problem with the material, he will perform air and slump testing and/or take cylinders for strength testing. Testing is needed for rejection, if applicable.

It is very important that proper sampling rates are maintained on projects.

Notify Contractor personnel of the test results. If the result of the air test does not comply with the specification, Construction personnel are to take the appropriate action and then notify the plant inspector. Complete Form LB-296 if applicable and complete Form LB-201.