

MICHIGAN  
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION  
FOR  
**PRESTRESSED CONCRETE 28-DAY CONCRETE STRENGTH**

STR:BMW

1 of 1

APPR:TEB:REL:10-28-21  
FHWA:APPR:11-12-21

**a. Description.** This work consists of making, curing, and testing additional concrete cylinders to determine the 28-day compressive strength and other characteristics of the concrete in a field cured environment. Complete all work in accordance with the contract.

**b. Materials.** None specified. These tests are not for material acceptance.

**c. Construction.** Make and cure compressive strength test specimens in accordance with *ASTM C31/C31M*, except as modified by this subsection. Make three additional strength test specimens for each production lot; one specimen representing each subplot (see 20SP-708A - Quality Control and Acceptance of Structural Precast Concrete).

Retain the additional strength test specimens alongside the prestressed element in a corresponding field cure environment until 28-day compressive strength testing. If the element ships before the required 28-day compressive strength testing is completed, continue to field cure the additional compressive strength test specimens at a secure location where the specimens will be exposed to comparable environmental conditions as their respective prestressed element.

Conduct compressive strength testing of the additional strength test specimens in accordance with *ASTM C39/C39M*.

Provide a report that contains the Job Mix Formula (JMF), the date of the concrete placement, and all 28-day compressive strength test results for each production lot for the project. Submit the report to the Engineer in a PDF using the following file name: 28 Break Report–JN XXXXXX–[MDOT Structure Identification]-Lot X.pdf. An example file name would be “28 Break Report-JN 125818-B02 of 13016-Lot 1.pdf”.

**d. Measurement and Payment.** The completed work, as described, will not be paid for separately, but will be included in other pay items in the contract.