

Memorandum

*Flex your power!
Be energy efficient!*

To: DEPUTY DISTRICT DIRECTORS, Construction
DEPUTY DIVISION CHIEF, Structure Construction
CONSTRUCTION MANAGERS
SENIOR CONSTRUCTION ENGINEERS
RESIDENT ENGINEERS

Date: June 24, 2010

File: Division of Construction
CPD 10-5

From: MARK LEJA
for Chief
Division of Construction



Subject: Adding Water to Concrete in the Field

The Division of Engineering Services, Office of Structure Construction and the State Materials Engineer concur that field conditions sometimes require latitude to add water within mix design parameters. Allowing this latitude is expected to provide more uniform concrete placement and finishing, reduce waste, and reduce concrete anomalies such as cold joints and rock pockets.

This new latitude allows a portion of the total water specified by the approved mix design to be withheld during batching and later added at the jobsite point of discharge if the contractor requests. When the added water will provide designed workability and improve concrete quality, finish, and workmanship, the change applies to concrete batched according to Sections 90-6.02, "Machine Mixing," and 90-6.03, "Transporting Mixed Concrete," of the *Amended Standard Specifications*.

The contractor must request and sign a contractor-requested change order to allow water to be added to concrete transported in mixer trucks (ready-mix trucks) at the jobsite's discharge location. According to Section 5-311B, "District Approval," of the *Construction Manual*, each district may issue and approve the contractor-requested change by executing a contract change order using the language of the technical content or conditions in the attached example. If you modify the language of the change order or memorandum the Division of Construction must authorize its issue and approval.

Verify that the contractor's mixer trucks are capable of adding water to an accuracy of 1.5 percent of the quantity of water, and confirm in writing that the contractor accepts all risks associated with the requested change, including the possible rejection of concrete that cracks excessively or fails penetration, strength, finish, and approved mix-design compliance testing.

This construction procedure directive will remain in effect until the *Standard Specifications* contract amendments are revised. If you have questions regarding this directive, please contact Dan Speer, Division of Engineering Services at (916) 227-7016 or Mike Kissel, Division of Construction, at mike_kissel@dot.ca.gov or (916) 654-2467.

Attachments: Adding Water to Concrete Contract Change Order
Adding Water to Concrete Contract Change Order Memorandum