

 <p style="text-align: center;">CONSTRUCTION MEMO</p>	Date Issued: August 20, 2010
	Date Effective: August 20, 2010
	Related Specifications: 552 & Drilled shaft Special Provision
Subject: Crosshole Sonic Logging (CSL) Testing Requirements	

To: District Construction Engineers

From: Kevin Christensen, P.E. *KC*
Construction Engineer

This memo rescinds and replaces the Construction Memo dated December 28, 2005.

The Construction Engineering Services (CES) Bureau is now equipped to perform CSL testing on Drilled Shafts. In the past, this testing has been performed by term contract Consultants. MDT will now perform most CSL testing but will also retain a Consultant as needed.

Having the equipment will enable MDT to perform more tests than in the past and will also enable more retesting of shafts when desired (e.g. after repairs, additional cure time, etc.)

At the minimum, CSL testing should be performed:

1. On at least one shaft per bent. The first shaft constructed generally would be preferred.
2. Whenever there is concern that a shaft could have a defect based on construction observations, concrete mix problems, or other reasons based on the engineering judgment of the Engineering Project Manager.
3. The first shaft constructed using altered procedures or construction techniques allowed based on an approved Change Order. (i.e., a contractor submitted new procedure, which varies from the Drilled Shaft Special Provision, but approved by Change Order). Deviation from the contract without a Change Order is not allowed.

CSL tubes should be placed so that they extend all the way to the bottom of the shaft. Placing CSL tubes above the bottom of the drilled shaft excavation prevents CSL testing at the most important area of the shaft. Ensure that the temporary caps on the tops of the tubes are securely fastened so that debris or concrete does not enter the tube.

Please coordinate with the CES Bridge Reviewers for scheduling CSL tests.

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