



Florida Department of Transportation

JEB BUSH
GOVERNOR


605 Suwannee Street
Tallahassee, FL 32399-0450
January 23, 2005

JOSÉ ABREU
SECRETARY

This Memo Has Expired

DCE MEMORANDUM NO.: 01-05
(FHWA Approved: 1/24/05)

TO: DISTRICT CONSTRUCTION ENGINEERS

FROM: Ananth Prasad, Director, Office of Construction 

COPIES: Williams Nickas, Dave Sadler, Tom Malerk, Steve Plotkin, District Structures Engineers, District Materials Engineers,

SUBJECT: INSPECTION OF DRILLED SHAFTS BY CTQP QUALIFIED STAFF

This memo is a follow-up to the 8/02/04 e-mail (text included below) from Dave Sadler to you. It has come to our attention that during the recent hurricane events that there were many failures of miscellaneous structures such as signs, lights and signals. The State Structures Design Office and District Structures Design Offices are of the opinion that many of these failures were due to drilled shaft foundation concrete materials and Contractor practices that did not comply with the specification when the shafts were constructed.

This memo is issued as a reminder that the current Construction Training and Qualification Manual (CTQM) Chapter 6, Section 8, requires all drilled shafts, which include those for miscellaneous structures, to be inspected by a CTQP Qualified Drilled Shaft Inspector. This office is of the opinion that if a CTQP qualified inspector is involved and overseeing the construction of drilled shafts for miscellaneous structures that many of the apparent specification violations recently discovered during and after the hurricanes are far less likely to occur in the future.

Please notify all CEI staff (in house and consultant) of this requirement as well as reminding them that the drilled shaft specification requirements from miscellaneous structure drilled shafts are just as critical as they are for bridge drilled shafts: the recent hurricanes have made this abundantly clear. Also, this office will be adding a formal requirement in the standard CEI Scope of Services, as posted on the SCO website, that all drilled shafts, including miscellaneous structures, must be inspected by CTQP Qualified Drilled Shaft Inspectors.

Text of 8/2/04 e-mail from Sadler to DCE's

State Construction Office Process Reviews in the past year have indicated statewide concerns with the installation of drilled shafts for miscellaneous structures. Typically, some of the things we have found:

1. Either no drilled shaft logs are maintained or the logs are incomplete.
2. No testing performed on slurry used in the shaft.
3. Shaft inspectors are not CTQP qualified.
4. Treating the installation of these shafts to be under CQC specifications (only the concrete is CTQP in drilled shaft work).

To improve the quality of the installation of these drilled shafts, it is recommended that DCEs obtain inspection assistance from the District Geotechnical Office on drilled shaft projects involving mast arms, cantilever signs, overhead truss signs, high mast light poles or other miscellaneous structures shown in the Contract Documents. This process includes checking and assisting in the field operations during construction. Please notify the District Geotechnical Offices of the drilling schedules for the projects so they can schedule time to assist.

If you have any questions, please call Steve Plotkin at suncom 997-4155.

AP/pw