



Florida Department of Transportation

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SECRETARY

December 27, 2011

This Memo Has Expired

DCE MEMORANDUM 14-11
(FHWA Approved: 12/28/2011)

**TO: DISTRICT MATERIALS RESEARCH ENGINEERS
DISTRICT CONSTRUCTION ENGINEERS
DISTRICT MAINTENANCE ENGINEERS**

FROM: David A. Sadler, P.E. Director, Office of Construction

COPIES: Ghulam Mujtaba, Chris Richter (FHWA), Tom Byron, Chad Thompson, Heather Dean, Bob Burleson, Steve Plotkin

SUBJECT: FIELD WELDING OF TEMPORARY WORKS

The purpose of this DCE Memorandum is to clarify DCE Memorandum 13-10 regarding the welding of Temporary Works and the like. DCE Memorandum 13-10 contained a list of seven requirements that must be complied with when field welding is performed on FDOT maintenance and construction projects. However, these requirements do not apply to temporary works (Specification 5-1.4.1 defines temporary works), metal stay-in-place forms, or any other welded temporary work that is left in place after use but that has no effect on the performance or durability of the permanent structure as designed.

For questions or discussion concerning this memorandum, contact Steven Plotkin at 904-360-5501 or Dan Hurtado at 850-414-4155.

DS/ph
Attachment



Florida Department of Transportation

CHARLIE CRIST
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STEPHANIE C. KOPELOUSOS
SECRETARY

September 1, 2010

MATERIALS BULLETIN NO. 04-10

DCE MEMORANDUM NO. 13-10

DME MEMORANDUM NO. 03-10

(FHWA Approved: 9/2/10)

**TO: DISTRICT MATERIALS RESEARCH ENGINEERS
DISTRICT CONSTRUCTION ENGINEERS
DISTRICT MAINTENANCE ENGINEERS**

FROM: Thomas O. Malerk, P.E. Director, Office of Materials
David A. Sadler, P.E. Director, Office of Construction
Tim Lattner, P.E. Director, Office of Maintenance

COPIES: Ghulam Mujtaba, Chris Richter (FHWA), Abraham Scott (FHWA)

SUBJECT: FIELD WELDING

During recent inspections performed throughout the State on bascule bridge rehabilitation projects the following welding related contract requirements were found to be in non-compliance:

1. Lack of approved Welding Procedure Specification as per Florida Department of Transportation (FDOT) Section 460 and Materials Manual (MM) 11.2.
2. Lack of welding inspectors or unqualified inspectors as per FDOT Sections 105, 460, and D1.5 Bridge Welding Code (D1.5) Clause 6 Inspection Part A.
3. The company performing welding was found to be not qualified as per FDOT Sections 105, 460, and D1.5 Clause 1 General Provisions.
4. There were improper welding procedure submittals for actual work being performed in the field - FDOT Sections 5 and 460.
5. No welder continuity logs were maintained - D1.5 Clause 5 Qualification Part B Subsection 2.21.4.
6. There were no calibration stickers on welding equipment or documentation that equipment is calibrated - FDOT Sections 105, 460, and D1.5 Clause 4 Technique, Part G, Subsection 4.26.1 Calibration of Equipment.
7. Welding of fracture critical members as identified on contract documents was performed without a Fracture Control Plan as per FDOT Sections 460 and D1.5 Clause 12 AASHTO/AWS Fracture Control Plan (FCP) for Non-redundant Member.

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The following are the requirements for field welding performed on FDOT maintenance and construction projects:

1. Field weld only if it is specified in the contract documents or with the prior approval of the Engineer.
2. Prior to the beginning of any welding a Weld Procedure Specification (WPS) and supporting Procedure Qualification Record (PQR) shall be submitted for review and approval by the Department, if required by the code for the welding being performed.
3. Welding shall not be done without an FDOT approved WPS.
4. All welding shall be performed by qualified welders that comply with the appropriate code, material, and position.
5. All welding shall be visually inspected by an American Welding Society (AWS) Certified Welding Inspector (CWI). A report shall be issued by the inspector that is stamped and dated stating that all welding has been completed in compliance with the contract documents and the appropriate code.
6. If non-destructive testing other than visual is required, qualified technicians shall perform the work as specified by the appropriate AWS code.
7. The PQR, WPS, and Welder Qualifications will be reviewed by the State Materials Office.

All questions concerning this matter should be directed to Steve Duke, State Materials Office, 352-955-6682 or Steve.Duke@dot.state.fl.us.

TOM/DAS/TL/sd