



## Florida Department of Transportation

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SECRETARY

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**\*\*Expired\*\***

**MATERIALS BULLETIN NO. 13-05**

**TEMPORARY DESIGN BULLETIN NO. C05-17**

**DCE MEMORANDUM NO. 29-05**

(FHWA Approved: 11/1/05)

**TO:** District Directors of Operations, District Directors of Production, District Design Engineers, District Structures and Facilities Engineers, District Geotechnical Engineers, District Maintenance Engineers, District Construction Engineers, District Structures Design Engineers, District Materials Engineers

**FROM:** Thomas O. Malerk, P.E., Director, Office of Materials  
William Nickas, P.E., State Structures Design Engineer  
Brian Blanchard, P.E., Director, Office of Construction

**COPIES:** Bob Greer, Larry Sessions, Marcus Ansley, Jeffrey Ger (FHWA), Ananth Prasad, Sharon Holmes, Henry Bollmann, Steve Plotkin, Tom Andres, Robert Robertson, Jerry Pfuntner, Rafiq Darji, David O'Hagan, Duane Brautigam, Bob Burleson, Jeffery Pouliotte, Ghulam Mujtaba, Steve Duke, Linda Houk

**SUBJECT: Policies for Welding Procedure Specifications and Repairs of Steel and Miscellaneous Metal Products Effective January 2006 Lettings**

The subject interim policies are related to the review and approval process of welding procedure specifications and repair of nonconforming steel and miscellaneous metal products.

**Requirement No. 1 (Welding Procedure Specification):**

Add the following new language, related to Welding Procedure, to Section 28.10 of the Plans and Preparation Manual (PPM):

The approval of pre-qualified joint welding procedures specification (WPS) will be the responsibility of the Department's Assigned Commercial Inspection Agency (ACIA). Once approved, these procedures will be posted on the State Materials Office's website and may be used on all future projects by the fabricator who developed them, until their expiration. A list of the welding procedures to be used on any individual project will be forwarded to the Engineer of Record prior to the start of fabrication. The Engineer of Record (EOR) may elect to review these documents, but it is the responsibility of the ACIA to assure the proper welding procedure is used at the correct location.

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Shop drawings depicting plate sizes, types of welds, weld designations, weld sizes, grades of materials, etc. will continue to be reviewed by the EOR.

**Background:**

At present fabricators are submitting multiple copies of WPS, for each project, through the contractor to the Engineer of Record and Florida Department of Transportation (FDOT) for review and approval process. The submittals of the same WPS documents may be repeated for each project.

**Commentary:**

In order to speedup the review and approval process of the WPS, FDOT is currently working to prepare new procedures. Section 11.2 of the Materials Manual and Section 28 of the PPM will address the WPS review and approval process. In the interim, the fabricators may follow the following process for the approval of their proposed WPS at their fabrication facilities:

The welding engineer or the certified welding inspector of the fabrication facility shall submit three signed and sealed copies of the WPSs on FDOT Standard Forms, available from the FDOT Forms and Procedures Office, to the ACIA for review and approval. Once accepted, the ACIA will stamp the forms "approved", return one (1) stamped copy to the fabricator, send one stamped copy to the State Materials Office, and retain the third copy. The individual approving the WPSs for the ACIA shall be a certified welding engineer.

The fabrication facilities may contact Steve Duke or Linda Houk at the State Materials Office to determine the name of the ACIA welding engineer who is responsible for the review and approval of the proposed WPS. The ACIA welding engineer will review and approve the WPS within two weeks of the receipt of the submittal of the documents. In case of questions or inadequate information, the facility will be notified to revise the submitted documents. The two-week review time will restart upon submittal of the completed information. The ACIA will send a stamped copy of the approved WPS to the fabricator and another copy to the State Materials Office. The approved copy of the State Materials Office will be maintained in Department's secured website and it will be accessible only to the FDOT authorized personnel.

For each project, the fabricator provides the list of the approved WPS as part of their general notes contained in the shop drawings or as attachments to the shop drawings. At the completion of the project, the list will be modified to include only the WPSs that were used on the project.

The fabricators of the overhead cantilevered sign supports with cantilevered arms less than 41 feet, light poles, high mast poles, expansion joints, roadway decking, bearings, Monotube Assemblies, standard mast arm assemblies, drainage items, stay-in-place forms, casing pipes, and steels strain poles products may include their proposed WPS as part of their quality control plan or obtain the approval of their WPS in advance and include the approved WPS as part of their quality control plan.

**Requirement No.2 (Repair of Noncomplying Structural Steel and Miscellaneous Metal Products):**

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Add the following requirements, related to repair of noncomplying steel and miscellaneous products at the fabrication facilities, to Section 11.1 of the Materials Manual:

The approval of the major repair requires the submittal of the proposal to the Construction Project Administrator for review and approval in accordance with Section 10.9 of the Construction Project Administration Manual. The Engineer of Record and Federal Highway Administration may be involved in this review and approval process.

The approval of minor repairs or FDOT standard repair methods may be included as part of the quality control plan of the fabrication facilities. The approval of each of these minor or FDOT standard repairs at the fabrication facilities is the responsibility of the Department's assigned ACIA. The ACIA Lead Inspector at the fabrication facility will review the type of minor defect and facility's proposed repair method and determine if the type of proposed repair is suitable for the exhibited defect. The ACIA approves the proposed minor repair method.

For each project, the facilities shall maintain documentation of the repairs that were used to correct the deficiencies of the products as part of the documents of the project.

**Background:**

At present fabricators are submitting the proposed repairs, for each project, through the contractor to Engineer of Record and FDOT for review and approval process. The submittals of the same repair method may be repeated for different projects or for each project multiple times. In order to speed up the approval process and prevent the time consuming re-submittals, the facilities may provide minor and FDOT standard repair methods as part of their quality control plan and utilize them without submittal of proposal to the Construction Project Administrator. The facilities are required to document the type of deficiencies and the repair methods that were used as remedial action.

**Commentary:**

Section 10.9 of the Construction Project Administration Manual provides information regarding the review and approval process of the repair of the noncomplying steel and miscellaneous products.

**Implementation:**

These policies will be implemented on all projects beginning with July 2006 letting. Projects that have already been bid may have these new procedures added through proper contractual arrangements such as change orders.

Please contact Ghulam Mujtaba at the State Materials Office, Jeffrey Pouliotte at the State Construction Office, and Robert Robertson at the State Structures Design Office if there are any questions.

TOM/WN/BB:gm