

ALABAMA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION BUREAU 1409 COLISEUM BOULEVARD MONTGOMERY, ALABAMA 36110

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John R. Cooper TRANSPORTATION DIRECTOR

Kay Ivey GOVERNOR

June 13, 2018

Construction Information Memorandum No. 3 - 2018

TO:

Region Engineers

ATTN:

Area Operations, Construction, Materials, and Local Transportation Engineers

FROM:

Winston J. Powe, PE

State Construction Engineer

RE:

Section 501: Steel Girder Erection Falsework

Due to problems recently encountered on two bridge projects, this CIM is being distributed to call attention to Subitem 501.03(i)1.a. regarding steel girder erection and the use of falsework. In both cases, failures occurred in either the lifting or rigging equipment, posing a significant safety threat to workers and project inspectors.

Please ensure that your inspection personnel are familiar with the following specification requirements and that they have the distributed drawings on hand during the steel girder erection. It is very important that the erection plan steps are followed and that the rigging/equipment used matches the erection plan. Although it is the Contractor's responsibility to ensure that steel girders are erected properly, it is incumbent upon our personnel to hold the Contractor accountable to the specification.

SubItem 501.03(i)1.a. Class 2, Falsework, reads in part (underline and bold text added for emphasis):

Unique or complex falsework such as that required for box girder construction, RCDG construction, structural cofferdams, or any falsework used in connection with steel erection.

The Contractor shall be responsible for designing and constructing safe and adequate falsework which provides the necessary strength and rigidity, supports all loads imposed, and produces a finished structure with lines and grades shown on the plans. Falsework shall be designed and constructed to withstand all imposed loads during erection, construction, usage, and removal.

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The Contractor shall submit to the (State) Construction Engineer working drawings and design calculations for falsework in accordance with Article 105.02.

For both classes of falsework drawings, the (State) Construction Engineer will verify that the licensed Professional Engineer signature and stamp requirements of Subarticle 105.02(d) are met. Class 2 drawings will be forwarded to the Bridge Engineer for review to determine if the results of the licensed Professional Engineer's calculations are in compliance with design criteria. If the design criteria are met, the submittal will be returned to the (State) Construction Engineer to be stamped for distribution and then distributed.

All falsework will be inspected by the **Project Manager** using the distributed drawings. For all Class 2 falsework, the licensed Professional Engineer who signed the falsework submittal shall verify that the falsework as constructed meets all design criteria prior to any load being placed thereon. A signed <u>statement from the licensed Professional Engineer</u> covering the verification shall be furnished to the Project Manager by the Contractor.

Please ensure that all your staff and project inspection personnel are familiar with these requirements.

WJP/JLB/BMW/bmw

Mr. George Conner, PE pc:

Mr. Scott George, PE

Mr. Tim Colquett, PE

FHWA

ARBA

AAPA

ALBCA

CIM File

ACIA

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