

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012142**Date Inspected:** 17-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

<b>CWI Name:</b>	Joe Pascalone/Bonafacio Daquina			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	Orthotropic Box Girders (OBG)		

**Summary of Items Observed:**

Quality Assurance inspector Michael Foerder was present at the American Bridge/Flour (ABF) job site lay down yard at Pier 7 in Oakland, California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

1. Orthotropic Box Girder (OBG) Lifts 4E erection preparation
2. Orthotropic Box Girder (OBG) Lifts 1W erection preparation
3. Orthotropic Box Girder (OBG) Lifts 4W erection preparation
4. Contract Files and Shop Drawings

**Item 1 Lift 4E**

The QA inspector periodically observed ABF personnel placing the suspender brackets at Panel Point (PP) 26 and 28 on the South side (Bike Path side) of the OBG. The QA inspector reviewed the gap between the faying surfaces of the deck plate and the suspender brackets. At the time of review for the bracket at PP26 only a few bolts were in place and the contractor was in the process of placing the shim plates between the side plate and the brackets. At the time of review the gap between the surfaces were measured to be up to 5mm and 4.5mm for the bracket at PP28. See digital photo included in the body of this report for clarification. These items were relayed to QCM Jim Bowers and QA Lead inspector Bill Levell via phone. Later in the shift the QA inspector reviewed the in process work again after the installation of the shim plates and additional bolts and the suspender bracket at PP26 appeared to be within intimate contact; however the suspender bracket at PP28 still appeared to have a gap of 2mm in a localized area. This information was also relayed to Mr. Bowers and Mr. Levell via phone. As a general item it was noted lift 3E was re-located to the field in order to lift it and push it into place.

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## Item 2 Lift 1W

The QA inspector noted and periodically observed ABF personnel placing the suspender bracket at PP 12 for the North side (counter weight side) of the OBG and the installation of the suspender bracket at PP10 was pending. It was noted these areas have not been closely reviewed as part of the arrival inspection as access to these locations required a man lift which was unavailable due to craft personnel utilizing it. These areas were reviewed generally from the edge of the deck plate and the ground with no major issues observed. This information was relayed to QCM Jim Bowers who relayed he would take it under advisement.

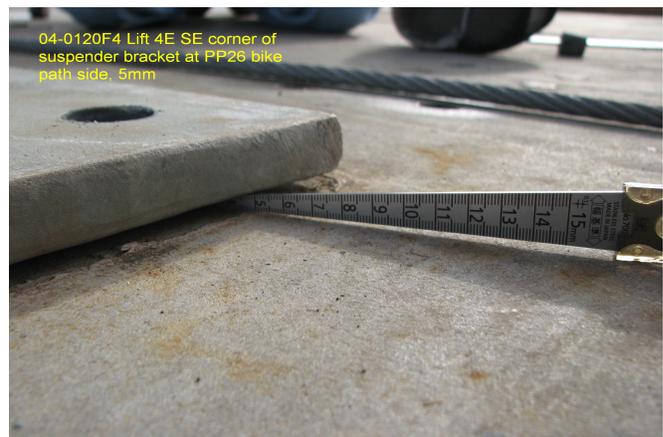
The contractor is in the process of flame cutting the access holes in the deck plate between PP 10 and 12 on the North and South side of the OBG. The flame cut edges appeared to be of a uniform kerf and free from significant notches in the stiffeners inside the OBG and no notches were noted in the deck plate. QC personnel Tom Pascalone, Steve McConnell, James Cunningham and Bonafacio Daquinag were noted to be present monitoring the work. In addition to this the QC personnel were measuring and recording dimensions along the deck plate transverse field splice in regards to bevel angle, closed (U-rib) rib location and the weld toe in relation to the edge of the bevel prep in order to assist in the ultrasonic testing interpretation of the completed joint later in the field. The QA inspector reviewed a portion of these dimensions and verified QC was utilizing a low stress stamp for the identification of the set back utilizing a 70 degree angle. The work progressed throughout a majority of the shift and the items appeared to be progressing in conformance with the contract documents.

## Item 3 Lift 4W

The QA inspector noted and periodically observed ABF personnel performing the grinding/buffing of the bevel edge preparation for the transverse field splice location for this lift. The QA inspector noted ABF personnel are in the process of periodically placing the components for scaffolding, welding, lighting, walkways, temporary bolts and other miscellaneous items in preparation of mobilizing lift 4 West to the erection site.

## Item 4 Contract Files Drawing review

The QA inspector spent a portion of the shift updating the contract files in regards to the contractor field splice plan, submittals and performing shop drawing reviews for this project.



## Summary of Conversations:

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As noted above in summary of items observed.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)813-3677, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Foerder, Mike	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell, Bill	QA Reviewer

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