

**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:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029587**Date Inspected:** 15-Apr-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

At the start of shift, this Quality Assurance Inspector (QAI) traveled to the project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) personnel. The inspection was performed on the various Complete Joint Penetration (CJP) groove welds and fillet welds of the East and West Orthotropic Box Girders (OBG's). The welding was performed utilizing Shielded Metal Arc Welding (SMAW) process as per the Welding Procedure Specifications (WPS's).

At the start of the shift this QAI observed the following:

This QAI witnessed the grinding removal of the 'bent-plate' for relocation of Ladder attachment at North Tower interior elevation +83M. There was no welding performed yet at this time.

This QAI performed the visual weld inspection of relocated 'bent-plate' for the Ladder attachment at East Tower interior elevation +83M. The AB/F Quality Control (QC) Inspector Fred Michels was present, monitoring the WPS parameters and performing his visual weld inspection. There were no defects noted. The welding, QC inspection and related work was observed and verified by this QAI and appeared to be in compliance with the contract documents.

This QAI witnessed the preheat operation of the vertical (second from the top, long) plate at location 13E-PP119(-1500)-E3 per AB/F RFI #003256R00 and WPS ABF-WPS-D15-F1200A. The welder present was Earl Clayborn #5070. No AB/F Quality Control (QC) Inspector was present at this time.

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## WELDING INSPECTION REPORT

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This QAI observed the welding without the proper required preheat of bottom small cover plate at 13E-PP119(+1500)-E3. The welder Gue Wu Chen #9340 was utilizing E7018 electrodes as required per WPS-ABF-F1200A and AB/F RFI #003256R00. No AB/F Quality Control (QC) Inspector was present at this time. Later in the day (2:30 pm) this QAI again observed welding without proper required preheat by the same welder at the bottom vertical long plate at 13E-PP119(+1500)-E3. No AB/F Quality Control (QC) Inspector was present at this time either. Later in the shift the QAI informed the QC inspector Sal Merino of this issue and Mr. Merino said that the issue would be resolved.

This QAI observed the grinding of weld surfaces and the application of the preheat 325 degrees F at the third long (vertical) plate from the top at location 13W-PP119(-1500)-W3. The welding was being performed by James Zhen #6001 utilizing the E7018 electrodes as required per WPS ABF-WPS-D15-F1200A and per RFI #003256R00. There was no AB/F Quality Control (QC) Inspector present at this time.

This QAI witnessed the application of a proper 325F preheat and welding in progress of bottom short cover plate at location 13W-PP119(+1500)-W3. The welding was being performed per RFI# 003256R00 by Lin E. Yun #9344 at 11:15, utilizing the required E7018 electrodes as per WPS ABF-WPS-D15-F1200A. AB/F QC Salvador Merino was present, monitoring the WPS parameters of the welding in progress.

### Summary of Conversations:

No significant conversations took place.

### 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 SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Morris, Monty	Quality Assurance Inspector
<b>Reviewed By:</b>	Reyes, Danny	QA Reviewer

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