

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003067**Date Inspected:** 06-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China**CWI Name:** Huang Wen-Pang**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:** Tower / OBG**Summary of Items Observed:**

## Bay 3

This Quality Assurance (QA) inspector arrived at ZPMC in Shanghai China for observation of Orthotropic Bridge Girders (OBG) and Self Anchored Suspension (SAS) Bridge. During this QA inspector's observation in bay 3 it was noted that ZPMC was in process for fit-up at multiple stages on side and bottom plates. ZPMC Certified Welding Inspector Huang Wen-Pang was present at the time of observation and this QA inspector spoke with Mr. Wen-Pang on the work in process for bay 3. It was stated that tack welds for WT and straight stiffener plates were in process for component numbers EP42A EP40A, SP181-001 and EP054A under WPS-B-P-2112-FCM using Shielded Metal Arc Welding (SMAW) welders observed for these location were in the flat position (1G). The ZPMC CWI Mr. Huang was monitoring the welding parameters and in process progression. ZPMC was also welding at gantry 1 performing 6mm fillet welds there 3 welding operators observed at this location under WPS-B-T-2132-3 for component EP035-001.

## Bay 4

During the continued observation by this QA inspector it was noted in bay 4 that ZPMC was welding and fitting interior ring flanges for diaphragm plates at 6 locations. Also observed by this QA inspector was heat straightening process for side plate number SP428-001 under ZPMC procedure number HSR 1 (B) p 1088 which had a maximum heat input for straightening of 600°C. This process was being monitored and documented by ZPMC Quality Control staff under CWI Huang Wen-Pang.

## Ultrasonic Testing

This QA inspector performed Ultrasonic Testing (UT) for QA verification of Complete Joint Penetration (CJP) weld joints on floor beams for the SPCM area Flange to web plate connections. The following is a list of components verified by this QA inspector for 10% of the weldments. FB012-003-043, FB010-002-043,

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FB016-007-045 and FB016-006-043 these areas appeared to be in general compliance with the contract documents. A TL-6028 will be generated for these areas.



## Summary of Conversations:

As noted above.

## 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Riley, Ken	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon, Albert	QA Reviewer

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