

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003084**Date Inspected:** 10-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1430**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yan Hua**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 Deck Panels**Summary of Items Observed:**

On this date, Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) Inspector Edward Leach was present to randomly observe and document the welding and Quality Control (QC) functions performed by ZPMC personnel relative to the fabrication of SAS Superstructure project. While on site, the QA Inspector noted the following work.

**Bay 3--New Tower Building**

The QA Inspector randomly observed ZPMC welding and QC personnel performing inspection, grinding, and Flux Core Arc Welding (FCAW) repairs of Orthotropic Box Girder (OBG) deck panel Partial Joint Penetration (PJP) welds. During initial observations it was noted that thirty-seven (37ea) deck panels are inside the shop. The deck panels in repair process are designated as: DP052-001, DP030-001, DP032-001.

**Visual Testing (VT)**

The QA Inspector performed initial VT, along with ABF and ZPMC QC personnel on deck panel DP051-001 prior to the initiation of welding repairs. Once the inspection was completed and a mutual agreement was reached for each marked area, a representative for each party signed and dated the yellow in process repair tracking sticker. Repairs for this deck panel were then initiated and were in process for the remainder of second shift.

Later in the shift the QA Inspector observed ZPMC personnel Wang Wei perform final magnetic particle testing (MT) after repairs on DP043-001. Upon completion of MT inspection, ZPMC personnel found relevant indications located on weld joint designation 001 at 660 mm Y. The QA Inspector, along with ABF QC personnel

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Kevin Chen, witnessed ZPMC personnel perform grinding to remove the indications and verify complete removal with MT verification. After grinding the QA Inspector measured the excavation at 15mm length and 1.5mm in depth. The QA Inspector was informed by ABF QC personnel Kevin Chen that the area will be repaired by welding, ground and re-inspected by MT once the repair is complete. Mr. Chen also informed the QA Inspector that the final VT and MT inspections by ZPMC, ABF and Caltrans will resume tomorrow morning (6/11/08) on DP043-001.



**Summary of Conversations:**

The QA Inspector was informed by ABF QC personnel Warren Buehler that DP029-001 was rejected by ABF and a red status tag has been placed on the panel below the yellow repair tracking tag. Mr. Buehler stated that eighteen (18ea) deck panels have been rejected by ABF as of this date and have received a red tag.

**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.

**Inspected By:** Leach,Ed Quality Assurance Inspector

**Reviewed By:** Carreon,Albert QA Reviewer