

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-007937**Date Inspected:** 28-Jul-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Jia**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 trial assembly/OBG bays 13, 14 and 19**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG 3AE/3BE

This QA observed no significant work was being performed on these segments during the time QA was present.

OBG 4AE

This QA observed ZPMC qualified welding personnel identified as 051356 and 044795 perform FCAW repair welding of what appeared to be delayed transverse cracks discovered via Magnetic particle Testing (MT) on weld joint identified as SSD17A-PP021-003. ZPMC QC identified as Mr. Zhang Hai Tao was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G-repair-2.

NOTE: According to ZPMC QC CWI identified as Mr. Li Jia the above mentioned repairs on OBG 4AE are being performed in accordance with ZPMC Critical Weld Repair (CWR) procedure number CWR-0629. This QA observed that the CWR procedure document produced by ZPMC QC on site does not appear to be approved by the Engineer as specified in AWS D1.5 2002 section 3.7.4. This issue has been written up in an incident report on July 25, 2009 by Caltrans QA Mr. Shrikant Utekar.

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OBG assembly bay 13

This QA observed no significant work was being performed in this bay during the time QA was present.

OBG assembly bay 14

This QA observed ZPMC personnel fitting and tack welding FL-2 floorbeam to OBG segment identified as 9EE at panel point PP085. No other significant work was observed in this bay during the time QA was present.

OBG assembly bay 19

This QA received ZPMC Non Destructive Testing (NDT) notification No. 003800 to perform Ultrasonic Testing (UT) of approximately 10% of weld joint BP025-008-001 which was previously tested and accepted by ZPMC Quality Control (QC) personnel. When this QA arrived in this bay to perform the above mentioned UT, QA noted that there was a large steel box setting on the panel partially covering the weld information box in which the contractors QC would have signed off on the UT of this weld. Due to this, QA was unable to verify that the contractor had completed and accepted the UT of this joint. This QA made two unsuccessful attempts to communicate with the workers in this bay to move the box. This QA noted that Caltrans QA identified on the material as B254 had rejected this joint via UT on 6/12/09. The reject markings were crossed out and replaced with a Caltrans QA yellow triangle lot# B239, indicating that the UT was accepted by Caltrans QA. The date the UT was performed and accepted was not legible. This QA contacted ZPMC QA identified as Mr. Shen Xuejun concerning the matter of moving the box so this QA could confirm that ZPMC QC did perform and accept the UT of this weld. Mr. Shen informed this QA that the UT had been performed and accepted by both ZPMC QC and Caltrans QA earlier in the day.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



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Summary of Conversations:

As mentioned 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 Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer
