

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-003003**Date Inspected:** 22-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Fu Yu Hong**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**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The QA inspector observed ZPMC performing layout, cutting, beveling, milling, fitting and welding activities in bay # 1 and 2 on Tower Assembly shop.

Heat Straightening Operations

The QA inspector observed ZPMC performing heat straightening operations at the skin plate # p71 correcting a 3 mm total deformation according with HSR1(T)-2442. ZPMC's heat straightening operations appeared to be in compliance with the contract documents.

Ultrasonic testing

The QA inspector performed ultrasonic testing (UT) at the completed joint penetration at the skin plates splices weld joints # SSD1-SA 159-F/J-22A; SSD1-SA-159-E/J-19B, SSD1-SA159-E/J-14B, SSD1-SA159-F/J-10A, SSD1-SA159-E/J-10A and SSD1-SA159-E/J-7B. The QA inspector performed 10 % UT at random locations. The QA inspector found that welds areas tested appeared to be in compliance with the contract documents. See UT report TL_6027 generated on this date.

Skin A North lift # 1

The QA inspector observed ZPMC welding operator Liu Zhen Hong performing welding operations with the submerged arc welding (SAW) process using the WPS-BT2221-U3 c-S in the flat (1G) position at the junction of the weld joint # NSD1-SA-33 A/F-25A Skin plate connections. The QA inspector performed welding parameters verifications. The QA inspector found that the welding parameters appeared to be in compliance with the contract documents.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Skin E East lift # 1

The QA inspector observed ZPMC welding operator Yun Chua Jin (0503060) performing welding operations with the submerged arc welding (SAW) process using the WPS-BT2221-U3-c-S in the flat (1G) position at the junction of the weld joint # SSD1-SA 16 A/G-44A longitudinal Stiffener. The QA inspector performed welding parameters verifications. The QA inspector found that the welding parameters appeared to be in compliance with the contract documents.

The QA inspector had a conversation with ZPMC representative Xue Jun. The QA inspector informed that the QA inspector have been in the middle of the UT verifications and ZPMC had informed that ZPMC needed to move, rotate or perform magnetic particle testing to the member. The QA inspector had stopped UTing the member in cooperation with ZPMC and postponed his verifications. These incidents had happened four times this week and it appeared that ZPMC was setting a pattern. The QA inspector informed Mr. Xu that the QA inspector had 24 hours to complete his verifications after ZPMC and the QA inspector needed ZPMC's cooperation on this matter. Mr. Xu agreed.

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.

Inspected By:	Acuna,Alfredo	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer
