

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-001401**Date Inspected:** 31-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**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:** OBG and Tower Mock-up**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.

Tower Shop (Tower Mock-up 89 M)

The QA inspector observed that ZPMC performing backgouged operations at the junction of the loose diaphragm to the diaphragm plate p213, joint # MUB-MA21 G/J-63. The QA inspector had conversation with the ZPMC QC inspector Zhang Jiadi. The QA inspector asked why ZPMC backgouged the root pass of the weld joint # 63.

After consulting with the QC inspector assigned to oversee the Tower Mock-up 89 M. Mr. Zhang Jiadi informed that ZPMC was directed by ABF representative Mr. Kevin Carpenter to remove the weld area because ZPMC found a root pass crack. The QA inspector asked why Caltrans was not informed about the crack. Mr. Zhang Jiadi said that ZPMC thought that ABF would inform Caltrans about it. The QA inspector issued an incident report because ABF allowed ZPMC to repair a root weld crack without informing Engineer representatives on site.

Bay II (Tower Mock-up)

The QA inspector observed that ZPMC was performing drilling operations without hardened bushing template on the Tower splice Mock-up 114 upper skin B. The QA inspector issued an incident report because ZPMC was not drilling in compliance with the contract documents. The QA inspector informed ZPMC representative Mr. Zhang Jiadi that ZPMC was performing drilling operations that were not in compliance with Caltrans Standard specification, Section 55, drilling.

The QA inspector observed no fabrication activities on the Tower Mock-up 77 M on this date.

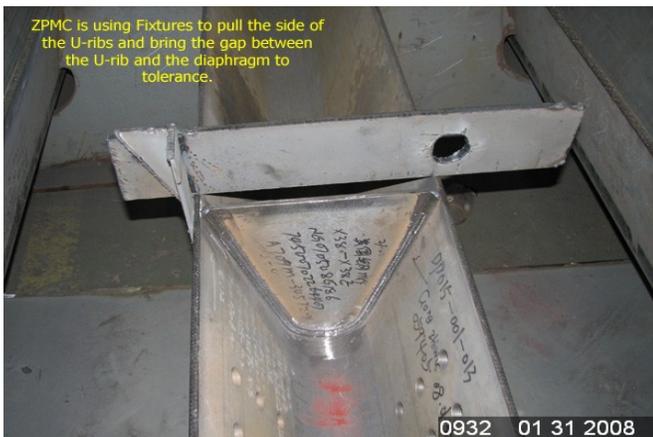
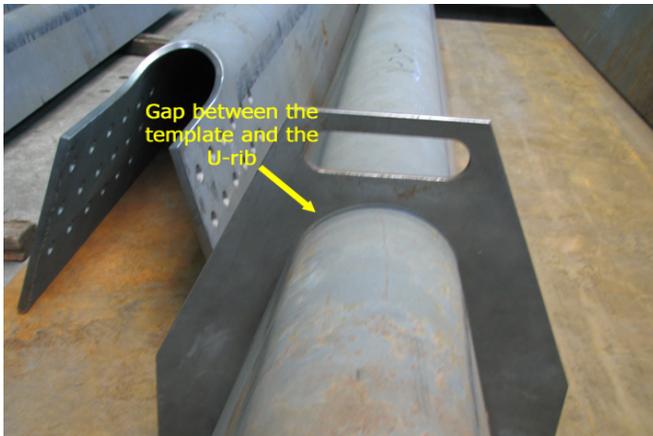
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Bay I (OBG Deck)

The QA inspector performed random dimensional verifications at the assembly of the deck panel DP-58A and the U ribs U-133, U-63, U-13, U-62 and U-64. The QA inspector found that dimensions (gaps, tack location, control lines) appeared to be in compliance with the contract documents.

The QA inspector had a conversation with ZPMC QC representative Fu Yu Hong, the QA inspector asked how ZPMC performed the fit-up of the internal diaphragm and the U-ribs on the areas where ZPMC had gaps exceeding the maximum required by AWS D1.5 (2002) for a fillet weld joint. Mr. Fu Yu Hong informed that ZPMC was bring in the the U-ribs applying external forces with a device shown on the digital photograph below. The QA inspector performed random dimensional inspection of the U ribs located at the level inspection table with the template. The QA inspector observed that the distance between legs on close rib U-26 appeared to be greater than maximum on the template. See photographs below. The QA inspector had a conversation with ABF representative Warren Buehler and ZPMC representative Xu Jun. The QA inspector asked if ZPMC has already accepted the U-rib U-26. ABF and ZPMC representative informed the QA inspector that ZPMC had not completed the dimensional inspection on the piece and that ZPMC was going to asked ZPMC technical department about the U rib U-26 condition.



Summary of Conversations:

As noted above.

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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:	Cuellar,Robert	QA Reviewer
