

**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-010755**Date Inspected:** 16-Nov-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:** See below**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 Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

FCAW buttering repair welding adding 10mm to 13mm on ends of various north tower, lift 1 strut plates per weld repair report T-WR (unnumbered) listing drawing number P1144(N). Welders were identified as 053116, 052075. ZPMC QC was identified as CWI Du Zhi Qun (QC1). The welding variables recorded by QC appeared to comply with WPS-345-FCAW-2G(2F)-repair. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Yang Ye Heng.

SMAW welding of temporary lower rotation fender located on PCMK north tower, lift 4, skin D at C/D corner between approximately 120M and 122M elevations. Welder was identified as 040491. ZPMC QC was identified as CWI Wang Chuan Qing (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC Sun Tian Liang, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-P-2114. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Li Nan.

Arc strike inside south tower, lift 4, skin A (near corner to skin B), at the 138M elevation. This QA Inspector marked the arc strike and informed QC Assistant Li Peng Fei and ABF Representative Li Nan who were present at

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this location and observed the arc strike. See photos below.

FCAW welding of temporary lower rotation fender located on PCMK south tower, lift 4, skin E at E/A corner between approximately 120M and 122M elevations. Welder was identified as 057244. ZPMC QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC Sun Tian Liang, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-P-2132. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Li Nan.

FCAW repair welding of weld joint SSTL-1B/L-1B located inside PCMK south tower, lift 4, skin C to skin D, inside 119M and 127M double diaphragms per weld repair report T-WR (unnumbered). Welder was identified as 053870. ZPMC QC was identified as CWI Wang Chuan Qin (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC Li Peng Fei, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-345-FCAW-2G(2F)-repair. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Li Nan.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



## 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 Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

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**Inspected By:** Goulet, George

Quality Assurance Inspector

**Reviewed By:** Dawson, Paul

QA Reviewer