

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018683**Date Inspected:** 16-Nov-2010**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 and OBG Components**Summary of Items Observed:**

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

**OBG Trial Assembly Area**

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

SMAW repair welding of weld joint OBE11A-003 in multiple locations inside PCMK OBG 11CE/11DE, transverse joint, deck plate to deck plate. See photo below of one of the repair locations. Welders were identified as 044515, 053871. QC was identified as ZPMC CWI Shi Lei (QC1). Welding variables recorded by QC1 appeared to comply with WPS-345-SMAW-4G(4F)-FCM-1 as displayed on ZPMC Weld Repair Report B-WR17152 presented to this QA Inspector and verbally identified by QC1. QC1 informed this QA Inspector that this welding was being performed to correct indications as a result of ZPMC ultrasonic testing (UT). ZPMC Weld Repair Report B-CWR17152 referred to ZPMC NDT Report UT-11E-055. Also present at this location and appearing to be monitoring the welding operation was ABF representative Cao Hai Zhou.

SMAW repair welding of weld joint OBE11B-007 in multiple locations outside PCMK OBG 11BE/11CE, transverse joint, side plate to side plate, north (crossbeam) side. Welder was identified as 040266. QC was identified as QC1. Welding variables recorded by QC1 appeared to comply with WPS-345-SMAW-3G(3F)-FCM-1 as displayed on ZPMC Weld Repair Report B-CWR2186 presented to this QA Inspector and verbally identified by QC1. QC1 informed this QA Inspector that this welding was being performed to correct indications as a result of ZPMC UT. ZPMC Weld Repair Report B-CWR2185 referred to ZPMC NDT

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Report UT-11E-045R4. Also present at this location and appearing to be monitoring the welding operation was ABF representative Cao Hai Zhou.

## Heavy Dock

This QA Inspector randomly observed the following on the Heavy Dock:

All 4 towers, lift 4 were positioned on a base pedestal at end of the Heavy Dock. All four towers, lift 5 were positioned on top of the respective lift 4. No ZPMC floating cranes were moored at or near the Heavy Dock.

A ZPMC worker was present and monitoring electric heaters at the following weld joints: EDS1-FASA4-2B/E-5, EDS1-FASA4-2B/E-26, SDS1-FASA4-1B/E-14, SDS1-FASA4-1B/E-15, SDS1-FASA4-1B/E-16, SDS1-FASA4-1B/E-17 located on PCMK east and south towers, lift 4, at 120M elevation, skin A to cross brace connection plate. The 120M cross brace was still in place and connected to all four towers. No welders or welding equipment were present.

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 Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet, George	Quality Assurance Inspector
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<b>Reviewed By:</b>	Carreon, Albert	QA Reviewer
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