

**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-017925**Date Inspected:** 06-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:

Heat straightening located on PCMK's OBG 11BW, longitudinal diaphragm between panel points 100 and 101. QC was identified as ZPMC CWI Liu Hua Jie (QC1). Assisting QC1 at this location and appearing to be monitoring the heat straightening and recording data was ZPMC QC Zhou Peng (QCA1), who was not a CWI. Heat treatment observed by this QA Inspector and recorded by QCA1 appeared to comply with HSR1(B)-9552 as presented to this QA Inspector by QCA1. See photos below. Also present at this location and appearing to be monitoring the welding and recording data were ABF Representatives Zhang Xiao Bin and Zhang Qi Li.

Carbon arc gouging removal of welds SEG071C-022, 024 located on OBG 11DW, south (crossbeam) side, east side of floor beam at panel point 106 to longitudinal diaphragm in conformance with ZPMC Weld Repair Report B-CWR2139. QC was identified as QC1.

SMAW welding of weld joints SP785-001-010 and SP507-001-053 located inside PCMK OBG 11DW/11EW, transverse joint, side plate T-rib web to side plate T-rib web. Welder was identified as 057333. QC was identified as ZPMC QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with

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WPS-B-P-2213-B-U2-FCM-1 as verbally identified by QCA1. Also present at this location and appearing to be monitoring the welding and recording data was ABF Representative Zhang Xiao Bin.

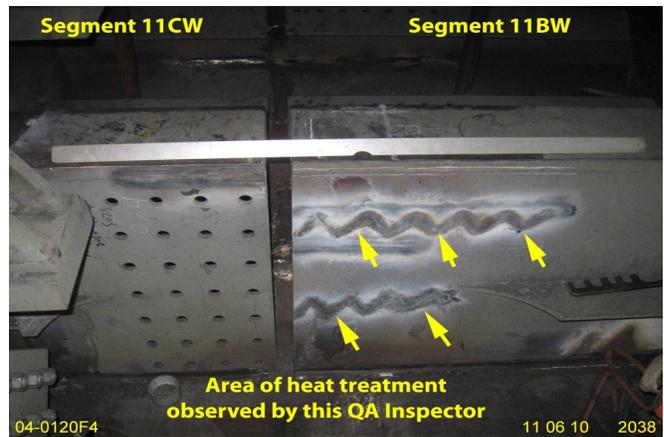
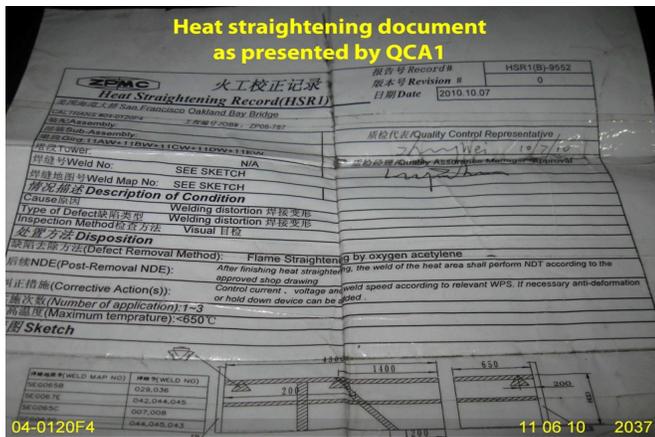
SMAW welding of temporary alignment plates located outside and across PCMK OBG 11DW/11EW, transverse joint, side plate to side plate, north (counterweight) side. Welder was identified as 218707. QC was identified as QC1. Welding variables recorded by QC1 appeared to comply with WPS-B-P-2114-FCM-1 as verbally identified by QC1.

## Heavy Dock

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

All four towers, lift 4 were positioned on a base separate pedestal at end of the Heavy Dock. OBG segment 10E was positioned on the deck of the ship moored to the end of the Heavy Dock. OBG segment 10W was positioned on top of OBG segment 10E. All four towers, lift 3 were positioned horizontally on the deck of the ship. OBG CB14 was positioned on stanchions on the deck of the Heavy Dock. No welding related work was being performed on any of the tower or OBG components on the Heavy Dock or the ship. The ZPMC 1600 ton floating crane was moored outboard of the ship and sitting idle.

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.

Inspected By: Goulet, George

Quality Assurance Inspector

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**Reviewed By:** Carreon,Albert

QA Reviewer