

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019014**Date Inspected:** 08-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Lv Li Qing**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**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

**ULTRASONIC TESTING****OBG SEGMENT 13CW**

ABF Request No: 12072010-1

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as the weld between deck panel and edge panel OBG segment 13CW on cross beam side. Inspection was carried out on repair areas only. The weld designations were as follows:

CA3016A-100

**MAGNETIC PARTICLE INSPECTION**

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## OBG SEGMENT 13CW

ABF Request No: 12072010-1

This QA Inspector Witnessed ABF personal performing Magnetic particle Testing (MT) on the welds between edge panel and deck panel of OBG segments 13CW (cross beam side). Inspection was carried out on repair areas. Weld identification number were.

CA3016A-100

No relevant indication was observed.

This QA Inspector randomly observed the following work in progress.

BAY # 14

## OBG 14 WEST

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045265 performing the Submerged Arc Welding process on weld 010 located at PCMK SEG3020\*. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2221-B-L2c-s.

## OBG 13EAST

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 216086 performing the Shielded Metal Arc Welding process on weld 108 located at PCMK SEG3007U. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F) Fcm-Repair. Weld repair report identified as B-WR17730.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067079 performing the Flux Cored Arc Welding process on weld 333 located at PCMK SEG3007Y. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044774 performing the Flux Cored Arc Welding process on weld 036 located at PCMK SEG3007K. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 050242 performing the Flux Cored Arc Welding process on weld 003 located at PCMK SEG3007AT. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC personnel performing Ultrasonic testing on the repair areas of the weld joint between floor beam to the longitudinal diaphragm (LD3036). Weld number identified as SEG3007G-017.

## OBG 14 EAST

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 048047 performing the Shielded Metal Arc Welding process on weld 009 located at PCMK SEG3019\*. ZPMC QC Mr. Gang Wei was monitoring this

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welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-Repair-1. Weld repair report identified as B-WR18551.

This Quality Assurance (QA) Inspector observed ZPMC personnel performing Ultrasonic testing for the splice weld between DP3163 and DP3162. Weld number identified as SEG3019\*-008.

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



## Summary of Conversations:

No significant conversations were reported on this date.

## 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 Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Utekar,Shrikant	Quality Assurance Inspector
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<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer
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