

**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-008049**Date Inspected:** 30-Jul-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** LIU FAWEN**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 & TOWER COMPONENT**Summary of Items Observed:**

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

In process Inspection

BAY #7

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) in the 2F position of the OBG Bottom Plate to stiffener weld No. BP3009-001-008. The welder is identified as #0544591. ZPMC QC is identified as Mr. Zhou Jie. The welding variables recorded by QC appear to comply with WPS- B – T-2232-3.

Flux Core Arc Welding (FCAW) in the 3G position of the Stiffener to stiffener for OBG Side Plate weld No. SP3045-001-072. The welder is identified as #053609. ZPMC QC is identified as Mr. Zhong Chong Biao. The welding variables recorded by QC appear to comply with WPS- B – T-2133-B-U2-F.

Flux Core Arc Welding (FCAW) in the 2G position of the OBG Side Plate to stiffener weld No. SP3012-001-077. The welder is identified as #220069. ZPMC QC is identified as Mr. Zhong Chong Biao. The welding variables recorded by QC appear to comply with WPS- B – T-2132-Tc-U4b-F.

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## WELDING INSPECTION REPORT

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Bay #6

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) in the 2G position of the Tower Strut assembly weld No. WD1-A305-77M-2-10B . Welders are identified as #037780 & # 037743. ZPMC QC is identified as Mr.Wang Xiao Bing. The welding variables recorded by QC appear to comply with WPS- B – T-3212-Tc-U5b.

Shielded Metal Arc Welding (SMAW) in the 2G position of the Tower Strut assembly weld No. WD1-A305-53M-3-9B . Welders are identified as #066481& #066456. ZPMC QC is identified as Mr.Wang Xiao Bing. The welding variables recorded by QC appear to comply with WPS- B – T-3212-Tc-U5b.

Shielded Metal Arc Welding (SMAW) in the 2F position of the Tower Strut assembly weld No. WD1-A305-53M-20/21 . Welder is identified as #069493. ZPMC QC is identified as Mr.Wang Xiao Bing. The welding variables recorded by QC appear to comply with WPS- B – T-2112.

Bay# 5

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) in the 3F position of the OBG Bike Path assembly weld No. BK-001-029-57~60. The welders are identified as #215185 & #204342. ZPMC QC is identified as Mr.Wang Liang .The welding variables recorded by QC appear to comply with WPS- B – T-2133.

Ultrasonic Testing (UT)

This QA Inspector performed Ultrasonic testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as OBG Traveller Rail CJP weld.

The Weld Designations are as follow

TR5A-PP13-002  
TR1E-PP28-009,010  
TR5C-PP17-005,006  
TR6B-PP18-003,004

This Quality Assurance Inspector (QA) performed 10% verification Ultrasonic Testing (UT) on weld joints identified as TR1E-PP28-009 for OBG Traveller Rail. This QA Inspector discovered One class “A” rejectable indications measuring approximately 25 mm in length. This weld was previously tested and accepted by ZPMC QC UT technicians.

This QA Inspector generated an incident report for this date.

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# WELDING INSPECTION REPORT

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## Magnetic Particle Testing(MT)

This Quality Assurance Inspector (QA) performed 15% verification Magnetic Particle Testing (MT) for Bottom and Side Plate to Stiffener fillet weld at Bay #6. This QA inspector generated a (MT) report for this date. This weld was previously tested and accepted by ZPMC QC MT technicians.

The Weld Designations are as follow

BP3020-001-67~69

BP3020-001-79~81

BP3020-001-91~93

BP3020-001-103~105

BP3020-001-117~119

SP-3022-001-036~038

SP-3022-001-046~048

This Quality Assurance Inspector (QA) performed 15% verification Magnetic Particle Testing (MT) on weld joint identified as SP-3022-001-048 between T-stiffener to Side plate. This QA Inspector discovered one rejectable transverse indication measuring approximately 5 mm in length. This weld was previously tested and accepted by ZPMC QC MT technicians.

This QA Inspector generated an incident report for this date.

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

### **Summary of Conversations:**

No relevant conversations

### **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 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bera,Subhasis	Quality Assurance Inspector
<b>Reviewed By:</b>	Prue,Erik	QA Reviewer

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